

INTEGRATED WASTE MANAGEMENT BOARD

I. EXECUTIVE SUMMARY

The Integrated Waste Management Board (IWMB) has a dual mission: protecting public health and safety and the environment through regulation of solid waste and solid waste facilities, and reducing solid waste disposal through diversion (recycling, composting and waste prevention). A wide variety of programs is needed to achieve these missions from: assistance and training for local partners and businesses; to analysis, policy and regulation development; to evaluating compliance with requirements and taking enforcement action, if needed. Enforcement activities include:

- oversight of permitted solid waste handling and disposal facilities;
- evaluation of Local Enforcement Agency (LEA) performance in assuring permitted solid waste facilities meet standards;
- enforcement of standards at tire facilities, and tire hauler and tire flow manifest requirements;
- enforcement when cities and counties have not implemented diversion programs to achieve 50 percent waste diversion; and
- enforcement when product minimum recycled content requirements are not met by businesses.

A) Major Program Highlights

Implementation of Strategic Directives

The IWMB Strategic Directives provide methodologies for measuring success of the implementation of the Integrated Waste Management Act. The Strategic Directives cover all aspects of waste management and aim to protect and preserve the public health and safety, the State's resources, and the environment.

Several Strategic Directives (specifically numbers 4 and 8) place a significant emphasis on compliance and enforcement. In 2008, the Strategic Directives and the Local Enforcement Agency (LEA) Compliance Targeting strategy led to increased enforcement, a decrease in the number of repeat violations, and an increase in solid waste facility inspections. More information is included in each enforcement program section below.

Tire Enforcement

The IWMB implemented a Zero Tolerance Compliance Strategy for tire hauler and tire manifest requirements that results in prompt enforcement action and an increase in the use of penalties to ensure a level playing field and timely, continuous compliance through a streamlined penalty process. The streamlined penalty process reduces time spent in resolving issues for waste tire haulers and the IWMB staff. Almost 95 percent of haulers accepted the streamlined penalties. This resulted in an 8-fold increase in tire hauler and manifest enforcement actions in 2008. Overall, there was a 73 percent increase in total tire related enforcement actions (tire hauler and manifest, and tire facility).

Solid Waste Facility and Local Enforcement Agency (LEA) Enforcement

One measure of the level of compliance with the state minimum standards for waste management facilities is the number of facilities on the [Inventory of Solid Waste Facilities Which Violate State Minimum Standards](#) (Inventory). This list is composed of facilities that have a repeated number of violations and require close oversight by LEAs to bring them into compliance. During 2008 the number of facilities on the Inventory dropped from eight to six, a 25 percent increase in compliance.

LEAs placed on work plans to improve their performance as a result of the third LEA evaluation cycle (2003-2006), all made progress in implementing their work plans. The statewide results of the fourth LEA evaluation cycle (2006-2009) will be available in 2010.

In 2008 State-sponsored legislation (AB 2679, Ruskin, Chapter 500, Statutes of 2008) added additional solid waste facilities enforcement provisions including: establishment of a minor violation program; streamlined assessment of administrative civil penalties; direct IWMB enforcement upon request of an LEA; no automatic stay of an enforcement action when an operator requests a hearing; and establishment of criminal penalties.

Local Government Diversion Enforcement

The 2007 statewide diversion rate increased to 58 percent. This exceeds the 50 percent diversion requirement. Information needed to calculate the diversion rate is only available after the calendar year is over, so the 2007 rate is the latest available rate. Local governments, businesses and citizens continue to increase the amount of waste diverted from disposal through waste prevention, recycling and composting activities.

In 2008 the IWMB completed biennial reviews of individual local government progress in implementing diversion programs to achieve or maintain 50 percent diversion: 340 local governments were approved for meeting the requirements; 57 local governments were approved as making a good-faith effort; three local governments were placed on compliance orders. Two local governments are still under review for potential compliance orders and their Biennial Reviews will be completed in 2009. One local government was penalized for failure to implement its existing compliance order. Nine local governments already under compliance orders were monitored; two met the terms of their compliance orders and were taken off compliance during 2008.

State-sponsored legislation (SB 1016, Wiggins, Chapter 343, Statutes of 2008) increases the focus on diversion program implementation and changes the diversion measurement system to be more timely and accurate. The legislative changes made it more explicit that compliance is based primarily on diversion program implementation. The legislative changes will go into effect in 2009.

Rigid Plastic Packaging Container (RPPC) Minimum Recycled Content Enforcement

Staff analyzed additional information submitted by several businesses whose rigid plastic packaging containers were originally found out of compliance with container recycled content requirements in calendar year 2005. Penalties of about \$225,000 were collected from three companies that failed to meet the container recycled content requirements.

Illegal Dumping Enforcement

Illegal dumping poses risks to the general public and the environment, degrades the quality of life in affected communities, and is costly to cleanup. Illegal dumping is an intentional act that is typically done for economic gain. Clean up of illegal dump sites costs local governments and CalTrans a minimum of \$89 million per year. Currently, no state agency is tasked with coordinating illegal dumping.

IWMB continues to move aggressively under its Solid Waste Disposal and Codisposal Site Cleanup Program to quickly cleanup large illegal disposal sites that pose a significant threat to the surrounding communities where responsible parties are unable or unwilling to perform the necessary remediation. Riverside County Code Enforcement Department requested the IWMB-managed cleanup of the Mission Fiber illegal disposal site near Blythe. Within four weeks over 8,550 tons of waste was removed and properly disposed.

IWMB is implementing innovative cleanup initiatives near the U.S.-Mexico border. The Imperial County New River Collaborative, consisting of various local agencies and IWMB staff, is cleaning up and preventing reoccurrence of 64 chronic mixed tire and solid waste illegal dumping sites in Imperial County through a pilot program Master Agreement. IWMB is working on a bi-national, multi-media effort in partnership with the California Department of Parks and Recreation to fund and install a trash boom system to improve the removal of trash, tires, and sediment during storm events and prevent impacts to the Tijuana River Estuary.

Reorganization for More Effective Compliance and Enforcement

During 2008 there were many changes in compliance and enforcement practices resulting from the mid-2007 major reorganization that consolidated a variety of compliance and enforcement activities within the new Waste Compliance and Mitigation Program's Compliance Evaluation and Enforcement Division (CEED). The reorganization consolidated compliance elements required by laws governing solid waste and tire facility operations, waste tire haulers, local government and state agency diversion from waste disposal, and minimum recycled content requirements for plastic and paper products. Challenges related to the reorganization include high vacancy rates, staff and management turnover. Hiring and training staff have been very high priorities.

B) What the Reported Data Tells Us

Tire Enforcement

The Strategic Directives set a goal of 100 percent compliance for waste tire facilities. Over 93 percent of the waste tire haulers are in compliance and 93 percent of waste tire facilities are in compliance. One thousand one hundred and forty-one (1141) tire enforcement actions were taken by local tire enforcement grantees and IWMB in 2008. This is a 73 percent increase over the 550 enforcement actions taken in 2007.

In 2008 the IWMB approved a six-month pilot streamlined penalty process to allow more timely tire hauler and manifest enforcement within existing staffing levels. The number of tire hauler and manifest penalty cases increased dramatically with the zero tolerance compliance strategy and the streamlined penalty process. The 92 tire hauler and manifest streamlined penalties plus the 18 tire hauler and manifest administrative complaints resulted in a total of 110 enforcement cases: an 8 fold increase from the 14 tire hauler and manifest administrative complaints in 2007.

Solid Waste Facility and LEA Enforcement

Solid waste facility integrated waste management enforcement programs are primarily carried out through 59 LEAs. LEAs inspect solid waste facilities to determine compliance with state minimum standards and permit conditions. There is a 4 percent significant violation noncompliance rate at solid waste facilities, solid waste operations and closed disposal sites. The Strategic Directives require 100 percent compliance at active solid waste facilities and IWMB is looking at methods outlined in the Compliance Targeting Strategy to achieve this goal. The IWMB is developing early triggers for areas of noncompliance, and providing assistance and training in those areas to achieve compliance. The Compliance Targeting Strategy lays out processes for moving promptly to enforcement if compliance is not achieved. The number of solid waste facilities with significant violations that were listed in the Inventory of Solid Waste Facilities Which Violate State Minimum Standards dropped from eight to six, a 25 percent increase in compliance.

An important component of achieving 100 percent compliance is working through LEAs and verifying that LEAs are performing their duties in accordance with the law. In 2007 IWMB completed the third evaluation cycle for the years 2003-2006. Twenty-six (26) of 54 evaluated LEAs were found to be fulfilling their responsibilities during the third LEA evaluation cycle. The remaining 28 LEAs were found to not to be fulfilling some of their responsibilities during this time frame. LEA responsibilities include requiring prompt action to remedy violations of state minimum standards at facilities, as well as longer term issues such as requiring each facility to have a closure plan and post-closure financial assurance. All 28 LEAs are on corrective action plans to correct issues. IWMB is monitoring LEA progress in implementing the corrective action plans and this will be part of the fourth evaluation cycle (2007-2009). At the end of 2008, all 28 LEAs on corrective action plans were making progress in implementing those plans

Local Government Diversion Enforcement

Every two years the IWMB reviews each local government's progress in implementing its planned waste diversion programs to achieve 50 percent diversion; this is called a biennial review. The IWMB considered the 2005-2006 biennial reviews starting in fall 2008. Nine local governments were on compliance orders throughout 2008 and three more local governments were put on compliance at the end of 2008 (2.9 percent on compliance). An additional two local governments (0.5 percent) met the terms of their compliance orders and were removed from compliance status during 2008. The IWMB imposed penalties on one local government (0.2 percent) for failure to meet the requirements of their compliance order. The remaining 96 percent of local governments were found to be in compliance with the diversion requirements.

The 58 percent 2007 statewide diversion rate exceeds the 50 percent diversion requirement. There was a four percent increase in diversion between 2006 and 2007. The total waste generated by Californian's increased by 900,000 tons between 2006 and 2007. The increase in waste generation reflected a 2.6 million ton decrease in disposal and a 3.5 million ton increase in diversion.

State-sponsored legislation passed during the 2007-2008 legislative session will make the measurement system more accurate, more timely, and streamline local government requirements. The improvements in accuracy and timeliness will make it easier to determine compliance in the future.

Rigid Plastic Packaging Container Minimum Recycled Content Enforcement

During 2008 the IWMB imposed penalties on three companies for failure to comply with the requirements for recycled content in rigid plastic packaging containers in the 2005 certification cycle. The three companies paid penalties of about \$225,000. One additional company has appealed the IWMB's finding, and the case is expected to be resolved in 2009. One hundred companies were analyzed in the 2005 certification cycle, so three percent have been found out of compliance, to date.

C) How The Program Will Use The Information

The data will be used, as described under each program component above, to analyze progress in achieving compliance and effectiveness of enforcement actions, and determine the need for future changes to the program components.

II. IWMB ENFORCEMENT PROGRAM

A) IWMB Enforcement Program Overview

Mission Statement

The IWMB's Waste Compliance and Mitigation (WCM) Program ensures that:

- All solid waste and tire facilities, and all tire haulers are permitted or registered as required.
- All waste management activities within the IWMB's purview as defined by law are assessed, enforced and penalized as appropriate.
- The State's diversion goals are met, and State agency and local programs achieve State mandated goals.
- Mandated producer responsibility programs including rigid plastic packaging containers (RPPCs), plastic trash bags and newsprint are in compliance.
- All hazards created by the illegal or inappropriate disposal of solid waste are mitigated.
- Staff and local partners have the training, technical support, and financial assistance necessary.
- All local enforcement agencies are properly certified, designated and evaluated as appropriate.

The Compliance Evaluation and Enforcement Division (CEED) within the WCM Program is responsible for all compliance and enforcement activities related to solid waste and tire facilities, and illegal tire disposal; compliance activities related to the IWMB's minimum content programs (newsprint, trash bags and rigid plastic containers); and compliance activities related to local government and state agency waste management planning and diversion requirements.

Organizational Structure

See Figure 1 on the next page for an IWMB organization chart.

Compliance Assistance Program Highlights

The law requires IWMB's programs to have a strong assistance and training component to help the regulated community comply with the law. The regulated community includes millions of businesses, thousands of schools and hundreds of state agencies and local governments. When compliance is not achieved, the IWMB emphasis switches to enforcement. There is a wide variety of compliance assistance activities that are carried out by approximately 230 staff, including development and presentation of training materials, development of web assistance materials and work with many individual businesses, state agencies and local governments. Customer assistance program highlights are below.

The IWMB web site has expanded greatly over the years and provides assistance to users ranging from media, schools and local governments to technical experts, 24/7, on all topics under the IWMB's purview. Figure 2 shows the number of IWMB web pages accessed by outside parties. There has been a dramatic increase in web page use since 1997 and a seven percent increase in web page use between 2007 and 2008. The IWMB also funded over \$47,000,000 in grants and loans in fiscal year 2007/2008 for a wide variety of assistance and enforcement activities. The information is currently available on a fiscal year basis rather than a calendar year basis as shown in Figure 3. Grants provide funds to local governments, landowners,

businesses and non-profits for activities such as LEA activities, farm and ranch clean up, solid waste disposal and codisposal site cleanup, household hazardous waste and used oil programs, tire site cleanup, tire amnesty days, local tire enforcement activities, tire product commercialization, and rubberized asphalt concrete projects. The Recycling Market Development Zone Loan Program provides direct loans to businesses and nonprofits that are located in a Recycling Market Development Zone. The purpose of these loans is to promote market development for waste materials.

Training and workshops are also an important component of IWMB compliance assistance. During 2008 over 80 trainings, workshops, symposia, conferences, roundtables and information exchanges were held with local governments, state and federal agencies, businesses and nonprofits to inform them of requirements and opportunities, solve problems, improve program effectiveness and develop sound policy recommendations. Over 1000 stakeholders received enforcement related training.

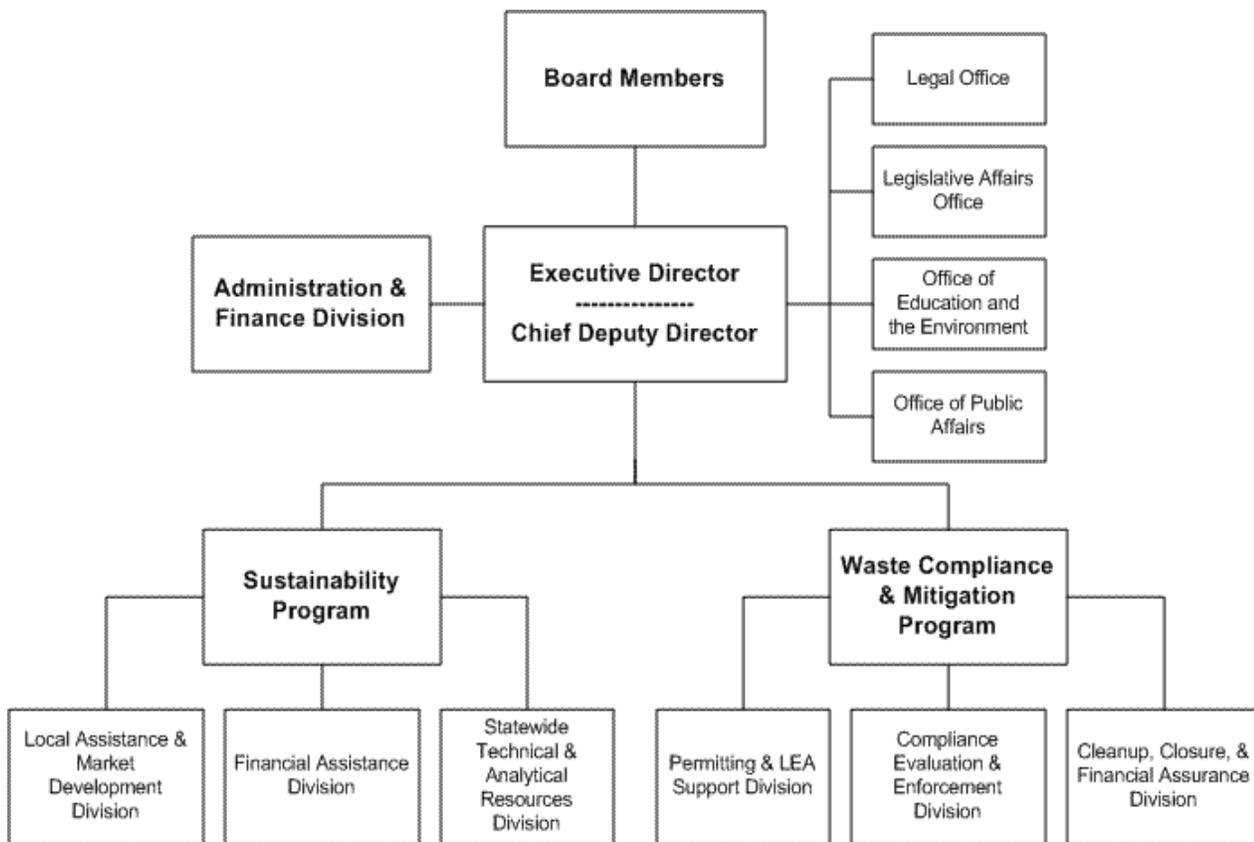


Figure 1. IWMB Organization Chart

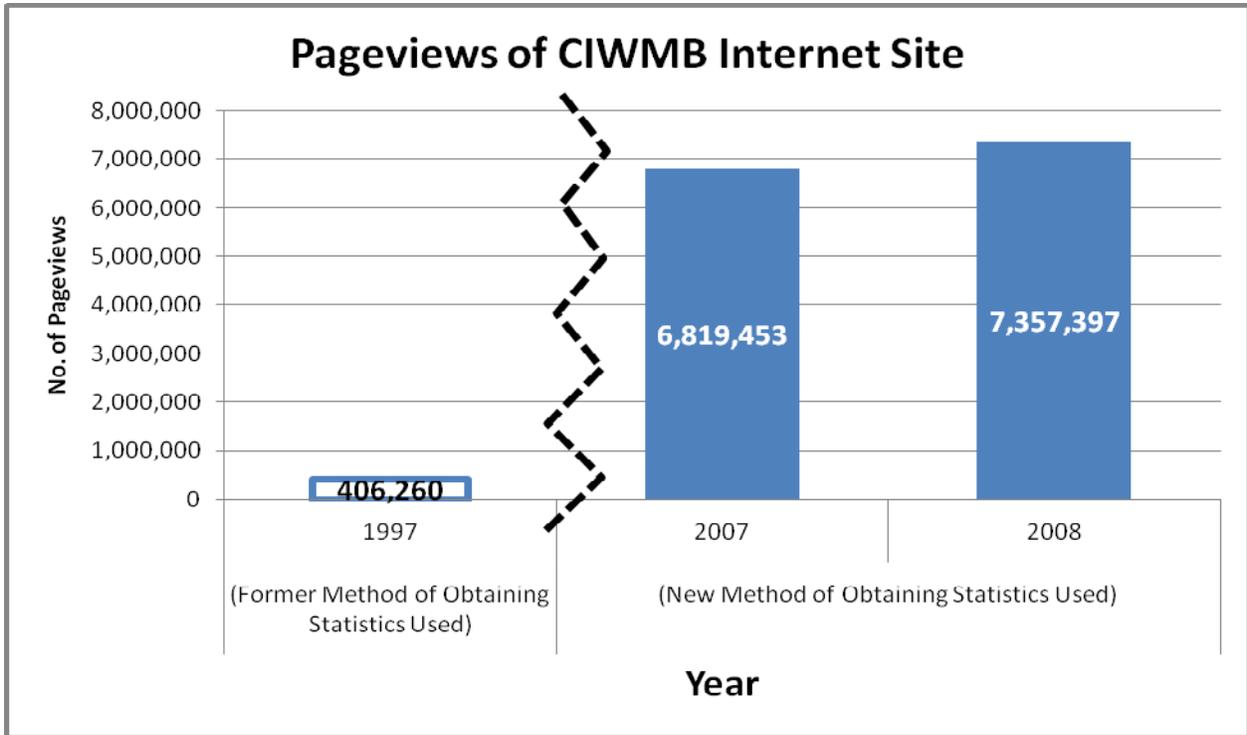


Figure 2. IWMB Internet Site External Pageviews Over Time

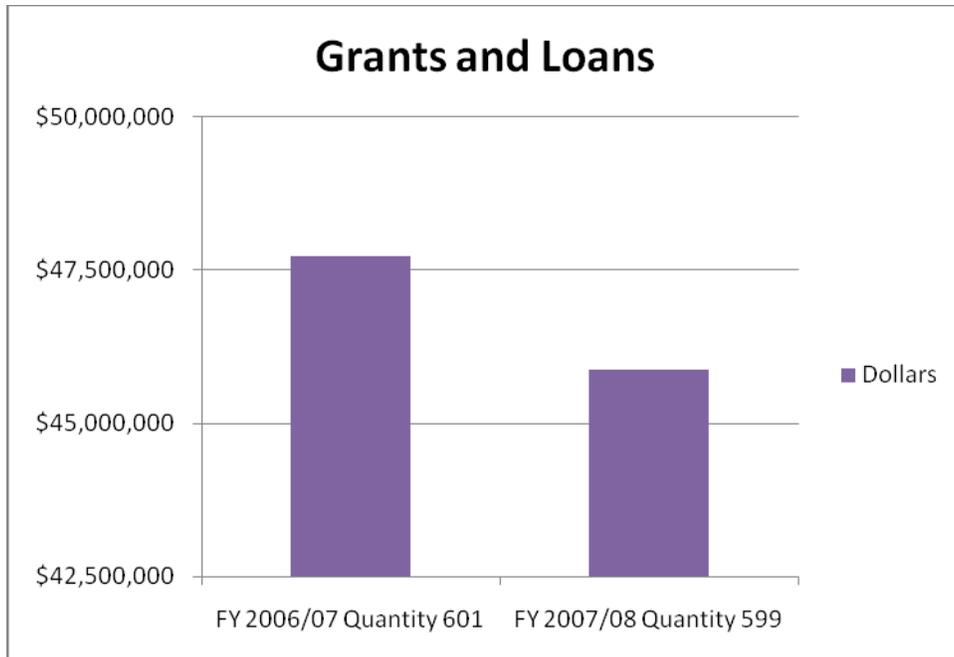


Figure 3. IWMB Grants and Loans for Fiscal Years 2006/07 and 2007/08

Scope of IWMB Enforcement Program

The IWMB has a variety of enforcement program components established under many laws. One of the key differences among the laws is the differing levels of enforcement authority, which requires different enforcement activities.

The IWMB has direct authority for enforcing requirements for:

- Tire haulers and handlers, processors and disposal facilities; recycled content in rigid plastic packaging containers (RPPC), plastic trash bags and newsprint.

The IWMB has oversight authority over:

- Solid waste facility Local Enforcement Agencies. The IWMB has the ability to take direct enforcement authority if solid waste facility LEAs do not choose to, or are not adequately performing, enforcement duties at solid waste handling, processing and disposal facilities.
- Local jurisdictions (cities, counties and IWMB - approved regional agencies) to ensure that they are implementing waste diversion activities to achieve 50 percent diversion from disposal. The IWMB places noncompliant jurisdictions on compliance orders and may impose penalties for failure to meet compliance order requirements.

Federal laws only govern solid waste facility enforcement; a more detailed description is included in the solid waste facility enforcement section.

The 2008 report focuses on describing the tire, municipal solid waste, local government diversion and RPPC compliance and enforcement programs in this report. Information on newsprint, plastic trash bag, plastic carryout bag and state agency programs may be added in future annual reports.

There are 50 staff, plus a number of students in the Compliance Evaluation and Enforcement Division that implement the IWMB enforcement programs. At any given time, there is recruitment for several vacant positions. Most staff assigned to this work are scientists. They perform inspections, field work, and prepare analyses. The IWMB legal office has four attorneys and a legal support staff working on IWMB enforcement programs. Filling staff vacancies was a priority throughout 2008 as staff left for higher paying positions elsewhere in CalEPA, or staff retired due to the 10 percent pay cut.

The IWMB relies heavily on working with local governments to enforce tire and solid waste facilities requirements. There are 59 solid waste LEAs that implement municipal solid waste requirements at permitted solid waste facilities. Forty-one local tire grantees perform tire related inspections and assist with tire enforcement throughout the state.

1) Tire Enforcement Program Component

Tire Enforcement Component Description

In 1990, the California Legislature enacted comprehensive requirements for the storage and disposal of waste tires. The IWMB was charged with responsibility for permitting of tire facilities, and tire pile stabilization and remediation where public health and safety and the environment may be at risk. The tire law gives the IWMB direct authority to enforce tire requirements.

The law required the IWMB to develop a "California Uniform Waste and Used Tire Manifest" (Public Resources Code Section (PRC) 42961.5). IWMB uses the information generated by the waste tire manifest system to ensure that all waste tires generated and transported within California have been accounted for and delivered to permitted end use facilities. IWMB identifies discrepancies and gaps in the manifest system data and actively enforces the requirements. The maximum civil penalties for violations of the waste tire hauling and manifesting requirements are \$25,000 per violation per day, and the maximum administrative penalties are \$5,000 per violation per day (PRC Section 42962).

Operating a waste tire storage facility without a waste tire facility permit is a misdemeanor punishable with a fine up to \$10,000 per day of the violation and/or up to one-year imprisonment in county jail (PRC Section 42824 and 42834).

In 2008, the regulated community included approximately:

- 26,000 tire related businesses
- 1,300 waste tire haulers
- 25 minor waste tire facilities, and
- 4 major waste tire facilities.

Expanding Tire Enforcement through Local Governments

Great strides have been made in expanding the statewide tire enforcement infrastructure through IWMB grants to local government tire enforcement entities. The IWMB may "consider designating a city or county, or city and county as the enforcement authority of regulations relating to the storage of waste and used tires" PRC section 42889(b)(4). This section also states that if the IWMB designates a local entity for this purpose, it must provide sufficient, stable, and noncompetitive funding to that entity, based on available resources. The IWMB and local tire enforcement grantees are working cooperatively with local district attorneys to hold those individuals who break California's waste tire laws accountable for their action either through fines or with criminal penalties.

Using Technology and Studies to Enhance Tire Enforcement

Enforcement is keeping up with technology in California as the IWMB is beginning to use sophisticated techniques such as satellite technology and motion-activated cameras to identify waste tire piles and to catch people illegally disposing of waste tires. The California Highway Patrol (CHP) is working in partnership with the IWMB to stop illegal hauling and stockpiling of waste and used tires. A portion of these combined efforts will focus on the border region between California and Mexico.

The IWMB has contracted with the ARB to authorize the ARB to purchase, construct, maintain and deploy surveillance equipment to be used for surveillance at various sites throughout the state. Through the contract, the Air Resources Board (ARB) has purchased and will set up high-tech, motion-activated video surveillance equipment to monitor activities that violate waste tire laws at locations specified by the IWMB. IWMB has contracted with San Francisco State University to evaluate use of satellite technology in identifying waste tire piles. The use of this technology could provide low cost information to target enforcement and clean-up efforts. The work continued in 2008 and results of this satellite study are expected in 2009.

As part of the efforts to reduce impacts of waste tires in the California/Mexico border region, the IWMB has contracted with San Diego State University to determine the flow of tires exported from California to Mexico, and possible actions to regulate the flow and reduce environmental impacts of the remaining waste tire piles. The results of this study are expected in 2009.

Tire Enforcement Goals

The Strategic Directives set a goal of 100 percent compliance for waste tire facilities. The purpose of the waste tire enforcement grant program is to enhance the statewide waste tire enforcement infrastructure in California by increasing local waste tire enforcement activities. The IWMB is pursuing more vigorous enforcement to achieve compliance with waste tire manifest requirements, based upon a zero tolerance compliance strategy for manifesting and hauler violations adopted in early 2007 as described in the Major Program Highlights. Additionally the IWMB approved a pilot streamlined penalty process for tire hauler and manifest violations to quickly resolve relatively small and noncontroversial cases.

Tire Enforcement Component Metrics

Tire Enforcement Component Data Characteristics

Tire enforcement data is collected from tire haulers submitting manifests that document tire flow in California and monthly inspections of each permitted tire facility.

Tire Enforcement Component Inputs

See description of enforcement program resources in the IWMB Enforcement Program Overview.

Tire Enforcement Component Outputs

Forty-one local tire enforcement grantees covered 79 percent of the state’s tire sites and related businesses in 2008. The IWMB covered the remainder of the tire sites and related businesses.

The number of inspections at tire facilities has increased dramatically over the last 5 years. As the number of tire grantees has increased, more tire facilities are inspected more frequently. Figure 4 shows tire facility inspections.

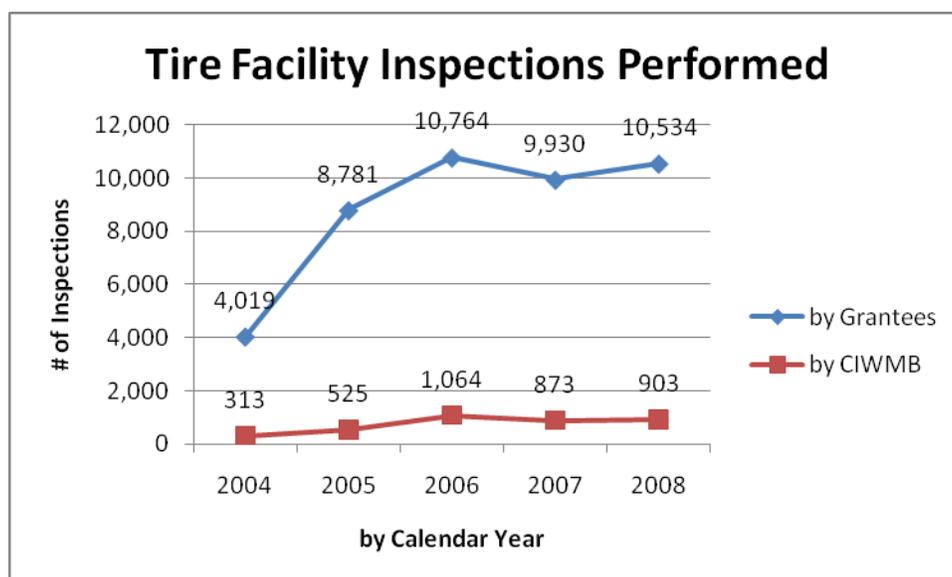


Figure 4. Tire Facility Inspections, 2004 to 2008

If an inspector observes that a tire business is out of compliance with a law or regulation, the inspector documents a Notice of Violation and identifies a date by which the business must become compliant. If the business does not become compliant after 2 re-inspections, enforcement action is initiated against the tire business. The IWMB defines these enforcement actions as significant violations.

One thousand one hundred forty one (1,141) tire enforcement actions were taken by local tire enforcement grantees and IWMB in 2008. This is a 73 percent increase over the 660 tire enforcement actions taken in 2007. The types of tire enforcement actions for tire businesses (which include tire sales and waste tire facilities) and tire haulers and the tire hauler manifest system include:

- Cleanup and Abatement Orders
- Notices of Violation
- Rejected Applications
- Administrative Actions
- Administrative Complaints
- Cease and Desist Orders
- Letters of Violation

Figure 5 shows notices of violations and significant enforcement actions for only permitted waste tire facilities. A permitted facility is a tire business that has a permit for 500 or more tires on site. The CIWMB takes enforcement action when significant violations occur. Tire facility enforcement actions initiated in 2006 and 2007 often resulted from violations of limits on on-site tire storage and not meeting fire safety standards. As a result many tire facilities operated under stipulated agreements as they obtained the appropriate, new tire facility permits. Stipulated agreement conditions incorporated the same conditions that will be required as part of the new permits. This resulted in fewer notices of violation and significant enforcement actions in 2008.

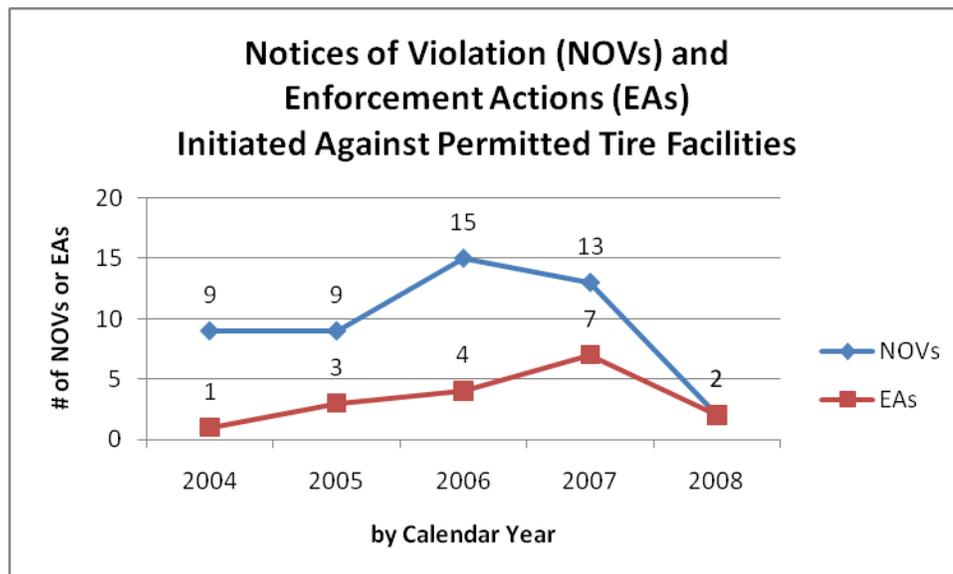


Figure 5. Tire facility Notices of Violation and Enforcement Actions, 2004-2008

When tire haulers fail to correct violations, IWMB will issue administrative complaints, as well as, the recently implemented “Streamlined Penalties” to tire haulers for violations of requirements related to hauler registration and manifesting of tire movement throughout California. Administrative Complaints for these types of violations from 2004 to 2008 are shown in Figure 4. In 2008, the IWMB approved a “streamlined penalty process” for dealing with violations which are determined to be less egregious and non-controversial.

The “Streamlined Enforcement Process” may be used, if the following conditions are met:

- The enforcement action is less than \$5,000 in potential Administrative Complaint fines;
- The site does not involve more than 2,000 waste tires;
- There is no controversy or special circumstances concerning the site.

The streamlined penalty process allows for cost effective prosecution of these violations without having to utilize the Administrative Hearing process. Under this process, and using IWMB pre-approved criteria, staff can propose a settlement to a violator in lieu of prosecution through the administrative complaint process. The numbers of prosecutions using this streamlined process are shown in Figures 6 and 7. The 92 tire hauler and manifest streamlined penalties plus the 18 tire hauler and manifest administrative complaints resulted in a total of 110 enforcement cases: an 8 fold increase from the 14 tire hauler and manifest administrative complaints in 2007.

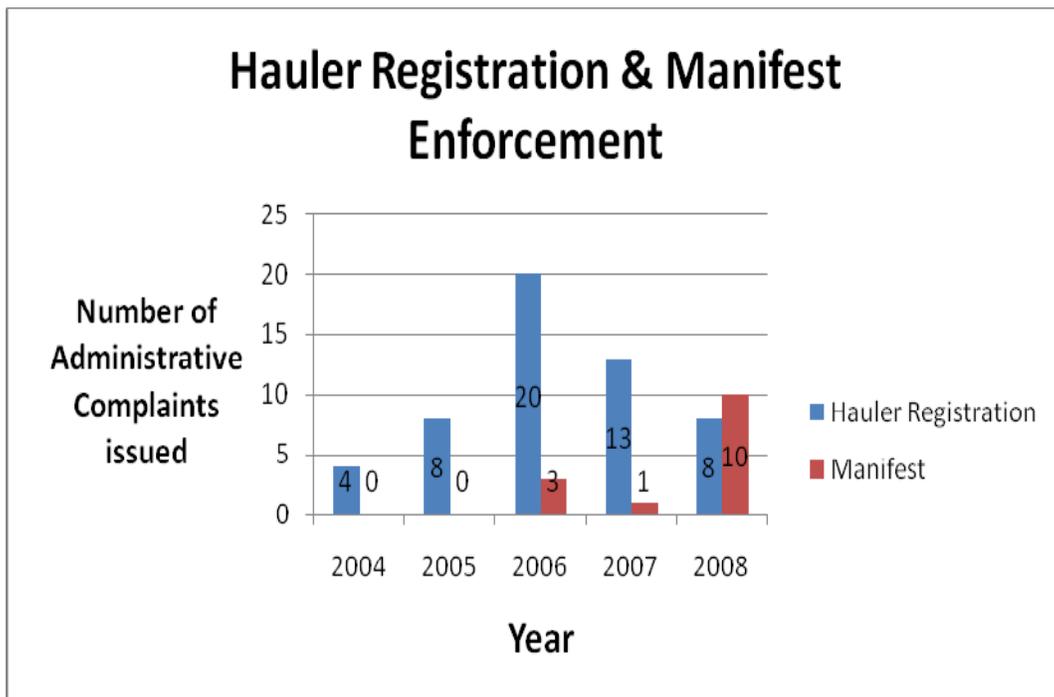


Figure 6. Tire Hauler Registration and Manifest Enforcement, Administrative Complaint Actions, 2004-2008

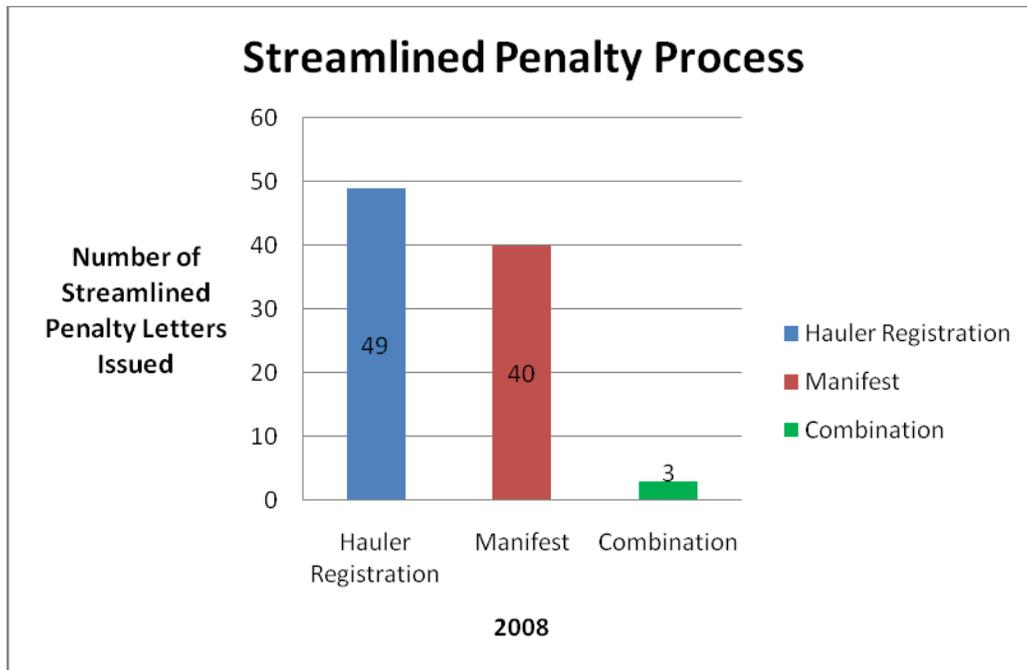


Figure 7. Tire Hauler Registration and Manifest Enforcement, Streamlined Enforcement Actions, 2008

Tire Enforcement Component Outcomes

The Strategic Directives set a goal of 100 percent compliance related to compliance with applicable State standards and permit conditions at active waste tire facilities. The CIWMB takes enforcement action when significant violations occur. For tire facility enforcement, there is a significant violation when the IWMB files an administrative complaint. The 2008 significant violation non-compliance rate for active waste tire facilities is 7 percent.

Tire Enforcement Limitations

The IWMB has reviewed the tire enforcement program to identify opportunities for additional progress in increasing compliance and enforcement. The zero tolerance strategy for the tire hauler program increased the enforcement workload significantly in 2008. However, the implementation of the streamlined penalty process allowed staff to efficiently respond to this increased workload. By instituting the streamlined penalty process staff have been able to achieve compliance at program level instead of referring these cases to the Legal Office, thus allowing legal staff time for more substantial tire enforcement cases.

2) Solid Waste Facility and Local Enforcement Agency (LEA) Enforcement Component

Solid Waste Facility and LEA Enforcement Component Description

Jurisdiction over the disposal of solid waste in California extends over several state and local agencies. Four state agencies play a regulatory role with respect to solid waste: 1) the California Integrated Waste Management Board (IWMB); 2) the State Water Resources Control Board (State Water Board); 3) the Air Resources Board (ARB); and 4) the Department of Toxic Substances Control (DTSC).

All of these agencies fall under the umbrella of the California Environmental Protection Agency (Cal/EPA). These agencies share concurrent authority over some aspects of solid waste disposal. The statutes and

regulations for solid waste management and disposal set forth a clear division of authority between these state agencies. The California Legislature has designated the IWMB as the lead agency for the federal Resource Conservation and Recovery Act (RCRA) Subtitle D, MSWLF (municipal solid waste landfill) permit program (PRC Section 40508).

The State Water Board's authority is established for protection of water quality, the ARB's for protection of air quality, and the DTSC's for protection from hazardous waste. The IWMB's authority is established for protection of public health and safety and the environment, which encompasses the responsibility for all other aspects of solid waste disposal not within the purview of the other entities. Under its broad authority for protection of public health and safety, the IWMB may take appropriate enforcement action, and implement the solid waste regulations of other state agencies if those agencies fail to act.

In 1993, the US Environmental Protection Agency (US EPA) approved the State of California's municipal solid waste landfill permit program pursuant to Subtitle D of the federal RCRA. As the lead state solid waste agency, the IWMB is responsible for coordination and communication on all aspects of solid waste with US EPA, including the RCRA Subtitle D Program. The primary point of contact for IWMB and California implementing agencies is the Waste Compliance and Mitigation Program Director. IWMB regularly meets with state implementing agencies to discuss and resolve issues on all aspects of solid waste management, including the RCRA Subtitle D Program.

IWMB also coordinates notification to US EPA of any potential significant statutory or regulatory changes to the State's Subtitle D RCRA Program. Summary of non-significant changes to the State's Subtitle D Program are provided to US EPA on an annual basis. IWMB notifies US EPA of significant changes as soon as practicable, or within a timeframe agreed to by the IWMB and EPA. IWMB also collaborates with US EPA on appropriate initiatives and partnerships involving the RCRA Subtitle D Program.

Solid waste facility integrated waste management enforcement programs are primarily carried out through LEAs and the IWMB acting as the enforcement agency (EA). LEAs are designated by the governing body of a county or city and upon certification by the IWMB are empowered to implement delegated IWMB programs and locally designated activities. LEA's are responsible for assuring facilities operate in accordance with the IWMB's State Minimum Standards and approved permit conditions.

Fifty nine LEAs cover all of the state except for the six local governments where the IWMB acts as the enforcement agency. The IWMB is the EA for the: City of Berkeley; City of Stockton; City of Paso Robles; County of Santa Cruz; County of San Luis Obispo; and County of Stanislaus.

The IWMB's regulation of solid waste facilities includes:

- Certifying and evaluating LEA programs.
- Reviewing permitting and closure/postclosure documents.
- Providing inspection and oversight of local programs to ensure that State programs are effectively implemented.
- Enforcing State standards and permit conditions in addition to or in lieu of the LEA.
- Administering a remediation program for orphaned, illegal, and abandoned sites.
- Taking appropriate enforcement action if the LEA fails to take appropriate enforcement.

There were 552 permitted, active solid waste management facilities in 2008. These include:

- 292 waste transfer and processing facilities
- 110 composting facilities
- 147 disposal facilities
- 3 waste-to-energy (transformation) facilities.

The following are additional details in specific program areas:

Active and Closed Solid Waste Facilities: Each jurisdiction's LEA or EA routinely inspects active and closed landfills, transfer stations, compost operations and facilities, construction and demolition operations and facilities, and other operations and facilities to ensure compliance with applicable State minimum standards and permit conditions. For operations or facilities that are not in compliance with State minimum standards or the conditions contained within their permit, the LEA or EA have the authority to issue Corrective Action Orders, Cease and Desist Orders, and civil penalties. The LEA and EA also have the authority to issue stipulated agreements and emergency waivers to facilities or operations located in an area with a declared emergency. Additionally, facilities found in chronic violation of State minimum standards are published on the IWMB's Inventory of Solid Waste Facilities That Violate State Minimum Standards. Facilities on the Inventory receive enhanced compliance assistance.

Closed, Illegal, and Abandoned Disposal Sites: The IWMB's Closed, Illegal, and Abandoned (CIA) Disposal Sites program assists local enforcement agencies in investigating and enforcing State minimum standards at CIA sites in California. Enforcement is an essential tool in the investigation and analysis of CIA disposal sites. Enforcement can include acquiring site access, abatement, notifications, stipulated agreements, and compliance with Title 14, California Code of Regulations (14 CCR).

The IWMB May Act as Enforcement Agency: When an LEA is not designated and certified, the local government requests the IWMB be the EA, or if the IWMB finds that a LEA is not fulfilling its duties and responsibilities, then the IWMB becomes the EA. The IWMB, as EA, inspects facilities for compliance with State minimum standards and/or solid waste facility permit (SWFP) terms and conditions. In the event that a facility owner/operator does not comply with the State minimum standards and/or terms and conditions of its SWFP, the IWMB will pursue appropriate enforcement action. For a variety of reasons, the IWMB acts as the enforcement agency in six jurisdictions: the City of Berkeley, the City of Stockton, the City of Paso Robles, the County of Santa Cruz, the County of San Luis Obispo, and the County of Stanislaus.

LEA Performance Evaluation: The IWMB LEA program includes the formation (designation), support and evaluation (audit) of the LEAs to improve their success in consistent enforcement of statutes, regulations, and solid waste facilities' permit terms and conditions statewide. LEA responsibilities include such duties as, making sure facilities are properly permitted, carrying out routine facility inspections, requiring prompt action to remedy violations of state minimum standards at facilities, as well as longer term issues such as requiring each facility to have a closure plan and post-closure financial assurance. To assess the LEAs' performance, the program includes a step-by-step approach and results range from finding that LEAs are fulfilling responsibilities to, corrective action, to withdrawal of the LEA's designation approval and de-certification. Each LEA must be evaluated once every three years. The fourth evaluation cycle runs from 2007-2009 and results will be available in 2010.

Solid Waste Facility and LEA Enforcement Goals

The Strategic Directives set a goal of 100 percent compliance for waste management facilities related to compliance with applicable State standards and permit conditions at active solid waste facilities.

The IWMB adopted a Targeted Compliance Strategy (Strategy) in December 2007 to ensure compliance. The IWMB developed the Strategy to ensure compliance with applicable State standards and permit conditions at active solid waste facilities and tire facilities. This Strategy provides direction on how to best focus resources where there is a need to provide assistance and oversight to Local Enforcement Agencies (LEA) carrying out their duties and to effectively monitor the compliance of solid waste and tire facilities and operations to ensure they are operating effectively. It lays out a blueprint for changes in the IWMB's approach to compliance and enforcement under the reorganization.

The Strategy is built upon the following principles:

1. Compliance first approach
2. Cooperation first approach
3. Consistent enforcement
4. Measuring compliance
5. Need for continuing education and training
6. Need for increased multi-media coordination when appropriate
7. Each LEA has an Enforcement Program Plan (EPP) that defines appropriate enforcement step for no-complying facilities.

This Compliance Targeting Strategy focuses on situations where:

- The facility is chronically violating state minimum standards and the LEA has not put the facility under a Notice and Order or a Compliance Plan.
- State minimum standards are not being adequately assessed to protect the public health and safety, and the environment.
- Multiple enforcement orders or extensions of orders have been issued to a facility and little or no progress is being made.
- Inspections are not being conducted pursuant to the statutes and regulations.

Strategies include:

1. Reducing the number of facilities listed on the IWMB's [Inventory of Solid Waste Facilities Which Violate State Minimum Standards](http://www.ciwmb.ca.gov/Swis/Inventory/Default.aspx) (<http://www.ciwmb.ca.gov/Swis/Inventory/Default.aspx>).
2. Providing inspection and enforcement training, assistance and oversight to LEAs to ensure that State programs are effectively implemented.
3. Increasing the number of random and independent inspections.
4. Using the LEA performance evaluation process to enhance solid waste enforcement.

In 2008 State-sponsored legislation ((AB 2679, Ruskin, Chapter 500, Statutes of 2008) added additional solid waste facilities enforcement provisions including: establishment of a minor violation program; streamlined assessment of administrative civil penalties; direct IWMB enforcement upon request of an LEA; no automatic stay of an enforcement action when an operator requests a hearing; and establishment of criminal penalties. The law became effective in 2009.

3) Solid Waste Facility and LEA Enforcement Component Metrics

Solid Waste Facility and LEA Enforcement Component Data Characteristics

Solid waste facility enforcement related data is collected from LEA and EA monthly/quarterly inspections at each permitted solid waste facility as required by law, LEA progress updates on implementing Enforcement Program Plans (EPP) and LEA evaluation workplans, and LEA and EA progress updates on enforcement actions.

Solid Waste Facility and LEA Enforcement Component Inputs

See description of enforcement program resources in the IWMB Enforcement Program Overview.

Solid Waste Facility and LEA Enforcement Component Outputs

Between 2000 and 2008 the number of enforcement orders issued to active facilities has decreased by nearly half. LEA inspections have decreased two (2) percent, EA inspections have increased 55 percent and IWMB pre-permit and 18-month oversight inspections have increased 33 percent.

In 2000:

- 10,765 inspections were conducted by LEAs
- 308 inspections by the IWMB's EA program
- 130 IWMB inspections (pre-permit and 18 month)
- 81 enforcement orders were issued
- 54 Notice and Orders were issued by LEAs
- 21 *Notices of Intent to List on the Inventory* were issued to facilities by the IWMB, and six (6) facilities did not comply and were listed on the *Inventory*.

In 2008:

- 10,495 inspections were conducted by LEAs
- 477 inspections by the IWMB's EA program
- 173 IWMB inspections (pre-permit, 18 month,)
- 45 enforcement orders were issued
- 17 Notice and Orders were issued by LEAs/EAs
- 22 *Notices of Intent to List on the Inventory* were issued to facilities by the IWMB, and six (6) facilities did not comply and were listed on the *Inventory*

Solid Waste Facility and LEA Enforcement Component Outcomes

Significant violation non-compliance rates at solid waste management facilities have decreased since implementation of the IWMB/LEA Partnership, which began in 2000. For solid waste facilities, significant violations are being listed on the Inventory of Facilities that Violate State Minimum Standards and being on an enforcement order. Four percent (23) of the 552 permitted active solid waste facilities and disposal sites had significant violations and were under enforcement action in 2008. In some cases a facility had multiple enforcement actions in 2008 (Notice of Intent to List on the Inventory, Inventory and one or more

enforcement orders). However, about ¾'s of the facilities that received a Notice of Intent to List on the Inventory, came into compliance and did not move to a significant violation. In addition, the number of solid waste facilities with significant violations that were listed on the Inventory dropped from eight to six, a 25% increase in compliance. The total number of enforcement actions from 2000-2008 are shown in Figure 8.



Figure 8. Solid Waste Facility Enforcement Actions, 2000 to 2008

Year	Solid Waste Facility Enforcement Action Type		
	Notice of Intent to List on Inventory	Listed on Inventory*	Enforcement Orders*
2000	21	6	54
2001	22	6	43
2002	40	13	48
2003	28	9	52
2004	34	11	51
2005	51	11	41
2006	28	9	51
2007	14	8	33
2008	22	6	17

* Significant Violation

Table 1. Solid Waste Facility Enforcement Actions, 2000 to 2008

Every three years the IWMB evaluates solid waste management LEA performance. The evaluation focuses on whether LEAs met their EPP and performed as required by statute and regulation. In 2007 IWMB completed the third evaluation cycle for the years 2003-2006. Twenty-six (26) of 54 evaluated LEAs were found to be fulfilling their responsibilities in regards to implementation of their enforcement authority during the third LEA evaluation cycle. The remaining 28 LEAs were found to not to be fulfilling all their responsibilities during this time frame. The 28 LEAs are all on corrective action plans to correct issues.

IWMB is monitoring LEA progress in implementing the corrective action plans and this will be part of the fourth evaluation cycle (2007-2009). All 28 LEAs on corrective action plans are making progress in implementing those plans

Solid Waste Facility and LEA Enforcement Limitations

An important component of achieving 100 percent compliance is working through LEAs and verifying that LEAs are performing their duties in accordance with the law. The IWMB is reviewing the municipal solid waste enforcement program to identify opportunities for additional progress in increasing compliance and enforcement. Specifically the IWMB is in the process of developing database triggers to identify issues early, and then providing assistance to help LEAs and operators achieve compliance with the ultimate goal of achieving 100 percent compliance. During 2008, the IWMB focused on updating information in its databases that will support the development of the database reports to track triggers such as: 1) chronic violations not handled at the local level; 2) chronic permit violations other than state minimum standards covered by the Inventory process; 3) lack of LEA inspections; and 4) multiple enforcement orders that do not show progress. This information will also be used by IWMB staff to develop LEA and operator training programs and focus its technical assistance efforts for LEAs.

Local Government Diversion Enforcement Component

Local Government Diversion Enforcement Component Description

The California Integrated Waste Management Act (AB 939, Sher, Chapter 1095, Statutes of 1989 as amended [IWMA]) made all California cities, counties, and IWMB-approved regional solid waste management agencies responsible for enacting plans and implementing programs to divert 50 percent of waste disposed starting in 2000. Waste diversion includes waste reduction, reuse, recycling, and composting of all waste generated (created) by residents, businesses, industries and institutions.

As required by law, the IWMB:

- provides assistance to local governments as they develop and implement plans to meet the mandates of the IWMA;
- approves local government waste management plans;
- determines whether local governments have complied with the diversion requirements;
- issues compliance orders to those not meeting diversion requirements; and
- assesses penalties of up to \$10,000 per day on local governments that fail to comply with the terms of the compliance orders.

Once a local government adopts a waste diversion plan, it must implement the plan to the best of its ability (PRC Section 41850). To help the IWMB determine the status of diversion program implementation, the local government submits an annual report to IWMB. Every two years the IWMB conducts an independent biennial review of the local government's progress toward implementing its diversion plan to achieve the 50 percent diversion requirement.

In 2008, there were 540 cities and counties in California that were required to plan and implement diversion programs to achieve 50 percent diversion. The IWMA allows cities and counties to join regional agencies, to realize reduced costs for programs and reporting, as well as to improve accuracy of measurements by reducing complex boundaries. Because many cities and counties have joined regional agencies, in 2008 there were 414 local governments subject to these requirements.

To ensure consistency in its evaluation and treatment of jurisdictions during the biennial review and any subsequent hearings, the IWMB adopted enforcement policies in February 1995, and updated the policies in August 2001. The policy is incorporated into statute by reference (PRC Section 41850).

If the implementation of a local government's waste diversion plan does not result in 50 percent solid waste diversion, the IWMB may do one of the following:

1. Determine that the local government's program implementation efforts are sufficient to warrant "good-faith effort" status; or
2. Place the local government under a compliance order (PRC Section 41825).

Since there are many diversion rate accuracy issues (see Local Government Diversion Program Limitations section below for a description of accuracy issues), the emphasis of the IWMB evaluation is on whether or not the local government has made a "good faith effort" to implement all reasonable and feasible diversion programs. When a local government fails to make a "good-faith effort" to implement diversion programs to achieve 50 percent waste diversion, the IWMB holds a hearing to determine whether to place the local government on compliance. The compliance order issued by the IWMB after such a hearing is accompanied by a plan for corrective action outlining specific steps and a schedule of deadlines which will bring the local government into compliance with the IWMA. The focus of the corrective action plan is also on implementation of all reasonable and feasible diversion programs, though some corrective action plans have included work on improving diversion rate measurement accuracy.

When a local government fails to implement the conditions of its compliance order, the IWMB conducts a penalty hearing to determine whether to exercise its authority under PRC Section 41850 to fine local governments up to \$10,000 per day.

To address the issues in the limitations section and address interests of the regulated community, the Legislature passed SB 1016 (Wiggins, Chapter 343, Statutes of 2008). This legislation allows a local government and the IWMB to obtain more timely and accurate information on reductions in tons disposed, focuses efforts on implementing diversion programs to reduce waste sent to disposal and makes compliance determinations easier.

Under the "old" system, calculating diversion rates was a time-consuming and lengthy process, and rates could not be finalized for about 2 years after the measurement year. Diversion rates also were based on estimates of generation that often were often outdated and inaccurate. The "new" SB1016 system enables local governments to see their progress in a timely manner. Under the new system, each local government has its per capita disposal indicator within 6-9 months of the end of the reporting period instead of 18-24 months. This enables the local governments and IWMB to address program performance issues earlier.

SB 1016 does not change the 50 percent diversion requirement, it just measures it differently. The measurement system shifts from the solid waste diversion measurement to a per capita disposal measurement system. The per capita disposal is an indicator that allows for local growth. As residents or employees increase, report-year disposal tons can increase and still be consistent with the 50 percent per capita disposal target. Through this system each local government's compliance will continue to be evaluated on a case-by-case basis. Local governments will not be compared to other local governments or the statewide average. Local governments will only be compared to their own 50 percent per capita disposal target.

Under the old and new systems, the most important aspect of compliance and enforcement is diversion program implementation. To evaluate compliance, the IWMB will look at a local government's per capita disposal rate as an indicator of how well its programs are keeping solid waste disposal at or below a local government's unique 50 percent per capita disposal target (the new system's benchmark indicator of the 50 percent diversion mandate). However, this number is just one factor and by itself does not determine compliance or when to take enforcement action. Compliance is based on the IWMB determining that a local government is continuing to implement its selected diversion programs and is making progress in meeting its target.

Local governments will have a new IWMB Board Review cycle to determine compliance. The review cycle will be based on each local government's 2005/06 biennial review status. The cycles include:

- 50 percent diversion or above--four years for local governments determined to be at or above 50 percent diversion, or met their rural reduced goal, in 2006 and who have implemented their diversion programs.
- Good faith effort--two years for local governments determined to have been below 50 percent diversion in 2006, but who have implemented their diversion programs and have been determined to be making a good faith effort.
- On a Compliance Order--as specified in compliance schedule.
- At any time for local governments determined to have performance problems (for example through random audits).

In the future, a Board Review frequency may change if a local government's status changes. The first two-year review will be in 2010 upon receipt of 2009 annual reports and the first four-year review will be in 2012 upon receipt of 2011 annual reports.

Local Government Diversion Enforcement Goals

The Strategic Directives focus on minimizing waste and maximizing diversion of materials from landfills through the waste management hierarchy of waste prevention, recycling and composting, and safe disposal of waste. The Strategic Directives also focus on compliance with the requirements that local governments plan and implement diversion programs to achieve 50 percent diversion. To accomplish these strategic directives the IWMB will:

- Provide vigorous oversight of local governments to ensure that 50 percent diversion is maintained among those that have already attained it.
- Increase the number of local governments that reach the 50 percent level.
- Continually increase the statewide annual diversion rate beyond 50 percent.
- Ensure implementation of diversion programs in 100 percent of jurisdictions in California.
- Ensure all jurisdictions are in compliance with the diversion requirements

Local Government Diversion Enforcement Component Metrics

Local Government Diversion Enforcement Component Data Characteristics

Local government diversion related data is collected from a number of sources. Waste disposed by all residents and businesses is collected at permitted solid waste facilities and reported to the IWMB in the Disposal Reporting System. This data is included in the IWMB's calculation of default diversion rates. Local governments correct diversion rate data, if they have corrections and adjustments and report the diversion rate and diversion program implementation data in their annual progress report to the IWMB.

Local Government Diversion Enforcement Component Inputs

See description of enforcement program resources in the IWMB Enforcement Program Overview.

Local Government Diversion Enforcement Component Outputs

Biennial reviews take place when the diversion rate information is available for the second year of the two year cycle (for example 2005-2006). For 2006 the calculation factors required to estimate the diversion rate were not available until December 2007. Local government annual reports with their 2006 diversion rates were due in March 2008 and the results of the 2005-2006 biennial reviews were considered by the IWMB in December 2008.

As a result of the 2005-2006 biennial reviews, three local governments were placed on compliance in 2008: Compton, Santa Paula and Firebaugh. Two other local governments were scheduled for 2009 biennial reviews for compliance orders.

Twelve local governments were on compliance orders at the end of 2008. These include: Cerritos, Compton, Daly City, Downey, Firebaugh, Hawaiian Gardens, Hermosa Beach, Inglewood, Los Angeles Regional Agency, Paramount, Ridgecrest and Santa Paula.

Two local governments met the terms of their compliance orders in 2008 and were removed from compliance status by the IWMB. These local governments include: Adelanto and Fortuna.

One local government on an existing compliance order did not successfully implement its compliance order. The IWMB conducted a penalty hearing for the City of Cerritos, determined the City had not made a good faith effort to implement its diversion programs and issued a penalty of \$84,000.

Local Government Diversion Enforcement Component Outcomes

The IWMB provides assistance to local governments, as required by law, to help them achieve compliance with diversion requirements. The IWMB also places local governments on compliance orders if they have not met requirements, or made a good faith effort to meet the diversion requirements. This has resulted in increased compliance over time. In the 1999-2000 Biennial Review Cycle 65 percent of local governments were found to be in compliance and approved by the IWMB. In the 2005-2006 Biennial Review Cycle 96 percent of local governments were found to be in compliance and approved by the IWMB (approval includes IWMB approval of good faith effort). See Figures 9 and 10 for results of the 1999-2000 and 2005-2006 Biennial Review Cycles.

Many of the issues with estimating diversion rates at the local government level are reduced when looking at statewide data. Since the IWMA went into effect in 1990, diversion rates have increased due to increased diversion, even as generation has increased. Statewide diversion rates have increased from 10 percent in 1989 to 58 percent in 2007 (the latest year for which data is available). See Figure 11 and Table 2 for the statewide per capita disposal and diversion over time.

The IWMB's Strategic Directives include continually increasing the statewide annual diversion rate beyond 50 percent. The 2007 statewide diversion rate was 58 percent, while the 2006 statewide diversion rate was 54 percent. The total waste generated by Californian's increased by 900,000 tons between 2006 and 2007.

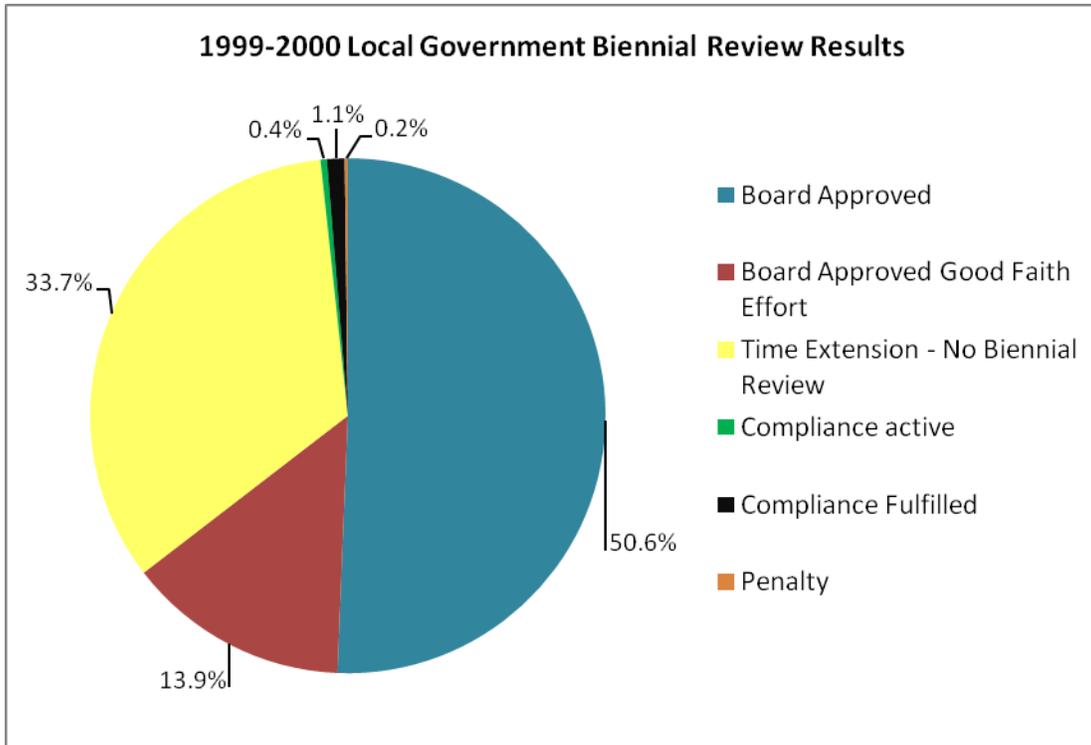


Figure 9. Results of the 1999-2000 Biennial Review Cycle

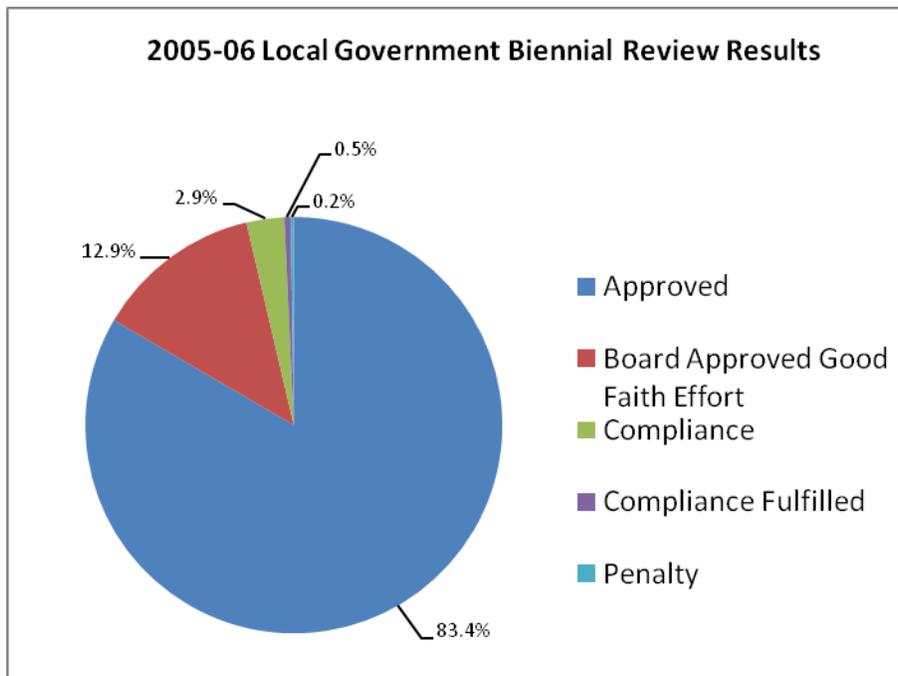


Figure 10. Results of the 2005-06 Biennial Review Cycle

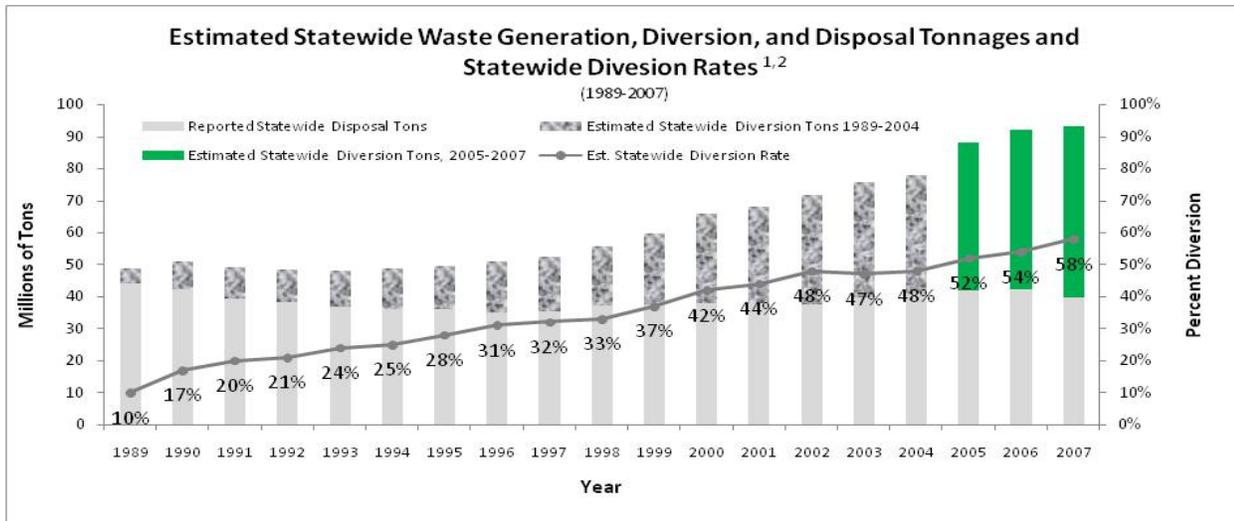


Figure 11. Statewide Disposal, Diversion and Generation Rates

¹ The Board's [Taxable Sales Deflator Index](#) (TSDI) was used to remove inflation from taxable sales amounts used in statewide diversion rate estimates for 2005, 2006 and 2007. A preliminary TSDI is used for the statewide diversion rate. Prior to 2005, Consumer Price Index (CPI) was used. In 2004, the State Board of Equalization stated that its taxable sales deflator is a more accurate measure of inflation in taxable sale amounts. Because of this change in methodology, the statewide generation and diversion rate estimates for 2005, 2006, and 2007 are not directly comparable with prior year estimates.

² Per Chapter 993, Statutes of 2002 (Chavez, AB 2308), 2001-2005 disposal figures do not include waste sent to three Integrated Waste Management Board-permitted inert mine-reclamation facilities in Southern California. Starting in 2006, disposal does not include waste sent to two of these facilities. This represents approximately 2 percentage points of diversion.

<u>Year</u>	<u>Estimated Statewide Diversion (Millions of Tons) ^{1,2}</u>	<u>Reported Statewide Disposal (Millions of Tons)</u>	<u>Est. Statewide Diversion Rate</u>	<u>Est. Statewide Generation (Millions of Tons)</u>
1989	5	44	10%	49
1990	8.5	42.4	17%	50.9
1991	9.7	39.5	20%	49.2
1992	10.2	38.4	21%	48.6
1993	11.4	36.7	24%	48.1
1994	12.4	36.3	25%	48.7
1995	13.7	36	28%	49.7
1996	15.9	35	31%	50.9
1997	17	35.5	32%	52.5
1998	18.5	37.4	33%	55.9
1999	22.2	37.5	37%	59.7
2000	28	38.1	42%	66.1
2001	29.9	38.1	44%	68
2002	34.2	37.6	48%	71.8
2003	35.8	39.9	47%	75.7
2004	37	40.9	48%	77.9
2005	46.2	42	52%	88.2
2006	50.1	42.2	54%	92.2
2007	53.5	39.6	58%	93.1

Table 2. Statewide Disposal, Diversion and Generation Rates

¹ The Board's [Taxable Sales Deflator Index](#) (TSDI) was used to remove inflation from taxable sales amounts used in statewide diversion rate estimates for 2005, 2006 and 2007. A preliminary TSDI is used for the statewide diversion rate. Prior to 2005, Consumer Price Index (CPI) was used. In 2004, the State Board of Equalization stated that its taxable sales deflator is a more accurate measure of inflation in taxable sale amounts. Because of this change in methodology, the statewide generation and diversion rate estimates for 2005, 2006 and 2007 are not directly comparable with prior year estimates.

² Per Chapter 993, Statutes of 2002 (Chavez, AB 2308), 2001-2005 disposal figures do not include waste sent to three Integrated Waste Management Board-permitted inert mine-reclamation facilities in Southern California. Starting in 2006, disposal does not include waste sent to two of these facilities. This represents approximately 2 percentage points of diversion.

Environmental/Health Outcomes

The CalEPA Environmental Protection Indicators for California (EPIC), that were originally published in 2004, look at statewide diversion data on a per capita basis rather than for the state as a whole as described above in the outcomes section. Many of the issues with estimating diversion rates at the local government level are reduced when looking at statewide data. Since the IWMA went into effect in 1990, per capita disposal rates have decreased due to increased diversion, even as generation has increased. See Figure 12 and Table 3 for the statewide per capita disposal and diversion over time.

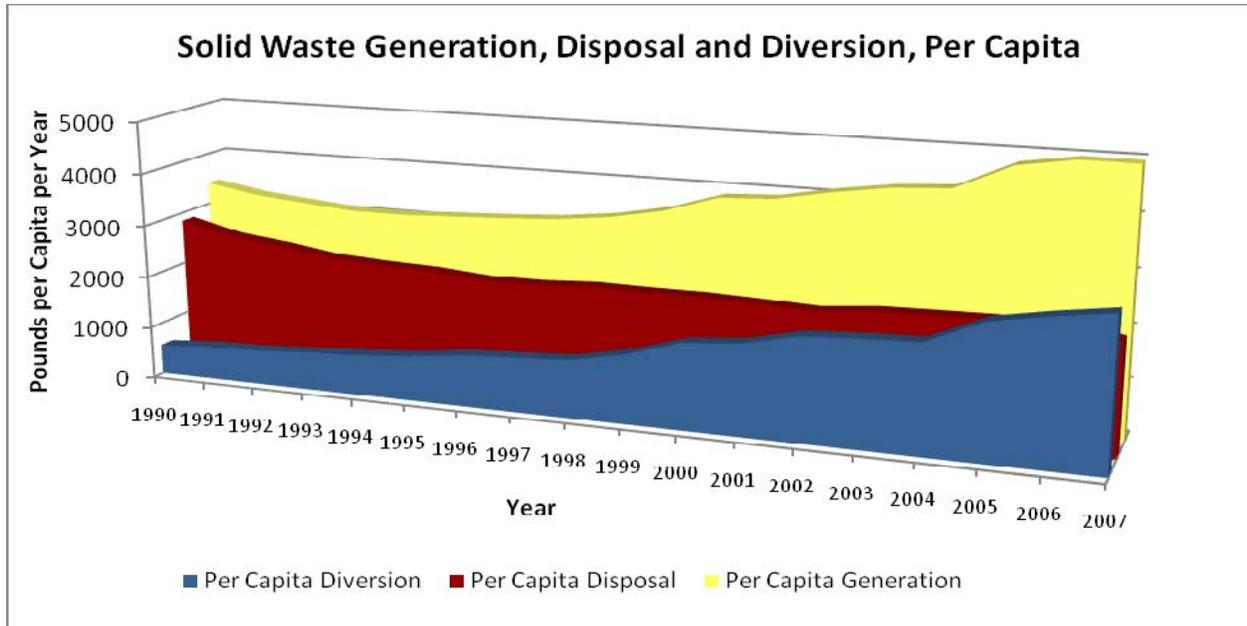


Figure 12. Statewide Per Capita Waste Disposal, Diversion and Generation

Pounds per Capita per Year

Year	Per Capita Diversion	Per Capita Disposal	Per Capita Generation
1990	570.5	2845.6	3416.1
1991	640.3	2607.3	3247.5
1992	662.3	2493.5	3155.8
1993	728.4	2345.0	3073.5
1994	782.3	2290.2	3072.6
1995	858.9	2257.1	3116.0
1996	987.6	2173.9	3161.5
1997	1042.9	2177.9	3220.9
1998	1104.5	2232.8	3337.3
1999	1313.6	2218.9	3532.5
2000	1632.7	2221.6	3854.2
2001	1718.4	2189.7	3908.0
2002	1954.3	2148.6	4102.9
2003	2011.2	2241.6	4252.8
2004	2049.9	2265.9	4315.8
2005	2510.9	2282.6	4793.5
2006	2693.5	2268.8	4957.0
2007	2845.7	2106.4	4952.1

Table 3. Statewide Per Capita Waste Disposal, Diversion and Generation

Local Government Diversion Enforcement Limitations

In the 1980s, California faced landfill siting problems and a projected shortage of landfill capacity that could impact the health and safety of Californians. In 1989, the IWMA established a framework to limit reliance on landfills and waste-to-energy projects and give greater weight to recycling, waste prevention, reduction, and composting methods. The IWMA placed the burden for achieving these goals on cities and counties and required that they establish base-level waste generation (generation tons = diversion tons + disposal tons) by measuring both diversion and disposal.

In the early 1990s, cities and counties found it was difficult and costly to obtain accurate information on quantities and types of wastes recycled and composted, and to calculate waste prevention. Waste diversion activities are decentralized and dispersed, as compared to disposal that occurs at a limited number of facilities. Recyclers and businesses were reluctant to provide information that could give competitors an advantage and the law does not require they provide such information. Local governments bear the responsibility of meeting IWMA requirements, but do not necessarily control all the waste generators within their borders.

In 1992, state law was changed to redesign the measurement system from a diversion measurement system to a disposal-based measurement system. Diversion rate estimates are made by comparing disposal tonnage to estimated waste generation (estimated diversion tons = adjusted base-level generation – disposal tons). The adjustment is needed so jurisdictions are not penalized for changes in population and economics outside their control that can significantly impact the amount of waste generated.

Base-level waste generation is the starting point of the disposal-based diversion rate measurement system. Many inaccurate assumptions were made about California's waste stream when local governments established their original base levels. Since the adjustment method is applied to base level data, inaccuracies in base-level data can have a significant impact on the estimated diversion rate.

In the mid-1990's, the IWMB was required to develop the disposal-reporting system to track where waste comes from because the measurement system is heavily dependent on accurate disposal data. The disposal reporting system regulations were recently revised to improve accuracy. However, there are still accuracy issues in areas with complex boundaries and high amounts of self-haul waste and for small jurisdictions.

There are many accuracy issues related to diversion rates and these have made compliance determinations more difficult. Key issues for the IWMB and local governments have always been:

- recognition that potential errors in the diversion rate measurement system make the diversion rate an estimate, not an absolute value; and
- The appropriate balance between resources needed to improve accuracy and resources needed to establish and maintain the diversion programs and infrastructure.

State-sponsored legislation passed during the 2008 legislative session to improve the measurement system. The changes in legislation will allow local governments and the IWMB to obtain more timely and accurate information on reductions in tons disposed, focus efforts on implementing diversion programs to reduce waste sent to disposal and make compliance determinations easier.

4) Rigid Plastic Packaging Containers (RPPC) Minimum Recycled Content Enforcement Component

RPPC Minimum Recycled Content Enforcement Component Description

The RPPC law was enacted as part of an effort to increase the use of recycled plastic and reduce the amount of plastic waste disposed in California landfills. The law regulates companies that produce or generate products that are held in RPPCs that are sold or offered for sale in California. The law is enforced by the IWMB through a compliance certification process for regulated companies.

California's RPPC law supports new and expanded infrastructures for collecting and recycling plastic resins in California and around the world. The law diverts plastics from disposal in California landfills by supporting demand for postconsumer material, which in turn encourages recyclers to divert more material that would otherwise go to landfills. Continued implementation and effective enforcement of the law is essential to follow through on the IWMB's commitment to protect the environment and is critical to maintaining demand for postconsumer resins.

The law applies to manufacturers/producers/generators of products sold or offered for sale in regulated RPPCs as defined by law. When a company's name, or any of its brand names or subsidiaries or affiliates, appears on the container label of a product that is sold or offered for sale into the State of California, either directly or indirectly (for example, through distributors, franchises, internet sales, etc.), then that company is subject to the requirements of the California RPPC law.

Several types of containers are exempt from the RPPC requirements these include rigid plastic containers:

- used for shipping drugs, medical devices, cosmetics, food, medical food, or infant formula as defined by the Federal Food, Drug, and Cosmetic Act;
- used for shipping toxic or hazardous products regulated by the Federal Insecticide, Fungicide, and Rodenticide Act; and
- used for shipping hazardous materials that are prohibited by federal law from being manufactured with "used material" (postconsumer resin) by federal packaging material specifications, or are subject to specified federal testing standards, or to which recommendations of the United Nations on the transport of dangerous goods are applicable.

California statute allows the IWMB to assess penalties of up to \$50,000 for any violation up to a maximum of \$100,000 annually. Violations include, but are not limited to, failure to submit all required forms, or submitting incomplete forms, or noncompliance with the RPPC law.

RPPC Minimum Recycled Content Enforcement Component Goals

The RPPC law supports California's recycling infrastructure and supports greater collection and reprocessing of plastic resins into containers produced. Compliance can be achieved in several ways:

- Some compliance options were designed to encourage source reduction (waste prevention), recycling, and reuse/refilling of RPPCs;
- The recycling compliance option promotes the use of more postconsumer resin in RPPCs, and reduces the amount of virgin resin used to manufacture RPPCs.

One hundred companies selected from a pool of companies that produce or generate products in RPPCs are required to certify they complied in a calendar year, and are subject to penalties if they fail to demonstrate compliance.

The RPPC program promotes extended producer responsibility by supporting infrastructure for collecting and recycling plastic resins and requiring recycled content in plastic packaging. The Strategic Directives set goals for additional producers to assume the responsibility for the safe stewardship of their materials in order to promote environmental sustainability.

RPPC Minimum Recycled Content Enforcement Component Metrics

RPPC Minimum Recycled Content Enforcement Component Data Characteristics

Companies selected to certify they complied in a particular calendar year are required to submit forms containing data required by statute and regulations.

RPPC Minimum Recycled Content Enforcement Component Inputs

See description of enforcement program resources in the IWMB Enforcement Program Overview.

RPPC Minimum Recycled Content Enforcement Component Outputs

During 2008, IWMB staff reviewed additional compliance certification information submitted by nine companies regarding compliance during 2005. Five of the companies submitted additional data that supported compliance. Three of the companies were found not to comply and penalties of about \$225,000 were collected. Additional information from one company is still under review and a decision is expected in 2009.

RPPC Minimum Recycled Content Enforcement Component Limitations

The CIWMB has conducted five compliance certification cycles for the following reporting periods: 1996; 1997-99 (combined into one certification); 2000; 2001 and 2005. Based on over 10 years experience in conducting compliance certifications and in taking enforcement actions, it became clear there were inconsistencies, inequities, complexities, and outdated provisions in the current regulations which are an impediment to the effective and efficient implementation of the law. Therefore, the IWMB decided to adopt revised regulations, and educate businesses about the requirements in the revised regulations, before undertaking another compliance certification cycle.

Stakeholders have raised many issues regarding the existing RPPC regulations. The IWMB directed staff to revise the RPPC regulations and implement an outreach and educational campaign before undertaking another compliance cycle and assessing penalties. Regulations revisions are needed to make them more clear and specific; to reorganize the regulations to improve ease of understanding; to eliminate inequities in regard to what types of containers are regulated; to align the regulations with the intent of the law to support markets for PCM; and to align the regulations with the Board's strategic directive for extended producer responsibility.

Modifying the regulations to clarify that the owner of the brand name is the corporate entity responsible for generating products packaged in RPPCs for sale in California will have the effect of requiring manufacturers to take responsibility for the packaging it uses. This should have the effect of "greening" manufacturer's entire supply chain as they require their suppliers to provide them with compliant containers.

Modifying the definition of a rigid plastic packaging container to include containers that are almost identical to regulated containers, but that are not currently regulated by the existing regulations will level the playing field. This regulatory inconsistency creates an inequitable regulatory environment. For example, containers with metal handles are currently not regulated, even though the same container without a handle, or with a plastic handle, is regulated.

IWMB directed staff to start the formal regulations revisions process. Due to high staff turnover and vacancies, the regulations revisions have been delayed. The IWMB will resume RPPC certifications after revised regulation are adopted.

5) Illegal Dumping Component

Illegal Dumping Component Description

Illegal dumping poses risks to the general public and the environment, degrades the quality of life in affected communities, and is costly to cleanup. Illegal dumping is an intentional act that is typically done for economic gain. In contrast, littering is not done for economic gain and may or may not be an intentional act. Currently, no state agency is tasked with the coordination of issues arising from illegal dumping. In general, local entities take the lead in enforcement and cleanup for such sites.

IWMB initiated a coordinated effort to assess: 1) the statewide extent of the illegal dumping problem; 2) the amount of resources that local governments spend annually combating the problem; and 3) local government's needs to combat the problem. An Illegal Dumping Enforcement Task Force (IDETF) was formed in early 2006 and activities continued into 2009. The twenty-two members included local, state, federal and local government employees, legal associations, hazardous material management associations, private solid waste operators and associations, environmental non-profit associations, and private citizens.

In conjunction with the IDETF activities, California State Association of Counties (CSAC) and the League of California Cities provided staffing to conduct a 2008 follow-up to the original 2006 cost survey. While not yet finalized, the 2008 survey had a greater level of local government participation and indicated results consistent with the 2006 survey. The 2006 survey reported an annual cost of over \$34 million to local government for abatement. In addition, the Department of Transportation has an annual budget for litter and illegal dumping abatement and prevention of \$55 million, which means a combined minimum cost of \$89 million.

Illegal Dumping Component Metrics

Illegal Dumping Component Data Characteristics

Since no state agency has authority for illegal dumping, a variety of data is collected by local and state agencies depending on their needs and available resources.

Illegal Dumping Component Inputs

See description of enforcement program resources in the IWMB Enforcement Program Overview.

Illegal Dumping Component Outputs

IWMB staff worked with local government representatives to develop a web-based [Illegal Dumping Resources Toolbox](#). The toolbox emphasizes the four core elements of an effective program to keep pace with illegal dumping; prevention, abatement, cleanup, and enforcement. The enforcement element articulates needed staff resources including illegal dumping enforcement officers; documentation tools and resources to support enforcement; and administrative and judicial approaches for case resolution. The toolbox will be rolled out to code enforcement officials, local enforcement agencies, and local government decision makers in 2009.

IWMB continues to move aggressively under its Solid Waste Disposal and Codisposal Site Cleanup Program to quickly cleanup large illegal disposal sites that pose a significant threat to the surrounding communities where responsible parties are unable or unwilling to perform the necessary remediation. A recent example of effective and timely remediation is the IWMB-managed cleanup of the Mission Fiber Illegal Disposal Site near Blythe, which was requested by the Riverside County Code Enforcement Department. Within four weeks of the Board's approval over 8,550 tons of waste was removed and properly disposed at a cost of over \$657,000.

In addition, IWMB is implementing innovative cleanup initiatives near the U.S.-Mexico border. IWMB is working in partnership with the California Department of Parks and Recreation to fund and install a trash boom system for basins to improve the removal of trash, tires, and sediment during storm events and prevent impacts to the Tijuana River Estuary. The Imperial County New River Collaborative (Collaborative), consisting of various local agencies and IWMB staff is cleaning up and preventing reoccurrence of 64 chronic mixed tire and solid waste illegal dumping sites in Imperial County. The Collaborative focuses on cleanup of sites voluntarily by responsible parties, or if necessary based on issuance of LEA enforcement activities. However, many sites are on public lands or otherwise impact innocent property owners that may qualify for funding through the Farm and Ranch Grant Program. A pilot program Master Agreement was awarded to the Solid Waste LEA under the Farm and Ranch Grant Program. The Master Agreement accelerates the normal process to cleanup 14 of these sites. As of December 2008, the LEA has verified that all but four of the sites are either cleaned up or in the process of cleanup.

To address 50 high-priority chronic illegal dumping locations on the public right-of-way the IWMB provided a \$500,000 grant to the City of Los Angeles in June 2008. The City plans to clean up the sites while discouraging future illegal dumping activities at these locations by utilizing various enforcement strategies, including daily and weekly patrols and surveillance, stakeouts, and issuance of citations and fines under the City's Neighborhood Prosecutor Program.

Illegal Dumping Component Limitations

Until the following are addressed, illegal dumping will continue to be an issue throughout California: (1) there is a critical need for state coordination, leadership, and assistance to local illegal dumping enforcement, abatement and prevention programs; (2) legislation is required to provide local and state government with the needed legislative authority and equipment to administer effective illegal dumping programs as described above and (3) additional funding sources are needed to support the increasing costs of illegal dumping.

Two pieces State-sponsored legislation related to illegal dumping were introduced during 2008, but the primary one, [Assembly Bill 2695 \(Niello\)](#), did not pass.

III. FUTURE DIRECTIONS

As a result of the 2007 reorganization to implement Governor Schwarzenegger's Enforcement Initiative, during 2008 CEED streamlined a number of existing compliance and enforcement practices to improve their effectiveness in meeting the IWMB's Strategic Directives, the Five-Year Tire Plan and the Compliance Targeting Strategy.

During 2008 many existing supervisors, managers and staff continued to leave for higher paying staff-level scientist positions elsewhere at CalEPA. IWMB hired many new staff, supervisors and managers and extensive training will be needed so they can perform their new duties.

The IWMB's key enforcement objectives for 2009 include meeting strategic directives, promoting state sponsored legislation, streamlining processes as described under each component below, clarifying requirements through regulations revisions and evaluating the potential of new technology to improve enforcement in the future. These activities have been identified in this chapter and are summarized below.

Solid Waste Facility and LEA Enforcement Component

In the area of solid waste facility compliance and enforcement the IWMB will focus on implementing Strategic Directives and the Compliance Targeting Strategy.

- Meet the Strategic Directives goals to:
 - Assure that 100 percent of active landfills and other solid waste facilities meet state minimum standards as well as permit terms and conditions and that they comply with federal and state waste management laws;
 - Reduce the number of solid waste facilities on the noncompliance ("Inventory") list;
 - Increase by 2 percent the number of independent and random CEED inspections (audits) and field investigations conducted at solid waste facilities
- Focus on LEAs that have been on corrective work plans for two or more evaluation cycles. Provide targeted assistance, and where the assistance does not improve performance, initiate an early LEA evaluation. Outcomes range from placing the LEA on probation to the IWMB taking over all LEA duties.
- Focus additional inspections on high profile sites with potential or known compliance issues
- Identify opportunities for additional progress in increasing compliance and enforcement.
 - Develop automated electronic inspection reports to obtain data more quickly and reduce potential data entry errors
 - Update information in databases and develop database triggers to identify issues early. Database triggers could include: chronic violations not handled at the local level; chronic permit violations other than state minimum standards covered by the Inventory process; lack of LEA inspections; and multiple enforcement orders that do not show progress.
 - Identify types of assistance and training needed to improve compliance with input from the LEAs
 - Provide assistance to help LEAs and operators achieve compliance with the ultimate goal of achieving 100 percent compliance
- Obtain authority to establish reimbursable positions when the IWMB assumes EA duties.
- Begin to implement AB 2679 by determining needed modifications to existing enforcement processes. Develop LEA guidance for minor violation program.

Tire Enforcement Component

The Tire Enforcement Program will focus on efforts to:

- Meet the Strategic Directive goal:
 - Assure that 100 percent of tire facilities meet state minimum standards as well as permit terms and conditions, and that they comply with federal and state waste management laws;
- Obtain Board approval for a permanent streamlined penalty process for tire hauler and manifest violations permanent and expand the streamlined process to tire facility violations that meet the same criteria. Continue to streamline processes to allow more enforcement within existing staff levels.

- Evaluate final results of the IWMB's contract on use of satellite technology in identifying waste tire piles. Determine whether the approach is currently viable and if so, identify the next steps in using this technology.
- Evaluate results of the IWMB's contract on tire flow in the California/Mexico border region. Determine appropriate IWMB actions to address illegal export of tires to Mexico and increase recycling/reuse of waste tires.

Local Government Diversion Enforcement Component

In this area, the program will focus on efforts to:

- Meet the Strategic Directives goals and:
 - Ensure implementation of diversion programs by 100 percent of local governments; and
 - Ensure all local governments are in compliance with the diversion requirements.
 - Continually increase the statewide diversion rate beyond 50 percent.
- Place local governments the Board found not to be making a "good faith effort" to achieve diversion requirements during the 2005/2006 biennial review on compliance orders. Compliance orders require a compliance implementation plan with additional diversion programs and an implementation schedule.
- Monitor local governments on compliance orders to determine whether they are meeting the schedule and terms of the compliance order. Determine whether each local government has met the terms of the compliance order. If not, conduct a hearing to consider penalties for failure to implement the compliance order.
- Conduct random audits of jurisdictions found to make a good faith effort in the 2005/2006 biennial review.
- Begin to implement SB 1016 by determining needed modifications to existing enforcement processes.

RPPC and Minimum Recycled Content Enforcement Component

In this program area, staff will focus on efforts to:

- Conduct an appeal hearing if a company appeals the IWMB decision that they are out of compliance with minimum recycled content requirements in the 2005 certification cycle.
- Revise RPPC regulations to clarify requirements and level the playing field prior to undertaking the next compliance certification process.

Illegal Dumping Component

Staff will focus on efforts to:

- Complete the pilot program in Imperial County for regional cleanup of illegal dumping sites under the IWMB's Farm and Ranch grant program and a grant application under the Solid Waste Cleanup Program.
- Complete roll-out of illegal dumping resources toolbox through trainings and participation in local and regional illegal dumping task force meetings.
- Promote State sponsored legislation to enhance local and regional efforts to combat illegal dumping.

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IV. APPENDICES

LIST OF ACRONYMS

Acronym	Full Name
14 CCR	Title 14, California Code of Regulations
27 CCR	Title 27, California Code of Regulations
ARB	California Air Resources Board
BMP	Best management practice
Cal/EPA	California Environmental Protection Agency
CalTrans	California Department of Transportation
CEED	Compliance Evaluation and Enforcement Division
CHP	California Highway Patrol
CIA	Closed, Illegal, and Abandoned Disposal Sites
CPI	Consumer Price Index
CSAC	California State Association of Counties
DTSC	California Department of Toxic Substances Control
EA	Waste tire enforcement action
EA	Solid waste enforcement agency
EPA	U.S. Environmental Protection Agency
EPIC	California Environmental Protection Agency Environmental Protection Indicators for California
EPP	Enforcement Program Plan
IDETF	Illegal Dumping Enforcement Task Force
Inventory	Inventory of Solid Waste Facilities That Violate State Minimum Standards
IWMA	Integrated Waste Management Act
IWMB	Integrated Waste Management Board
LEA	Solid waste local enforcement agency
MSWLF	Municipal Solid Waste Landfill
NOV	Notice of Violation
PCM	Post-consumer material
PRC	Public Resources Code
RCRA	U.S. Resource Conservation and Recovery Act
RPPC	Rigid Plastic Packaging Container
SMS	State Minimum Standards at solid waste handling facilities
SWFP	Solid waste facility permit
SWRCB	California State Water Resources Control Board
TSDI	Taxable Sales Deflator Index
WCM Program	Waste Compliance and Mitigation Program

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