
Follow-Up Audit of the Waste Management Programs of the Department of Health

A Report to the
Governor
and the
Legislature of
the State of
Hawaii

Report No. 96-11
April 1996

THE AUDITOR
STATE OF HAWAII

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Submitted by

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Foreword

This is a report of our follow-up audit of the Department of Health's waste management programs for the period from February 1994 to January 1996. The audit focused on the findings and recommendations contained in our 1994 Report No. 94-3, *Audit of the Hazardous Waste Management Program of the Department of Health*. Both audits were conducted pursuant to Section 23-4, Hawaii Revised Statutes, which requires the Auditor to conduct postaudits of the transactions, accounts, programs, and performance of all departments, offices, and agencies of the State.

We wish to express our appreciation for the cooperation and assistance extended by the officials and staff of the Department of Health.

Marion M. Higa
State Auditor

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Chapter 1

Introduction

The purpose of this audit is to follow up on actions taken by the Department of Health with respect to the findings and recommendations in our January 1994 report, *Audit of the Hazardous Waste Management Program of the Department of Health*, Report No. 94-3. Both audits were conducted pursuant to Section 23-4, Hawaii Revised Statutes, which requires the Auditor to conduct postaudits of the transactions, accounts, programs, and performance of all state agencies.

Background

Hawaii's waste management programs

The State's waste management programs are governed by the federal Resource Conservation and Recovery Act and by state laws. The federal Environmental Protection Agency (EPA) has the authority to develop waste management programs and adopt regulations. Its guidance documents and policy directives clarify how the regulations are to be implemented. While federal law gives authority directly to the EPA, the statute also allows EPA to authorize specific states to assume the lead role in administering waste management programs. Hawaii's programs regulating underground storage tanks and hazardous wastes are carried out under a joint federal-state arrangement with the EPA.

The Resource Conservation and Recovery Act allows each state to develop and run its own regulatory program for solid waste management, if EPA approves. Because the EPA approved Hawaii's solid waste program in June 1994, the State's program is now governed by state law. The State's program regulating infectious waste is also governed by state law because there are no federal regulations governing infectious waste.

The waste management regulatory programs are now carried out under the following laws:

- **Subtitle C of the federal Resource Conservation and Recovery Act** establishes a system for controlling hazardous waste from generation to disposal. Waste is defined as hazardous if it is ignitable, corrosive, reactive, toxic, or could cause an increase in mortality or illness, and poses a threat to human health or the environment. Examples of hazardous waste include benzene, mercury, and lead.

- **Subtitle I of the Resource Conservation and Recovery Act** regulates underground tanks used for storing hazardous substances and petroleum products including oil, gasoline, and other products.
- **Chapter 342H, HRS**, regulates the management of solid (primarily nonhazardous) wastes, such as household and commercial waste.
- **Section 321-21, HRS**, regulates the management and disposal of infectious wastes. Examples of infectious waste include blood and contaminated sharps (needles).

The programs are managed by the Department of Health's Solid and Hazardous Waste Branch, which is part of the Environmental Management Division (see Exhibit 1.1). The branch has three sections:

- the Office of Solid Waste Management,
- the Hazardous Waste Section, and
- the Underground Storage Tank Section (further divided into the Underground Storage Tank and the Leaking Underground Storage Tank sub-sections).

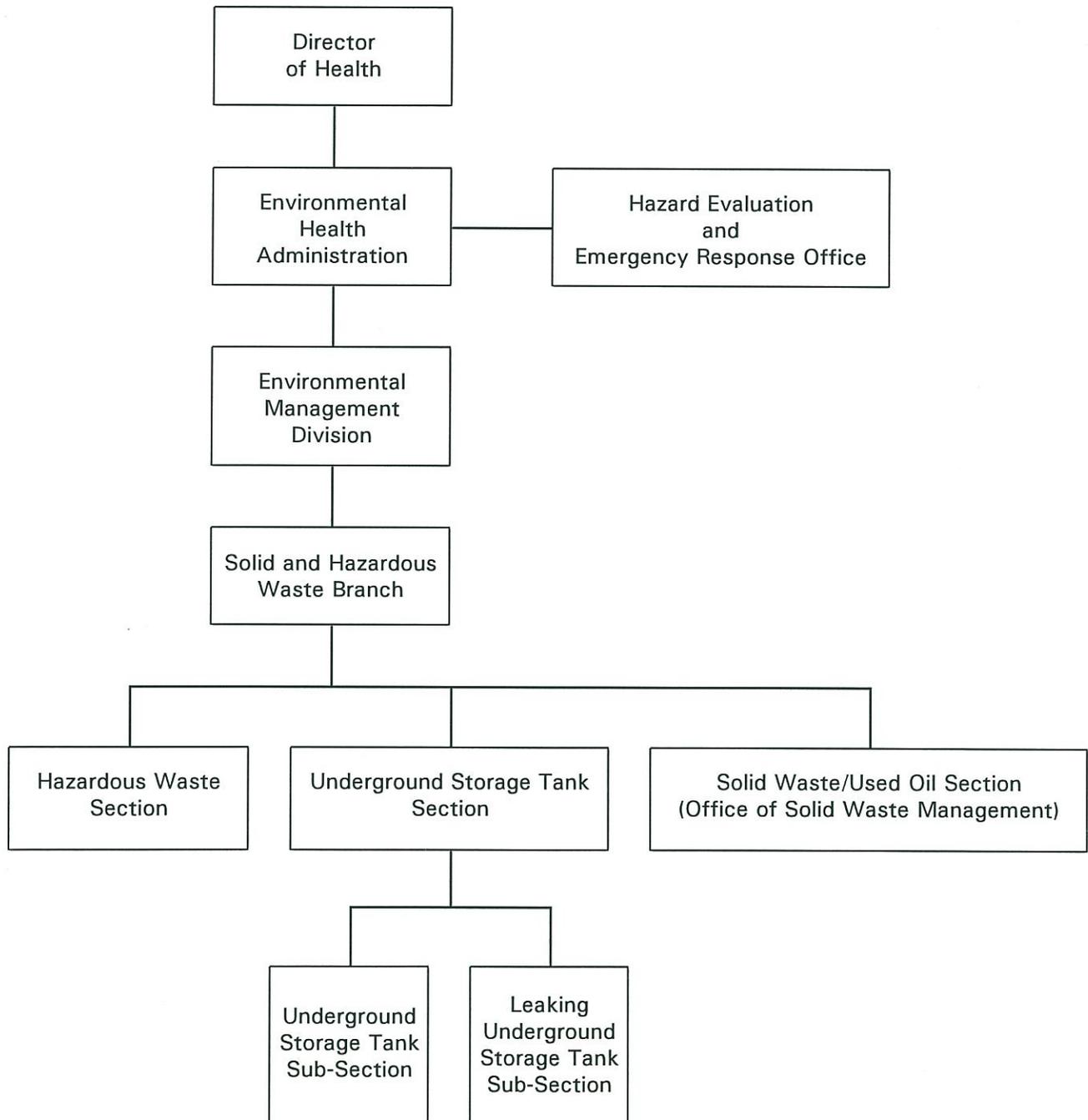
As of January 1996, the Solid and Hazardous Waste Branch had 31 authorized positions. The branch received approximately \$2.3 million in total funding for program operations in FY1995-96. About 20 percent of this amount came from state general funds, 33 percent from federal funds, and 47 percent from state special and revolving funds.

Prior report findings and recommendations

Our 1994 report found that the executive branch had not given Hawaii's waste management programs adequate budget and staff support. We recommended that the Department of Health submit a budget to ensure continuity of funding; fill vacant positions with qualified staff; give staff training opportunities; request the Legislature to restore positions; and work with the Department of Human Resources Development to streamline the classification process for authorized positions.

We found that EPA authorization for the hazardous waste and underground storage tank programs is important in strengthening enforcement, and approval for the solid waste program is important in avoiding costly landfill requirements. We recommended that the Department of Health give high priority to achieving authorization and approval.

Exhibit 1.1
Organization of Waste Management Programs
Department of Health



We also found that the department had few management controls to guide and direct its Resource Conservation and Recovery Act programs, including a central tracking system for enforcement actions, and policies and procedures. We recommended that the department develop policy and procedure manuals for the hazardous waste and solid waste programs so that compliance and enforcement actions could be tracked and monitored.

Our previous report found that the department's enforcement of regulations for hazardous waste handlers was weak, inconsistent, and long delayed. We recommended improving enforcement by inspecting facilities found to be in violation to ensure their return to compliance, and by planning how to take over responsibility for enforcement once the State becomes authorized.

We found it unlikely that the department would be able to achieve the State's solid waste reduction goal of 25 percent by January 1, 1995. We recommended that the department inform the Legislature of what was being achieved, develop strategies for meeting the 25 percent reduction goal, and notify the Legislature of the resources needed to achieve the goal.

We also found that the department's regulation of leaking underground storage tanks was minimal and relatively meaningless. We recommended that the department work on developing a meaningful field presence to monitor and enforce regulation of underground storage tanks. We also recommended that the underground storage tank special account in the Capital Loan Revolving Fund of the Department of Business, Economic Development, and Tourism be permitted to sunset because it had not been effective in funding loans for businesses to improve tanks and clean up releases.

Our prior report also found that the effectiveness of the department's regulation of infectious waste spills was uncertain because the department lacked complete information on spills. We recommended that the department amend its administrative rules to include a threshold for reporting infectious waste spills and a requirement that the counties and other responding agencies report such spills to the department's Hazard Evaluation and Emergency Response office.

Agency response

The Department of Health agreed with most of the findings and recommendations in our 1994 report and said that it would make changes to address the problems that we raised. These changes would include:

- actively pursuing authorization of the hazardous waste and underground storage tank programs;

- pursuing a streamlined procedure for classifying positions and reorganization;
- increasing the number of follow-up inspections;
- improving its documentation and filing system on follow-up inspections;
- working with the Legislature to establish and attain goals for solid waste diversion programs; and
- developing an action plan to improve monitoring and enforcement of the underground storage tank program.

The department did not agree that the underground storage tank special account should be permitted to sunset.

Objectives of the Follow-Up Audit

1. Review the extent to which findings and recommendations contained in our prior audit are being addressed.
2. Make recommendations as appropriate.

Scope and Methodology

We reviewed the Department of Health's enforcement of the Resource Conservation and Recovery Act provisions (or equivalent Hawaii statutes) for hazardous waste, underground storage tanks, and solid waste. We also examined the department's regulation of infectious medical wastes. Our focus was on the department's efforts to strengthen enforcement of the hazardous waste and underground storage tank programs, because of the high potential for environmental damage and financial impact in these areas.

We reviewed information on the budget and staffing of the programs since our previous report. We examined program databases and sampled the department's records. We sampled files on regulated facilities and examined inspection and enforcement records.

We reviewed quarterly and annual reports that detail inspecting, monitoring, investigating, and enforcing activities. We interviewed appropriate personnel in the department, other state offices, and EPA Region IX.

The period under review was from February 1994, the month after we issued our previous audit, to January 1996. Our work was performed from December 1995 through March 1996 in accordance with generally accepted government auditing standards.

Chapter 2

Findings and Recommendations

This chapter presents the findings and recommendations of our follow-up audit of the waste management programs of the Department of Health.

Our 1994 report concluded that the waste management programs had not received adequate support from the executive branch. In this follow-up audit, we found that support for the programs remains uncertain. This weakens the programs' foundation, and undermines implementation and enforcement.

We recognize that recent budget cutbacks have affected the programs and that the department must set priorities based on relative risks. We also understand that a realistic balance of tough enforcement and cooperation with regulated facilities must be achieved. However, it is important that the department do everything possible to protect humans and the environment within these limitations.

Summary of Findings

1. Support for the budget, authorization, and staffing of the Department of Health's waste management programs is uncertain. This has hindered the programs from effectively ensuring adequate protection from improperly disposed wastes and leaking underground storage tanks.
2. Enforcement of regulations covering hazardous waste handlers has weakened. Site visits are infrequent and many facilities are not in compliance.
3. Solid waste control needs improvement. Landfill inspections are uneven and infrequent, and some illegal dumpers escape enforcement.
4. The regulation of underground storage tanks fails to effectively prevent leaks and facilitate cleanup of leaking sites.
5. Databases used for program management in the underground storage tank and solid waste programs are flawed.
6. Responsibility for infectious waste regulation is fragmented and needs clarification.

Support for Waste Management Programs Remains Uncertain

Hawaii's waste management programs need adequate support if they are to effectively protect the public and the environment from improperly disposed wastes and leaking underground storage tanks. Key elements of this support include securing adequate funding, obtaining federal authorization, and filling positions with qualified staff.

During our follow-up audit, we found that funding for the hazardous waste program has become somewhat unstable. We also found that the Department of Health has hesitated in seeking authorization for the hazardous waste and underground storage tank programs. In addition, the department has not taken all the necessary initiatives to resolve staffing deficiencies. These conditions create uncertainty for the programs and weaken their foundation.

Budget support for hazardous waste program is unstable

In response to cost-control initiatives by the state administration, the Department of Health explored an option of eliminating the hazardous waste program. Although the department subsequently decided to shift funding for the program rather than eliminate it, the interest in possible elimination left a residue of uncertainty about the program's budget support.

Elimination of the program considered

Under pressure from the governor and the state budget director to cut costs, the department looked closely at the hazardous waste program. One possibility explored was elimination of the program, perhaps because the federal government would then become fully responsible for hazardous waste regulation.

Apparently responding to the department's requests, the Solid and Hazardous Waste Branch prepared written analyses of options, including elimination of the hazardous waste program. The option of eliminating the program also involved transferring the two remaining general funded positions in the underground storage tank program to a revolving fund. This option would have saved \$223,610 in general funds. The Solid and Hazardous Waste Branch also proposed an option of saving the program through shifting funding for certain provisions to federal funds, and other cuts amounting to \$220,351.

The branch laid out in detail the negative consequences of eliminating the program, and the department decided to retain the program. Under the branch's proposal, the program would now be funded primarily with federal and special funds for FY1996-97. Only three of the program's ten authorized positions would be funded through general funds, in order to provide the required minimum state match for federal funds. Federal

funds that were formerly used for training and other items including compliance inspections would now be used to fund positions.

Although the program was retained, these events demoralized program staff, who did not understand why the hazardous waste program was being considered for elimination.

Federal funds at stake

As explained by the branch, eliminating the hazardous waste program would have cost the State over \$400,000 in federal funds. The EPA would give Hawaii's grant amount to other states and EPA would become responsible for enforcement of the Resource Conservation and Recovery Act regulations in Hawaii. However, funds for federal enforcement are already scarce and appear targeted for budget cuts. Thus, the EPA would likely contribute little to monitoring and enforcement if the state program were eliminated.

Supplemental budget request raises concern

To prevent elimination of the hazardous waste program, it will be funded primarily with federal funds for FY1996-97. The branch proposed to fund only three of the program's ten authorized positions through general funds, in order to provide the required minimum state match for federal funds. In addition to the three positions that are currently federally funded, the branch proposed to change funding for four positions from general to federal funds.

However, in its supplemental budget request for FY1996-97, the department initially requested that a fifth position be changed from general to federal funds. As a result, the state could lose up to \$150,000 in federal funds because it would not be providing sufficient matching funds. Furthermore, if it loses these federal funds, the program may lack funding for 50 percent of program positions.

Department has delayed federal authorization

The Federal Resource Conservation and Recovery Act intended that each state develop and run its own hazardous waste and underground storage tank programs by becoming "authorized." According to a Hawaii official, Hawaii is one of three states that have not yet achieved authorized status for their hazardous waste programs. The Department of Health has had a *policy* to seek authorization, which would allow the state to set its own priorities for the programs and improve enforcement. However, the department's recent *actions* do not reflect its policy.

The process of achieving authorization is lengthy, involving submission of a final draft of state administrative rules, a multi-year program narrative, and a transmittal letter from the state attorney general certifying that Hawaii's statutes and rules sufficiently comply with federal rules. Until

recently, the State planned to achieve authorization for the hazardous waste program by 1995 and to seek authorization for the underground storage tank program thereafter.

The hazardous waste program was close to obtaining EPA authorization in 1995, but the deputy director for environmental health chose to delay the process until 1998 in order to incorporate recent federal rules into state administrative rules. We found, however, that it would have been possible to achieve authorization by using the current administrative rules and then later amending them to include recent federal rules. The decision to delay authorization suggests that the department is uncertain about the need for it.

Indeed, the department recently questioned the need to obtain authorized status for federal environmental protection programs. The deputy director for environmental health asked his branch chiefs to weigh the costs and benefits of authorization and determine if it is in the best interests of the State. An important consideration is that a decision to cease efforts to achieve authorization would result in the loss of federal funding, which accounted for almost 60 percent of funding for the hazardous waste and underground storage tank programs in FY1994-95.

Many branch positions are vacant

The Solid and Hazardous Waste Branch continues to experience difficulty in recruiting and retaining qualified staff. Currently, the branch has 7 staff vacancies out of 31 authorized positions. Vacant positions have weakened program functions, including monitoring and enforcement. Recent budget restrictions have contributed to the problem. The executive branch did not allow programs to hire staff from March to October 1995.

In addition, the department's delay in addressing an existing position classification problem has impeded efforts to hire qualified environmental specialists. Private consulting firms reportedly are able to offer higher salaries for comparable positions. Changes to the classification of these state positions would allow the department to offer more competitive salaries. Although the department is aware of the problem, it has not taken the initiative to make the necessary changes.

In 1994, the Department of Human Resources Development suggested that the Department of Health take the first step towards changing the classification system for environmental specialist positions, by re-writing these position descriptions. However, we found that the department has not yet done so.

Our previous report also recommended that the department give technical staff the opportunity to participate in free EPA training programs, which could help in attracting and retaining qualified staff. Recent travel

restrictions from the executive branch may have limited travel opportunities for staff. However, the branch has recently brought instructors to Hawaii and is making other efforts to provide needed training.

Enforcement of the Hazardous Waste Program Has Weakened

The Department of Health's hazardous waste program is responsible for monitoring and enforcing regulations on facilities that generate, treat, store, dispose of, or transport hazardous waste in Hawaii. The program's compliance and enforcement functions are essential in protecting human health and the environment from mismanaged hazardous wastes.

In our previous report, we recommended that the program develop enforcement policies. The department subsequently adopted an enforcement response policy which states that the purpose of enforcement is to achieve compliance quickly and deter future violators. Hawaii's program has taken over primary enforcement responsibility from the EPA for incidents occurring after the adoption of state rules in June 1994.

However, we found that site visits and inspections by the program are infrequent. Repeat offenses by large facilities and widespread noncompliance with notification requirements indicate that the program has ineffectively enforced compliance.

Site visits are infrequent

A significant drop in the number and frequency of site inspections has prevented the program from effectively monitoring hazardous waste facilities and enforcing compliance with applicable regulations. The number of site inspections has decreased by over 35 percent from 66 in the year before the program assumed enforcement responsibility to 42 in the year after assuming responsibility.

Even priority sites, which generate large amounts of hazardous waste, and facilities previously cited for violating hazardous waste regulations are infrequently inspected. Our review of the records of 19 visits to priority sites in 1994 and 1995 revealed that inspectors found violations in 16 out of 19 facilities. However, the program failed to conduct any follow-up visits to those 16 facilities to verify that the facilities had rectified problems and returned to compliance. The program relied instead on the facilities themselves or consultants to show compliance.

Two staff members are responsible for monitoring and enforcing compliance of over 500 facilities. Without conducting adequate site visits, the program cannot be assured that hazardous waste facilities meet environmental and human safety standards.

Many facilities are not in compliance

During routine inspections, the hazardous waste program found repeat violations and a lack of compliance with reporting requirements. The number of facilities not complying with hazardous waste regulations indicates that the program's enforcement activities do not effectively deter violations.

Repeat violations not uncommon

The hazardous waste program conducts routine inspections to verify facility compliance with hazardous waste regulations. Our review of 37 files on waste handlers revealed 7 cases in which inspectors found one or more repeat violations in a later inspection. These facilities either did not fully come into compliance after the previous violation, or they initially complied but did not remain in compliance.

Hazardous waste activities unreported

Act 267 of the 1993 legislative session required all hazardous waste generators, handlers, and treatment facilities to notify the department of their activities. The notification requirement is important because it allows the program to identify facilities that handle hazardous waste.

During random compliance inspections in FY1993-94 and FY1994-95, the department found that many facilities which should have been classified as generators of hazardous waste did not report their activities. In reviewing a sample of these files, we found that nearly 40 percent of the facilities failed to notify the department of their activities in generating, treating, storing, or disposing of hazardous waste. Some of these facilities had been disposing of their waste illegally until the department visited them. For example, several photo labs had been pouring untreated hazardous waste down the drain.

Solid Waste Control Needs Improvement

Since our previous report, the department's solid waste program has been approved by the federal government. The program has also improved its reporting to the Legislature. However, monitoring and enforcement of regulations for municipal solid waste landfills are weak. These are the primary functions of the solid waste program. The regulations seek to protect groundwater and prevent pollution from inadequately designed and operated landfills. The federal government sets minimum national standards for solid waste disposal, but state, tribal, and local governments are responsible for implementing and enforcing waste programs.

We found that landfill inspections are infrequent, especially for landfills on neighbor islands. In addition, enforcement actions against illegal dumpers have been insufficient, allowing some violators to escape enforcement. Staffing problems have limited the program's effectiveness in monitoring sites and enforcing regulations.

Waste reduction reporting has improved

Our previous report recommended that the department's solid waste program inform the Legislature of its solid waste reduction achievements, develop strategies for meeting its goal of a 25 percent reduction in solid waste by January 1, 1995, and notify the Legislature of resources needed to achieve this goal.

In a 1995 report to the Legislature titled *Integrated Solid Waste Management*, the program estimated that the State would achieve the 25 percent goal by July 1996 rather than January 1, 1995. The program reports that the State achieved a 17 percent reduction by January 1, 1995. The 1995 report said that diversion of waste had been growing, but recent gains would not continue without a major effort to expand the state's recycling capacity and to develop local markets for recycled materials. The report also outlined the program's achievements, its strategy for reaching its goal of a 50 percent reduction of solid waste for the year 2000, and resource limitations that constitute barriers. Also, the program has been drafting enforcement policies, as recommended in our previous report.

Landfill inspections are infrequent

The program narrative of the solid waste program states that staff will inspect major facilities four times a year and minor facilities two times a year. However, we found that staff visit sites less than annually, on average.

Staff vacancies prevent the program from meeting the recommended inspection schedule. Two staff members handle inspections and enforcement actions for about 200 facilities. The staff member responsible for monitoring and enforcing rules for landfills also monitors and enforces rules for illegal dumps and transfer stations (facilities that collect off-site waste for transport to a solid waste handling facility).

We reviewed landfill files and found no records of inspections during the past five years at several neighbor island sites. Of the 11 files on municipal solid waste landfills, 4 had no record of inspections. All 4 landfills are on neighbor islands.

Illegal dumpers escape enforcement

Landfills are required to obtain permits to receive waste. Illegal dumps are facilities that receive waste without a permit. These sites often dispose of waste improperly and may pollute the environment. The program's enforcement actions against major illegal dumpers have not been effective in bringing all violators into compliance.

We found that 9 of 11 files on major illegal dumps contained no information indicating that the sites were cleaned up and closed. Several dumps are persistent violators that received repeated warnings from the program but did not comply. For example, one site has operated a large

illegal dump since August 1994 despite repeated visits and enforcement actions, including a warning letter and formal notice of violation from the department.

Enforcement cases require a great deal of time and effort. Because staff have both enforcement and inspection responsibilities, and often must choose one at the expense of the other, program staff may not pursue further enforcement action for difficult cases because this would take time away from inspections.

Regulation of Underground Storage Tanks Is Inadequate

The underground storage tank program is responsible for regulating approximately 6,000 underground storage tanks at 2,000 facilities owned by 900 businesses and governmental entities. The tanks store both hydrocarbon fuels, such as gasoline and diesel fuel, and hazardous substances. The program's major activities include education of tank owners and operators, inspection of facilities, and oversight of cleanups of tank leaks.

As in our previous report, we found that the Department of Health's regulation of underground storage tanks does not adequately protect the public from the risk of leaking tanks. Site visits are infrequent, even for facilities with leaks. In addition, the program does not consistently monitor facilities to check on compliance with federal preventative requirements. The department has inadequately monitored storage tanks because it lacks inspection staff and has focused on sites that have completed cleanups.

Consequently, the number of facilities with leaking tanks that have not yet begun cleanup has increased. Hawaii is well below the national average in complying with federal requirements. For example, the EPA recently noted that Hawaii ranked 46th out of 50 states in cleanups initiated and 48th in cleanups completed. This is an improvement over several years ago, when the State's performance in cleanups was last in the nation. However, Hawaii still has a long way to go before it can meet its goals of preventing leaks and facilitating cleanups.

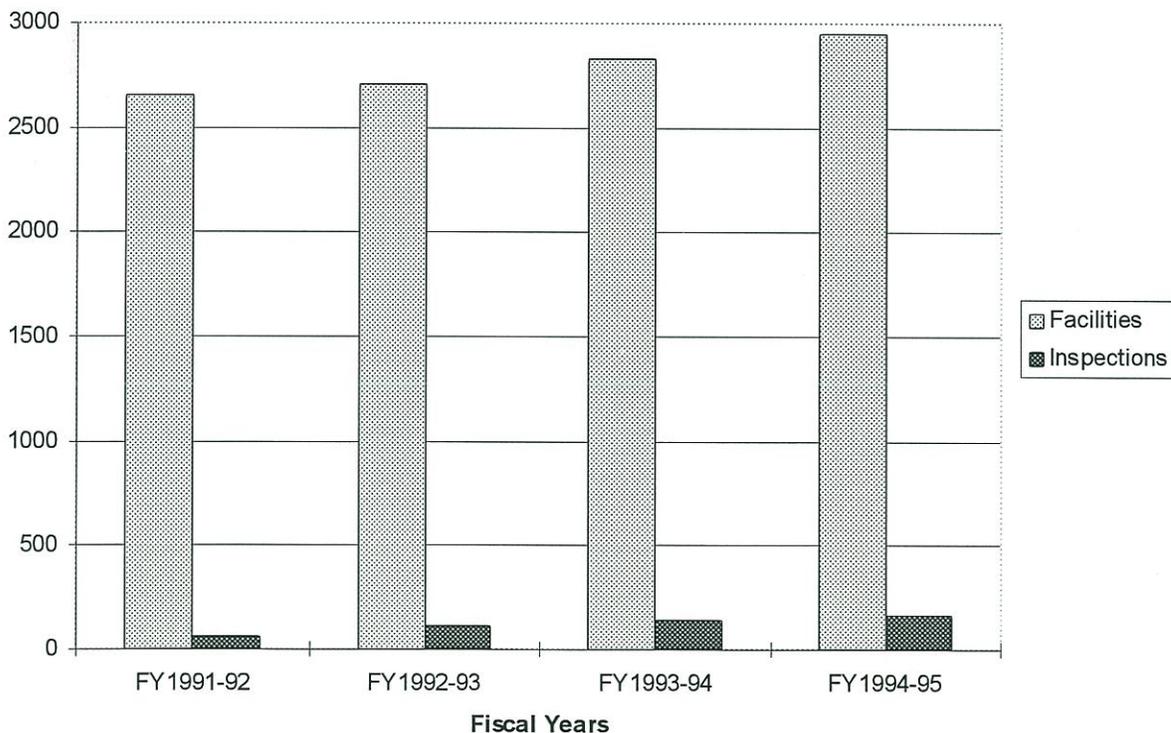
In addition, the state program will be unable to take on additional responsibilities of enforcing rules until it improves its capacity to monitor for compliance. The state program cannot currently enforce regulations because the program is not authorized. Sufficient enforcement capacity is an important criterion in obtaining authorization. The EPA has suggested that the state program develop the capacity to issue field citations in order to build its enforcement capacity. However, because the program does not have adequate staffing to effectively monitor facilities, it is unlikely to take on additional enforcement activities until it improves its monitoring activities.

Our previous report recommended that the underground storage tank special account in the Capital Loan Revolving Fund, which was used to provide loans to businesses with underground storage tanks and to support educational activities, be permitted to sunset on January 1, 1994. The revolving fund was allowed to sunset as scheduled.

Site visits are infrequent

Site visits check compliance with leak prevention requirements and verify progress in cleaning up leaking sites. However, the underground storage tank program seldom conducts site visits. Exhibit 2.1 compares the number of site visits as reported by the program with the total number of facilities for FY1991-92 through FY1994-95. The State conducts routine inspections no more than once every 20 years, on average. According to the EPA, this rate is not adequate to protect the public from the risk of leaking tanks. An inspection rate of once every 3 years is considered acceptable, and annual inspections are considered ideal.

Exhibit 2.1
Number of Facilities with Underground Storage Tanks Compared to Number of Inspections, FY1991-92 to FY1994-95



Source: Fourth quarter progress reports to the Environmental Protection Agency from the underground storage tank program.

Reliance on self-reporting

Staff of the underground storage tank program visit leaking sites infrequently. The program relies on consultants or facility self-reporting in order to monitor cleanup progress. The program envisions staff visiting all high and medium priority sites immediately after the leak report. However, of the 28 high and medium priority underground storage tanks with the oldest remaining leaks, the program's database records indicate that only 9 were inspected by the program since the leaks occurred.

The EPA is concerned about infrequent site visits, because voluntary compliance with release detection requirements has not been fully effective in any state. According to the EPA, other states are doing more to check on compliance with requirements. For example, some states require quarterly reports regarding leak detection equipment. Other states conduct routine inspections more frequently than Hawaii's program. Programs in California and Florida try to visit operating facilities annually.

Focus on cleaned-up sites

The program visits sites when a facility requests assistance, or when a facility requests a "no further action" letter from the department indicating that cleanup has been completed. However, these facilities are more likely to be in compliance with regulations than high priority facilities.

The program shifted the focus of its site visits from high priority facilities to facilities requesting visits due to pressure from facilities that had completed cleanups. Facilities complained because the department's inaction in clearing facilities once cleanups were completed had delayed development of the properties. The Legislature responded to the problem by passing Act 203 in 1994, which required the department to develop a process to ensure the prompt issuance of "no further action" letters. The program has increased the number of "no further action" letters issued from 4 in calendar year 1992 to 74 in calendar year 1995.

Oversight of preventative requirements is uneven

Federal regulations regarding underground storage tanks require owners or operators of tanks to install leak detection equipment and demonstrate financial responsibility through insurance or other means. These requirements were intended to help prevent leaks and to ensure that owners have resources to clean up and deal with the consequences of potential spills. The state program's oversight of these requirements has been uneven, resulting in incomplete information regarding the extent of compliance. Staff shortages are cited as the main problem.

The underground storage tank program has not yet processed forms that facilities submitted in 1994 to certify that they had installed leak detection equipment. As a result, information regarding compliance with leak detection requirements is often not included in facility files or in the program's database. About 45 percent of facility files did not contain information regarding compliance. Because routine site visits are rare and the program has not reviewed self-certification forms, the department does not know the extent of compliance.

The program also does not know the extent of compliance with financial responsibility requirements. We found that nearly 50 percent of facility files contained no information regarding these requirements. The program collects information regarding financial responsibility during site visits. However, visits are rare and will provide information on only a small percentage of facilities each year. Because insurance and other requirements can be expensive, some tank owners may be delaying compliance because they believe that the department is unlikely to inspect their facilities.

Backlog of leaking tank sites is growing

The number of facilities with leaking underground storage tanks that have not yet initiated cleanup has been increasing. Consequently, there is a growing threat of future leaks from these sites. During the second quarter of FY1992-93, the program reported that 267 facilities with leaking tanks had not initiated cleanup of their sites. A report for the first quarter of FY1995-96 showed that 367 facilities had not initiated cleanup.

In addition, many of the highest priority facilities have tanks with leaks that occurred at least five years ago. The program ranks facilities with leaking tanks according to the level of risk associated with the leak. All of the high priority leaking sites, and over 75 percent of the medium priority leaking sites, had leaks that occurred in 1991 or earlier. Because the program does not inspect many facilities with leaking tanks, little is known about the current condition of these tanks. The EPA is concerned about the number of sites that have not yet initiated cleanup, and has suggested that the program pay more attention to tracking and following up on facilities with leaking tanks.

Databases for Program Management Are Flawed

Our previous report found that the waste management programs lacked appropriate management controls, including a central tracking system. Databases can be a useful management tool to track compliance and enforcement actions. The underground storage tank and solid waste programs now maintain databases to store information on facilities, monitor compliance, and keep track of permits.

Such databases must contain accurate information. However, we found that they are flawed. Consequently, the databases fail to serve as reliable tools for effective program management and may provide the EPA with a misleading picture of program activities. Improved quality control is needed to minimize database errors.

Underground storage tank data are inconsistent

The underground storage tank program stores information about tank owners and operators in corresponding paper files and computerized databases. Although these two types of files should match, we found many discrepancies.

We sampled the files and found that the database differed from the paper files for more than 70 percent of the facilities. The discrepancies included information on compliance with federal preventative requirements.

Program reports sent to the EPA include information from the database. The EPA uses this information to determine the size of its grants to the State, which consider the number of tanks and releases statewide. Errors in the data present a misleading picture to the EPA, which could affect EPA grants to the state program.

Although temporary staff from the EPA began to correct information in the database at the end of 1995, better quality control is needed to ensure that future data input procedures result in accurate databases.

Information in permit database is not current

The solid waste program created a permit database containing information about each facility with a permit for construction or operation. Because the database was intended to be a tracking tool, it contains information on inspection dates, status of permits, and other facility data, including facility type and type of waste handled.

Information on nearly a third of the facilities in the database has not been updated since 1994 or earlier because the staff member responsible for this task also handles inspections and enforcement activities. Staff do not find the database useful and prefer to depend on the paper files.

Responsibilities for Infectious Waste Monitoring Need Clarification

The Department of Health's administrative rules establish minimum requirements for the management, treatment, transport, storage, and disposal of infectious waste and treated infectious waste. The rules were intended to assure practices to protect the health and safety of Hawaii residents. The department's role is to monitor infectious waste management by hospitals and commercial treatment facilities and to respond to reports of infectious waste spills.

In our previous report, we found that the department lacked sufficient information on infectious wastes. In our follow-up, we found that the department has not coordinated its monitoring of infectious waste generators, and therefore has incomplete information on the extent of compliance with the rules.

Little coordination occurs within the department

Responsibility for monitoring compliance with infectious waste regulations appears to be divided among three offices within the department. The solid waste program monitors commercial medical waste treatment facilities. The Hospital and Medical Facilities Branch monitors health care facilities that generate infectious waste. The Hazard Evaluation and Emergency Response office handles reports of infectious waste spills.

The solid waste program and the Hospital and Medical Facilities Branch have different approaches to inspecting facilities. The solid waste program conducts annual compliance inspections of facilities. The Hospital and Medical Facilities Branch does not conduct annual visits, but may check during the permitting process and during audits to determine if permitted facilities are handling infectious waste properly.

The three offices that monitor infectious waste management and disposal do not coordinate their activities. The department at times seems to view infectious waste as a relatively minor problem and this may be the case. However, in a memo the solid waste program manager expressed concern about a growing problem of improper disposal of infectious waste.

The program's 1995 report, *Integrated Solid Waste Management*, also expressed this concern and indicated that resources for oversight are severely lacking. We believe that coordination would be helpful in addressing the lack of capacity in the state for infectious waste treatment. Unless this problem is addressed, increased illegal disposal of infectious waste may occur.

In November 1994 and February 1995, the solid waste program manager formally proposed clarification of the department's position on treatment and disposal of infectious medical wastes. The proposals addressed the need for coordination and other issues. However, the department has not yet approved the clarifications.

Information regarding compliance is incomplete

The Hazard Evaluation and Emergency Response office and the solid waste program receive reports of improper disposal of infectious waste. Because there is no departmental coordination, aggregate information on improper infectious waste disposal has not been compiled. The Hazard Evaluation and Emergency Response office keeps information on reports

from the public of infectious waste spills. However, the office has no uniform method for recording these reports. This makes it difficult to determine the total number of spills reported to the office.

The solid waste program receives reports of improperly disposed infectious waste from county landfill operators and trash handlers. The office does not keep this information separately and thus cannot determine the total number of reports of improper disposals that it receives. In addition, the counties may not report all cases of improper disposals to the solid waste program. As in our previous report, we recommend again that the department require all state and county agencies to report incidents to the department. Because the department has not yet done this, the information that it collects is fragmented and incomplete and it is difficult to determine the extent of compliance with infectious waste regulations.

Our previous report recommended that the program amend its administrative rules to set a minimum threshold for reporting infectious waste spills. However, the department points out that it is difficult to specify a minimum level because infectious waste takes many forms, including blood products and syringes. Moreover, the public would perceive any amount of improperly disposed infectious waste as a problem. We believe that the department's position on this point is reasonable, and we no longer recommend that a threshold be set.

Conclusion: Key Policy Issues

The waste management programs of the Department of Health have not made significant improvements since our previous report. Uncertain support for the budget, authorization, and staffing of the programs—complicated by State budget constraints—has weakened the quality of databases, monitoring and enforcement, and other functions. Until the programs receive stronger support, their performance is unlikely to improve.

Several policy issues affect the future of the programs. Some key issues and our concerns are discussed below.

Setting priorities within budget constraints

Due to recent budget cuts, all state departments have been faced with the need to set priorities among programs. The Department of Health has also been faced with several lawsuits that have shaped its priorities by requiring the department to fund certain functions. For example, the department is protecting funding for children's mental health services due to the outcome of the *Felix v. Waihee* case. As a result, other health programs have taken larger cuts. We recognize that priorities must be set, but we are concerned that programs such as children's mental health,

which require frequent emergency appropriations to address past deficiencies, are siphoning funds away from other programs that protect the public.

Weighing relative risk

The department has recognized the need for incorporating the concept of relative risk into its decision making. Relative risk refers to a comparison of risks from different hazards based on the potential effects on human health or the environment.

The department recently looked at relative risks associated with various health hazards through the Hawaii Environmental Risk Ranking Project. The project ranked hazardous waste low on the list of problem areas. The department is considering using the results of the project in budget planning.

However, the study considered residual risks, which are the risks that remain after assuming adequate regulation by existing programs. The study cautions that its results should not be used to guide allocation of additional money for environmental management until the costs and effectiveness of existing programs are known. We agree.

We also note that at the level of the department's Environmental Health Administration, Hawaii's problems with hazardous wastes and leaking tanks are not considered very serious. However, we continue to believe that the State should allocate sufficient resources to protect the public from the considerable risks that exist.

Establishing a philosophy of regulation

Regulation can follow a cooperative approach, which involves educating regulated facilities and working with them to achieve compliance; a hard-nosed approach, which involves assessing stringent penalties on violators; or a combination of the two. The EPA has indicated that states have flexibility in regulation.

The department tries to combine both cooperation and enforcement in its waste management programs. As it shapes its regulatory approach for the future, we encourage it to be strong on enforcement when appropriate because cooperation may often be insufficient to deter violations.

Summary

The department needs to consider these policy issues when deciding on its support for and approach to the waste management programs. Simply maintaining the programs with lukewarm support could cut the heart out of them. The department should not allow a combination of factors—priority setting, relative risk, and “cooperative” regulation—to compromise its efforts to protect health and the environment.

Recommendations

1. The Department of Health should provide sufficient support to the waste management programs to enable them to meet their stated goals. This should include:
 - a. Securing stable funding within existing budget constraints;
 - b. Achieving federal authorization for the hazardous waste and underground storage tank programs as soon as possible; and
 - c. Working to fill vacant positions with qualified staff.
2. The department should improve enforcement in the hazardous waste program by increasing field presence through an increase in the number of inspection staff.
3. The department should improve its landfill monitoring and enforcement activities by:
 - a. Increasing the number of staff working on inspection and enforcement; and
 - b. Ensuring that illegal dumpers come into compliance.
4. The department should strengthen its regulation of underground storage tanks by:
 - a. Increasing the number of inspectors in order to increase field presence;
 - b. Monitoring compliance with preventative requirements; and
 - c. Developing enforcement capabilities in preparation for EPA authorization.
5. The department should ensure the accuracy of its databases for tracking waste generators in the underground storage tank and solid waste programs.
6. The department should coordinate its monitoring of infectious waste management by:
 - a. Designating a program to take the lead in coordinating monitoring; and
 - b. Requiring counties and other agencies to report infectious waste spills to the Hazard Evaluation and Emergency Response office or to the designated lead program.

Responses of the Affected Agency

Comments on Agency Response

We transmitted a draft of this report to the Department of Health on April 17, 1996. A copy of the transmittal letter to the department is included as Attachment 1. The department's response is included as Attachment 2.

The Department concurs with our recommendations. The department also commented on several of the findings covered in our report.

In addition to other comments, the department says that the frequency of its landfill inspections is considerably higher than our report indicates. It points to inadequate maintenance of its documentation, record keeping, and filing system as a major cause of the problem. We encourage the department to correct any deficiencies in its inspection records that make it impossible to verify the frequency of inspections.

The department confirms the accuracy of our conclusion as to the lack of coordination of infectious waste management activities, but suggests that we do not understand the limited scope of the infectious waste problem. However, our report acknowledges that infectious waste may be a relatively minor problem. We simply recommend stronger coordination and reporting requirements to help ensure adequate information.

In response to the department's comments, we adjusted the number of "no further action" letters issued in calendar year 1995 (on page 16 of our report).

ATTACHMENT 1

STATE OF HAWAII
OFFICE OF THE AUDITOR
465 S. King Street, Room 500
Honolulu, Hawaii 96813-2917



MARION M. HIGA
State Auditor

(808) 587-0800
FAX: (808) 587-0830

April 17, 1996

COPY

The Honorable Lawrence H. Miike
Director of Health
Department of Health
Kinau Hale
1250 Punchbowl Street
Honolulu, Hawaii 96813

Dear Dr. Miike:

Enclosed for your information are three copies, numbered 6 to 8 of our draft report, *Follow-Up Audit of the Waste Management Programs of the Department of Health*. We ask that you telephone us by Friday, April 19, 1996, on whether or not you intend to comment on our recommendations. If you wish your comments to be included in the report, please submit them no later than Friday, April 26, 1996.

The Governor and presiding officers of the two houses of the Legislature have also been provided copies of this draft report.

Since this report is not in final form and changes may be made to it, access to the report should be restricted to those assisting you in preparing your response. Public release of the report will be made solely by our office and only after the report is published in its final form.

Sincerely,

Marion M. Higa
State Auditor

Enclosures

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII



LAWRENCE MIIKE
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH
P.O. BOX 3378
HONOLULU, HAWAII 96801

In reply, please refer to:
EMD/SHW

April 26, 1996

RECEIVED

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OFFICE OF THE AUDITOR
STATE OF HAWAII

TO: The Honorable Marion M. Higa, State Auditor
Office of the Legislative Auditor

FROM: Lawrence Miike *Lawrence Miike*
Director of Health

SUBJECT: FOLLOW-UP AUDIT OF THE WASTE MANAGEMENT
PROGRAMS

We appreciate the opportunity to comment the above report. Protection of Hawaii's unique and extremely sensitive environment requires a commitment to regulatory activities which include permitting, monitoring, enforcement, education, and public/private partnerships. Successful implementation of these activities remain intensely resource driven. This follow-up report correctly points out that most of the shortcomings cited are still a direct result of lack of resources. The Department again concurs with the recommendations of the report.

It should be noted that the Department initiated a plan of action in 1994, that addressed most of the original recommendations of your Office. However, many of the actions implemented by the previous administration had to be re-prioritized based on the financial crisis of the State of Hawaii beginning in late 1994. With very little hope of improvement to the State's financial status, all programs within the Department are being challenged to seek innovative strategies to be outcome oriented.

Since the 1994 Audit report, the waste management programs have made significant progress in several areas policy development, technical guidance, and outreach. The programs have focused on assisting the regulated community and the public in making sound decisions for the protection of the environment. Many activities have been done on a volunteer basis by the staff. The Department would like to recognize the efforts of the waste management staff as well as all Department personnel for "going beyond the call."

Having stated the above, we now offer the following specific comments on the findings and of the report.

Summary of Findings

Page 10, Authorization:

The decision to delay hazardous waste authorization was made in order to adopt new regulations that allow the State greater flexibility in management. Adoption of new regulations on used oil and universal waste will allow the State and its regulated community better options for the recycling and lowering the cost to dispose of waste. By delaying authorization, the State will seek delegation of the hazardous waste program that provides the greatest benefit to the Hawaii.

It should be emphasized that the Department is reviewing cost and benefit associated with delegation of all programs. In fact, the Deputy of Environmental Health asked all program managers to evaluate the cost associated to authorization, prior to the 1996 Legislative Session by a memorandum dated December 4, 1995.

Page 12 to 14, Solid Waste Control:

While the Office of Solid Waste Management (OSWM) has not met its program goals, as established in our program approval narrative to EPA, relating to landfill inspections the frequency of inspections is considerably higher than the Auditor's report indicates. Over the past 4 years we have visited all major landfills at least twice annually and the minor landfills at least annually. A Major cause of the problem is our documentation, record keeping and filing system which has not been adequately maintained.

While the landfill inspection policy appears to be uneven, the program has established inspection priorities, within the limits of our available resources and based on potential environmental risk. The Auditors report did not take into consideration landfill size, nor groundwater resource value when evaluating our inspection frequencies. The Neighbor Island Landfills [Kalaupapa (1 tons per day (tpd)), Hana (5 tpd), Lanai (10 tpd) and Molokai (15 tpd) which have been determined to be of lowest priority are, by an order of magnitude, the four smallest in the State and none are located over a potable water resource. By comparison the next smallest landfills are Kapaa (Oahu), (120 tpd) and Kekaha (Kauai), (225 tpd).

Page 16, Underground Storage Tanks:

Prior to the 1994 Legislative Session the LUST Program has already initiated a streamlined process for the prompt issuance of "no further action" letters. The issuance of these letters was due in part to the shift in focus on reviewing LUST facilities files and the increase of staff (from 2 to 4) and the development of the

Technical Guidance Manual in 1992. Therefore, it would be inaccurate to say that the Act 204 resulted in a program shift.

There were 74 "no further action" letters issued for the calendar year 1995. The 49 letters stated in the report reflects "no further action" letters issued from January to September 1995. It should be noted that there were 56 and 74 "no further action" letters issued in 1993 and 1994 respectively.

Page 18, Underground Storage Tanks:

The UST and LUST programs is in the process of converting the current data into a UST-ACCESS (a program developed by the Environmental Protection Agency - Office of Underground Storage Tank. The ACCESS software is more user-friendly and availability of technical assistance and resources is available to staff.

We believe that this would improve the tracking of information and site status of each facility.

Page 18 to 19, Infectious Waste Management:

While the Auditor's comments regarding the lack of coordination of Infectious Waste Management activities is accurate, it appears that there is still a significant lack of understanding by the Auditor as to the scope of the problem in relation to more pressing solid waste issues.

Infectious medical waste comprises less than .1 of 1% of the solid waste generated in the State and our estimate is that well over 99% of that waste is properly managed. The primary source of "spills" of infectious waste come from improperly managed sharps (needles) generated by self/home health care providers (diabetics, surgery recovery, cancer treatment, etc) and sharps discarded by intravenous drug users (segments of the generator population almost impossible to regulate). As far as can be determined by the OSWM there has not been a documented case of infection or spread of disease caused by the improper disposal of infectious waste during the past five years of the program's existence. Monitoring the thousands of doctors and dentists offices and clinics which generate small amounts of infectious waste to get an accurate assessment of compliance would be a effort so resource extensive it would dominate all other program issues.

The OSWM's comments regarding lack of capacity was primarily focused on the Neighbor Islands and in cases where new facilities where having difficulty in getting land use approvals due to the "not in my back yard" syndrome. The capacity issue is primarily a public perception issue not a regulatory one and our recommendation was for greater involvement by the Medical and Health Care Providers in developing a industry solution not a recommendation for more extensive regulatory oversight.