

Performance Audit Division

Sunset Review

Department of Environmental Quality—Sunset Factors

September • 2013 REPORT NO. 13-10



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September 20, 2013

Members of the Arizona Legislature

The Honorable Janice K. Brewer, Governor

Mr. Henry Darwin, Director Department of Environmental Quality

Transmitted herewith is a report of the Auditor General, *A Sunset Review of the Department of Environmental Quality*. This report is in response to an October 26, 2010, resolution of the Joint Legislative Audit Committee and was conducted as part of the sunset review process prescribed in Arizona Revised Statutes §41-2951 et seq.

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

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

Sincerely,

Debbie Davenport Auditor General

Attachment

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INTRODUCTION

Scope and Objectives

The Office of the Auditor General has conducted a sunset review of the Department of Environmental Quality (Department) using the criteria in Arizona's sunset law. The review was conducted pursuant to an October 26, 2010, resolution of the Joint Legislative Audit Committee and prepared as part of the sunset review process prescribed in Arizona Revised Statutes (A.R.S.) §41-2951 et seq.

This report includes responses to the sunset factors specified in A.R.S. §41-2954 and is the final in a series of three reports on the Department. The first report focused on the Department's processes for monitoring and enforcing regulated facilities' compliance with state and federal environmental laws and regulations. The second report examined the Department's processes for ensuring that owners and operators of petroleum underground storage tanks comply with state and federal laws and regulations regarding financial responsibility for leaks and spills.

Department's mission is to protect public health and the environment

The Arizona Legislature created the Department of Environmental Quality (Department) in 1986 as the State's primary environmental regulatory agency. The Department's mission is to "protect and enhance public health and the environment in Arizona." Consistent with this mission, the Department is also responsible for administering Arizona's environmental laws and assumes regulatory responsibility for some federal environmental protection programs delegated to the State from the U.S.

Environmental Protection Agency (EPA) (see textbox).1 These federal programs are authorized and established under federal laws and regulations and are designed to control or prevent environmental pollution. For example, the Clean Water Act authorizes the regulation of waste discharges into US waters while the Solid Waste Disposal Act and Resource Conservation and Recovery Act govern the regulation of solid and hazardous wastes. According to EPA policy, state and local governments are expected to assume primary responsibility for the implementation of delegated environmental programs.

Federal delegation—The assumption of partial or full control over one of the federal environmental programs is known as "delegation." In order for delegation to occur, the state legislature must have passed authorizing legislation that is at least as stringent as the federal standard while demonstrating the state has adequate resources to run the program. The state then files a petition with the EPA. Delegation usually includes the following activities: permitting, inspections, monitoring, and enforcement, and often includes standards setting.

Source: EPA policy on delegation to state and local governments and the Environmental Council of the States.

Organization

The Department organizes its staff into the following two offices and four divisions—the Director's Office, Southern Regional Office, Administrative Services, Air Quality, Waste Programs, and Water Quality. Division and directors' office staff work in the Department's main office in Phoenix.² The director of the satellite office in Tucson—the Southern Regional Office—and

Some tribal environmental programs are under the EPA's jurisdiction. Additionally, responsibility for some programs may be shared with the counties. For example, the Department is responsible for asbestos abatement in 12 of the State's 15 counties, but the EPA has delegated responsibility for asbestos abatement to Maricopa, Pima, and Pinal Counties.

The Department's Air Quality Division has staff in two vehicle emissions offices, one in Phoenix and one in Tucson, who process waiver requests for the Department's Vehicle Emissions Inspection Program. Additionally the Department employs four full-time community liaisons who are based in Flagstaff, Phoenix, Safford, and St. Johns, and two part-time community liaisons who are based in Tucson.

the directors of each of the divisions report to the department director. As of June 30, 2013, the Department had 470.5 full-time equivalents (FTEs) with 148 vacancies. The staffing, missions, and responsibilities of the Department's divisions and offices are as follows:

- Director's Office (20 FTEs, 5 vacancies)—The Director's Office supports the Department's divisions in the areas of communications, community outreach, legislative affairs, legal counsel, and rule and policy development. The Director's Office also includes several program and project managers who share resources and coordinate their efforts among the Department's divisions, including the Director's Special Assistant for Children's Environmental Health, and the department ombudsman/tribal liaison.
- Southern Regional Office (25 FTEs, 4 vacancies)—The Southern Regional Office serves Cochise, Graham, Greenlee, Pima, Santa Cruz, and Yuma Counties. It conducts inspections and complaint investigations of permitted and nonpermitted air pollution sources, drinking water systems, and wastewater facilities; responds to emergencies that threaten public health and the environment; and processes open-burn permit applications. The Southern Regional Office also monitors and tests water at public drinking water systems, regulates the construction and operation of wastewater treatment facilities, oversees the investigation and cleanup of contaminated soil and groundwater Superfund sites, and supports the Department's groundwater and surface-water-monitoring and water-guality-permitting activities.
- Administrative Services Division (73.5 FTEs, 22 vacancies)—The Administrative Services
 Division supports the Department's mission, goals, programs, and employees by managing the
 Department's administrative and business activities, such as accounting, human resources,
 payroll, and procurement.
- Air Quality Division (96 FTEs, 22 vacancies)—The Air Quality Division's mission is to control present and future sources of air pollution in the State. It accomplishes this mission by collecting and analyzing data on ambient air quality; studying the impact of pollution on public health and welfare; issuing permits to sources of air pollution to help ensure that facilities are legally constructed and operated and that discharges to the air are within healthful standards established by law; investigating complaints and violations of and helping regulated facilities achieve compliance with Arizona's air pollution laws; preparing pollution forecasts to help people limit their exposure to air pollution and to help air pollution sources manage their emissions; overseeing the State's vehicle emissions testing program; and working with the public, the regulated community, and other state, local, and federal agencies to plan and implement strategies to meet federal air quality standards.
- Waste Programs Division (124 FTEs, 52 vacancies)—The Waste Programs Division's mission is to protect and enhance public health and the environment by reducing the risk associated with waste management, contaminated sites, and regulated substances, such as lead-based paints, battery acid, heavy metals such as mercury, and explosive or flammable substances, such as solvents. This division reviews and approves construction plans for landfills and special waste facilities to help ensure that facilities are legally constructed and operated; issues permits to waste treatment, storage, and disposal facilities and landfills to help ensure the proper handling, storage, treatment, and disposal of wastes; verifies that installers

and servicers of underground storage tanks in the State have the proper training, knowledge, and other qualifications and experience to work on underground storage tanks; investigates complaints and violations of Arizona's solid waste, hazardous waste, and underground storage tank laws; investigates, manages, and remediates soil and groundwater that are contaminated with regulated and hazardous substances; and promotes pollution prevention and recycling.

• Water Quality Division (132 FTEs, 43 vacancies)—The Water Quality Division's mission is to ensure safe drinking water for Arizona residents and to reduce the impact of pollutants discharged to surface and groundwater in Arizona. It accomplishes this mission by overseeing the design and construction of new public drinking water systems and regulating water quality at more than 1,700 existing public drinking water systems; issuing permits for wastewater treatment plants and other facilities that may release pollutants to surface and groundwater to help ensure that the discharge of pollutants does not degrade the waters based on health standards established in law and regulations; investigating complaints and violations of Arizona's water quality laws, rules, and permits; analyzing water pollution problems and establishing standards to address them; and monitoring and assessing the State's surface and groundwater quality.

Budget

Since fiscal year 2010, the Department has relied less on State General Fund monies and more on other sources of revenue to support its activities. Specifically, beginning in fiscal year 2011, the Legislature stopped providing State General Fund appropriations to the Department, other than those specifically required by statute. However, in fiscal years 2010 and 2011 the Legislature passed legislation authorizing the Department to adjust some of its licensing fees in fiscal years 2011 and 2012 to offset the loss of State General Fund appropriations. The Legislature also authorized the Department to transfer approximately \$6.5 million annually from the Underground Storage Tank Revolving Fund and the Regulated Substance Fund to pay for administrative costs in fiscal years 2013 and 2014. These two funds are funded primarily with a 1-cent-per-gallon excise tax on fuel that has been placed in petroleum underground storage tanks.

As illustrated in Table 1 (see page 4), the Department received revenues from a variety of sources between fiscal years 2011 and 2013, including intergovernmental revenues, such as federal monies; taxes, such as the 1-cent-per-gallon excise tax on fuel that has been placed in petroleum underground storage tanks; fees assessed for permits and other licenses issued by the Department; vehicle emissions inspection fees; and revenues from fines, forfeitures, and penalties. As shown in Table 1, during fiscal year 2013, the Department's revenues totaled more than \$142 million, a decrease of nearly \$10.8 million from its fiscal year 2012 revenues.

As shown in Table 1, during fiscal year 2013, the Department's expenditures and transfers totaled more than \$112 million, with more than \$46 million, or 41 percent, going toward personal services and related benefits, and more than \$40 million, or 36 percent, going toward professional and outside services, including hiring private consultants and contractors. Additionally, the Department transferred \$10 million to the State General Fund in fiscal year 2013. The more than \$112 million in

Table 1: Schedule of revenues, expenditures, and changes in fund balance Fiscal years 2011 through 2013 (In thousands) (Unaudited)

| | 2011 | 2012 | 2013 |
|--|-----------|-----------|-----------|
| Revenues | | | |
| Intergovernmental, including federal | \$ 41,495 | \$ 38,824 | \$ 34,065 |
| Taxes ¹ | 38,022 | 37,779 | 38,450 |
| Vehicle emission inspection fees | 36,304 | 38,454 | 39,808 |
| Licenses, permits, and fees | 27,747 | 28,252 | 26,761 |
| Fines, forfeitures, and penalties | 603 | 1,106 | 949 |
| Other | 997 | 8,652 | 2,279 |
| Total revenues | 145,168 | 153,067 | 142,312 |
| Expenditures and transfers | | | |
| Personal services and related benefits | 47,481 | 45,496 | 46,551 |
| Professional and outside services | 34,957 | 36,530 | 40,347 |
| Travel | 728 | 654 | 619 |
| Aid to organizations and individuals | 16,102 | 4,246 | 2,981 |
| Other operating | 7,562 | 7,158 | 7,803 |
| Equipment | 723 | 329 | 3,333 |
| Total expenditures | 107,553 | 94,413 | 101,634 |
| Transfers to the State General Fund | 25,320 | 22,857 | 10,000 |
| Other transfers | 2,116 | 3,708 | 490 |
| Total expenditures and transfers | 134,989 | 120,978 | 112,124 |
| Net change in fund balance | 10,179 | 32,089 | 30,188 |
| Fund balance, beginning of year | 21,087 | 31,266 | 63,355 |
| Fund balance, end of year | \$ 31,266 | \$ 63,355 | \$ 93,543 |

¹ Amount primarily consists of monies from a 1-cent-per-gallon excise tax on fuel placed in petroleum underground storage tanks. It also includes \$7 million in corporate income taxes transferred annually from the State General Fund to the Water Quality Assurance Revolving Fund, which is administered by the Department, in fiscal years 2011 through 2013, in accordance with Laws 2010, 7th S.S., Ch. 7, §9; Laws 2011, Ch. 36, §12; and Laws 2012, Ch. 303, §18.

Source: Auditor General staff analysis of department-prepared financial information for fiscal years 2011 through 2013.

expenditures and transfers for fiscal year 2013 represented a decrease of nearly \$8.9 million from the Department's fiscal year 2012 expenditures and transfers.

SUNSET FACTORS

In accordance with Arizona Revised Statutes (A.R.S.) §41-2954, the Legislature should consider the following 12 factors in determining whether the Department of Environmental Quality (Department) should be continued or terminated.

Auditors' analysis of the sunset factors found strong performance by the Department with regard to many of these factors, particularly in its efforts to streamline many of its internal processes (see Sunset Factor 2, pages 8 through 10). However, auditors found the Department needs to make changes in three areas:

- Improving its procedures for approving and renewing Aquifer Protection Permit (APP) and Air Quality general permit coverage (see Sunset Factor 2, pages 12 through 16);
- Adopting statutorily required rules when the
 Governor's rule-making
 moratorium expires (see
 Sunset Factor 4, pages 17
 through 18); and
- Posting on its Web site the full text of each substantive policy statement currently in use and the related public notice, as required by A.R.S. §41-1091.01 (see Sunset Factor 5, pages 18 through 19).

In addition to the recommendations in this report, the Department needs to address the recommendations directed to it in the other two audit reports issued as part of this sunset review (see Report Nos. 13-01, and 13-06).

Sunset factor analysis

 The objective and purpose in establishing the Department and the extent to which the objective and purpose are met by private enterprises in other states.

The Arizona Environmental Quality Act of 1986 created the Department to protect human health and the environment. In establishing the Department, several programs and offices that had previously operated within the Department of Health Services were transferred to the Department.

The Department's mission is "to protect and enhance public health and the environment in Arizona." It is responsible for administering the State's environmental laws, and it also shares responsibility for administering federal environmental laws in the State with the U.S. Environmental Protection Agency (EPA). State law also outlines several specific department responsibilities, including:

- Formulating policies, plans, and programs to protect the environment;
- Conducting research on its own initiative or at the request of the Governor, the Legislature, or state or local agencies pertaining to any department objectives;
- Encouraging industrial, commercial, residential, and community development that maximizes environmental benefits and minimizes the effects of less-desirable environmental conditions;
- Ensuring the preservation and enhancement of natural beauty and man-made scenic qualities; and
- Promoting the restoration and reclamation of degraded or despoiled areas and natural resources.

In an effort to fulfill these responsibilities, the Department's three programmatic divisions—Air Quality, Waste Programs, and Water Quality—perform several core functions, including (see Introduction, pages 2 through 3, for more information on the Department's divisions):

 Pollution control—The Department issues licenses (see textbox on page 6) to ensure that facilities are legally constructed and operated and that any pollution discharges to the air, water, and soil are within health standards established by law. According to data provided by department staff, the Department received 4,038 license applications **Department licenses**—The Department issues more than 200 different types of licenses. Examples of these licenses include:

- Air pollution control and water quality control permits—Limit facilities'
 emissions and discharges of pollutants to the environment and may specify
 requirements for facilities to be constructed, operated, and maintained to
 reduce the risk of damage to public health and the environment.
- Underground storage tank servicer certifications—Verify the qualifications of installers and servicers of petroleum underground storage tanks in the State to reduce the risk of leaks.
- Pesticide approvals—Assess technical data on new agricultural pesticides to determine if they have the potential to pollute groundwater in the State so that users can institute methods to minimize the risks of groundwater contamination.

Source: Auditor General staff review of state statutes, state regulations, department documents, and the Department's Web site.

in fiscal year 2012.¹ However, in areas where pollution has exceeded health standards established by law, department planning specialists also develop strategies to reduce pollution levels. These strategies range from instituting restrictions on open-burning and wood-burning fireplaces during exceptional air pollution events such as forest fires, to implementing long-term pollution control plans aimed at attaining acceptable pollution levels over time, such as identifying and implementing best management practices for agricultural activities aimed at reducing particulate matter levels in Maricopa County.²

• Monitoring and assessment—The Department collects air, water, and soil samples for laboratory analysis to monitor for the presence of contaminants, such as mercury and E. coli in water, sulfur dioxide and ozone in the air, and benzene or petroleum by-products in soil. For example, according to department data, in fiscal year 2012, the Department's Air Quality Division collected and analyzed data from 106 air quality monitors and four cameras at 46 different locations throughout Arizona, measuring factors such as carbon monoxide, ozone, particulate matter, sulfur dioxide, and visibility. According to the Department, it used this data in several ways, including publishing daily air quality forecasts—which give state residents information on pollution levels that can exacerbate respiratory conditions such as asthma or bronchitis—and demonstrating Arizona's compliance with federal air quality standards to the EPA. According to the Department, it has also used monitoring data from past years to develop state-wide plans for meeting health-based air quality standards established in law and regulations.

Additionally, during fiscal year 2012, the Department's Water Quality Division reported collecting 355 water samples from lakes, rivers, streams, and groundwater at 125 sites around the State. The Division tested the samples for the presence of chemical and biological contaminants, and assessed the water for other water quality measures, such

¹ This total includes applications for permit modifications and revisions, as well as applications for facility closures.

² The term "particulate matter" (PM) includes both solid particles and liquid droplets found in air. Many man-made and natural sources emit PM directly or emit other pollutants that react in the atmosphere to form PM. Particles fewer than 10 micrometers in diameter tend to pose the greatest health concern because they can be inhaled into and accumulate in the respiratory system.

as the level of dissolved oxygen in the water, which is an indicator of the ecological health of a lake, river, or stream. Department staff also interpreted this data to inform future planning and policy decisions. For example, the Department assesses the water quality in the State's lakes, rivers, and streams every 2 years and, based on the results of that assessment, identifies bodies of water with poor water quality and prioritizes them for pollution reduction activities, such as modifying allowable pollutant discharges for permitted facilities that discharge to the water body.

• Compliance management—Department staff monitor regulated facilities for compliance with environmental laws and regulations by inspecting regulated facilities, reviewing information submitted to the Department by facilities as part of self-monitoring and reporting requirements, and investigating citizen complaints alleging environmental violations. If department staff identify violations, they may pursue enforcement actions in an attempt to bring the violating facilities back into compliance with regulations. The Department can take enforcement actions ranging from issuing an informal notice of opportunity to correct, which allows the operators of a facility a specified number of days to correct a minor deficiency, to filing a civil action, which involves the Arizona State Attorney General's Office and can include substantial financial penalties to the violating facility. In fiscal year 2012, department staff conducted 2,726 inspections and initiated 895 enforcement actions (see the Office of the Auditor General's Performance Audit of the Department of Environmental Quality—Compliance Management, Report No. 13-01, for specific findings on the Department's inspections and enforcement activities).

The Department also provides compliance assistance to help regulated facilities comply with laws and regulations. For example, the Department's Monitoring Assistance Program helps public water systems serving up to 10,000 people comply with complex monitoring and reporting requirements by hiring a private contractor to collect and test drinking water samples from these systems and report the test results to the Department. The systems participating in the program pay a fee for this service, but according to the Department, pooling these systems' resources to hire a contractor lowers the systems' monitoring and reporting costs.

• Cleanups—The Department oversees the removal and cleanup of contaminated soil and water to help protect public health and the environment. For example, according to the Department, in fiscal year 2012, the Waste Programs Division's Remedial Projects Section oversaw the cleanup of more than 13 billion gallons of contaminated groundwater, removing more than 1.5 million pounds of metals, more than 35,000 pounds of hazardous substances, and more than 28,000 pounds of volatile organic compounds. The Department's emergency responders also helped local fire and police efforts to contain and clean up hazardous chemical releases. Specifically, according to the Department, in fiscal year 2012, the Department's Emergency Response Unit responded to 18 incidents, including fuel tanker accidents on Interstate 10 in Phoenix and State Route 260 near the Towns of Heber and Overgaard.

Self-monitoring and reporting regulations require some facilities to regularly monitor or test their discharges, emissions, or other aspects of the facility and to report the results of that monitoring to the Department. For example, public drinking water systems must regularly test their water supplies in order to ensure that the water is safe to drink, and they must regularly report the testing results to the Department.

This audit found no evidence that the Department's objectives and purpose are fulfilled by private enterprises in other states. According to the U.S. Environmental Protection Agency's (EPA) policy on delegation to state and local governments, federal environmental programs were designed to be administered at the state and local levels using federal, state, and local governments. Further, based on a review of the EPA's Web site, and according to an EPA official, environmental regulation is handled exclusively by government agencies across the country. However the Department uses private contractors to conduct some of its activities (see Sunset Factor 12, pages 25 through 26, for more information on the extent to which the Department has used private contractors as compared to other states).

The Department also delegates certain regulatory responsibilities to other government agencies. For example, the Department has delegated authority to Maricopa and Pima Counties for regulating public drinking water systems, public swimming pools, and wastewater treatment facilities. State law authorizes the Department to delegate any of its responsibilities or powers to local government agencies as long as the local agency agrees to perform the delegated functions.

2. The extent to which the Department has met its statutory objective and purpose and the efficiency with which it has operated.

The Department has generally met its statutory objective and purpose to protect the environment in Arizona and administer the State's environmental laws. Specifically, the Department:

- Reported meeting many of its performance goals—According to information reported to the Governor's Office of Strategic Planning and Budgeting, the Department met many of its performance goals during fiscal years 2010 through 2012. For example, to help ensure it issued permits in a timely manner, the Department established a goal of issuing permits in accordance with timelines outlined in rule, and during fiscal years 2010 through 2012 it reported issuing at least 99 percent of its permits within these required time frames. Additionally, according to the Department, it established a goal of making drinking water systems with systemic noncompliance, such as multiple unaddressed health-based violations, a priority for its enforcement staff to help ensure that public drinking water systems in the State are free from contamination. The Department reported meeting this goal in fiscal years 2010 through 2012. Further, the Department reported that all three of its programmatic divisions had customer approval ratings of more than 90 percent during fiscal years 2010 through 2012.
- Developed additional performance measure goals—In its strategic plan for fiscal years 2014 through 2018, the Department further developed its performance measures in an attempt to better align the measures with its mission. As such, the Department's strategic plan for fiscal years 2014 through 2018 includes 25 performance measures, each one related to one of the Department's four goals of supporting environmentally responsible economic growth, enhancing Arizona's unique environment, accelerating cleanups, and fully supporting the Department's mission. The Department believes these new performance measures will help it better assess its performance because each includes a measurable outcome, and many also include a goal for improving that outcome during the 5-year

strategic planning period. For example, the Department has a goal to improve water quality in 50 percent of the State's monitored waters from fiscal years 2014 through 2018. Additionally, the Department aims to reduce the amount of waste per capita sent to landfills by 10 percent from fiscal years 2014 through 2018.

• Initiated a department-wide process improvement effort—The Department also initiated a department-wide process improvement program in fiscal year 2012 with the goal of increasing its efficiency. The program, which began in fiscal year 2012 and, according to the Department, has continued on into fiscal year 2014, is referred to as "Lean," a system of principles and tools often used in the private sector that focuses on reducing waste through continuous process improvement and empowering employees to evaluate and improve the processes that they use.

In April and May of 2012, the Department held two separate events for employees to examine two of the Department's permitting processes—one in the Air Quality Division and the other in the APP program. According to the Department, it began with these two permit processes because they are among its most complex, and in many cases, the Department took well over a year to issue permits under these processes. As part of the Lean effort, department staff examined these processes, brainstormed solutions for improving the processes, and chose 12 action items to improve these processes that appeared to offer the most impact and the least amount of difficulty to implement.

As a result of this effort, the APP participants reduced the number of steps involved in the APP permitting process from 235 to 84, and the air quality permitting participants reduced the total number of steps in the air quality permitting process from more than 300 to fewer than 100. As the Department began implementing the action items, it also had department managers and other staff assess whether they could apply any of the process improvements identified for the two permitting processes to other types of permits. According to the Department, as of the end of fiscal year 2013, it had fully implemented all but one of the action items, completed an assessment of the feasibility of applying the improvements identified for the two permitting processes to other permit processes, and had started implementing applicable improvements to other permitting processes.

Initial results from the Lean effort suggest that the program has met one of its goals—decreasing the amount of time the Department takes to make permitting decisions. As a result, the Department is able to issue more permits in less time, which allows applicants to receive their permits faster and potentially begin operating sooner. The Department implemented some or all of the process improvements for 13 air quality permit types and, according to an analysis conducted by the Department, the combined average number of days to issue a permit for these 13 permit types decreased by 67 percent. For one of these 13 permit types, the average number of days to issue a permit decreased from almost 110 days to about 17 days. Additionally, the Department implemented some or all of the process improvements for 16 APP permit types, and it reported that the combined average number of days to issue a permit for these 16 permit types decreased by 62 percent.

Throughout fiscal year 2013, the Department examined seven more processes and identified changes or potential improvements to increase efficiency. For example:

- According to the Department, department staff examined the process for procuring contractors to clean up leaking underground storage tank sites and recommended that the Department bundle geographically close sites to make the projects larger and potentially more attractive for private contractors to bid on. According to the Department, after implementing this change, the number of active projects increased from 63 in fiscal year 2012 to 103 in fiscal year 2013, and the time to procure the contractors decreased from 100 days to 50 days. Further, since implementing this change, the Department stated that contractors have decreased the amount they have billed the Department for traveling expenses to cleanup sites.
- Department staff examined the process for identifying the State's most polluted surface waters and developing cleanup plans to address the pollution, and according to department staff, they found that measuring the impact of cleanup activities was difficult because it was developing plans for large watersheds and the pollution sources often vary widely across these watersheds. Staff recommended that the Department develop plans for smaller areas of watersheds to help make the impact of cleanups easier to measure. Although this change has not yet been implemented, the Department stated that this change will help the Department and other entities engaged in cleanup efforts better measure the impact of their activities.

However, the performance audits completed as a part of the Department's sunset review also identified areas for improvement. Specifically:

- Making improvements to its compliance management practices—The Office of the Auditor General's March 2013 report on compliance management found that the Department can improve its inspection and enforcement practices to better protect public health and the environment (see Report No. 13-01). This report recommended changes in two main areas:
 - Developing and implementing a plan to inspect facilities based on risk—The Department's strategy for scheduling routine inspections, which is mostly dictated by its monitoring agreements with the EPA, is to inspect all facilities of the same type or category with the same frequency, regardless of risk. This approach results in similar rates of inspections for compliant facilities, which may pose lower risks to public health and the environment, and for less compliant facilities, which may pose higher risks to public health and the environment. However, literature on effective environmental regulation suggests that targeting inspections based on various risk factors can lower compliance-monitoring costs while increasing the effectiveness of inspections by focusing inspection efforts on the facilities most likely to violate regulations. Therefore, the report recommended that the Department request that the EPA collaborate with it to develop a framework for a risk-based inspections approach, which will allow it to focus its inspection activities toward facilities that pose the greatest risk to public health and the environment. Additionally, the report recommended that the Department

develop and implement policies and procedures for assessing the effectiveness of the risk-based inspections approach.

- Taking timely and effective enforcement action when facilities commit violations— Although effective and timely enforcement deters or discourages violations, the Department has not consistently met its own time frames for notifying facilities that they have committed a violation. For example, although department policy requires that informal enforcement action be taken within 45 calendar days after an inspection, the Department's hazardous waste program issued 80 percent of its notices of opportunity to correct or notices of violation more than 45 calendar days after the inspection in fiscal years 2006 through 2011. Further, the Department gives facilities specific deadlines to address violations and return to compliance, but 45 percent of the enforcement cases from fiscal years 2006 through 2011 did not meet the Department's compliance deadlines. Moreover, the Department seldom followed its own policies for escalating enforcement for missed compliance deadlines. Therefore, the report recommended that the Department should issue enforcement actions in a timely manner, implement a corrective action plan that addresses the main barriers to providing effective assistance to noncompliant facilities, and develop and adhere to more effective policies for escalating enforcement action.
- Ensuring that underground storage tank owners and operators meet financial responsibility requirements—The Office of the Auditor General's September 2013 performance audit of underground storage tank financial responsibility found that the Department can better ensure that owners and operators of petroleum underground storage tanks (USTs) comply with state and federal laws and regulations requiring them to provide guarantees for cleanup of potential leaks (see Report No. 13-06). These financial responsibility requirements help ensure that UST owners and operators, rather than the general public, can pay to clean up UST leaks and compensate third parties for damages incurred because of the leaks. Federal and state regulations allow UST owners and operators to demonstrate financial responsibility through several different mechanisms, including insurance, local government bond rating tests, and guarantees.

However, the Department is not adequately ensuring that UST owners and operators in Arizona are meeting financial responsibility requirements, resulting in state monies being used to clean up sites contaminated by UST leaks. For example, although state regulations require UST owners to provide proof of financial responsibility to the Department within 30 days of the UST being brought into use, auditors found that the Department accepted evidence of financial responsibility that did not meet regulatory requirements and registered UST facilities without evidence of financial responsibility. Further, the Department conducted only limited followup on facilities with expired financial responsibility. For example, department staff reported selecting and sending only 21 follow-up letters to facility owners and operators with expired financial responsibility between November 2012 and March 2013, compared to the 746 facilities with expired coverage as of March 2013.

During the audit, the Department had begun taking steps to identify and mitigate problems with UST financial responsibility, including establishing and filling a financial responsibility

program manager position to oversee the program and improve department processes. However, the report recommended additional actions, including that the Department develop and implement updated policies and procedures to ensure that USTs are not registered without evidence of financial responsibility and that the evidence is adequately evaluated to ensure it complies with state and federal regulations, train department financial responsibility staff to appropriately evaluate the evidence submitted by UST owners and operators, and develop and implement supervisory review practices. Additionally, the report recommended that the Legislature consider modifying statute to require insurance companies to inform the Department before and/or after UST financial responsibility insurance is terminated, canceled, or not renewed.

Finally, auditors identified three areas for improvement the Department should address related to its processes for approving and renewing coverage under general permits (see textbox for the definition of a general permit and permit coverage). Specifically:

Department should track required renewals of APP general permit coverage, identify
entities with expired coverage that are still operating, and develop a process for
addressing facilities that do not renew as required—Arizona Administrative Code R189-A303 requires facilities covered under two types of APP general permits to renew their
coverage every 2 to 7 years, depending on the type of facility.¹ To renew its coverage, an

General permits—The Department issues general permits for groups of facilities that have similar processes and pollution sources, such as dry cleaners or commercial gas stations. These permits usually include a set of standard requirements that can apply to the entire group of similar facilities, rather than specifying requirements tailored to each individual facility. Facilities qualified to operate according to the terms of a general permit generally receive an authorization to operate under the terms of the permit, referred to by the Department as permit coverage. In general, as long as a facility qualifies for a general permit based on the application criteria and the applicant agrees to meet the standard set of permit requirements, the facility can receive coverage under a general permit.

Source: Auditor General staff review of department documents, the Department's Web site, and state statutes.

applicant only needs to submit an application reporting any ownership changes and any changes that have been made to its facility since receiving coverage under the general permit and pay a renewal fee, which is one-third of the initial application fee. If a facility does not submit its renewal application at least 30 days before its coverage expires, it must submit a new application for coverage, including all supporting documentation, and pay the full initial application fee.

However, although the Department provides the coverage expiration date to facilities in its letters of approval for the initial applications, according to department staff, it does not have a process for tracking when applicants' permit coverage has expired and does not notify facilities when they are nearing their coverage expiration date. As a result:

 Some facilities have operated without either renewing their permit or applying for new coverage, which is a violation of state regulations subject to enforcement action. With assistance from department staff, auditors found that 3 of the 12 permittees that received permit coverage under one of the APP permits issued between fiscal years

Not all of the Department's permits require renewals. For example, APP individual permits are good for the life of the facility. However, laws and regulations require permittees for many permits to renew coverage and to pay a renewal fee. For example, according to federal and state law, the Department's air quality permits cannot be issued for longer than 5 years, and state regulations require the permittees to reapply for coverage at least 6 months before their permit expires.

- 2006 and 2011 and had expired coverage as of June 2013, did not renew their general permit coverage as required and never submitted a new application to the Department.¹
- Other facilities are applying for renewal after their permit coverage has expired, and these facilities face an extra paperwork burden and higher fees. Specifically, with assistance from department staff, auditors found that an additional 1 of the 12 facilities did not renew coverage on time and submitted a new general permit application after the deadline for renewal. By not renewing on time, this permittee had to pay an extra \$10,000 and submit a full application and documentation to regain coverage under a general permit.²

Department staff stated that they do not track the renewals because the Department's data systems do not allow for automated tracking of the renewals, and doing so manually would take too much staff time. Further, state regulations do not require the Department to notify facilities that their coverage is nearing expiration. However, other permit sections within the Department track permit renewals and notify facilities when they are nearing the due date for renewals, even though state regulations do not require them to do so. For example, the Air Quality Permits Section and the Surface Water Section's permit units track the expiration dates of permits using reports and database functions created by the Department's Information Technology staff, and both sections notify the permittees of their renewal obligation several months in advance of the renewal deadline.

Therefore, the Department should track renewals of APP general permit coverage, and it should notify permittees in writing when their coverage is coming due for renewal. Department management agreed that it should track renewals of APP general permit coverage. Additionally, the Department should identify any entities with expired APP coverage, determine if they are still operating in a manner that requires a permit, and notify them of their duty to submit a new application for coverage or face enforcement action for operating without a permit. Finally, the Department should develop a process for addressing facilities that do not renew on time in the future.

• Department should develop policies and procedures for reviewing and approving air quality general permit coverage—The Department's Air Quality Permits Section does not have any written policies, procedures, or other guidance documents for permit engineers to use when reviewing applications for general permit coverage. Auditors found that air quality permit engineers generally followed similar processes for reviewing the applications for general permit coverage. Further, auditors reviewed a random sample of one application file for each of the Department's ten types of air quality general permits processed in fiscal years 2010 through 2012 and found that the engineers appropriately approved coverage under a general permit. Although auditors did not identify problems with the Department's

One of the three permittees held a meeting with department staff nearly 7 months after its coverage expired to discuss its plans for expanding the facility. However, the other two permittees never contacted the Department, and the Department did not take any enforcement action against these two permittees for operating without a permit. After department staff determined that these two permittees had not renewed coverage, department staff notified the two permittees of their responsibility to submit a new application for coverage.

This permittee had two facilities at the same location that needed permit coverage. The application fee for this type of general permit is \$7,500 per facility, and the renewal fee is \$2,500 per facility. Therefore, the permittee paid an extra \$5,000 per facility by not renewing on time

process, written policies and procedures would help ensure that Air Quality Permits Section engineers continue to consistently review and approve general permit applications.

However, a department initiative could lessen the need for policies and procedures in this area. Specifically, in fiscal year 2014, the Department plans to test a system for electronic permit application processing via the Internet referred to as electronic permitting, or

Air quality general permit application review process

When a facility applies for coverage under one of the Department's ten air quality general permits, it submits a paper application. Some applications include a set of yes or no questions, while others include relatively simple emissions calculations worksheets that the applicant has to complete. The Department's process for reviewing these applications consists mainly of assessing whether or not the applicant qualifies for coverage under the general permits based on its answers to the questions and any emissions calculations, and checking the emissions calculations for errors.

To simplify this review process, the Air Quality Permits Section has developed Microsoft Excel worksheets that contain the formulas for calculating emissions. The engineers can use these worksheets to quickly check the emissions calculations by entering a few key numbers provided by the applicant, such as an engine's horsepower rating. Department management stated that an online permit application would allow the applicant to answer the yes or no questions and enter any key emissions numbers, and programming in the Department's Web site could instantly assess the applicant's qualification for the permit.

Source: Auditor General staff review of department documents and the Department's Web site, and interviews with department staff.

e-permitting. The Department plans to include one of the air quality general permits in a pilot project to test this approach. As part of this plan, the Air Quality Permits Section plans to automate the application review process for this general permit by creating a computer program that will determine appropriate coverage based on the information submitted electronically by the applicant (see textbox). If this pilot project is successfully implemented, the air permits section could automate all of its general permit applications. Doing so would eliminate the need for permits section engineers to review general permit applications, thus eliminating the need for guidance documents for permit engineers. However, permits section managers stated that they plan to continue to review the automated e-permitting decisions and periodically audit the e-permitting system to help ensure it is making appropriate coverage decisions. Thus, the Department should develop written policies and procedures for reviewing air quality general permit applications and continue with efforts to test the feasibility of e-permitting for air quality general permits; and if these e-permitting tests prove successful, use e-permitting for all of its air quality general permits and develop policies, procedures, or other guidance documents for manager review of e-permitting decisions and periodic audits of the e-permitting system.

• Department should adopt risk-based approach for inspecting on-site wastewater facilities prior to issuing permit coverage—As part of its APP program, the Department approves the construction and operation of "on-site" wastewater treatment systems, which treat sewage and wastewater at the site where they are generated (see textbox on page 15). Once approved, the wastewater systems receive a discharge authorization under the Department's APP general permits for on-site wastewater systems. During its general permit application review and approval process for these systems, the Department's main office does not conduct any inspections of these systems, but instead relies on construction plans provided by the applicant to assess whether or not the system complies with permit requirements.

Conversely, the Department's Southern Regional Office (SRO), which issues discharge authorizations for on-site systems in four counties in Arizona, conducts post-construction

On-site wastewater systems

On-site wastewater systems are commonly found in areas where public sewers may be impractical or unsuitable, and often treat wastewater for a single residence or for a small group of homes or buildings. These systems include conventional septic tanks and other alternative systems for treating sewage and wastewater using methods such as chemical disinfection, filtering, or use of aerobic bacteria to remove contaminants. The term "on-site" refers to the fact that the systems treat and dispose of wastewater at the site where it is produced, rather than transporting it through a sewer to a remote location for treatment. Under state regulations, approval of on-site systems involves two stages: approval to construct and approval to operate once construction is complete, referred to in state regulations as issuing a "discharge authorization."

The Department has delegated authority for approving septic tanks to county agencies in most areas of the State. However, it has retained authority to approve certain types of alternative on-site systems in Apache, Cochise, Graham, Greenlee, La Paz, Mohave, Navajo, and Santa Cruz Counties.

For the counties in the State where it has retained approval authority, the Department's main office approves construction of all systems. However, the Department splits the issuance of discharge authorizations between its main office, which handles the systems in the four counties in western and northern Arizona, and its Southern Regional Office, which handles the systems in the four counties in eastern and southern Arizona.

Source: U.S. EPA, National Onsite Wastewater Recycling Association, and Auditor General staff review of department documents and state regulations.

inspections of all small on-site systems.¹ According to SRO staff, the SRO conducts inspections of these smaller on-site systems because it has historically found permit violations during its inspections of these systems, such as shoddy construction or design deficiencies that were not apparent on the system design plans. Auditors' review of four SRO post-construction inspection reports from fiscal years 2010 through 2012 confirmed that the SRO identified multiple violations of permit requirements during some inspections. However, according to SRO staff, only one of the violations, which involved a raw sewage leak, posed an immediate threat to human health and the environment, while the other violations posed potential threats to public health and the environment that could have developed over time.

Three factors contribute to these internal department differences for reviewing and approving systems for operation under general permits for on-site wastewater systems. First, the Department does not have formal procedures or guidance for performing post-construction inspections of on-site facilities, but according to department management, it has given the SRO some autonomy for prioritizing inspections. Second, in fiscal years 2010 through 2012, according to data provided by the Department, it issued an average of only 22 discharge authorizations annually for small on-site systems. Thus, the scope of potential environmental and public health problems caused by these systems is likely small compared to other types of facilities the Department regulates, such as the more than

State administrative rule provides for separate general permits for small on-site systems that are designed to handle fewer than 3,000 gallons of wastewater per day, and larger on-site systems that are designed to handle between 3,000 and 24,000 gallons of wastewater per day. The application requirements for the larger systems are more stringent than those for the small systems, requiring, among other things, that an Arizona Registered Professional Engineer design the system and certify that it was constructed in accordance with the permit requirements. The permits for the smaller systems do not require this involvement by a professional engineer.

1,700 public drinking water systems in the State that provide water to more than 6 million people. Finally, department management stated that inspecting all small on-site systems is potentially an inefficient use of its inspectors' limited time, since it believes that other types of inspections, such as those of public drinking water systems, are likely more important for protecting public health and the environment.

However, since the operating authorizations the Department issues for on-site wastewater systems are good for the life of the system, department management stated that inspections of some on-site systems might be warranted, especially if the system is near an already polluted lake or stream, or near groundwater used for drinking water. Therefore, similar to the risk-based inspection approach recommended in the Office of the Auditor General's March 2013 report (see Report No. 13-01), for individual regulated facilities as well as facility types and its environmental programs, the Department should assess the risks posed by these systems against the risks posed by the other facilities it regulates and inspects in order to prioritize inspections of on-site wastewater systems and identify which applicants should be inspected prior to approving operation. This approach should be implemented by both its main and Southern Regional Offices.

3. The extent to which the Department serves the entire State rather than specific interests.

The Department has developed several strategies to provide services to all areas of the State. The Department's offices are located in the State's two largest cities—Phoenix and Tucson. Although the Department had a third office that was located in Flagstaff, it closed this office in 2011 in an effort to reduce its operating costs. However, to help provide a local presence in all areas of the State, the Department employs six community liaisons, and all except one are based in the areas of the State they serve. For example, one liaison covers Coconino, Mohave, and Yavapai Counties. These liaisons perform several duties, including providing permitting assistance; coordinating with local governments; handling customer service and information inquiries from the regulated community, the public, citizens groups, and other government entities; and conducting education and outreach on such topics as available grant funding and regulatory changes.

The Department provides specific benefits to residents and geographic areas throughout Arizona through many of its core activities. Specifically, the Department:

- Issues permits or oversees the issuance of permits to control pollution at facilities operating
 in all areas of the State. For example, the Department's Air Quality Division issues operating
 permits for certain types of portable construction equipment that can be used throughout
 the State.
- Monitors facilities for compliance with environmental laws and regulations, and these
 facilities have a direct impact on a large number of the State's residents. For example, the
 public drinking water systems regulated by the Department serve more than 6 million
 Arizona residents.

¹ The Department's community liaison for La Paz and Yuma Counties is based in its Southern Regional Office in Tucson.

- Collects data on air and water quality throughout the State, develops plans to help reduce pollution in areas where standards are not being met, and provides expertise to local agencies and groups, such as regional watershed associations, to help them reduce pollution or maintain clean air and water.
- Funds numerous cleanups of contaminated soil and water in areas throughout the State.
 For example, in fiscal year 2012, the Department's Waste Programs Division spent more than \$5 million for site cleanup and related activities at state Water Quality Assurance Revolving Fund sites in Avondale, Gilbert, Globe, Goodyear, the unincorporated community of Klondyke, Mesa, Payson, Phoenix, Quartzsite, Tucson, and Yuma.¹
- Provides funding for several projects throughout the State. For example, the Department's Monitoring Assistance Program hires a private contractor to conduct required water sampling and analysis for public drinking water systems throughout the State that serve up to 10,000 people, regardless of location.² According to the Department, since introducing this program in 1999, the number of small drinking water systems that maintain compliance with complex monitoring and reporting regulations has increased. Further, the Department states that the program provides important information about drinking water quality to the Department and the public, increasing confidence in the quality of the water and helping ensure that customers of small drinking water systems have the same access to safe and reliable drinking water as customers of larger systems.

Additionally, the Department allocates federal grant money to fund several water quality improvement projects throughout the State each year and has funded projects in 13 of Arizona's 15 counties. For example, in 2009, the Department awarded more than \$290,000 to the Gila Watershed Partnership in Eastern Arizona to assess the sources of E. Coli contamination in the San Francisco and Lower Blue Rivers in Greenlee County, and to recommend and implement methods for reducing the contamination. The Gila Watershed Partnership completed the project in June 2012, recommending several nonregulatory solutions, including adding permanent restroom facilities in recreation areas. The Gila Watershed Partnership also used part of the grant to conduct education and outreach programs for river users and area residents.

4. The extent to which rules adopted by the Department are consistent with the legislative mandate.

General Counsel for the Auditor General has reviewed the Department's rule-making statutes and believes that, in general, the Department's rules are consistent with the legislative mandate. However, in one area, General Counsel for the Auditor General found that the Department has not established rules required by statute. Specifically:

• Solid waste facilities—A.R.S. §49-761 requires the Department to establish rules regarding the storage, processing, treatment, or disposal of solid waste at solid waste facilities that

The Water Quality Assurance Revolving Fund (WQARF) was created by the Environmental Quality Act of 1986. Under the WQARF program, the Department identifies, assesses, and cleans up soil and groundwater contaminated with hazardous substances, such as benzene, toluene, and methyl tertiary butyl ether (MTBE) from gasoline underground storage tank leaks.

Water systems serving up to 10,000 people are required to participate in the program, and they pay an annual fee that the Department uses to hire the contractor.

are identified in A.R.S. §49-762.01, to issue by rule best management practices for the classes of solid waste facilities set forth in A.R.S. §49-762.02, to adopt rules relating to financial assurance requirements, and to adopt facility design, construction, operation, closure, and post-closure maintenance rules for biosolids-processing facilities and household waste composting facilities that must obtain plan approval pursuant to A.R.S. §49-762.

The Department stated that it had not adopted rules prescribed by this statute because, after having gone through most of the rule-making process in 2007 and 2008, the Department stopped this process in response to the Governor's 2009 moratorium on rulemaking. The Governor later extended the moratorium for fiscal years 2011 and 2012, and in fiscal year 2012, the Governor issued Executive Order 2012-03, which prohibits state agencies from conducting any informal or formal rule-making activities until December 31, 2014. However, state agencies may seek exemptions from the moratorium if rulemaking is necessary to create jobs, lessen regulatory burden, or reduce government waste, or the rules are required to comply with a federal requirement. The Department has determined that the rules required by this statute do not qualify for an exemption from the Governor's moratorium, and General Counsel for the Auditor General agrees with this assessment. The Department stated that, although it understands the need to continue rule-making efforts once the moratorium expires, it believes that the solid waste rule package developed in 2007 and 2008 is out of date and does not use all the options available to address solid waste issues. For example, in 2011, the Legislature authorized the Department to issue solid waste general permits. The Department stated that when the moratorium is lifted or expires, it will evaluate agency needs and priorities and develop a rule-making strategy for solid waste issues. Thus, the Department should complete the rule-making process for the rules required by this statute once the Governor's rule-making moratorium expires.

5. The extent to which the Department has encouraged input from the public before adopting its rules and the extent to which it has informed the public as to its actions and their expected impact on the public.

The Department has encouraged input from the public before adopting its rules and has informed the public as to its actions and their expected impact on the public. According to the Department, it regularly solicits input from stakeholders and attempts to work toward a consensus on rule changes before it begins the formal rule-making process. The Administrative Procedure Act requires the Department to inform the public of a proposed rule by filing a Notice of Rule-making Docket Opening and a Notice of Proposed Rule-making with the Office of the Secretary of State. The Notice of Proposed Rule-making provides the public with an explanation of the rule, the Department's reason for initiating the rule-making, and the expected impact of the rule. The Secretary of State subsequently publishes each notice in the Arizona Administrative Register before beginning any rule-making proceedings. Further, the Administrative Procedure Act requires an agency to allow for, at a minimum, a 30-day public comment period to solicit and respond to suggested language or other input on the proposed rule. In its most recent rule-making, in 2011, the Department complied with the Administrative Procedure Act by filing the appropriate notices with the Secretary of State and allowing for a public comment period. Additionally the Department used its e-mail listsery to notify stakeholders of its rule-making

activities. The public and members of stakeholder groups can subscribe to the listserv on the Department's Web site. According to the Department, comments made during the public comment period become part of the official rule-making record. The Department stated that in many instances, comments have led to changes in draft rules.

In addition to its proposed rules, the Department is required to inform the public of existing rules and policies. Specifically, A.R.S. §41-1091.01 requires the Department to post on its Web site the full text of each rule and substantive policy statement currently in use, and a notice that the substantive policy statement is advisory only. Although the Department complies with the requirement to post the full text of each rule, auditors found that the Department does not post the full text of each substantive policy statement or the related notice. Therefore, to fully comply with A.R.S. §41-1091.01, the Department should post on its Web site the full text of each substantive policy statement currently in use and the related notice.

6. The extent to which the Department has been able to investigate and resolve complaints that are within its jurisdiction.

The Department has established processes to address complaints received from the public and investigate complaints within its jurisdiction in a timely manner. The Department receives complaints from the public primarily through its Web site and over the phone, but also receives complaints through letters, e-mails, and in-person. To help ensure that complaints are addressed in a timely manner, the Department has established a performance goal of addressing complaints within 5 days of receiving a complaint, and it uses a database to manage and track complaints.

Once the Department receives a complaint, the complaint is forwarded to the appropriate program—such as the Water Quality Division, Air Quality Division, Waste Programs Division, or the Southern Regional Office. Program staff then assess the complaint and determine if an inspection is necessary to investigate the complaint. Depending on the nature of the complaint, program staff may also contact the complainant and respondent to collect additional information to resolve the complaint.

In calendar year 2012, the Department received 865 complaints and addressed 99 percent of these complaints within its 5-day goal. Additionally, in calendar year 2012, approximately 25 percent of the Department's complaints required an inspection. According to the Department, if these inspections determined that a violation had occurred, the complaint was resolved through the Department's compliance and enforcement process.

7. The extent to which the Attorney General or any other applicable agency of state government has the authority to prosecute actions under the enabling legislation.

A.R.S. §49-103 authorizes the Attorney General to act as the Department's legal advisor and to "prosecute and defend in the name of the state" actions that allow the Department to fulfill the provisions of the Department's enabling statutes. The statute also states that any compensation for personnel assigned to perform these duties will be a charge against the Department's appropriations.

The Department and the Arizona Attorney General's Office have further formalized this relationship with six interagency service agreements. The agreements outline the tasks the Attorney General will perform for the Department to provide legal and litigation services, the number of Attorney General staff assigned to these tasks, and the expenses for these staff and other costs related to providing legal services to the Department. The agreements indicate that Attorney General staff can perform the following tasks on the Department's behalf:

- Obtaining, reviewing, and documenting evidence for enforcement;
- Participating in negotiations;
- Drafting consent orders and agreements;
- Assisting with rule development;
- Conducting administrative and judicial litigation;
- Researching state and federal laws, rules, and opinions;
- Participating in formal and informal appeals processes;
- Providing legal advice and counsel; and
- Delivering other legal services as determined by the Department.

The agreements provide the Department with the services of nine full-time attorneys and six support staff. In fiscal year 2013, the Department agreed to pay \$1,751,890 to the Attorney General for employee salaries and benefits, rent, travel, capital equipment, and other operating expenses incurred during the fiscal year. Additionally, in September 2012, the Department agreed to pay the Attorney General \$30,000 for administrative and judicial litigation expenses incurred through the end of fiscal year 2013, such as filing fees, postage, court reporters, expert witnesses, investigator and consultant fees, and transcripts of depositions.

The Department also stated that it refers potential criminal violations of state environmental law to the Attorney General, but that it does not participate in the prosecutions of these cases unless the Attorney General requests its assistance. For example, if the Department had evidence that a regulated facility had knowingly falsified emissions or discharge data it submitted to the Department, it would refer this evidence to the Attorney General for a possible fraud prosecution. However, according to the Department, it rarely refers cases to the Attorney General because the burden of proof is much higher for criminal cases than it is for administrative or civil cases, and the Department is often unable to gather enough evidence to meet this higher burden. According to department staff, the Attorney General's Office has recently offered the Department the services of an investigator to help gather evidence for potential prosecutions, but the Department would need to pay for these services.

8. The extent to which the Department has addressed deficiencies in its enabling statutes that prevent it from fulfilling its statutory mandate.

According to the Department, the Legislature has enacted several pieces of legislation since 2007 that addressed deficiencies in its enabling statutes. These changes included:

- Laws 2007, Ch. 31—This law extended the sunset date for the Department's Waste Tire Program and the fees and fund associated with the program from December 31, 2007 to December 31, 2017. The Waste Tire Program requires counties in Arizona to develop plans for regulating the storage, disposal, and recycling of waste tires, and to submit these plans to the Department. According to the Department, the Waste Tire Program is one of its core programs for meeting its statutory mandate of protecting the environment because it aims to prevent fires caused by large piles of tires, which can threaten public health and the environment.
- Laws 2008, Ch. 218, §4—This law mandated that containment and release-detection requirements be met prior to installation of a hazardous substance underground storage tank, authorized the Department to affix a stop-use tag to an underground storage tank not in compliance with law, and provided for a hearing for an appeal of a stop-use order. According to the Department, these changes were necessary to comply with federal requirements.
- Laws 2010, Ch. 265—This law authorized the department director to increase water quality permit fees to replace existing statutory fees. It also granted the Department authority to charge the existing fees until new fees could be set. According to the Department, fee changes such as this one were important to ensure the Department had adequate funding to meet its statutory mandate when the Legislature began to reduce and eventually eliminate State General Fund allocations to the Department from fiscal years 2009 to 2011.
- Laws 2010, Ch. 45—This law extended the sunset date for the Department's Voluntary Remediation Program from July 1, 2010 to July 1, 2020. The Voluntary Remediation Program encourages private entities to clean up contaminated sites in exchange for expedited approvals for their cleanup plans and a determination that the Department will not take any actions requiring any future cleanups of the site once the cleanup plan is complete. According to the Department, the Voluntary Remediation Program is one of its core programs for meeting its statutory mandate of promoting the restoration and reclamation of degraded or despoiled areas.
- Laws 2010, Ch. 277—This law extended the sunset date for the Department's Monitoring Assistance Program from July 1, 2010 to July 1, 2020. The Monitoring Assistance Program hires a private contractor to conduct required water sampling and analysis for public drinking water systems throughout the State that serve up to 10,000 people, regardless of location.¹ According to the Department, since introducing this program in 1999, the number

Water systems serving up to 10,000 people are required to participate in the program, while larger systems may voluntarily participate in the program. All systems in the program pay an annual fee that the Department uses to hire the contractor.

of small drinking water systems staying in compliance with complex monitoring and reporting regulations has increased. Further, the Department stated that the program provides important information about drinking water quality to the Department and the public, increasing confidence in the quality of the water and helping ensure that customers of small drinking water systems have the same access to safe and reliable drinking water as customers of larger systems. Therefore, the Department considers the Monitoring Assistance Program one of its core programs for meeting its statutory mandate to ensure that public drinking water systems provide state residents with safe drinking water.

- Laws 2010, Ch. 278—This law extended the sunset date for the Total Maximum Daily Load Program from July 1, 2010 to July 1, 2020. Total maximum daily load is an estimation of the total amount of a pollutant from all sources that may be added to a water body while still allowing the water to achieve or maintain statutory surface water quality standards. As part of its administration of the federal Clean Water Act, the Department develops total maximum daily loads for surface waters that do not meet water quality standards and helps develop management plans to ensure that pollutants discharged to the water body do not exceed the total maximum daily load. According to the Department, the Total Maximum Daily Load Program is one of its core programs for meeting its statutory mandate of administering federal and state environmental laws.
- Laws 2013, Ch. 244—This law delayed the repeal of the Underground Storage Tank Tax and the Underground Storage Tank Assurance Account until December 31, 2015, and extended the time period to submit claims for corrective action. It also created a 17-member underground storage tank study committee made up of legislators; state and local government officials; members of the petroleum, insurance, and environmental cleanup industries; and members of the public. The legislation directs the study committee to present its findings on the need for future funding of the Underground Storage Tank Assurance Account and other issues by December 1, 2013.
- The extent to which changes are necessary in the laws of the Department to adequately comply with the factors in the sunset law.

The performance audits conducted as part of the Department's sunset review (see Report Nos. 13-01, and 13-06) proposed one change to the Department's statutes. Specifically, the Office of the Auditor General's September 2013 report on petroleum underground storage tank (UST) financial responsibility recommended that the Legislature consider modifying statute to require insurance companies to inform the Department when UST financial responsibility insurance is terminated, canceled, or not renewed (see Report No. 13-06). Such a reporting requirement would provide important information to the Department regarding whether owners and operators of USTs comply with state and federal laws and regulations requiring them to meet financial responsibility requirements for cleaning up leaks if they occur. According to department data, 78 percent of UST owners and operators in Arizona use insurance as their financial responsibility mechanism. At least one other state has a requirement for insurance companies to notify the state's environmental department about financial responsibility coverage changes. Specifically, Michigan requires insurers to notify its Department of Environmental Quality within 20 days after termination or nonrenewal of UST financial responsibility coverage. Additionally, in

Arizona, at least one type of insurance already has a similar requirement. Specifically, A.R.S. §23-961 requires insurers to notify the Industrial Commission if a workers' compensation policy is canceled or is not renewed.

10. The extent to which the termination of the Department would significantly affect the public health, safety, or welfare.

As the state agency responsible for protecting public health and the environment, the Department protects the health, safety, and welfare of Arizona residents in numerous ways. For example, the Department protects residents from the health risks of contaminated drinking water by regulating the State's drinking water systems and supporting the cleanup of water contamination when it occurs. Similarly, the Department protects human health, safety, and welfare by regulating waste treatment, storage, and disposal facilities and supervising the cleanup of leaking underground storage tanks and sites that have contaminated soil or water. Finally, the Department protects Arizona residents from the adverse health effects of air pollution by monitoring air quality throughout the State, regulating sources of air pollution, and administering several programs designed to reduce the level of air pollution, such as the Vehicle Emissions Inspection Program.

Terminating the Department would not necessarily result in cessation of these activities. However, unless the Department's responsibilities and authorities were transferred to another state agency, it would likely result in a loss of local regulatory control, and a shift of regulatory responsibility from the State to the federal government. Specifically, termination of the Department would shift responsibility for administering federal environmental laws, such as the Clean Water Act, the Clean Air Act, and the Safe Drinking Water Act, to the EPA. Further, administration of these laws would likely fall to the EPA's Region 9 Office, which is located in San Francisco, California.

Additionally, terminating the Department could create a potentially uncertain and inconsistent regulatory environment for the State's businesses. Specifically, termination of the Department could result in the EPA shifting responsibility for administering federal environmental programs to local governments. This shift could result in an uncertain and uneven regulatory environment for regulated facilities if local governments choose to administer these programs in different ways.

Finally, terminating the Department could result in Arizona losing federal grant money aimed at protecting the environment. The Department receives several federal grants to help pay for administering federal laws. For example, the Department received more than \$2.2 million in federal grant money from the EPA in fiscal year 2013 to administer the federal clean water act and the federal safe drinking water act, about \$3 million in federal grant money in fiscal years 2012 and 2013 for its hazardous waste program, and more than \$7 million in federal grant money in fiscal years 2012 and 2013 for air pollution prevention. Most of these grants must be allocated directly to state environmental agencies and likely could not be used by the EPA Region 9 office. Thus, if the Department were terminated, at least some of the grant money the Department receives for administration of federal environmental programs would likely go to

¹ The grant for water programs was a 1-year award, while the grants for air pollution prevention and hazardous waste were 2-year awards.

other states. Further, the Department also receives money from federal grant programs that states receive only if eligible agencies apply for the funds, such as the State and Tribal Response Program for waste cleanups. In fiscal years 2011 through 2013, the Department received more than \$3 million from two such EPA grant programs for cleanups of contaminated sites around the State. Terminating the Department would likely result in Arizona losing out on the benefits provided by these grants, unless the Legislature designated another state agency to apply for and administer the grants, or unless tribes, counties, cities, or towns applied for the funds directly if they were eligible to do so.¹

11. The extent to which the level of regulation exercised by the Department compares to other states and is appropriate and whether less or more stringent levels of regulation would be appropriate.

This audit found that the level of regulation exercised by the Department is generally appropriate. In its role as the state agency charged with implementing federal and state environmental laws and regulations, the Department must follow both state and federal requirements regarding the stringency of its regulations. Specifically, state law requires the Department to ensure that state environmental regulations are consistent with but no more stringent than the corresponding federal law that addresses the same subject matter unless the Legislature authorizes it to enact more stringent regulations.² As such, enacting more stringent levels of regulation would not be appropriate unless the Legislature specifically approved such changes. Further, the EPA generally requires states to enact laws and rules that are at least as strict as the requirements in federal law as a condition for delegating regulatory authority for federal environmental programs. Moreover, the EPA reserves the right to revoke this regulatory authority, to implement federal laws and regulations, or to cancel grant funding agreements if it believes states are not meeting federal requirements. As such, enacting less stringent regulations than those found in federal law might not be appropriate since it could jeopardize the Department's ability to implement federal environmental laws, thus ceding state control over environmental regulation to the federal government.

Additionally, the level of regulation exercised by the Department in environmental programs covered by federal law is consistent with the level of regulation exercised by other state environmental agencies in EPA Region 9 and the western U.S. Although none of the other Region 9 states has a law similar to Arizona's that limits state environmental agencies from enacting regulations that are more stringent than federal law in all environmental areas, Nevada has such a law related to underground storage tanks. Additionally, both Colorado and Utah, which are in EPA Region 8, have laws related to certain environmental programs requiring the state environmental agencies and commissions to provide evidence of the environmental or public health necessity for rules that are more stringent than federal laws. Utah has enacted more stringent regulations in some cases, such as designating nerve gas as a regulated substance. In addition, Colorado has enacted administrative rules for air quality that are more stringent than the federal standard. For example, Colorado is continuing an automobile

¹ The State and Tribal Response Program grants are available only to states or federally recognized tribes. However, other federal grants may be available to counties, cities, and towns.

² More than 20 states have enacted laws that limit state environmental regulations from being more stringent than corresponding federal regulations.

inspections and maintenance program in a specific area of the state even though federal standards no longer require it to do so.

The environmental regulations in the EPA Region 9 states are also generally consistent with federal requirements, with a few exceptions. For example, California has enacted requirements for allowable levels of certain pollutants in air and drinking water that are more stringent than federal standards, while Nevada has adopted more stringent regulations for certain air pollutants.

In areas where the Arizona State Legislature has granted the Department authority to regulate activities not covered by federal law, the regulations generally address environmental issues of special interest to Arizona citizens. For example, the State's APP program regulates activities that could pollute underground aquifers that may provide drinking water. This program is important in Arizona because groundwater is the primary source of drinking water for many of the State's rural residents. Further, all of the EPA Region 9 states and others in the western U.S., such as Colorado and Oregon, have enacted similar regulations protecting groundwater. Finally, Nevada has a groundwater-protection permit program that, similar to Arizona's APP program, protects groundwater that may provide drinking water because many residents in that state also rely on groundwater for drinking water.

12. The extent to which the Department has used private contractors in the performance of its duties as compared to other states and how more effective use of private contractors could be accomplished.

The Department accomplishes several of its duties through the use of private contractors. Specifically, in fiscal year 2012, the Department paid more than \$36.5 million—approximately 39 percent of its fiscal year 2012 expenditures—to private enterprises, nonprofit organizations, and local governments. The vast majority of these monies—\$21.8 million—went to the contractor that operates vehicle emissions inspection stations in and around metropolitan Phoenix and Tucson as part of the Vehicle Emissions Inspections Program. Other examples of the Department's use of private contractors include:

- Expedited permitting process—The Department uses private contractors to provide expedited permit application processing for air quality and APP permits. The expedited permitting process allows applicants to pay for a private contractor to immediately begin working on their application for the permit, rather than waiting for the Department to process the permit application in the order it was received. For example, in fiscal years 2010 through 2013, 10 of the 188 APP permit applicants chose expediting processing by private contractors, while 1 of the 234 air quality permit applicants also chose expedited processing by private contractors, according to the Department.
- APP permit processing—In fiscal year 2011, the Department awarded a contract to a
 private engineering and environmental consulting firm to provide APP permit processing
 services, including reviewing permit applications, drafting permits, and providing the
 Department with technical assistance. According to the Department, it initiated this contract
 in response to a July 2011 report from the Arizona Commission on Privatization and

Efficiency, which recommended that the Department use flexible contracts with vendors that can be hired on a temporary, as-needed basis in order to deal with fluctuating permit application activity. The Department reported that it has used the contract once to obtain assistance with a site-closure cost-estimate review.

- Soil and groundwater cleanups—Although the Department's Waste Programs Division oversees cleanups of contaminated soil and groundwater, private contractors conduct all of the cleanup work.
- Information systems development—The Department uses contractors for programming
 and developing its information systems, such as internal databases and its Web site. EPA
 Region 9 officials stated that they consider the Department's waste programs information
 system a model for other states to emulate because it synchronizes with the EPA's
 systems. This system was developed using contractors.
- Monitoring Assistance Program—The Department's Monitoring Assistance Program
 pays for a private contractor to conduct required water sampling and analysis for nearly
 900 public drinking water systems throughout the State that serve up to 10,000 people.

Auditors did not identify any other opportunities for the Department to use private contractors. In addition, neither the EPA nor other EPA Region 9 states identified any additional opportunities for privatization. Specifically, some Region 9 states indicated that their use of contractors is similar to the Department's, such as vehicle emissions inspections, soil and groundwater remediation, and mathematical modeling used to predict the dispersion of air pollution.¹

¹ Though the Department had not used contractors for mathematical modeling, the Department stated that it employs only one person trained to conduct this modeling. As such, department staff stated that they are developing a standard contract for modeling services to use during periods of high permit activity or in the event that its modeling expert leaves the Department.

APPENDIX A

This appendix provides information on the methods auditors used to meet the audit objectives.

This performance audit was conducted in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient appropriate evidence to provide reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

The Auditor General and staff express appreciation to the Department of Environmental Quality (Department) Director and his staff for their cooperation and assistance throughout the audit.

Methodology

The Department's performance was analyzed in accordance with the statutory sunset factors. Auditors used various methods to address the sunset factors. These methods included gathering information on the Department's goals, objectives, and strategic plan; federal and state laws; staff and vacancies; revenue and expenditures; and any contracts or department agreements with the EPA and other government agencies. Auditors also reviewed and analyzed information on the Department from the Fiscal Years 2010-2013 Master List of State Government Programs, the Fiscal Years 2012-2015 Master List of State Government Programs, and interviewed department management and staff.

Additionally, performance audit work related to the Department's Compliance Management (see Auditor General Report No. 13-01) and Underground Storage Tanks Financial Responsibility (see Auditor General Report No. 13-06) provided information for this report. Auditors also used the following additional methods:

- To obtain information on the Department's "Lean" process improvement initiative, auditors attended department process-improvement events, reviewed process improvement activity and data analysis documents prepared by department staff, and interviewed department staff.
- To assess whether the Department's processes for approving and renewing Aguifer Protection Permit (APP) and air quality general permit coverage needed improvement, auditors reviewed the Department's policies, procedures, and manuals for approving general permit coverage, as well as applicable state laws and regulations. Additionally, auditors interviewed officials with the United States Environmental Protection Agency's (EPA) Region 9 office and permitting officials at county environmental agencies in Arizona.¹ Auditors also reviewed a random sample of ten department air quality general permit applications from fiscal years 2010 through 2012, a convenience sample of four inspection reports from the Department's Southern Regional Office for fiscal years 2010 through 2012 that were provided by department staff, and reviewed electronic permit activity records for all 74 facilities issued coverage under APP Type 3 general permits by the Department in fiscal years 2006 through 2011 that still had active coverage as of May 9, 2012, when the data was pulled.

Auditors interviewed permitting officials who oversee APP general permits in Maricopa, Pima, and Yavapai Counties.

• To assess the Department's activities in relation to other states, auditors interviewed officials within the EPA Region 9 office, which oversees EPA's programs in Arizona, California, Hawaii and Nevada. Auditors also interviewed some other state environmental agency officials in EPA Region 9 states—California, Hawaii, and Nevada. Additionally, auditors reviewed other states' statutes and regulations, as well as documents from other state environmental agencies, to further assess the level of regulation in these states.¹

Auditors' work on internal controls focused on the Department's processes and procedures for approving general permit coverage in accordance with federal and state laws and regulations. Conclusions on this work are included in Sunset Factor 2, pages 8 through 16. Computerized system information was not significant to auditors' objective; therefore, auditors did not conduct test work on information systems controls.

¹ Auditors reviewed statutes or regulations from California, Colorado, Hawaii, Nevada, Oregon, and Utah, and reviewed documents from California's and Nevada's environmental agencies.

AGENCY RESPONSE



Arizona Department of Environmental Quality

1110 West Washington Street • Phoenix, Arizona 85007 (602) 771-2300 • www.azdeq.gov



September 12, 2013

Debra K. Davenport Auditor General 2910 N. 44th Street, Ste. 410 Phoenix, AZ 85018

Dear Ms. Davenport:

This letter provides the Arizona Department of Environmental Quality's response to the September 5, 2013 revised preliminary report draft of the department's Sunset Factors report. We appreciate the diligence and hard work of the Auditor General's staff in completing this report and their consideration of our feedback on the previous draft.

The auditors identified three areas for improvement the Department should address related to its processes for approving and renewing coverage under general permits. Specifically:

1.1 The Department should track required renewals of Aquifer Protection Permit (APP) general permit coverage, identify entities with expired coverage that are still operating, and develop a process for addressing facilities that do not renew as required

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

1.2 The Department should develop policies and procedures for reviewing and approving air quality general permit coverage applications and continue with efforts to test the feasibility of e-permitting for air quality general permits; if these e-permitting tests prove successful, use e-permitting for all of its air quality general permits and develop policies, procedures, or other guidance documents for manager review of e-permitting decisions and periodic audits of the e-permitting system.

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

1.3 The Department should adopt a risk-based approach for inspecting on-site wastewater facilities prior to issuing permit coverage.

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

2.1 The Department should complete the rule-making process for rules required by A.R.S. §§ 49-761, 49-762, and 49-762.02 once the Governor's rule-making moratorium expires.

Debra K. Davenport September 12, 2013 Page 2 of 2

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

3.1 In order to comply with A.R.S. § 41-1091.01, the Department should post on its Web site the full text of each substantive policy statement currently in use and the related notice.

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

On behalf of ADEQ, we appreciate having had this opportunity to respond to the above recommendation. Moreover, we appreciate the professionalism and cooperation your audit team demonstrated in working with us throughout the performance audit process. We found the process and the results to be both constructive and informative, and we look forward to timely implementation of all the recommendations identified in your audit reports.

Sincerely,

Henry R. Darwin Director

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