

A REPORT
TO THE
ARIZONA LEGISLATURE

Performance Audit Division

Performance Audit

Department of Environmental Quality

Waste Programs Division

August • 2004
REPORT NO. 04 – 06



Debra K. Davenport
Auditor General

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AUDITOR GENERAL

STATE OF ARIZONA
OFFICE OF THE
AUDITOR GENERAL

WILLIAM THOMSON
DEPUTY AUDITOR GENERAL

August 30, 2004

Members of the Arizona Legislature

The Honorable Janet Napolitano, Governor

Stephen A. Owens, Director
Arizona Department of Environmental Quality

Transmitted herewith is a report of the Auditor General, a Performance Audit and Sunset Review of the Department of Environmental Quality, Waste Programs Division. This report is in response to a November 20, 2002, resolution of the Joint Legislative Audit Committee. The performance audit was conducted as part of the Sunset review process prescribed in Arizona Revised Statutes §41-2951 et seq. I am also transmitting with this report a copy of the Report Highlights for this audit to provide a quick summary for your convenience.

As outlined in its response, the Department of Environmental Quality agrees with all of the findings and plans to implement all of the recommendations.

My staff and I will be pleased to discuss or clarify items in the report.

This report will be released to the public on August 31, 2004.

Sincerely,

Debbie Davenport
Auditor General

Enclosure

PROGRAM FACT SHEET

Department of Environmental Quality
Waste Programs Division

Services:

The Waste Programs Division, implements programs to regulate and monitor the handling of solid and hazardous waste, identify and oversee the cleanup of hazardous waste sites, and minimize waste generation. The Division provides services in five main areas:

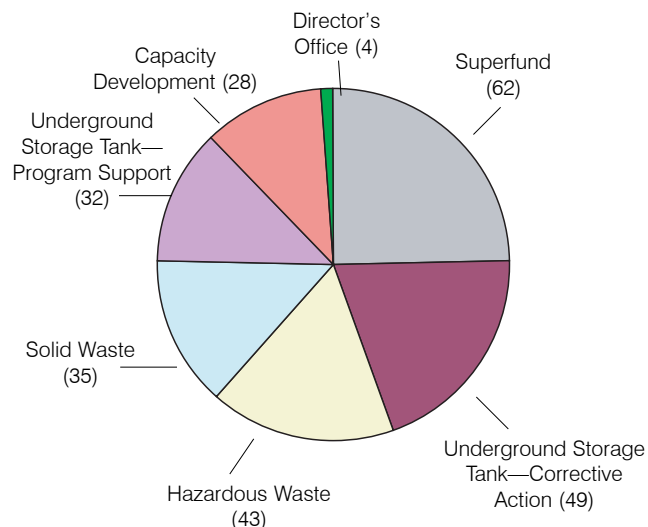
- **The Solid Waste program**—Monitors relevant waste storage, treatment, and disposal facilities (such as landfills), and encourages waste reduction, reuse, and recycling.
- **The Hazardous Waste program**—Monitors hazardous waste generation, storage, treatment, and disposal.
- **The Underground Storage Tanks (UST) program¹**—Monitors all USTs, such as gasoline storage tanks, to ensure proper installation and operation. It is also responsible for overseeing the cleanup of sites contaminated by leaking USTs.
- **The Superfund section**—Manages the identification and cleanup of sites contaminated by hazardous substances. The cleanup of these sites takes place as part of the Water Quality Assurance Revolving Fund (WQARF) or in conjunction with federal agencies.
- **The Voluntary Remediation and Prevention program**—Oversees voluntary remediation of contaminated sites and promotes pollution prevention.

Facilities:

The agency's headquarters are located at 1110 West Washington Street in Phoenix and are leased under the PLTO (private lease-to-own) program. The Waste Division uses approximately 43,000 square feet at this facility. The Department pays an annual lease fee of nearly \$3.5 million for the use of 184,200 square feet. In addition to the Central Phoenix Office, the Division has some staff located in the

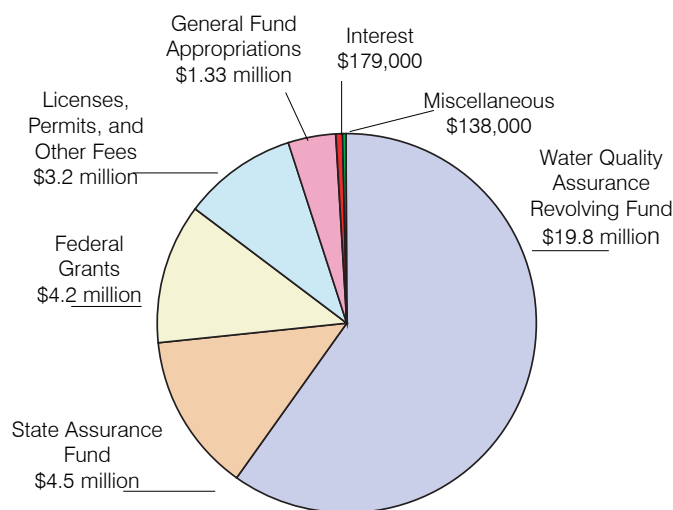
Program staffing:

253 FTEs, including 78 vacancies (as of April 1, 2004)



Program revenue:

\$33 million (fiscal year 2003)



¹ After the completion of audit work, effective August 2, 2004, the UST program has been moved to the newly created Tank Programs Division.

Southern Regional Office (SRO) in Tucson. The SRO is located in a state-owned building that the Department rents from the Department of Administration. The annual lease costs \$116,000 for 5,700 square feet. The Department does not break down these building costs by division.

Equipment:

The Division owns emergency response, and soil and groundwater sampling equipment. The Division also pays the Department of Administration a monthly lease fee of nearly \$10,000 for 26 vehicles.

Mission:

To protect and enhance public health and the environment by reducing the risk associated with waste management, regulated substances, and contaminated sites.

Program goals:

The Waste Programs Division has adopted the Department's four goals .

1. Improve the quality of Arizona's air, land, and water (by reducing the risk associated with waste management and contaminated sites).
2. Enhance relationships with the public, the regulated community, and agency partners.
3. Provide leadership on children's environmental health.
4. Provide value to all of Arizona.

Adequacy of the performance measures:

The Division's 16 performance measures are generally adequate, and include 10 outcome measures, 3 output measures, 2 efficiency measures, and 1 quality measure. However, the Division should consider adopting a few additional performance measures to more fully capture the breadth of its work. For example, the Division could create an input measure that reports the number of leaking underground storage tank (UST) incidents reported, and an output measure that reports the number of letters of closure issued. The Division already tracks and reports this type of data to the UST Policy Commission. Additionally, the Division has not developed any performance measures related to providing leadership on children's environmental health.

Source: Auditor General staff compilation of unaudited information from the Department and Arizona Financial Information System (AFIS) Accounting Event Transaction File for the year ended June 30, 2003.

SUMMARY

The Office of the Auditor General has conducted a performance audit of the Department of Environmental Quality, Waste Programs Division pursuant to a November 20, 2002, resolution of the Joint Legislative Audit Committee. This audit was conducted as part of the Sunset review process prescribed in A.R.S. §41-2951 et seq and is the second in a series of four reports on the Department of Environmental Quality. The first report focused on the Water Quality Division, and the subsequent reports will focus on the Air Quality Division and an analysis of the 12 statutory Sunset factors.

The Department's Waste Programs Division regulates underground storage tanks (USTs), landfills, and other facilities that store solid waste and hazardous waste, such as dry cleaning solvents.¹ The Division also operates or assists with two cleanup funds. One, the State Assurance Fund, assists underground storage tank owners and operators with cleanup costs if their tanks leak. The second, the Water Quality Assurance Revolving Fund (WQARF), is for cleaning up sites that have been contaminated by hazardous substances.

Changes made to the State Assurance Fund, and Department should take additional actions (see pages 11 through 19)

The Legislature recently made changes to the State Assurance Fund (Fund), and the Department should take additional actions to increase compliance with financial assurance requirements and to reduce costs to the Fund. The Fund, supported by a \$.01 per gallon excise tax on regulated USTs, based on the quantity of regulated substances placed in a tank in any calendar year, assists qualifying UST owners and operators with up to \$1 million per leak to clean up leaking underground storage tank sites. The Legislature created the Fund in 1990 to help UST owners meet federal and state requirements for financial responsibility. These regulations require that UST owners acquire a minimum level of financial assurance to cover costs associated with the cleanup of leaking USTs. Although this assurance could normally be

¹ Effective August 2, 2004, UST regulation is located in the newly created Tank Programs Division.

provided through private insurance, in the late 1980s private insurance became less available as insurers declined to continue writing policies. The Fund was intended to help fill the gap created by the declining insurance availability. However, insurance is currently available and affordable, and most UST owners and operators who are in compliance with financial assurance requirements have private UST insurance.

In May 2004, legislation making several important changes to the Fund was passed. First, the legislation changed the requirement that UST owners and operators first access their own insurance before applying to the Fund. Additionally, the legislation set June 30, 2006, as the last day that UST releases can be reported to the Department to maintain eligibility for cleanup assistance from the Fund. Owners and operators of leaking USTs who have not reported releases by that date will need to access their alternative financial assurance mechanism, such as private UST insurance, to pay for cleanup costs.

The legislation also created a Regulated Substance Fund to succeed the State Assurance Fund in July 2011. The Regulated Substance Fund will provide cleanup assistance to sites for which the UST owner cannot be located within 90 days. The legislation directs the Department's director to transfer money from the State Assurance Fund to the Regulated Substance Fund once all State Assurance Fund claims are paid. However, if the State Assurance Fund still has unpaid claims in July 2011, then the Regulated Substance Fund will not receive any funding until the claims are paid. Further, the \$.01 per gallon excise tax will not begin funding the Regulated Substance Fund as scheduled until all the State Assurance Fund's claims are paid.

The Department should build on the legislative changes to the Fund by taking steps to improve UST owners' and operators' compliance with financial assurance requirements. Compliance with these requirements will be even more important as eligibility for the State Assurance Fund ends, when owners and operators have only their own financial assurance to provide for cleanup of leaking USTs. As of January 2004, only 62 percent of UST facilities have met these state and federal requirements. The Department should continue its work to improve the rate of compliance with financial assurance requirements, including using formal enforcement actions if necessary.

Additionally, the Department should take steps to reduce costs to the Fund. First, the Department should reassess the Fund's cost ceilings to see if they are too high. Private consultants who are hired by the owners, operators, or Fund volunteers to clean up a leaking UST site can bill the Fund for the cleanup work that is performed.¹ However, there are limits, called cost ceilings, on the amount that consultants can bill the Fund for various cleanup activities. Key UST stakeholders convened by the director believe that cleanup costs are inflated to the point that the cost ceilings are no longer the upper limit, but have become the going price of the cleanup work. Further, according to some fund management staff, the cost ceilings are higher than

¹ A volunteer is someone who has acquired ownership or control of property where a UST is located, but is not the owner of the UST. A volunteer may provide for cleanup of a leaking UST and may receive Fund coverage, but is not legally liable for cleanup.

they should be because they were based on a cost survey that was created using a flawed method. If the Department uses a cost survey to create its next set of cost ceilings in June 2005, department management should ensure that methodology used to perform the cost survey is appropriate. Further, fund management should explore the possibility of using competitive bidding for cleanup work as a method for controlling costs.

Division should improve its hazardous waste enforcement efforts (see pages 21 through 28)

The Department should improve the timeliness of issuing, escalating, and resolving hazardous waste enforcement actions. The Division is responsible for ensuring that all hazardous waste in Arizona is stored, transported, and disposed of properly. It is important for hazardous waste to be managed properly because it can represent a significant public health threat. An enforcement action, whether informal or formal, is taken when violations of hazardous waste laws and regulations are found at a facility. However, the Division sometimes takes several months to issue an enforcement action when it finds a violation. For example, while the Division's policy requires it to send an enforcement action to a facility's responsible party within 45 days of the inspection, the Division has taken longer than 90 days to issue some actions. Although the Division immediately notifies the facility of serious violations in writing at the time of the inspection, not as much detail and information is included as on the official enforcement action. Further, the responsible party may be unaware of the details for compliance regarding less serious violations and therefore remain out of compliance longer. In addition, the Division does not always escalate enforcement actions to the next level when responsible parties do not correct their facilities' violations and return to compliance.

To improve its enforcement efforts, the Division should take several steps. First, the Division should explore ways to streamline its review and approval process for enforcement actions. The Division should also modify its computer system so that it will produce reports that management and staff can use to track the status of enforcement actions that are in the review process. Finally, the Division should escalate enforcement actions to the next level as appropriate.

Other pertinent information (see pages 29 through 36)

During the audit, auditors gathered information about the State's Water Quality Assurance Revolving Fund (WQARF) program, also known as the State Superfund program. The WQARF program is the state program responsible for identifying,

assessing, and cleaning up soil and groundwater contaminated with hazardous substances. In many respects, WQARF is similar to the federal Superfund program, and both programs are currently responsible for cleaning up sites in Arizona. However, reforms in 1997 substantially changed several key aspects of WQARF. These reforms included dedicating more revenues to the program and changing the liability standard to assign financial responsibility based on each party's proportion of the contamination.

As of March 31, 2004, the 33 sites on the WQARF registry were in various stages of cleanup. At all 33 sites, the Department has evaluated the current risk to the public and the environment. At 10 sites, cleanup work has not yet begun. Sixteen sites are in the process of undergoing or have just completed the remedial investigation, which is the first step. One site is in the feasibility study stage, which identifies several options for cleanup. One site has just begun the process to identify the final cleanup plan, two sites have proposed final cleanup plans in place, and for three sites work on the final remedy is ongoing. In order to assign financial liability, the Department has started searches for parties potentially responsible for contamination at all 33 sites.

According to the Department, it has recovered \$12.4 million for cleanup from responsible parties, and responsible parties have also spent another \$120 million for cleanup on their own. Lastly, auditors determined that for fiscal year 2004, the Department's categorization of the WQARF program's administrative costs and the methodology used to calculate these costs appear appropriate.

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INTRODUCTION & BACKGROUND

The Office of the Auditor General has conducted a performance audit of the Department of Environmental Quality, Waste Programs Division pursuant to a November 20, 2002, resolution of the Joint Legislative Audit Committee. This audit was conducted as part of the Sunset review process prescribed in A.R.S. §41-2951 et seq and is the second in a series of four reports on the Department of Environmental Quality. The first report focused on the Water Quality Division, and the subsequent reports will focus on the Air Quality Division and the analysis of the 12 statutory Sunset factors.

Division regulates waste pollutants in Arizona

The Waste Programs Division is one of four divisions within the Department of Environmental Quality (Department). The other divisions are the Air Quality Division, the Water Quality Division, and the Administrative Services Division.¹ The Waste Programs Division's mission is to protect public health and the environment by reducing risk associated with waste management, regulated substances, and contaminated sites. The Division is responsible for regulating underground storage tanks (USTs) that contain petroleum products; as well as solid waste, such as refuse in landfills; and hazardous waste, such as dry cleaning solvent. The Division also oversees the cleanup of Water Quality Assurance Fund (WQARF) sites, the State's Superfund program, at which soil or water are contaminated with hazardous substances.

The danger posed by waste products is significant. For example, petroleum that leaks from an underground storage tank can seep into the soil and contaminate groundwater. A leaking underground storage tank may also present other health and environmental risks, including the potential for fire and explosion. Proper management of solid and hazardous waste is needed to ensure that waste does not enter the environment and potentially adversely affect people's health or the environment. Solid waste can also become a nuisance, especially at landfills where blowing litter and odors can negatively impact nearby residents. Poor management of the growing amount of waste produced in the United States after

¹ After the completion of audit work, the Department created a fifth division, the Tank Programs Division, effective August 2, 2004.

World War II led to many areas being contaminated. These areas are now part of federal or state Superfund programs, which provide funding and oversight for the cleanup of contaminated soil or water.

Division organization and responsibilities

According to the Waste Programs Division, as of April 1, 2004, it had 253 FTEs, of which 78 were vacant positions. The employees are organized in 6 sections, each providing a variety of services related to waste management, regulated substances, and contaminated sites.¹

- **Underground Storage Tanks Program (USTs)**—The UST program is divided into two sections, Program Support and Corrective Action:
 - **Program Support Section (32 FTEs, 9 vacancies)**—This program registers and maintains an inventory of all USTs. It also performs inspections of USTs to ensure that the proper leak detection equipment has been installed and is working correctly, and educates UST owners and operators about monitoring leak detection equipment. Additionally, this program certifies UST installers and other UST service providers. Further, the program is responsible for ensuring that UST owners and operators comply with financial assurance regulations, such as the minimum amount of insurance that owners must maintain to provide for cleanup. Finally, the program enforces noncompliance with leak detection regulations or financial assurance through informal enforcement actions, such as giving the UST owner or operator a Notice of Opportunity to Correct Deficiencies (NOC) or a Notice of Violation (NOV), or formal enforcement actions such as an administrative order or consent order.
 - **Corrective Action Section (49 FTEs, 12 vacancies)**—This program is responsible for overseeing the cleanup of leaking USTs and can issue NOCs or NOVs, and administrative orders against entities that are not performing needed remediation. The program also contains the state-lead program, through which it oversees cleanup on sites with no known owner, or whose owners are financially or technically unable or are unwilling to provide for remediation work.
- **Hazardous Waste Section (43 FTEs, 15 vacancies)**—Arizona received final authorization from the Environmental Protection Agency (EPA) in 1985 to manage the State's hazardous waste program. The Hazardous Waste Section is responsible for ensuring that all hazardous waste in Arizona is stored, transported, and disposed of properly, and is largely a preventative program to

¹ The Waste Programs Division's total of 253 FTEs includes 4 FTEs in the Director's Office, including the division director, the deputy division director, a rule writer, and an administrative assistant.

keep hazardous waste from entering the environment. This is accomplished in four ways: 1) by conducting periodic inspections of hazardous waste transporters, generators, and treatment, storage, and disposal (TSD) facilities; 2) by taking enforcement actions against facilities' responsible parties that are not following the applicable state and federal regulations; 3) by permitting facilities that treat, store, and/or dispose of hazardous waste; and 4) by tracking hazardous waste from generation to disposal.

- **Solid Waste Section (35 FTEs, 16 vacancies)**—The Division's Solid Waste Section monitors relevant waste storage, treatment, and disposal facilities (such as landfills) and encourages waste reduction, reuse, and recycling. The regulation of solid waste facilities includes the approving of operational plans, issuing permits, and monitoring compliance through facility inspection. The Department can take enforcement action, such as issuing NOCs and NOV's against responsible parties found out of compliance during an inspection. The agency receives funding for the regulation of solid waste from the General Fund, as well as other sources, such as the Solid Waste Fee Fund and the Recycling Fund.
- **Superfund Section (62 FTEs, 21 vacancies)**—This section is responsible for identifying, assessing, and cleaning up sites on which the soil or groundwater has been contaminated with hazardous substances. The section uses the Arizona Water Quality Assurance Revolving Fund (WQARF), created under the State's Environmental Quality Act of 1986, to support hazardous substance cleanup efforts at these WQARF, or state Superfund, sites. The section also assists efforts at federal sites, known as federal Superfund sites, that have soil or water contaminated with hazardous substances. Finally, the section also works to identify parties responsible for contamination at a site and to recover appropriate cleanup costs from them.
- **Capacity Development Section (28 FTEs, 5 vacancies)**—The Capacity Development section has a variety of functions. These include oversight of voluntary cleanup programs, identification of new WQARF sites and federal Superfund sites, and determination of standards for cleanup at particular sites. The section also employs one FTE to write administrative rules relating to division programs, and assists other sections with data management.

The Division also works with the State Assurance Fund (Fund) section, which is located in the Administrative Services Division. The Fund exists to assist UST owners and operators with the costs of cleaning up leaking USTs by providing payments of up to \$1 million for eligible cleanup costs.

- **State Assurance Fund Section (31 FTEs, 2 vacancies)**—This section administers the State Assurance Fund by processing claims applications, reviewing the applications to ensure that they meet technical and cost requirements, and paying eligible claims. In fiscal year 2003, the section paid

approximately \$15.6 million to help clean up contaminated UST sites. According to fund management reports, the Fund received 699 applications in calendar year 2003. As of March 31, 2004, the section reduced the backlog of unprocessed claims to 17.

In May 2004, the Legislature passed Laws 2004, Chapter 273, which provided that eligibility for the Fund would end in 2006 and the Fund itself would be terminated no later than 2013. After this legislation was passed, the Department consolidated the UST Corrective Action Section, the UST Program Support Section, and the State Assurance Fund Section into a new division, called the Tank Programs Division. The Tank Programs Division plans to focus on implementing the new legislation, increasing outreach efforts across the State, increasing inspections and compliance, and streamlining the State Assurance Fund.

Update of previous Waste Programs Division audits

The Office of the Auditor General has reviewed the State Assurance Fund and aspects of the Waste Programs Division in previous audit reports. This report updates some information found in those reports.

- **State Assurance Fund**—An audit in 1998 (Auditor General Report No. 98-4) found that the Fund had a \$48 million backlog of claims. This backlog was the result of several factors, including insufficient revenues, high administrative costs, and the Legislature sweeping some money from the Fund. The report recommended some ways to reduce the backlog and also recommended that the Legislature consider sunseting the Fund. An audit in 1999 (Auditor General Report No. 99-21) found that the backlog of claim payments had increased to \$55 million.

The current audit discusses the changes made by Laws 2004, Chapter 273 and reports on additional changes the Department could make to increase compliance with UST financial assurance requirements and to reduce costs to the Fund (see Finding 1, pages 11 through 19).

- **Hazardous Waste Enforcement**—An audit in 1993 (Auditor General Report No. 93-8) found that the Hazardous Waste Section was slow to resolve enforcement cases. The Section rarely used strong enforcement tools, which allowed violations to continue for years without closure.

This audit finds that some of the same conditions present in 1993 still exist today and that the Hazardous Waste Section could still improve its enforcement activities. Specifically, this audit found that the Division could improve its

timeliness for issuing enforcement actions and should escalate enforcement actions to the next level when necessary (see Finding 2, pages 21 through 28).

- **Water Quality Assurance Fund**—WQARF has been included in several audits performed by the Auditor General's Office. Report No. 93-8, issued before WQARF reform in 1997, found that the remediation of contaminated sites was taking too long. Weak enforcement and a lack of funding contributed to this problem. The report further detailed how the lack of funding for WQARF adversely impacted work on remedial projects and recommended that the Legislature reconsider funding for WQARF. Report No. 99-21 was completed soon after the reforms of 1997, when it was still too early to assess the changes made to the program. However, it was noted that the new proportional liability standard would pose new challenges for the Department in regard to finding responsible parties and recovering money from them.

This report details some of the progress made in cleaning up WQARF sites. Further, it shows where the WQARF sites are in the cleanup process, the money that the program has collected from potentially responsible parties, how much money the program is spending on cleanup activities, and the appropriateness of the program's administrative costs (see Other Pertinent Information, pages 29 through 36).

- **Solid Waste Inspections**—A 1993 audit (Auditor General Report No. 93-8) found that the Solid Waste Section had not met its goal of inspecting all active landfills annually. Specifically, over one-third of active landfills had not been inspected in 1992. In addition, of those not inspected during 1992, nearly two-thirds had gone more than 2 years between inspections.

Audit work conducted as part of this audit found that the Solid Waste Section was still not meeting its annual inspection goal for active landfills. More than one-half of the 37 landfills auditors reviewed had gone longer than 1 year since their last inspection. Fifteen of these 37 landfills went more than 2 years since their last inspection. Based on interviews with Solid Waste Section personnel, auditors concluded that the primary reason the Division has not met the landfill inspection goals is the time spent before the inspection creating and receiving approval for facility-specific inspection checklists. The inspectors have been spending considerable time creating these new checklists in order to perform more thorough inspections. Division personnel stated that inspections at a landfill are not conducted until the checklist is completed, reviewed, and approved. Additionally, according to division management, during the audit, 14 of 35 staff positions in the Solid Waste Section were vacant because of funding reductions. Four of these positions were in the Inspections and Compliance Unit.¹ Despite these reductions, the Division reported that it conducted 267 inspections of solid waste facilities in fiscal year 2003, and 41 of these were landfill inspections.

The Solid Waste Section is not meeting its goal to inspect all active landfills annually.

¹ According to the Department, an additional position in the Inspections and Compliance Unit was abolished in April 2003 due to funding reductions.

Budget and funding

As illustrated in Table 1 (see page 7), the Division received \$33.3 million in fiscal year 2003. Of this, \$19.8 million came from the Division's portion of corporate income taxes, water use taxes, fines and forfeits, and fees deposited into the Water Quality Assurance Revolving Fund (WQARF), as well as monies from WQARF's available fund balance. An additional \$4.5 million came from the State Assurance Fund for costs including administration of the Fund and cleanup of leaking UST sites through the state-lead program. Additionally, the Division received \$4.2 million in federal grants; \$3.2 million in licenses, permits, and other fees; and \$1.3 million in State General Fund appropriations.

The Water Quality Assurance Revolving Fund is administered within the Division. As illustrated in Table 2 (see page 8), WQARF received \$15.5 million in fiscal year 2004. Ten million dollars came from corporate income taxes, and \$2.2 million came from taxes assessed on businesses operating municipal water delivery systems. Additionally, \$1.5 million came from licenses, fees, and permits, while \$1.6 million came from cleanup costs recovered from parties for contamination cleaned up by the WQARF program.

This audit also looked at the State Assurance Fund, which provides funding to help UST owners and operators clean up contamination caused by leaking USTs. As illustrated in Table 3 (see page 9), the State Assurance Fund received \$29.3 million in fiscal year 2004; \$28.7 million of these revenues came from the \$.01 excise tax on USTs regulated by the Department, and approximately \$630,000 came from investment interest.

Scope and methodology

This audit focused on additional changes the Department could make to the State Assurance Fund, the timeliness of the Division's enforcement actions against hazardous waste facilities, and the status of the WQARF program. This audit report presents two findings and associated recommendations:

- Legislative changes have been made to the State Assurance Fund, but the Department should take additional actions (see Finding 1, pages 11 through 19); and
- The Division should more quickly resolve enforcement actions against hazardous waste facilities and their responsible parties (see Finding 2, pages 21 through 28).

Table 1: Waste Programs Division
Schedule of Revenues and Expenditures¹
Years Ended June 30, 2002 and 2003
(Unaudited)

	2002	2003
Revenues:		
State General Fund appropriations	\$ 1,250,759	\$ 1,335,701
Water Quality Assurance Revolving Fund ²	25,764,626	19,766,648
State Assurance Fund ³	5,100,706	4,498,121
Federal grants	4,428,573	4,218,803
Licenses, permits, and other fees	2,909,274	3,156,544
Interest	271,066	178,763
Miscellaneous	<u>359,942</u>	<u>137,890</u>
Total revenues	<u>40,084,946</u>	<u>33,292,470</u>
Expenditures:⁴		
Personal services and related benefits	10,048,614	9,582,809
Professional and outside services	24,779,392	19,329,567
Travel	224,753	193,556
Aid to organizations	187,569	
Other operating	708,832	457,678
Equipment	68,621	82,289
Allocated costs	<u>4,248,734</u>	<u>4,193,937</u>
Total expenditures	<u>40,266,515</u>	<u>33,839,836</u>
Excess of revenues (under) expenditures	(181,569)	(547,366)
Net operating transfers out	<u>726,924</u>	<u>664,200</u>
Excess of revenues and operating transfers in (under) expenditures and operating transfers out ⁵	<u>\$ (908,493)</u>	<u>\$ (1,211,566)</u>

¹ This schedule presents revenues and expenditures of the Division's operations. However, 2004 estimates are not readily available because the Department's budgets are based on its appropriated budget units and are not consistent with the format of this schedule. In addition, the Northern and Southern Offices' waste-related expenditures are not included in this table because the Department does not allocate expenditures among its divisions. These offices conduct water, waste, and air activities and have expenditures of approximately \$4.1 million.

² Primarily consists of the Division's portion of corporate income taxes, water use taxes, fines and forfeits, and fees deposited in the Water Quality Assurance Revolving Fund (WQARF), as well as its available fund balance. See Table 2, page 8 for WQARF's financial table.

³ Consists of the Division's portion of underground storage tank contents taxes deposited in the State Assurance Fund. See Table 3, page 9 for the State Assurance Fund's financial table.

⁴ Includes administrative adjustments from the prior year.

⁵ The excess of revenues under expenditures was paid by the Division's available fund balance.

Source: Auditor General staff analysis of the Arizona Financial Information System (AFIS) *Accounting Event Transaction File* for the years ended June 30, 2002 and 2003.

Table 2: Water Quality Assurance Revolving Fund
Statement of Revenues, Expenditures, and Changes in Fund Balance
Years Ended June 30, 2002 through 2004
(Unaudited)

	2002	2003	2004
Revenues:			
Corporate income taxes ¹	\$ 5,000,000	\$10,000,000	\$10,000,000
Water use taxes ²	2,213,435	2,150,995	2,197,184
Licenses, fees, and permits ³	1,452,229	1,582,917	1,460,237
Fines and forfeits ⁴	778,299	3,492,112	1,633,482
Interest on investments	1,001,409	279,007	194,036
Other	43,417	5,400	9,078
Total revenues	<u>10,488,789</u>	<u>17,510,431</u>	<u>15,494,017</u>
Expenditures:⁵			
Personal services and related benefits	3,536,331	3,186,440	3,526,784
Professional and outside services	21,156,559	16,494,581	12,270,212
Travel	93,370	95,228	94,419
Aid to individuals and organizations	178,956		11,589
Other operating	751,545	412,229	327,937
Equipment	22,679	28,119	66,858
Allocated costs ⁶	1,765,056	1,584,515	1,538,825
Total expenditures	<u>27,504,496</u>	<u>21,801,112</u>	<u>17,836,624</u>
Excess of revenues under expenditures	(17,015,707)	(4,290,681)	(2,342,607)
Net operating transfers out ⁷	<u>(1,371,503)</u>	<u>(816,000)</u>	<u>(2,885,107)</u>
Excess of revenues and transfers in (under) expenditures and transfers out	(18,387,210)	(5,106,681)	(5,227,714)
Fund balance, beginning of year	<u>33,222,404</u>	<u>14,835,194</u>	<u>9,728,513</u>
Fund balance, end of year	<u>\$14,835,194</u>	<u>\$ 9,728,513</u>	<u>\$ 4,500,799</u>

¹ Consists of corporate taxes transferred to the Department in accordance with A.R.S. §49-282; however, the statutory formula for funding provided was temporarily suspended by Laws 2002, Chapter 328 and Laws 2003, Chapter 263, and the Department was appropriated \$5 million in 2002 and \$10 million in 2003 and 2004.

² Taxes are assessed on businesses operating municipal water delivery systems in accordance with A.R.S. §42-5302.

³ Includes fees for prospective purchaser agreements, water quality assurances, fertilizer licenses, and manifest resubmittals, and for hazardous waste facility, hazardous waste resource recovery facility, industrial discharge, and pesticide registrations.

⁴ Consists of remedial action costs recovered from responsible parties.

⁵ Includes administrative adjustments from the prior year.

⁶ Amount is the portion of department-wide overhead expenditures allocated to the Water Quality Assurance Revolving Fund. Examples include administrative personnel, rent, general accounting, telecommunications system, and risk management costs.

⁷ Consists primarily of transfers to the Department of Health Services, Department of Water Resources, and Attorney General's Office for WQARF-related activities. In addition, 2002 includes \$167,779 of corporate taxes returned to the State General Fund, and 2004 includes a \$2.5 million transfer from the Air Quality Fund and a \$5 million transfer to the State General Fund, as required by Laws 2003, Chapter 262.

Source: Auditor General Staff analysis of the Arizona Financial Information System (AFIS) *Accounting Event Transaction File and Trial Balance by Fund* report for the years ended June 30, 2002, 2003, and 2004.

Table 3: State Assurance Fund
Statement of Revenues, Expenditures, and Changes in Fund Balance
Years Ended June 30, 2002 through 2004
(Unaudited)

	2002	2003	2004
Revenues:			
Underground storage tank contents tax	\$ 27,819,119	\$ 27,769,151	\$28,651,812
Interest on investments	1,228,818	873,330	630,492
Other	59,604	99,911	55,130
Total revenues	<u>29,107,541</u>	<u>28,742,392</u>	<u>29,337,434</u>
Expenditures and operating transfers out: ¹			
Personal services and related benefits	3,376,361	3,427,747	3,475,659
Professional and outside services	1,615,564	1,262,392	1,574,431
Travel	30,326	22,918	22,534
Aid to individuals and organizations ²	14,553,442	17,400,672	29,258,872
Other operating	230,464	166,220	158,358
Equipment	26,641	41,898	35,285
Allocated costs ³	1,685,752	1,688,338	1,711,414
Total expenditures	<u>21,518,550</u>	<u>24,010,185</u>	<u>36,236,553</u>
Operating transfers out	20,000	6,020,000 ⁴	20,000
Total expenditures and operating transfers out	<u>21,538,550</u>	<u>30,030,185</u>	<u>36,256,553</u>
Excess of revenues and transfers in over (under) expenditures and transfers out	7,568,991	(1,287,793)	(6,919,119)
Fund balance, beginning of year	<u>39,862,805</u>	<u>47,431,796</u>	<u>46,144,003</u>
Fund balance, end of year	<u>\$ 47,431,796</u>	<u>\$ 46,144,003</u>	<u>\$39,224,884 ⁵</u>

¹ Includes administrative adjustments from the prior year.

² Reimbursement for leaking underground storage tank cleanup costs to owners/operators.

³ Amount is the portion of department-wide overhead expenditures allocated to the State Assurance Fund. Examples include administrative personnel, rent, general accounting, telecommunications system, and risk management costs.

⁴ Includes \$6 million transferred to the State General Fund in accordance with Laws 2003, Chapter 1.

⁵ Amount is designated for payments to claimants for cleanup costs and program operating expenditures, except for \$6 million that is reserved for a long-term loan to the Regional Public Transportation Authority.

Source: Auditor General Staff analysis of the Arizona Financial Information System (AFIS) Accounting Event Transaction File and Trial Balance by Fund report for the years ended June 30, 2002, 2003, and 2004.

Various methods were used to study the issues addressed in this audit. General methods used for all areas included interviews with department management and staff, as well as interviews of representatives from two advisory bodies related to the audit areas. Additionally, auditors obtained information from representatives of the EPA and the Arizona Attorney General's Office. Finally, auditors reviewed Arizona Revised Statutes, the Arizona Administrative Code, the Code of Federal Regulations, and the Department's *Compliance and Enforcement Handbook*.

The following specific methods were used in reviewing each area:

- To determine whether there were any changes the Department should make to the State Assurance Fund, auditors analyzed the changes made to the Fund by Laws 2004, Chapter 273, which provided for the termination of fund eligibility in 2006 and for the termination of the Fund itself no later than 2013. Additionally, auditors obtained information regarding the degree of compliance with UST financial assurance requirements. Finally, an auditor attended meetings of key UST stakeholders in which they addressed various issues related to the UST program.

To determine the Fund's financial status and the status of the claims processing backlog in the SAF section, auditors obtained, validated, and analyzed data from the State Assurance Fund, spanning from the Fund's inception to January 2004.

- To determine whether the Hazardous Waste section has taken enforcement actions in a timely manner, auditors obtained, validated, and analyzed data from the Hazardous Waste Program's two inspection, compliance, and enforcement databases.¹ Auditors also reviewed documentation for 127 enforcement actions to determine whether the Department was meeting its responsibility regarding the timeliness of issuing, escalating, and resolving enforcement actions. Additionally, auditors attended two internal agency meetings regarding compliance and enforcement, as well as two agency roundtables, one held with the regulated community, and one with the environmental community.
- To obtain information on the Water Quality Assurance Revolving Fund, auditors reviewed program documents regarding work done on sites within the WQARF program.

This audit was conducted in accordance with government auditing standards.

The Auditor General and staff express appreciation to the director, division director, and staff of the Department of Environmental Quality for their cooperation and assistance throughout the audit.

¹ The two databases auditors obtained information from are ICE (Inspections, Compliance, and Enforcement) and the Hazardous Waste Inspections database.

FINDING 1

Changes made to the State Assurance Fund, and Department should take additional actions

The Legislature recently made some significant changes to the State Assurance Fund (Fund), and the Department should take additional actions to increase compliance with financial assurance requirements and to reduce costs to the Fund. Created in 1990, the Fund provides owners and operators of leaking underground storage tanks (USTs) with funding to clean up contaminated sites. In May 2004, the Legislature made several important changes to the Fund, including ending eligibility for the Fund in 2006 and creating a Regulated Substance Fund to succeed the State Assurance Fund. The Regulated Substance Fund will provide coverage for leaking USTs whose owners cannot be located, and is slated to receive up to \$60 million in transfers from the State Assurance Fund for this purpose.

However, the Regulated Substance Fund may not receive the entire \$60 million if paying all claims to the Fund requires additional time beyond July 1, 2011. The Department should take further action to ensure that UST owners comply with federal and state financial assurance requirements. Finally, the Department should make some changes to reduce costs to the Fund.

Fund provides coverage for leaking USTs

The Legislature created the Fund in 1990 to help UST owners and operators meet federal and state requirements for financial responsibility. These regulations require that UST owners and operators acquire a minimum level of financial assurance to cover costs associated with the cleanup of leaking USTs. UST owners and operators are required to have at least \$500,000 of coverage for each UST leak, and \$1 million of coverage for individual leaks on tanks meeting certain location and size requirements. UST facilities must also have annual aggregate coverage, a minimum level of coverage for the total amount of cleanup needed in a 1-year period. For facilities with 100 or fewer USTs, at least \$1 million in annual aggregate coverage is

A minimum level of financial assurance for USTs is required.

required, while facilities with more than 100 USTs must have at least \$2 million in annual aggregate coverage. These coverage amounts include both cleanup costs and third-party liability. The Fund partially fulfills these requirements by providing qualifying owners of leaking USTs up to \$500,000 per leak, or \$1 million in certain instances. However, the Fund does not provide third-party liability coverage, including damage caused to another owner's property due to a UST leak.

Although this assurance could normally be provided through private insurance, in the late 1980s private insurance became less available as insurers declined to continue writing policies. The Fund was intended to help fill the gap created by declining insurance availability. However, insurance is currently available and affordable, and most UST owners and operators who are in compliance with financial assurance requirements have private UST insurance. Other ways to meet this requirement include self-insurance and a surety bond.

The Fund's revenue is provided by an excise tax of \$.01 per gallon on most regulated underground storage tanks (USTs), based on the quantity of regulated substances placed in a tank in any calendar year. The Arizona Department of Transportation (ADOT) collects this excise tax from owners and operators of Arizona USTs and transfers it, less an administrative fee, to the Fund. In fiscal year 2003, fund revenues totaled approximately \$29 million.

The State also uses the Fund to pay for its state-lead program. The state-lead program cleans up contaminated orphan sites, which are sites whose owner cannot be located, because, for example, the owner is deceased. The state-lead program also takes cleanup responsibility for sites whose owners do not have the financial capacity to pay for the cleanup or are unwilling to do so. If an owner is unwilling to pay for cleanup, the state-lead program will perform the cleanup and then attempt to recover the costs.

Recent legislation significantly changed the Fund

In May 2004, Laws 2004, Chapter 273 was enacted, which made several important changes to the Fund.¹ Specifically, the legislation provided that UST owners and operators can use the Fund for cleanup coverage before accessing their private financial assurance. Additionally, the legislation set an eligibility end date of June 30, 2006. After this date, UST releases are no longer eligible for coverage from the Fund. Further, the legislation set a termination date for the Fund itself, as well as the excise tax that funds it. Finally, the legislation created a Regulated Substance Fund to begin operation after the State Assurance Fund is terminated. The Regulated Substance Fund will provide for the cleanup of USTs whose owners cannot be located or are financially unable to provide for cleanup.

¹ The legislation became effective August 25, 2004.

Fund now pays for cleanup before insurance—The May 2004 legislation now allows UST owners and operators to access the Fund before submitting claims to their insurance. Prior to Laws 2004, Chapter 273, UST owners and operators who had private UST insurance were required to file a claim with their insurance carrier before they could access the Fund.¹ However, this legislation changed that requirement to allow owners and operators who use private insurance to meet financial assurance requirements to access the Fund for coverage up to \$500,000 before they file a claim with their insurance carrier. Further, this modification is retroactive to December 31, 2002. Consequently, owners and operators can now reapply for fund coverage if their fund application was denied on or after December 31, 2002, because of failure to first file a claim with their private insurance.

Although recent legislation now allows owners and operators to access the Fund prior to filing a claim with their insurance carrier, some owners and operators can receive additional monies from the Fund if they file a claim with their insurance carrier first. If owners and operators access the Fund first, they can only receive fund coverage up to \$500,000 and then need to rely on their insurance, which, according to a department representative, normally provides another \$1 million of coverage. If the cost of cleaning up their contaminated site exceeds \$1.5 million—which is the combined coverage provided by the Fund and the insurance—the owner becomes responsible for paying the additional costs. However, owners and operators are eligible for up to a total of \$1 million of fund coverage if they exhaust any financial assurance they possess before attempting to access the Fund, which provides them with at least \$2 million in combined coverage.

Eligibility for the Fund ended—In addition to allowing UST owners and operators to access the Fund before filing a claim with their own private insurance, Laws 2004, Chapter 273 set June 30, 2006, as the final day that UST leaks can be reported to the Department and still be eligible for cleanup coverage from the Fund. Owners and operators of leaking USTs will need to access their alternative financial assurance mechanism, such as private UST insurance, after that date. However, those who report releases before the eligibility end date will be given additional time to submit applications for coverage. For example, an application for pre-approval of cleanup costs must be submitted by June 30, 2009. Applications for direct payments of pre-approved costs and for reimbursement of cleanup costs must be submitted by June 30, 2010. After this date, any application made, or expense incurred, related to cleanup of a leaking UST will not be eligible for coverage.

UST leaks reported after June 30, 2006, are ineligible for fund coverage.

Regulated Substance Fund to replace State Assurance Fund—Laws 2004, Chapter 273 also created the Regulated Substance Fund, which will succeed the State Assurance Fund. The legislation did not create either an eligibility deadline

¹ Prior to Laws 2004, Chapter 273, UST owners and operators who met their financial assurance requirements through methods other than private UST insurance, such as companies that used self-insurance, were not required to use their own financial assurance before accessing the Fund.

Monitored natural attenuation is the use of natural processes, such as chemical breakdown by microorganisms, to clean up contamination at a UST site.

or a termination date for the Regulated Substance Fund. The Regulated Substance Fund will have two primary uses. First, it will pay for cleanup of releases from leaking USTs called “orphan tanks,” whose owner or operator cannot be located within 90 days of the release. As mentioned previously, right now the Department handles cleanup of orphan tanks through its state-lead program. Second, it will provide for cleanup at any leaking UST site where monitored natural attenuation has been approved by the Department as a cleanup technique before July 1, 2010. Cleanups using monitored natural attenuation will be paid for through a separate section of the Regulated Substance Fund called the Monitored Natural Attenuation (MNA) account.

For the cleanup of leaking orphan tanks, the Regulated Substance Fund can receive revenue from three sources. The first source is a transfer from the State Assurance Fund. On July 1, 2011, the Department’s director is required to transfer to the Regulated Substances Fund all monies remaining in the State Assurance Fund if all of its eligible claims have been paid. A possible second source is the \$.01 per gallon excise tax. If the amount transferred to the Regulated Substance Fund is less than \$60 million, it will receive revenue from the excise tax until it reaches \$60 million, or until the excise tax expires on December 31, 2013.¹ The Fund is statutorily limited to receiving no more than a total of \$60 million in revenues from the State Assurance Fund transfer and the excise tax.² The third source is an amount equal to co-pays made by people who volunteer to clean up leaking USTs.³ This amount will go into the State Assurance Fund, but will be tracked by the Department. If the State Assurance Fund has more than \$60 million when all eligible claims have been paid, then this amount can also be transferred to the Regulated Substance Fund.

The Fund’s MNA account will receive funding through a different source. The MNA account will be funded by monies set aside by the Department’s Director from the State Assurance Fund on or before June 30, 2011. The monies in the MNA account are separate from monies in the Regulated Substance Fund for the cleanup of orphan tanks. Therefore, monies set aside for funding cleanups using monitored natural attenuation cannot be used to cleanup orphan tanks.

Monies available for orphan tank cleanup may be limited—Although the Regulated Substance Fund’s revenues for the cleanup of orphan tanks may be in excess of \$60 million, it could receive far less than this amount. As stated above, the legislation allows the director to transfer funds from the State Assurance Fund to the Regulated Substance Fund on July 1, 2011, only if all eligible applications to the State Assurance Fund have been paid. However, according to a department official, paying all the applications may require additional time beyond July 1, 2011. For

1 However, the State Assurance Fund and the excise tax end on December 31, 2013, even if the Regulated Substance Fund has not yet reached \$60 million.

2 If the State Assurance Fund has more than \$60 million at the time of the transfer, the amount beyond \$60 million will go to the State’s General Fund.

3 However, Laws 2004, Chapter 273 provides that a volunteer’s co-pay is waived if the value of the property where the leaking tank is located is less than the volunteer’s 10 percent co-pay.

example, additional time may be required if the State Assurance Fund sees a significant number of groundwater contamination claims. According to the department official, groundwater contamination generally takes longer to address than contamination of soil. If additional time is needed to pay these claims, the State Assurance Fund will continue to receive monies from the excise tax until all of its claims are paid. This would limit the amount of excise tax revenues the Regulated Substance Fund would receive since the excise tax will expire no later than December 31, 2013, regardless of whether the Regulated Substance Fund has reached \$60 million.

In fact, the Regulated Substance Fund could potentially receive no funding at all for orphan tank cleanup. By law, the State Assurance Fund will be terminated when all of its claims are paid, and the Regulated Substance Fund receives \$60 million from any combination of a transfer from the State Assurance Fund and excise tax revenues. However, if any State Assurance Fund claims remain unpaid as of December 31, 2013, then the State Assurance Fund will terminate without the Regulated Substance Fund receiving either a transfer of funds or any excise tax revenues. Additionally, this would result in some approved cleanups of UST leaks that will not receive their full funding.

This possible lack of funding could be averted. Laws 2004, Chapter 273 requires that the Department's director submit a report on the State Assurance Fund's anticipated liability to the President of the Senate and the Speaker of the House by September 1, 2009. If this report finds that the liabilities to the Fund will likely prevent the director from transferring monies to the Regulated Substance Fund in July 2011, the Legislature could consider extending the excise tax beyond December 31, 2013, so that the Regulated Substance Fund revenues could reach \$60 million.

Additionally, according to a department official, if the Regulated Substance Fund does not receive adequate funding to perform orphan tank cleanup, the Department will monitor contaminated orphan sites to assess whether they pose a threat to human health. If the contamination at the sites does pose a threat to human health and necessary cleanup funds from the Regulated Substance Fund are unavailable, the Department may begin active cleanup using funds from the Water Quality Assurance Fund (WQARF). Agency officials have indicated that WQARF funds would be used as a last resort.

A report on the Fund's anticipated liability is required by September 1, 2009.

Greater compliance needed when Fund eligibility ends

To ensure compliance with financial assurance requirements, the Department should continue to take steps to strengthen its compliance efforts, including taking formal enforcement actions as necessary. Currently, tank owners and operators have a relatively low rate of compliance with financial assurance requirements. Compliance

with financial assurance regulations will become even more important as eligibility for the State Assurance Fund ends.

Full compliance with financial assurance requirements has not been achieved—Although required by federal and state regulations, many UST facilities do not comply with financial assurance requirements. As mentioned previously, current federal and state regulations require that UST owners acquire at least \$500,000 and up to \$1 million of financial assurance to cover costs associated with a UST leak. However, according to the Department, as of January 2004, only 62 percent of UST facilities were in compliance with federal and state financial assurance requirements.

There are two primary reasons why compliance with the financial assurance regulations is low. First, according to a department representative, prior to October 2003, the Department did not enforce compliance with financial assurance requirements unless a noncompliant facility became the subject of another enforcement action. The Department reports that limited resources hampered its ability to take timely enforcement action against these facilities, and instead it prioritized enforcing UST regulations and assisting UST owners and operators in complying with these regulations. Second, according to this representative, the compliance rate is low because some owners and operators erroneously think that the Fund fully covers their financial assurance requirements. However, owners and operators who must provide \$1 million in financial assurance, but who only qualify for \$500,000 in coverage from the Fund, are responsible for providing another \$500,000 in additional financial assurance through some other means, such as private insurance or self-insurance. Also, as mentioned previously, the Fund does not cover third-party liability.

Consequences of noncompliance with financial assurance requirements—The lack of compliance with financial assurance requirements could have financial repercussions for the State. When eligibility for the Fund ends, owners and operators who do not maintain the required level of financial assurance may not have the financial ability to clean up leaking USTs. As a result, the State may be liable for the future cleanup of these additional contaminated sites through either the Department's state-lead program or the Regulated Substances Fund. As eligibility for the Fund is ending, the State can reduce its potential future liability by ensuring that all UST owners and operators meet financial assurance requirements.

Steps recently taken to increase compliance with financial assurance requirements—The Department has recently taken steps to reduce this potential for liability to the Fund by enacting a more proactive approach to ensuring compliance with financial assurance requirements. At the June 2003 UST Conference, the Department announced a renewed enforcement effort to ensure compliance with financial responsibility requirements. According to the Department, this announcement was followed by a postcard sent to all owners and operators

The State can reduce its potential future liability by ensuring compliance with financial assurance requirements.

outlining the requirements. In addition, in the fiscal year 2005 budget, the Legislature at the Department's request made funding available for two inspectors and an administrative assistant who will address inspections and compliance needs at UST facilities throughout the State, including enforcing financial responsibility requirements. Since October 2003, the Department reports having sent a letter to all owners and operators whose facilities had been out of compliance for more than 90 days and whose addresses were known. The Department also updated its database with new addresses as they were identified. As of June 2004, 437 of 497 noncompliant owners and operators (88 percent) had received a letter from the Department informing them of their status and reminding them of their need to attain compliance. Also, in October 2003, the Department began a policy of mailing enforcement actions to owners and operators of noncompliant facilities. The Department believes this approach has resulted in an increase in the compliance rate from 52 percent of UST facilities in October 2003 to 62 percent in January 2004. Additionally, in April 2004, the Department began performing complete inspections of those facilities that did not comply with their financial assurance requirements after having received a reminder letter. The Department should continue to work on increasing compliance with financial assurance requirements, including pursuing formal enforcement actions, such as consent orders and compliance orders, as necessary.

Fund costs could be reduced

While the Department continues to pay claims from the State Assurance Fund, it could take steps to reduce costs incurred by the Fund. First, it should reassess the cost ceilings used for payment of cleanup costs. Second, it should examine the feasibility of using the competitive bidding model the state-lead program uses.

High cost ceilings should be reassessed—Some UST stakeholders believe that the cost ceilings are too high. The cleanup of leaking UST sites is typically performed by private consultants hired by the owner or operator, or by a fund volunteer. These consultants bill the Fund for the cleanup work that is performed, but there are limits, called cost ceilings, on the amount that consultants can bill the Fund for various cleanup activities. However, key UST stakeholders convened by the director believe that cleanup costs are inflated to the point that the cost ceilings are no longer the upper limit, but have become the going price of the cleanup work. The Department should assess the cleanup costs charged to the Fund to see if contractors are routinely charging at the cost ceilings. If so, the Department should consider revising its cost ceilings to better reflect the true cost of cleanup work.

Cost ceilings—The maximum cost that the State Assurance Fund will pay for activities related to the cleanup of leaking USTs.

Some stakeholders believe that cost ceilings are used as the actual price of cleanup work.

Additionally, according to fund management, fund cost ceilings themselves are higher than they should be because a flawed method was used to create them. The cost ceilings are based on a 2000 cost survey of various consultants in the field of UST cleanup, and are adjusted for inflation in the intervening years before the next cost survey is conducted. However, in the 2000 survey, respondents were allowed to answer questions that did not pertain to their occupation, and this may have resulted in an inaccurate estimate of the true costs for particular activities. For example, tank installers were allowed to answer questions about lab testing costs, which they were unfamiliar with. Further, the Fund pays some general business costs that appear to be unreasonably high. For example:

- In 2004, the Fund can pay up to \$2 per mile for a cleanup consultant's travel costs.
- In 2004, the Fund can pay up to \$47 per hour for clerical and support work done by a cleanup consultant's administrative assistant.

The Department will be creating new cost ceilings for use beginning in July 2005. However, according to a fund official, the Department has not yet decided whether it will perform a new cost survey to create the cost ceilings, or whether it will simply update the 2004 cost ceilings with information from the Bureau of Labor Statistics. If the Department performs a new cost survey, it should be careful to ensure that it uses an appropriate methodology and does not allow respondents to answer questions that do not pertain to their occupation.

Competitive bidding may be an option—Another possible way of reducing costs is by implementing competitive bidding. This would require owners and operators to solicit multiple bids for cleaning up a contaminated UST site. By instituting competitive bidding, the Department would likely be able to use the market to control costs rather than relying on a cost ceilings that need to be updated. Arizona's UST owners and operators are not required to solicit bids from cleanup consultants before choosing one to clean up a contaminated site. However, the Department's UST state-lead program uses competitive bidding for its projects and reports costs at approximately 60 percent of the cost ceilings. Requiring competitive bidding for all owners and operators would require a statutory change. The Department should examine the feasibility of instituting competitive bidding as a possible method of controlling costs incurred by the State Assurance Fund.

Recommendations

1. The Department should continue to work on increasing compliance with financial assurance requirements, including pursuing formal enforcement actions, such as consent orders and compliance orders, as necessary.
2. The Department should assess the cleanup costs charged to the State Assurance Fund to see if cost ceilings are being treated as the actual price of cleanup costs rather than as an upper limit for costs.
3. If contractors are routinely charging at the cost ceilings for certain cleanup activities, the Department should consider revising cost ceilings to better reflect the true cost of cleanup work.
4. If the Department performs a cost survey to create the cost ceilings that will be effective beginning in July 2005, it should use an appropriate methodology and not allow respondents to answer questions that do not pertain to their occupation.
5. The Department should examine the feasibility of instituting competitive bidding as a method of controlling State Assurance Fund costs.

FINDING 2

Division should improve its hazardous waste enforcement efforts

The Waste Programs Division (Division) should more quickly issue, escalate, and resolve enforcement actions against hazardous waste facilities and their responsible parties that are out of compliance with standards. The Division is responsible for ensuring that all hazardous waste in Arizona is stored, transported, and disposed of properly. It is important for hazardous waste to be managed properly because it can represent a significant public health threat. However, the Division sometimes takes several months to issue an enforcement action when it finds a violation. Although the Division informs the facility of serious violations in writing at the time of the inspection, the Division does not do so for less serious violations. Further, it does not always escalate enforcement actions when responsible parties do not correct their violations and return to compliance. To improve in this area, the Division should take several steps. First, it should streamline the approval process for issuing the enforcement actions resulting from major violations. In addition, it should better track the status of its enforcement actions. Finally, it should escalate enforcement actions to the next level as necessary against responsible parties that have not corrected their violations.

Division regulates through inspections and enforcement actions

The Hazardous Waste Section of the Division is responsible for regulating hazardous waste facilities, including those facilities that generate, treat, store, or dispose of these types of materials. The Division regulates these facilities by issuing permits, conducting periodic inspections, and taking enforcement action when a violation is identified.

The Division classifies violations identified during inspections as either major or minor. Major violations are those that pose risk to human health and the environment. An example of a major violation is a responsible party's failure to correctly identify

Major violations pose risk to human health and the environment.

waste it produces and ships off-site for disposal, which could result in hazardous substances being improperly disposed of and possibly entering the environment. In contrast, minor violations are those that pose a minimal risk to human health and the environment, such as responsible party's failure to pay a hazardous waste fee. For minor violations, the Division may take an informal enforcement action. For example, the Division may send the responsible party a "Notice of Opportunity to Correct" (NOC), which explains the violation and the action the responsible party needs to take to verify return to compliance.

In contrast, for a major violation, the Division may take either an informal or a formal enforcement action, such as issuing a Notice of Violation (NOV), or an administrative

Enforcement Actions

Informal Actions:

Notice of Opportunity to Correct Deficiencies (NOC)—Puts the responsible party on notice that the Division believes a nonsignificant violation of an environmental law has occurred.

Notice of Violation (NOV)—Puts the responsible party on notice that the Division believes a significant violation of environmental law has occurred.

Formal Actions:

Administrative Order—Orders entered into between the Department¹ and the responsible party.

- **Compliance Order**—A unilateral order issued by the Department¹ without input from the responsible party. It is an appealable action.
- **Consent Order**—A bilateral written order issued with the complete agreement of the responsible party and the Department.¹ It is not an appealable action.
- **License Suspension/Revocation**—Suspension or revocation of a responsible party's license for a specified period of time. It can be issued bilaterally or unilaterally. If issued unilaterally, it can be appealed.

Civil Referral—Referred by the Department to the Attorney General's Office¹:

- Temporary Restraining Order/Preliminary Injunction
- Permanent Injunction/Civil Penalty
- Consent Judgment/Consent Decree—A negotiated settlement of a civil complaint

Criminal Referral—The State's authority for prosecution of environmental crimes lies exclusively with the Attorney General's Office, but the Department assists by gathering evidence.

¹ Although signed by the division director, this enforcement action requires department director approval before it is issued to the responsible party.

Source: Auditor General staff summary of the Department's Compliance and Enforcement Handbook.

order, or referring the action to the Attorney General's Office for civil or criminal action. The enforcement process also requires the inspector to follow up to ensure the responsible party corrects the violation and returns to compliance. If a responsible party has not corrected the violation within the specified time frame, division policy recommends that it escalate the enforcement action. For example, if the Department issued an NOV for the violation, the Division could escalate the action to an administrative order, and then to a referral for a civil action. In each case, the enforcement action taken by the Division depends on the severity of the violation and is not necessarily issued in order of the actions listed on page 20. For example, for relatively minor violations, the Division could choose to issue an NOC or an NOV, and if the responsible party does not correct the violations in a timely manner, the Division could escalate the action to any one of the formal actions. In contrast, for more serious violations, the Division could choose to issue a formal enforcement action without first issuing an informal action. As shown on the list of enforcement actions on page 20, this formal action could be either an administrative order, a civil referral, or a criminal referral.

Division should improve enforcement timeliness

The Division should improve the timeliness of issuing enforcement actions. For many cases from July 1, 2000, to November 30, 2003, the Division failed to issue enforcement actions within its policy of 45 days after it identified the violation, and some actions took longer than 90 days. While the Division's timeliness of issuing informal enforcement actions improved in fiscal year 2003 compared to fiscal year 2002, it was worsening in the first half of fiscal year 2004. Some of the more recent delays may be attributable to recent changes in division policy, one of which requires that more people approve issuing such actions.

Division should issue enforcement actions more quickly—The Division should review and issue its enforcement actions more quickly, to help responsible parties return to compliance as quickly as possible and minimize the risk to human health and the environment. The Department's policy requires the Division to send the NOC or NOV to the responsible parties within 45 calendar days of the inspection during which the violation was identified. However, as illustrated by Table 4 (see page 24), the Division does not always meet this goal. For example, between July 1 and November 30, 2003, the Division issued only 26 percent of its NOCs and NOVs within the prescribed 45 calendar days. Further, the Division has taken longer than 90 days to issue some enforcement actions. For example, between July 1 and November 30, 2003, the Division issued 23 percent of its NOCs and NOVs after 90 days. Although the Division immediately notifies the facility of serious violations and the requirements to correct those violations at the time of the inspection through an Exit Debriefing Form, this briefing is not as detailed and inclusive as the official enforcement action. Further, the responsible party may be unaware of the details for compliance regarding less serious violations. Consequently, the responsible party may remain out of compliance longer.

Table 4: Hazardous Waste Section
Timeliness of Issuing Informal Enforcement Actions
Fiscal Years 2001 through 2004

Fiscal Year	Type	Total Issued	Number Issued		
			Within 45 Calendar Days	Between 46 and 90 Calendar Days	Beyond 90 Calendar Days
2001	NOC	13	5	3	5
	NOV	<u>17</u>	<u>7</u>	<u>5</u>	<u>5</u>
	Total	<u>30</u>	<u>12</u>	<u>8</u>	<u>10</u>
2002	NOC	10	2	6	2
	NOV	<u>63</u>	<u>19</u>	<u>24</u>	<u>20</u>
	Total	<u>73</u>	<u>21</u>	<u>30</u>	<u>22</u>
2003	NOC	7	5	1	1
	NOV	<u>49</u>	<u>25</u>	<u>18</u>	<u>6</u>
	Total	<u>56</u>	<u>30</u>	<u>19</u>	<u>7</u>
2004 ¹	NOC	22	7	10	5
	NOV	<u>21</u>	<u>4</u>	<u>12</u>	<u>5</u>
	Total	<u>43</u>	<u>11</u>	<u>22</u>	<u>10</u>

¹ Statistics presented are from July 1, 2003 through November 30, 2003.

NOC = Notice of Opportunity to Correct Deficiencies
NOV = Notice of Violation

Source: Auditor General staff analysis of the Division's inspections database (Paradox) and the Inspections, Compliance, and Enforcement (ICE) database.

Recent changes to review process may contribute to delays—The Department recently changed its process for reviewing and approving NOV's by requiring division director approval. As of February 2003, most NOV's that result from major violations must be reviewed by two additional people. Additionally, enforcement actions are usually routed back to the originator for finalization before it is sent to the responsible party.

Further, no specific time frames are given to each person in the routing process to review and approve the enforcement action. Not only are more people required to review and approve these enforcement actions, but because there is no individual time frame guidance the enforcement action can sit on each person's desk for a week or longer. The combination of more people in the process and no individual time frame guidance can negatively impact the issuance of enforcement actions. Therefore, the Division should explore ways to streamline its review and approval process for enforcement actions. For example, it should examine the process and eliminate any steps that are not necessary. In addition, it should consider developing specific time frames for each step in the review and approval process.

Division should ensure facilities correct violations

According to department management, compliance is the ultimate goal for the Division. To help achieve this goal, the Division frequently establishes a more aggressive return-to-compliance time frame requirement for violators than provided for in the Department's Compliance and Enforcement Handbook. Once the Division has issued an enforcement action, however, it does not always ensure that the responsible party returns to compliance within the time frame specified in the action. Also, when responsible parties exceed these prescribed time frames, the Division does not always escalate the enforcement actions according to its policies. Improvements in tracking enforcement actions could help remedy this situation.

Some facilities do not return to compliance in a timely manner—Some responsible parties that the Division has taken an informal enforcement action against do not return to compliance in a timely manner. According to division policy, a responsible party receiving an NOC should return to compliance within 180 days, and a responsible party receiving an NOV should return to compliance within 120 days.¹ The Division can—and usually does—direct responsible parties to correct violations in a much shorter time frame. Auditors examined 99 enforcement actions issued in fiscal years 2003 and 2004 and found the Division directed the responsible parties to come into compliance in 5 to 90 days, with the most frequent time frame being 30 days. As Table 5 (see page 26) shows, 35 of the 99 (35 percent) responsible parties issued enforcement actions from July 1, 2002 through November 30, 2003, did not return to compliance within these shortened time frames specified in the actions. In some instances, it has taken more than a year for the responsible party to return to compliance. For example, there were six cases from fiscal years 2001 and 2002 that were still open as of November 30, 2003.

In addition to not ensuring that all informal enforcement actions are resolved in a timely manner, the Division may not ensure that all formal enforcement actions are resolved in a timely manner. In contrast to informal actions, which usually involve violations posing less risk to humans and the environment, formal enforcement actions usually deal with significantly higher risk that can involve hazardous waste cleanup. Similar to the informal actions, formal actions also have specified time frames to guide resolution; however, the time frames are specific to each action. One type of formal action is an administrative order. Auditors reviewed the files for 3 of the 12 administrative orders issued in fiscal year 2003. In two of the three cases, the responsible party failed to meet the Division's initial compliance requirements, even after repeated assistance from division staff. Further, both of these administrative orders resulted from violations identified during inspections years ago—1994 and 1995 inspections, respectively.

The Division gives the majority of responsible parties 30 days to return to compliance.

¹ According to division policy, once a facility has missed the RTC time frames set in the NOV, the Division will contact the responsible party to discuss their options for demonstrating RTC. Policy calls for the inspector to state that one of three options must occur within the next 45 days or a compliance order will be issued: 1) send proof to the Division that they have returned to compliance, 2) take the appropriate steps to return to compliance within the 45 days and then notify the Division, or 3) enter into a consent order when an extension can be negotiated between both parties.

Table 5: Hazardous Waste Section
Status of Informal Enforcement Actions
Fiscal Years 2003 and 2004

Fiscal Year	Type	Number Issued	Number Closed Within Designated Time Frame	Number Closed but Exceeded Designated Time Frame	Number Still Open and Exceeding Designated Time Frame
2003	NOC	7	4	3	0
	NOV	<u>49</u>	<u>33</u>	<u>9</u>	<u>7</u>
	Total	<u>56</u>	<u>37</u>	<u>12</u>	<u>7</u>
2004 ¹	NOC	22 ¹	11	6	3
	NOV	<u>21¹</u>	<u>5</u>	<u>3</u>	<u>4</u>
	Total	<u>43</u>	<u>16</u>	<u>9</u>	<u>7</u>

¹ Statistics presented are from July 1, 2003 through November 30, 2003; for two NOCs and nine NOVs, the designated time frame had not yet elapsed.

NOC = Notice of Opportunity to Correct Deficiencies
NOV = Notice of Violation

Source: Auditor General staff analysis of the Division's inspections database (Paradox) and the Inspections, Compliance, and Enforcement (ICE) database.

The Division does not always escalate enforcement actions as called for by policy.

Enforcement actions not always escalated—When responsible parties do not return to compliance in a timely manner, the Division does not always escalate enforcement actions to the next level as called for by policy. According to division policy, a responsible party's enforcement action, such as an NOC or NOV, should be escalated to the next level if the responsible party does not correct its violation(s) within the specified time frames. For example, if a responsible party received an NOC and did not correct the violation within the time frame, the Division should then issue the responsible party an NOV. However, according to the Division's database, as of November 30, 2003, the Division had not escalated any of the 35 informal enforcement actions auditors reviewed where the facilities had not come into compliance within the specified time frames.¹ Department management indicated it has limited resources to pursue enforcement actions, and evaluates each case independently to determine the most efficient and effective manner in which to proceed.

Similar to informal enforcement actions, division policy also calls for the escalation of formal enforcement actions if the responsible party does not correct the violation within the specified time frame. For example, an administrative order could be escalated to a civil action. However, the Division may not always escalate its formal

¹ According to Table 5, the 35 cases is a total of the enforcement actions for fiscal year 2003 and 2004 from the column "Number Closed but Exceeded Designated Time Frame" and those from the column "Number Still Open and Exceeding Designated Time Frame."

enforcement actions. Of the three administrative orders reviewed by auditors, all issued in fiscal year 2003, the Division did not escalate one of them as specified by policy. According to the Division, instead of escalating enforcement of this administrative order, it continued to negotiate with the facility to bring it into compliance. Further, the Division can send formal enforcement actions to the Attorney General's Office for resolution. However, the Division has managed several formal enforcement actions itself instead of referring them to the Attorney General's Office for a civil lawsuit to be filed. According to the Department, if the negotiation succeeds in returning a responsible party to compliance, then the referral to the Attorney General's Office is to obtain an appropriate civil penalty.

Computer system enhancements could improve enforcement monitoring—One reason why the Division may not escalate enforcement actions is that management and inspectors currently monitor the status of all enforcement actions manually, which does not easily allow them to know which actions need to be escalated. Although each inspector tracks his/her own inspection and enforcement activity and submits a monthly report to the unit manager, there is no system in place for the inspectors or management to easily view the status of the enforcement actions and whether they have been resolved or not. Additionally, according to management, staff turnover in the Hazardous Waste Section has contributed to slow resolution of enforcement actions, since it often takes a new inspector up to one year to become familiar with the Division's policies and procedures regarding the enforcement process.

To better monitor the status of all enforcement actions, the Division should modify its new computer system to allow for the easy generation of management reports. In February 2002, the Department implemented a new computer system to manage its inspection and enforcement data. During the audit, the Department agreed that an enforcement action tracking report would be a valuable tool and it reported that it began implementation of this report on February 6, 2004. However, this report will only assist management in tracking return-to-compliance time frames. It does not include any enforcement actions that are in the review process. An additional report should be generated to track these cases so management can monitor the timeliness of issuing enforcement actions.

Recommendations

1. To more quickly notify responsible parties about violations identified during inspections, the Division should explore ways to streamline its review and approval process for enforcement actions.
2. The Division should consider setting in policy specific time frames for each step in the enforcement action review and approval process.
3. The Division should escalate both informal and formal enforcement actions to the next level as necessary against responsible parties that have not corrected their violations.
4. The Division should modify its computer system to allow for the generation of a management report to track the status of enforcement actions that are in the review process, and should use this report to monitor the timeliness of issuing these enforcement actions.

OTHER PERTINENT INFORMATION

During the audit, auditors gathered information about the status of cleanup efforts within the State's Water Quality Assurance Revolving Fund (WQARF) program, also known as the State Superfund program. Auditors reviewed division information on the progress of investigations and cleanup work at all WQARF sites, status in identifying parties responsible for contamination, and how much money the Department has recovered from those it has identified as responsible. Lastly, auditors examined how the Department calculated the program's administrative costs as a result of new legislative requirements.

Superfund programs in Arizona

In Arizona, cleaning up sites contaminated by hazardous substances is managed by both federal and state agencies. At the federal level, the Environmental Protection Agency oversees cleanup under the authority of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) or, in certain cases, by the Resource Conservation and Recovery Act (RCRA). WQARF is the state program responsible for identifying, assessing, and cleaning up soil and groundwater contaminated with hazardous substances. In many respects WQARF and CERCLA are similar, but reforms in 1997 substantially changed several key aspects of WQARF.

The beginnings of the Superfund—Congress passed CERCLA, also known as the Superfund, in 1980 in response to the discovery of numerous hazardous waste dump sites that were threatening human health and contaminating the environment. One of the most famous of these is Love Canal in Niagara Falls, New York, where an elementary school and housing development were built on top of an abandoned chemical dump. Over time, chemicals began leaking into the groundwater and seeping above ground, resulting in noxious fumes and concerns about birth defects, miscarriages, and other health problems increasing among affected residents. When Love Canal became a national issue in 1978, the only viable way the federal government could deal with the problem was to declare the site a federal disaster area. As Love Canal and other hazardous waste sites became more visible, Congress passed CERCLA to give the Environmental Protection Agency more power to deal with these problems. This power includes identifying sites where hazardous

Congress created the Superfund program in 1980.

waste releases have occurred, the ability to take appropriate action to remedy releases, and to force parties responsible for a release to pay for cleanup.

State efforts to clean up contaminated sites—In 1986, the Legislature created WQARF, the state equivalent of the federal superfund program. However, dissatisfaction with the liability standards, cleanup goals, and the cost and slow pace of cleanup prompted the formation of a task force in 1995 to seek changes in the program. In 1997, the Legislature enacted reforms that changed several major parts of the WQARF program:

- **Dedicated funding**—The first reform dedicated \$18 million to the program annually, which come from a mix of various appropriations and transfers from state revenue sources. A.R.S. §49-282 stipulates that WQARF receive an annual \$15 million transfer from the Corporate Income Tax (CIT).¹ This gave the WQARF program funding that was more stable than under previous statutes.
- **Change in liability**—The second major reform changed the liability scheme of WQARF from a joint liability scheme, similar to what the federal Superfund program uses, to proportional liability. Under joint liability, one party can be held liable for the entire cost of the cleanup regardless of the share of the waste contributed by that party. In contrast, proportional liability requires responsible parties to pay only for the cleanup of contamination they were responsible for at a site. However, proportional liability leaves “orphaned shares,” which are portions of cleanup costs that no responsible party pays for. The cost of cleaning up these orphaned shares would then fall to the State.
- **More settlement options**—The third major reform was the creation of qualified business and financial hardship settlements, which give liable businesses options for settling their cleanup liability. A qualified business settlement allows a business to settle for an amount less than its actual liability. To qualify for such a settlement, the business must have an average annual gross income that is less than \$2 million for the 2 years preceding the initiation of an investigation into that business’ share of the cleanup costs and for each of the 2 years prior to the submission of the settlement application. The business can then settle and pay 10 percent of its average annual gross income for the 2-year period preceding its application. A financial hardship settlement is available to those parties demonstrating that their potential liability would affect their ability to stay in business or require them to seek bankruptcy protection. Financial hardship settlements do not take into account a party’s actual liability. Any costs for cleanup that exceed the settlement amount would then be paid by the State.

¹ A.R.S. §49-282 requires the State Treasurer to adjust the CIT transfer so that the combined total from the CIT and fee-generated revenue is \$18 million annually. Some types of revenue, including cost recovery collections and interest, are not included in this calculation, which allows total program revenues to exceed \$18 million annually. The revenue set at \$18 million has actually been lower for the last 2 fiscal years. In fiscal year 2002, these revenues were \$8.7 million, and in fiscal year 2003, they were \$13.7 million.

- **More flexible cleanup standards**—The final major reform was the adoption of more flexible cleanup standards. Previously, contaminated groundwater cleanup usually used drinking water standards without taking into account cost or feasibility. In contrast, the Department can now consider what the water will be used for, as well as feasibility and cost in selecting a final remedy. Further, the remedy does not necessarily have to return the contaminated water to drinking water standards.

WQARF cleanup process

Figure 1 (see page 32) shows how the cleanup of sites contaminated by hazardous substances happens in several stages. This includes the initial investigation of the site to identifying those responsible, and finally, deciding on a final cleanup remedy. Contractors do the actual work at sites, which includes collecting and analyzing data that is later reviewed by department staff, preparing reports as part of the site investigation, and designing, installing, operating and maintaining equipment required to conduct a remedy.

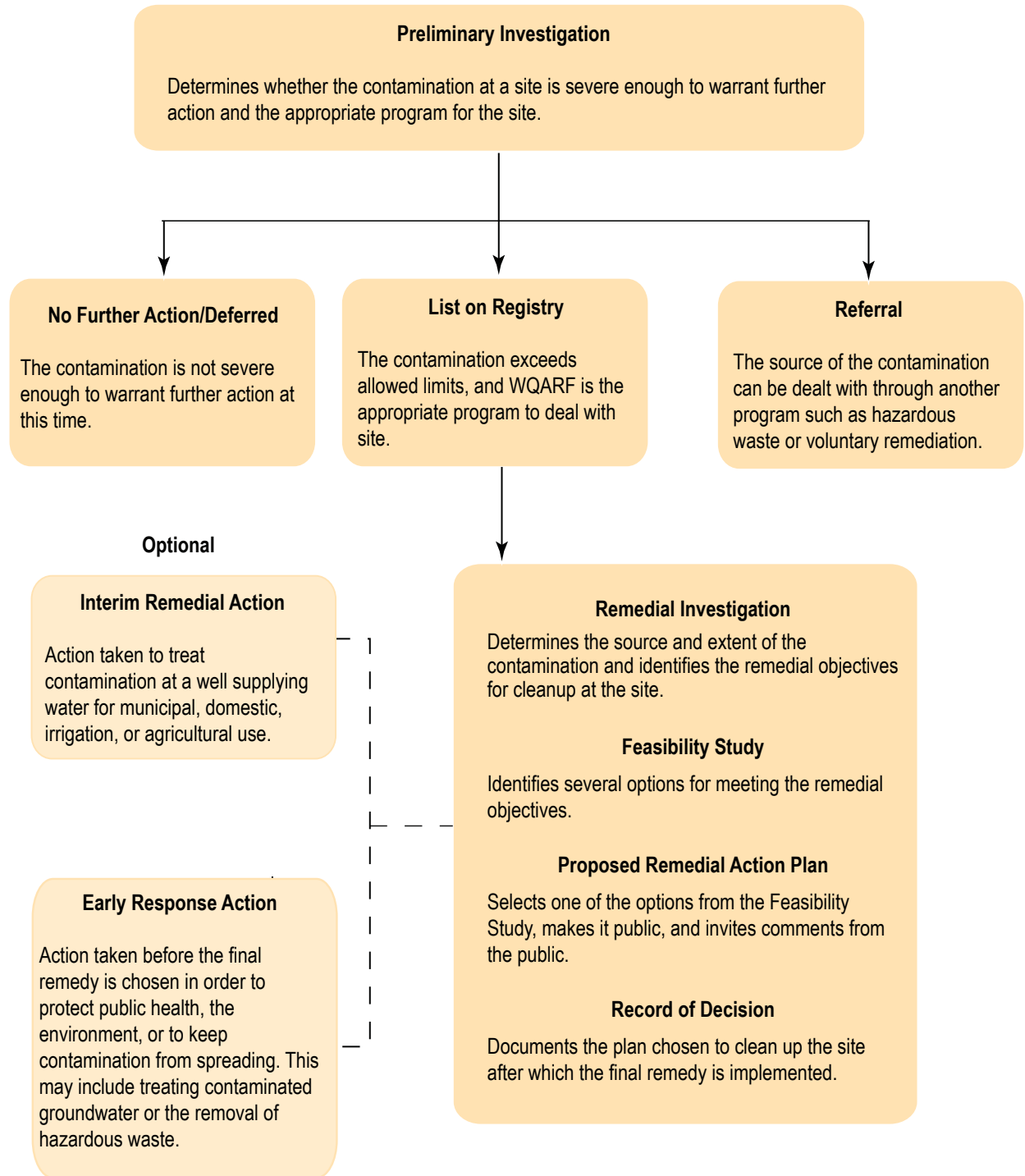
When a site enters the WQARF program, it is added to the WQARF Registry, which is a list of all the sites in the program. As of March 31, 2004, there were 33 sites listed on the WQARF Registry.¹ Figure 2 (see page 33) shows where each site is in the various stages of the cleanup process. Three sites have finalized records of decision and work on a final remedy is ongoing. Two other sites are nearing this stage, as they have finalized proposed remedial action plans, while another site has just begun this process. One site is in the feasibility study stage, and 16 are in the process of undergoing or have just completed the remedial investigation. For the remaining 10 sites, the first step, the remedial investigation, has not yet begun.

While some sites have not yet begun the WQARF cleanup process, this does not mean that there is no work being done to address contamination. At all 33 sites, the Department has evaluated the current risk to the public and the environment, and for some sites it is taking action to address contamination through an Early Response Action, Interim Remedial Action, or the Final Remedy. Specifically, 24 sites have been or are currently being addressed by either an interim remedial or early response action as described in Figure 1 (see page 32). Another five sites were evaluated to determine whether an early response action was appropriate, but the Department has not yet taken any action. The remainder of the sites are being either cleaned up through the final remedy or are nearing this stage.

As of March 2004, there were 33 sites on the WQARF Registry.

¹ The EPA is cleaning up an additional nine sites listed on the federal National Priority List. The Department of Defense is cleaning up ten sites. Two sites were added to the WQARF registry in June 2004 after the completion of audit work and are not included in any of the numbers reported in this section.

Figure 1: Water Quality Assurance Revolving Fund (WQARF)
Cleanup Process
As of March 31, 2004



Source: Auditor General staff analysis of Water Quality Assurance Revolving Fund statutes, rules, and program reports.

**Figure 2: Water Quality Assurance Revolving Fund
Stages by Site
As of March 31, 2004**

Sites	Remedial Investigation		Feasibility Study		Proposed Remedial Action Plan		Record of Decision
	Started	Completed	Started	Completed	Started	Completed	
East Central Phoenix							
24th Street & Grand Canal							
32nd Street & Indian School							
38th Street & Indian School							
40th Street & Indian School							
40th Street & Osborn							
48th Street & Indian School							
West Central Phoenix							
East Grand Avenue	█						
North Canal Plume	█						
North Plume							
West Grand Avenue		█					
West Osborn Complex	█						
7th Street & Arizona Avenue							
16th Street & Camelback							
Klondyke Mine Tailings	█						
20th Street & Factor							
Broadway Pantano	█						
Central & Camelback							
East Washington Fluff	█	█	█	█	█	█	
El Camino del Cerro	█						
Miracle Mile	█						
Park Euclid	█						
Payson PCE	█	█	█	█	█	█	
Pinal Creek	█						
Shannon-Rillito	█						
South Mesa	█						
Tonto & Cherry	█	█	█				
Tyson Wash	█	█	█				
West Van Buren	█						
Western Avenue	█						
Estes Landfill	█	█	█	█	█	█	
Los Reales	█	█	█	█	█	█	█
Silverbell Jail Annex	█	█	█	█	█	█	█
Vulture Mill	█	█	█	█	█	█	█

Early Response Action—Evaluation Completed
 Early or Interim Response Action—Ongoing/Completed
 No Early Response Action

Source: Auditor General staff analysis of Water Quality Assurance Revolving Fund site work reports.

Potentially responsible party searches

Cleanup efforts at WQARF sites are funded in part by cost recovery from the parties responsible for contamination. Responsible parties may include property owners, businesses that operated at a site, or other parties that might have disposed of hazardous substances on the site. The Department conducts a potentially responsible party (PRP) search in conjunction with the remedial investigation, proposed remedial action plan, and record of decision. As the remedial investigation gathers more information about the types, extent, and sources of contamination, the Department can identify those who might be responsible for the problem. Much of the actual work done as part of PRP searches is carried out by a contractor.

The Department has begun work on PRP searches at all 33 sites. However, not all of these searches are active. For example, the Department may terminate a search if it determines that cost recovery at a site is not viable because a responsible party is bankrupt or defunct. Other searches, where PRPs are eligible for a qualified business settlement, have been suspended while the Department awaits possible reform on this issue.¹ Searches may also be on hold until the Department is able to identify sources of contamination through the remedial investigation. Of the PRP searches at the 33 sites:

- Nine are currently ongoing;
- Ten are suspended pending potential changes to qualified business settlements;
- Five are on hold while the Department gathers more information via the remedial investigation;
- Four are completed due to the responsible party taking the lead and paying for cleanup on its own; and
- Five searches were terminated because there are no viable parties from which the Department can recover costs.

The time it takes to complete a PRP search can range from less than 2 years to over 10 years, and depends on many factors. Some of the searches took less than 2 years and determined that no viable parties remained from which the Department could

PRP searches have begun at all 33 WQARF sites.

¹ The WQARF Advisory Board, a board made up of state officials and other stakeholders, was established as part of the 1997 reforms to monitor the program and offer recommendations for improvement. The Board is investigating several options in regard to reforming qualified business settlements. One option being considered is the creation of a dry cleaner remediation program. Another option being considered is to raise the annual income threshold at which businesses become eligible for qualified business settlements.

recover costs. Other searches, like the PRP search at the Estes Landfill, a now-closed municipal landfill located in Phoenix, date back to before WQARF reform in 1997. According to department officials, the complexity of the site and the large number of PRPs contribute to the search taking such a long time to complete.

Cost recovery and cleanup spending

Identifying responsible parties through PRP searches should lead to the Department recovering cleanup costs. Original estimates were that responsible parties would fund 65 percent of the program after the reforms. However, there is concern among stakeholders and program management that cost recovery from responsible parties will be much less than the original estimate. One reason for the difference between the initial estimates and what may become reality is that responsible parties cannot be found or are not viable, resulting in orphaned shares.

Despite concerns about the ability to collect, the Department has recovered costs from responsible parties while other parties pay directly for cleanup. These other parties are known as working parties and pay for cleanup at a site without entering into a settlement with the Department. The money these working parties spend does not pass through WQARF and is not reflected as revenue for the program. According to the Department, it has recovered a total of over \$12.4 million from responsible parties and spent \$6.1 million on PRP searches since the beginning of fiscal year 1998.¹ In addition, the Department estimates that working parties have spent over \$120 million of their own money on cleanup work at 12 sites. In all, work at 17 sites is funded either through settlements or working party contributions.

For sites where the Department cannot find viable, responsible parties, the State will have to pay for all or part of the cleanup. There are now four sites where PRP searches have found no viable, responsible parties. At least 19 other sites may have some orphaned shares as well. This means the State will have to pay for some of the costs of cleanup at these sites while other viable, responsible parties pay for their share.

Since fiscal year 2001, according to the Department, it has spent more on sites than on its core costs, which include personnel, conducting PRP searches, and transfers to the Attorney General. Site costs include remedial investigations, feasibility studies, and other cleanup costs. For fiscal year 2004, the Department budgeted \$11.3 million for work on sites and \$7.6 million for its core costs. The Department expects expenditures on sites to continue to exceed those of core costs.

Since fiscal year 2001, WQARF has spent more money on sites than on core costs.

¹ This does not include transfers to the Attorney General who, in addition to other duties, provides assistance on PRP searches. WQARF transfers to the Attorney General total \$5.6 million between fiscal years 1998 and 2003.

Administrative costs are calculated appropriately

In 2003, the Legislature required the WQARF Advisory Board to make recommendations to the Department about how to reduce the administrative costs of the WQARF program.¹ To fulfill this requirement, the WQARF Board and the Department used legislative guidelines to create three categories of costs: administrative, program, and PRP search-related. The WQARF Board and the Department determined that administrative costs include senior management activities, clerical support, WQARF fund administration, contract administration, rule development activities, nonsite specific public notices, data entry, and community involvement personnel. Program costs (or costs related to actual cleanup work) are defined to include site contractor costs, activities related to project management, hydrologic support, preliminary investigations, and emergency response. Finally, PRP search costs include the search contractor, legal assistance, and search oversight.

The Department and the WQARF Advisory Board determined that for fiscal year 2004, WQARF will spend approximately \$2 million, or 9.9 percent of its total budget, on administrative costs. The Advisory Board recommended setting a ceiling of \$2.5 million for administrative costs. Although the Department's calculated amount of administrative costs for fiscal year 2004 was not audited, the categorization of these costs and the methodology used to calculate them appear appropriate.

¹ Laws 2003, Chapter 262, section 32.

AGENCY RESPONSE



Janet Napolitano
Governor

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Stephen A. Owens
Director

August 26, 2004

Debra K. Davenport, C.P.A.
Auditor General
2810 North 44th Street, Suite 410
Phoenix, AZ 85018

Re: Performance audit and Sunset review – Waste Programs Division

Dear Ms. Davenport:

On behalf of the Arizona Department of Environmental Quality, we appreciate the opportunity to respond to the Waste Programs Division performance audit report. The report is a useful assessment of the Division's enforcement time frames and the Underground Storage Tank State Assurance Fund. We thank the Office of the Auditor General for its effective communication throughout the audit process.

As the audit reflects, the Waste Programs Division's mission is to "protect and enhance public health and the environment by reducing the risk associated with waste management, regulated substances and contaminated sites." The Division achieves this mission with hazardous waste facility inspections, landfill approvals, site investigations, clean up orders and recycling fund grants administered by the Division, to name only a few of the Division's responsibilities. Despite revenue and budget reductions in the past few years, ADEQ has seen improvements in quality and performance, including the Hazardous Waste Program, Underground Storage Tank Program and the State Assurance Fund, which are the focus of your audit.

As the audit noted, children's health is a goal of the Waste Programs Division and the Department as a whole. This goal is a direct result of the Governor's leadership to protect Arizona's most valuable resource--our children. The Division has taken significant steps to improve the environment for children. For example, ADEQ's pollution prevention program, within the Waste Programs Division, recently received a grant from the U.S. Environmental Protection Agency to educate and encourage school districts to construct or retrofit schools to be more environmentally friendly. This "Green Schools" initiative will develop design, construction and operational practices that will reduce children's exposure to potentially harmful chemicals typically found in school settings.

Additionally, the Division surveyed Arizona schools on the use of chromated copper arsenic wood-coated playground equipment to assess children's potential exposure to this substance. Finally, when TCE-contaminated water was being used for irrigation in a north Arizona

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elementary school, the Division quickly stepped in and conducted sampling of drinking water wells to ensure that children were being protected. The Division is conducting further investigation of the cause of contamination in the irrigation water and options for correcting the problem.

FINDING 1: CHANGES HAVE BEEN MADE TO THE STATE ASSURANCE FUND, AND THE DEPARTMENT SHOULD TAKE ADDITIONAL ACTIONS

The audit addressed the Underground Storage Tank Program and the State Assurance Fund (SAF). As the audit noted, the Legislature has enacted numerous significant changes to the Department's administration of the SAF, including an eligibility deadline of 2006 and claims deadline of 2010. To better enable the Department to implement the new legislation and to improve efficiencies throughout the UST and SAF programs, these programs have been consolidated into a new Tank Programs Division. The new Division consists of the SAF Program, which was moved from the Administrative Services Division, and the UST Corrective Action Section and UST Program Support Section, which were moved from the Waste Programs Division. The new Division will focus on implementing the new legislation, cleaning up leaking UST sites, increasing outreach efforts across the state, increasing inspections and compliance, streamlining SAF, and continuing other program efforts. The creation of the new Division will allow the Department to effectively implement the statutory changes and the audit recommendations.

As the audit recognizes, the Department also has made substantial administrative improvements to the SAF. By January 2003, the Department faced a backlog of over 1,100 unpaid SAF applications by SAF claimants. In early 2003, an internal working group was established by the Department to determine the reasons for this enormous backlog. In May 2003, the Department made key administrative changes to the SAF, and, as the audit recognizes, since that time, the Department has eliminated this backlog completely. SAF applicants no longer must wait years for payment. The SAF is operating on a cash basis and, as applications are processed and approved, they are paid. The Department thanks the Auditor General for noting this dramatic improvement to SAF claims processing in the audit.

Further, the audit recognizes the significant progress the UST program has made since October 2003 in enforcing the federal and state regulations concerning financial responsibility (FR) requirements for owners and operators of underground storage tanks. The Department has recognized the importance of enforcing FR requirements and initiated an aggressive program of informing the regulated public about FR requirements in June 2003. The Department sent post cards to all owners and operators of underground storage tanks describing the FR requirements. In October 2003, the UST program transmitted FR site status letters to more than 450 UST owners that were identified as not having FR. This effort resulted in an increase in the FR compliance rate from 52 percent of UST facilities in October 2003 to 62 percent in January 2004. To further increase the FR compliance rate, the department began conducting operational compliance inspections at facilities out of compliance with FR requirements. This effort is the prelude to more formal enforcement measures, including the issuance of orders and the assessment of penalties, if required.

In addition to the Department's increased effort to ensure compliance with the financial responsibility requirements, from July 1, 2003, to July 31, 2004, the UST program dramatically improved its UST facility inspection cycle times from greater than 9 years to approximately once every 4 years. During this time period, 618 facilities were inspected for operational compliance which resulted in the issuance of 47 Notice of Violations for significant operational violations. The program is in the process of hiring additional inspectors to reduce the inspection cycle to every 3 years.

The audit recommendations address continued enforcement of the UST financial responsibility requirements and an evaluation of the reasonableness of the SAF cost ceilings. The Department agrees with the auditor's assessment that compliance with financial responsibility requirements is a high priority as the SAF comes to an end. Similarly, to reduce the burden on the SAF and thereby help ensure all valid claims are paid and the new Regulated Substance Fund is fully funded, the Department will reassess the existing cost ceilings. Please be assured that the new Tank Programs Division will implement these recommendations in addition to other steps necessary to make SAF a more efficient and effective public fund.

RECOMMENDATIONS

1. The Department should continue to work on increasing compliance with financial assurance requirements, including pursuing formal enforcement actions, such as consent orders and compliance orders, as necessary.
The finding of the Auditor General is agreed to and the audit recommendation will be implemented.
2. The Department should assess the cleanup costs charged to the State Assurance Fund to see if cost ceilings are being treated as the actual price of cleanup costs rather than as an upper limit for costs.
The finding of the Auditor General is agreed to and the audit recommendation will be implemented.
3. If contractors are routinely charging at the cost ceilings for certain cleanup activities, the Department should consider revising cost ceilings to better reflect the true cost of cleanup work.
The finding of the Auditor General is agreed to and the audit recommendation will be implemented.
4. If the Department performs a cost survey to create the cost ceilings that will be effective in July 2005, it should use an appropriate methodology and not allow respondents to answer questions that do not pertain to their occupation.
The finding of the Auditor General is agreed to and the audit recommendation will be implemented.

5. The Department should examine the feasibility of instituting competitive bidding as a method of controlling State Assurance Fund costs.

The finding of the Auditor General is agreed to and the audit recommendation will be implemented.

FINDING 2: THE DIVISION SHOULD IMPROVE ITS HAZARDOUS WASTE ENFORCEMENT EFFORTS

The audit of the hazardous waste enforcement program focused very specifically on the timeliness of enforcement actions. ADEQ recognizes the importance of swift enforcement, and the Division will explore and implement ways to speed up, streamline, and escalate as appropriate its enforcement actions in accordance with the recommendations in the audit. However, the audit's focus on a single aspect of the hazardous waste enforcement program gives an incomplete picture of the total effectiveness and accomplishments of our hazardous waste enforcement efforts.

First and foremost, the Department's hazardous waste inspection program ensures that any imminent and substantial risk discovered at an inspection is addressed during or immediately in response to the inspection. This is accomplished by providing the facility with immediate written and oral instructions on major violations at the time of the inspection through an exit debriefing interview and written instructions. The exit debriefing frequently requires the facility to provide documentation to ADEQ that major violations are addressed within 10 days. Although Arizona law requires only the inspection report to be issued within 45 days after the inspection, ADEQ has adopted a policy requiring that the initial enforcement action also be issued within this same time frame. Even though ADEQ's inspection report and enforcement action may in some cases be issued up to 90 days after the inspection, ADEQ's use of the exit debriefing has ensured that any actual imminent risk to human health or the environment is corrected in a timely manner.

Overall, the hazardous waste enforcement program is very effective in discovering violations, returning violators to compliance, and imposing appropriate penalties to serve as a deterrent. For example, the audit includes a summary table, which demonstrates clearly that the number of informal enforcement actions--Notices of Opportunity to Correct (NOCs) and Notices of Violation (NOVs)--have generally increased over the last four years, and during fiscal year 2004 the program initiated 96 informal actions (36 NOCs and 60 NOVs), compared to 56, 73, and 30 in fiscal years 2003, 2002, and 2001, respectively. This far exceeds the number of actions taken in any fiscal year since the year 2000, and is a 71% increase compared to the 56 that were issued in fiscal year 2003. This data is indicative of a program that is active, mature and appropriately enforcing Arizona's hazardous waste laws.

ADEQ's policy generally provides that facilities get the opportunity to address violations in the context of an informal enforcement action, the Department must pursue penalties when a facility has either received an economic advantage by operating out of compliance or they have significantly violated the law threatening human health and the environment. The hazardous waste program has demonstrated a record of taking aggressive, yet appropriate, penalty actions

for the state. In 2001, ADEQ and EPA settled the largest hazardous waste case in the United States for over \$22 million. Since that time, ADEQ has consistently taken penalty actions that are appropriate given the potential contamination that could occur as a result of mismanagement of hazardous waste. In the last two years, the Department has concluded 9 penalty cases resulting in facilities paying more than \$600,000 to the state's General Fund and more than \$100,000 in supplemental environmental projects (SEP). See Table 1.

Table 1. 2002-2004 Hazardous Waste Enforcement Penalty Cases

Aviation Management Services	\$30,000
W.L. Gore & Associates	\$90,000
Phoenix Heat Treating, Inc.	\$50,000
Arizona Public Service	\$200,000
Dome Rock Industries, Inc.	\$100,000
Sunbelt Tank	\$7,000
Thermofluids	\$22,250
Superior Special Services	\$143,000, plus \$125,000 SEP
Mesa Oil	\$7,500, plus \$1,000 SEP

In addition to penalty cases, ADEQ's hazardous waste program also has taken administrative actions that directly protect the citizens of Arizona. On February 26, 2003 the Department issued orders against and revoked the license of Innovative Waste Utilization, LLC, in Phoenix. On March 7, 2003, ADEQ initiated an emergency response action to remove approximately 1,000 barrels of hazardous waste from the facility after a number of the barrels were found to present an imminent and substantial endangerment to the community during an inspection earlier in that day. These and other enforcement actions demonstrate the Department's increased efforts to protect and enhance public health and the environment, and we are committed to do more.

The audit report states that facilities often do not return to compliance within the short time frames required by the hazardous waste program. ADEQ operates with the goal of minimizing potential impacts to human health and the environment, and therefore, returning facilities to compliance within the shortest possible time. To that end, the hazardous waste enforcement program uses aggressive time frames for achieving compliance. As the report states, these time frames are often far less than the 120 days initially allowed by the Department's policy. If a facility makes progress on accomplishing all of the required actions, ADEQ has the authority to extend the time frame an additional 60 days. Although the data you have presented in the audit report suggest that facilities are not returning to compliance within an acceptable time frame, a further review of the data shows that the program is, in fact, responsibly taking actions to return facilities to compliance. ADEQ records show that 96% of all facilities receiving informal enforcement actions during fiscal year 2004 were either returned to compliance or escalated for further enforcement within the 180 total days allowed by ADEQ policy.

RECOMMENDATIONS

1. To more quickly notify responsible parties about violations identified during inspections, the Division should explore ways to streamline its review and approval process for enforcement actions.
The finding of the Auditor General is agreed to and the audit recommendation will be implemented.
2. The Division should consider setting in policy specific timeframes for each step in the enforcement action review and approval process.
The finding of the Auditor General is agreed to and the audit recommendation will be implemented.
3. The Division should escalate both informal and formal enforcement actions to the next level as necessary against responsible parties that have not corrected their violations.
The finding of the Auditor General is agreed to and the audit recommendation will be implemented.
4. The Division should modify its computer system to allow for the generation of management reports to track the status of enforcement actions.
The finding of the Auditor General is agreed to and the audit recommendation will be implemented.

Thank you for the opportunity to respond to the performance audit and Sunset review for the Waste Programs Division.

Sincerely,

Stephen A. Owens
Director

Performance Audit Division reports issued within the last 12 months

02-07	Arizona Health Care Cost Containment System—Medical Services Contracting	03-05	Department of Economic Security—Child Protective Services—Foster Care Placement Stability and Foster Parent Communication
02-08	Arizona Health Care Cost Containment System—Quality of Care	03-06	Arizona Board of Appraisal
02-09	Arizona Health Care Cost Containment System—Sunset Factors	03-07	Arizona Board for Charter Schools
02-10	Department of Economic Security—Division of Children, Youth and Families, Child Protective Services	03-08	Arizona Department of Commerce
02-11	Department of Health Services—Health Start Program	03-09	Department of Economic Security—Division of Children, Youth and Families Child Protective Services—Caseloads and Training
02-12	HB2003 Children’s Behavioral Health Services Monies	04-L1	Letter Report—Arizona Board of Medical Examiners
02-13	Department of Health Services—Office of Long Term Care	04-L2	Letter Report—Gila County Transportation Excise Tax
03-L1	Competitive Electric Metering, Meter Reading, and Billing and Collections	04-01	Arizona Tourism and Sports Authority
03-01	Government Information Technology Agency—State-wide Technology Contracting Issues	04-02	Department of Economic Security—Welfare Programs
03-02	Registrar of Contractors	04-03	Behavioral Health Services’ HB2003 Funding for Adults with Serious Mental Illness
03-03	Water Infrastructure Finance Authority	04-04	Department of Emergency and Military Affairs and State Emergency Council
03-04	State Board of Funeral Directors and Embalmers	04-05	Department of Environmental Quality—Water Quality Division

Future Performance Audit Division reports

Arizona Department of Transportation—Motor Vehicle Division—State Revenue Collection Functions

Department of Environmental Quality—Air Quality Division