

Janet Napolitano, Governor Stephen A. Owens, ADEQ Director



A Message from the Director...

Fiscal year 2006 was another productive year for the Arizona Department of Environmental Quality (ADEQ). The department implemented several successful initiatives and continued to improve delivery of services and increase focus on the central functions of our mission: to protect and enhance Arizona's environment and the health and safety of our state's citizens.

Among the department's top priorities, the Children's Environmental Health Project has continued to draw an enthusiastic response from school officials, children's health experts, parents and educators. The School Bus Idling Project, which began as a pilot effort in 2004 with seven school districts to reduce children's exposure to harmful diesel emissions from buses idling near schools, has grown to more than 140 districts, benefiting more than 698,000 children throughout the state.

The department also oversaw the work of the Arizona Climate Change Advisory Group (CCAG), a 35-member advisory group established by Governor Napolitano to develop recommendations for reducing greenhouse gas emissions in Arizona.

The CCAG delivered its Climate Change Action Plan to the Governor in August 2006. In September, the Governor signed Executive Order 2006-13, which, among other things, sets a goal to reduce Arizona's future greenhouse gas emissions to the 2000 emissions level by the year 2020, and to 50% below the 2000 level by 2040. In April 2006, ADEQ's rule to limit emissions of hazardous air pollutants (HAPs) was approved by the Governor's Regulatory Review Council (GRRC). ADEQ's rule sets maximum emission levels for HAPs and requires new and modified sources of HAPs to install air pollution control technology to reduce the amount of HAPs emitted into the air.

Under Arizona law, ADEQ was supposed to have developed a rule regulating emissions of HAPs in Arizona by November 1993, but failed to do so. For the last 12 years, Arizonans have been exposed to tons of toxic air pollutants that should have been regulated. The new HAPs rule is a long-overdue step toward protecting children and families in Arizona from exposure to toxic air pollutants.

During FY06, ADEQ developed regulations to dramatically reduce toxic mercury emissions from coal-burning power plants. The new rules, which were unanimously approved by GRRC in November 2006, require coal-burning power plants in Arizona to cut their mercury emissions by 90 percent by December 31, 2013. The rule also requires consideration of new, less-polluting technologies on plants built in Arizona in the future.

More detailed information about our department's programs may be found in the appendices to this report and on the department's Web site at: http://www.azdeq.gov.

Stephen A. Owens Director

ADEQ at a Glance...

The Arizona Legislature established ADEQ as the state's environmental regulatory agency under the Environmental Quality Act of 1986. Its mission is to protect and enhance public health and the environment in Arizona. The department achieves this mission by administering our state's environmental laws and delegated federal programs to prevent pollution of our air, water and land, and to clean up such pollution when it occurs.

During FY 2006, ADEQ had an average of 660 employees. The department's organizational structure is composed of four programmatic divisions that fulfill our environmental protection mission in the areas of air quality, water quality, waste programs and tank programs. Those divisions are supported by the director's office and an administrative services division.

Our agency's core functions are vital to public health and safety. The core functions align with the agency mission, strategic plan and performance objectives, which are summarized below.

Pollution Control

Permitting – ADEQ issues permits, approvals and certifications to ensure that facilities are constructed and operated in accordance with the law and that any discharges to the air, water and soil are within healthful standards established by law.

Planning – ADEQ's planning specialists develop management practices and increasingly stringent control strategies in areas where health-based environmental standards are threatened or violated. Arizona's air quality management areas and watershed planning efforts are examples of this activity.

Pollution Prevention – As an alternative to regulatory enforcement, ADEQ offers guidance, assistance and financial incentives to encourage businesses to minimize waste and resulting pollution.

Environmental Clean Up

Remediation – ADEQ investigates and oversees the removal and cleanup of contaminated soil and groundwater to protect public health and the environment.

Emergency Response – ADEQ provides technical support and assistance to emergency response agencies to help them minimize the impacts to public health and the environment in the areas of air quality, water quality and hazardous waste.

Voluntary Remediation Program - Through ADEQ's Voluntary Remediation Program (VRP), property owners, prospective purchasers and other interested parties investigate or

clean up a contaminated site in cooperation with ADEQ. VRP results in a streamlined process for program participants who work with a single point of contact at ADEQ to address applicable cross-program remediation efforts. ADEQ reviews these voluntary remedial actions and provides a closure document for successful site remediation that is accepted by all relevant ADEQ programs.

Compliance Management

Compliance Assistance – ADEQ offers a variety of informational resources to help businesses understand and comply with environmental regulatory requirements and promote positive environmental practices.

Inspections – ADEQ inspects facilities on a regular basis and in response to citizen complaints to ensure compliance with environmental laws.

Enforcement – ADEQ ensures compliance with environmental laws by pursuing informal enforcement through notices of opportunity to correct or notices of violation and formal enforcement through administrative orders and judicial enforcement actions in conjunction with the Arizona Attorney General's Office.

Monitoring and Assessment

Monitoring – ADEQ's monitoring personnel collect air, water and soil samples for laboratory analyses to determine the presence or absence of contaminants.

Assessment – ADEQ's assessment staff interpret the data that result from field research to draw conclusions about environmental indicators and trends and form the basis for future planning and policy decisions.

Public Outreach

Education and Outreach – ADEQ offers a variety of seminars, workshops, presentations and publishes information via newsletter and the Internet to inform the public about department programs and activities. ADEQ also supports numerous advisory and stakeholder groups and conducts public hearings and meetings in support of our regulatory and public policy functions.

Financial Assistance – ADEQ offers financial assistance for leaking underground storage tank cleanup costs and provides grants to local governments for air quality and water quality programs. Other ADEQ programs also make funding available to eligible applicants for recycling, water quality and pollution prevention projects and activities.

Public Policy

Policy Development – ADEQ works with state and national organizations and stakeholders to shape and influence environmental policy at the state and federal levels. Policies are developed to explain how we interpret statutes and rules to ensure consistent, equitable decisions and to inform the public about how we do business.

Rule Development – ADEQ writes rules, based on science and public policy, to implement the broad statutory language contained in legislation.

FY 2006 Accomplishments...

Pollution Control – Permitting

Drake Cement

On April 11, 2006, an air quality permit was issued for a new Portland cement facility to be owned and operated by Drake Cement Company in Drake, Yavapai County. The facility will have the capacity to produce approximately 660,000 tons of cement each year. The proposed permit imposes Best Available Control Technologies (BACT) for emissions of particulate matter, oxides of nitrogen and carbon monoxide, as well as volatile organic compounds and sulfur dioxide. In addition, the permit imposes a federal Maximum Achievable Control Technology (MACT) standard for the reduction of dioxins/furans and toxic metals. Drake plans to begin construction in February 2007.

NAFTA Environmental, Inc.

On July 29, 2005, ADEQ issued a new permit to NAFTA to operate a biohazardous waste treatment facility six miles east of Wellton. The facility will store, transfer, and treat biohazardous medical waste. NAFTA will be able to process up to 1,500 pounds of biohazardous medical waste per hour and plans to operate up to eight hours per day. NAFTA will process the waste in a steam autoclave. ADEQ has determined that no regulated pollutants will be discharged from the autoclaving process. After autoclaving, the wastes may be disposed in an approved solid waste landfill.

Safety-Kleen Chandler

ADEQ issued a final hazardous waste storage facility permit to the Safety Kleen Chandler Service Center on March 30, 2006. The commercial hazardous waste facility stores spent solvents, aqueous-based cleaners, paint wastes, photo imaging wastes and dry cleaning waste collected from offsite generators located within the metropolitan Phoenix area. Wastes are stored, sent to offsite recycling centers for purification, and are returned as reclaimed and clean product material. Safety-Kleen's permit renewal application did not propose major changes to the facility operation. One condition of approval was that Safety-Kleen's tank truck operators avoid using roads passing through residential areas or passing by schools.

Carlota Copper Company

In April 2006, the air quality permit issued by ADEQ for the Carlota Copper Company's proposed open-pit copper mine and processing facility near Miami was upheld by the Arizona Court of Appeals. The Appeals Court ruled the decision made by ADEQ in February 2003 to renew Carlota's air permit was proper under both the federal Clean Air

Act and the state air quality law. Under the permit, Carlota would employ a variety of water sprays and other methods throughout the construction process to reduce the amount of dust generated by rock crushers, conveyor belts and truck traffic. The permit limits the facility's emissions of the following pollutants: oxides of nitrogen, sulfur dioxide, carbon monoxide, particulates as well as sulfuric acid mist from the electrowinning tankhouse, and volatile organic compounds from storage tanks and the solvent extraction process.

Barry M. Goldwater Range

On June 30, 2006, ADEQ issued a hazardous waste post-closure permit to the Barry M. Goldwater Range (BGR). The U.S. Air Force manages the eastern part of the BGR, including a munitions treatment range (MTR) on the northeastern portion of the BGR, within Maricopa County, about 15 miles southwest of Gila Bend. The MTR was used to destroy waste munitions and included eight former treatment units, now closed. The permit will be in effect for 10 years. It may then be renewed as necessary to continue maintenance of the cover during the 30-year post-closure care period.

Pollution Control – Planning

Redesignation and Clean Data Findings

The EPA redesignated the Douglas Sulfur Dioxide planning area to attainment status effective May 1, 2006. Its official label now matches its ambient air levels, which have attained this National Ambient Air Quality Standard for more than a decade.

EPA published a finding that the Ajo PM10 (particulate matter 10 microns in size and smaller) nonattainment area had achieved clean air, effective April 10, 2006. This is one of five elements required for redesignation to attainment status. EPA also published a clean air finding for the Yuma PM10 nonattainment area, effective May 16, 2006. A redesignation request and Maintenance Plan for the Yuma area were submitted to EPA August 18, 2006.

Pollution Control – Pollution Prevention

City of Yuma Recognized for Participation in Green Auto Shops Program

In April 2006, ADEQ presented a plaque to the City of Yuma's fleet services department for helping pioneer ADEQ's Green Automotive Shops program, which recognizes businesses that go beyond the government environmental regulations all automotive repair facilities must meet, taking additional measures to reduce or prevent pollution. Yuma's ADEQ-certified Green Automotive Shop is a 10-bay maintenance and repair facility that services the City's 450 vehicle fleet. "Green" features at the facility include a wash rack that recycles water, a solar panel to powers a system to de-sulfate lead

batteries, a water-based parts-washing system and numerous other pollution prevention measures. Automotive repair is the first industry to be certified under ADEQ's voluntary Arizona Green Business Program.

Record Year for Issuing Water Quality Permits and Plan Review Approvals

Unprecedented development growth throughout Arizona resulted in record numbers of applications to permit wastewater treatment facilities and drinking water facilities and to conduct plan reviews for installation of these systems and related appurtenances. Despite decreases in staff, the Water Quality Division issued 29 individual APP permits and 29 significant APP amendments – many for new or expanded sewage treatment facilities and 32 "other" APP amendments. The division also issued seven clean closures, 23 Type 2 general permits and three Type 3 general permits. Fifty-two permits for reuse of reclaimed water were issued and more than 3,300 drywells were registered.

FY06 also saw a 20% increase in construction related approvals issued over the previous record-setting year. In engineering review, over 1,250 certificates for Approvals to Construct and Certifications of Completion were issued; 285 construction authorizations and 188 discharge authorizations were approved for Type 4 general permits, which include sewage collection systems and on-site wastewater treatment systems, and over 170 new subdivisions were approved.

School Bus Idling Program Expanded

In September 2005, ADEQ announced an expansion of the School Bus Idling Program, a voluntary program to protect children from harmful diesel emissions from unnecessary school bus idling. The program was launched as a pilot in August 2004 with seven school districts. By December 2006 the program had grown to 146 districts around the state, representing every county in Arizona. Key elements of the School Bus Idling Program include having drivers turn off buses upon reaching a school or other location and not turning on the engine until the vehicle is ready to depart; parking buses at least 100 feet from a school air intake system; and posting appropriate signage advising drivers to limit idling near the school. About 698,000 students riding almost 5,000 buses are breathing cleaner air as a result of this program.

Grant Program to Fund Low Emission School Buses

Eleven school districts in the Phoenix and Tucson metro areas were awarded 15 grants totaling \$3,177,000 under ADEQ's Diesel School Bus Grant Program to reduce children's exposure to harmful diesel emissions. More than 100 low-emission buses will be purchased under the program. School districts eligible for the grants must be located within either the metro Phoenix or metro Tucson areas and participate in ADEQ's voluntary School Bus Idling Program.

Under the Diesel School Bus Grant Program, Arizona school districts are eligible for grants up to \$35,000 towards the purchase of a new compressed natural gas-powered (CNG) school bus; up to \$15,000 towards the purchase of a new school bus equipped to run on ultra-low sulfur diesel (ULSD) fuel and equipped with a diesel particulate filter; and up to \$8,000 to retrofit used school buses to run on ULSD with diesel particulate filters.

Environmental Clean Up - Remediation

County and Municipal Tank Closure Program and Route 66 Initiative

The County and Municipal Tank Closure Program (CMTCP) provides small cities, towns and counties funding to remove orphaned underground storage tanks that were used to store fuel or other regulated substances. To date, ADEQ has received a total of 69 applications from 28 cities, towns and counties, and has removed over 100 orphaned USTs from 56 sites.

ADEQ launched the Route 66 Initiative approximately two years ago. The program is aimed at expediting LUST case closures and orphan UST identification and removal. Along this historic route, approximately 350 sites had reported releases. Of these, 77 remain open with corrective actions incomplete, 22 fewer than one year ago. This year, the U.S. EPA teamed with ADEQ and communities in the Holbrook-Winslow area to launch the Route 66 Partnership with those communities to explore cleanup and redevelopment opportunities.

LUST Closure Project

The ADEQ Leaking UST (LUST) Closure Project began in January 2005, funded by an EPA grant. ADEQ hired a consulting company to review LUST files for potential case closure. The contractors performed reviews and made initial determinations or recommendations which were then checked by ADEQ. LUST file reviews were selected and prioritized by their relative risk ranking. As of June 30, 2006, the project team had reviewed 1,870 releases and closed 681.

"Standin' on the Corner" Cleanup in Winslow

In June 2006, ADEQ awarded a \$96,600 grant from the Brownfields program to the City of Winslow in Navajo County to clean up the "Standin' on the Corner" monument and reopen the park at the site. The park and monument were closed after a fire gutted the former J.C. Penney/Rasco Building in 2004. Concerns about asbestos contamination in the charred rubble had prevented efforts to remove the debris and reopen the park.

In the fall of 2005, ADEQ committed to help the city clean up the asbestos contamination and get the monument and park reopened. In early June 2006, ADEQ received the results of the necessary environmental assessment for the site, which cleared

the way for ADEQ to provide the cleanup funds to Winslow under the Brownfields State Response Grant program.

WQARF Program Cleaned Up 16.3 Billion Gallons of Groundwater in FY 2006

Through ADEQ's Superfund program, the Water Quality Assurance Revolving Fund (WQARF), the State cleaned up more than 16.3 billion gallons of contaminated groundwater in the fiscal year that ended June 30, 2006. In addition, more than 3.4 million pounds of metals, 2,816 tons of soils and 113,945 pounds of volatile organic substances were removed from contaminated sites throughout Arizona.

Compliance Management – Compliance Assistance

Arizona Performance Track Welcomes Two Companies and One City

The first two Arizona companies to join the Arizona Performance Track program were announced on May 11, 2006. The program is a voluntary partnership between ADEQ, businesses and other regulated entities started by ADEQ in 2005 that recognizes and rewards environmental leadership for going above and beyond the minimum requirements of the law.

Intel Arizona's Ocotillo Campus in Chandler, which manufactures semiconductors, aims to reduce non-hazardous solid waste generated by 21%, or 1,500 tons annually, and thereby save 70 million gallons of water. The company also reduced use of volatile organic chemicals (VOCs) and committed to reduce VOC use further. Ping, Inc., in Phoenix, which designs, manufactures and services golf clubs and other golfing equipment, has already reduced water usage by 3 million gallons per year and hazardous waste generation by almost 40,000 pounds per year. They have also committed to reducing air particulate emissions by 16% and to further reducing materials use and non-hazardous waste generation.

In addition, the City of Scottsdale joined the program, being recognized for committing to add 1,200 acres of land and habitat to the McDowell-Sonoran Preserve, an increase of more than 10% to the 11,000 acres the city has previously purchased or preserved, and for reducing non-transportation energy use by installing more efficient heating, ventilation and air conditioning equipment. Scottsdale also committed to use biodiesel in the city's fleet of diesel vehicles, which will help reduce particulate matter air pollution; to replenish the underground aquifer with treated effluent; and to construct future buildings to conform to the energy-efficient Leadership in Energy and Environmental Design standard.

First "Green Shops" Certified Under Green Business Program

Three auto repair centers in Tucson were the first facilities in the state to be certified as "Green Shops" under ADEQ's Green Business program. The innovative "Green Shops"

program, a public-private partnership with the Automobile Association of America (AAA), gives automotive service facilities an opportunity to promote an environmentally responsible approach to car repair. "Green Shops" set high standards for pollution prevention and resource conservation as well as follow procedures designed to minimize waste generation.

Compliance Management – Inspections and Enforcement

Phelps Dodge Sierrita, Inc.

In June, 2006, ADEQ issued a Mitigation Order to Phelps Dodge Sierrita, Inc. (PDSI) to address impacts to Community Water System's drinking water wells from a sulfate plume originating from PDSI's mining operation. As part of the mitigation order, PDSI must provide the residents of Green Valley with drinking water that meets applicable drinking water standards including sulfate concentrations of less than 250 mg/L. The Order required PDSI to develop a work plan which will result in a method and timeframe to analyze and ultimately remediate the sulfate plume. In addition, it requires PDSI to establish a community action group to assist with the public's access to and understanding of the Order.

Praxair Consent Judgment and Settlement

On December 20, 2005, Praxair, Inc. agreed to pay \$550,000 in civil penalties for violations of the company's air quality permit and Arizona air quality rules at its facility near Kingman, in Mohave County. This facility is a large producer of industrial gases which are used in various manufacturing processes. Some of the gases, called hydride gases, are highly toxic and require high-efficiency air pollution control devices in order to ensure public safety. The violations included the company's failure to properly monitor and report the emissions these hydride gases, as well as the company's failure to apply for an appropriate permit in a timely fashion. In addition to the penalty, the company entered into a Consent Judgment with ADEQ that requires the company, among other things, to monitor and report emissions of total hydride gases emitted by the facility.

Presto Casting

In September 2005, ADEQ announced that Glendale-based aerospace company Presto Casting would pay a \$95,000 penalty for illegally treating potentially explosive waste. During a routine inspection in January 2004, ADEQ inspectors observed Presto personnel treating magnesium fines, a reactive hazardous waste, with water in an open dumpster, releasing hydrogen gas. A second inspection in April 2004 revealed that Presto was still improperly treating the magnesium fines. ADEQ issued two Notices of Violation, citing Presto for illegal treatment and disposal of hazardous waste, failure to operate the facility in a way to prevent fires and releases, meet container management requirements, provide training to employees and post emergency information.

Aero Spring and Manufacturing Company, Inc.

In February 2006, Aero Spring and Manufacturing Company, Inc., a South Phoenix company that manufactures airplane parts, agreed to pay a \$24,000 penalty for hazardous waste violations. In June 2004, Aero Spring had an uncontrolled chemical reaction in a neutralization and evaporation tank. The reaction occurred when ethylene glycol was added to concentrated nitric acid waste, releasing an orange gas cloud and requiring an evacuation of the surrounding area until the Phoenix Fire Department was able to control the reaction.

Earth Protection Services

In March 2006, ADEQ announced a settlement agreement totaling \$100,000 against Earth Protection Services, Inc. (EPSI), a company that recycles discarded mercury-containing lamps. During a November 2002 inspection of EPSI's former Phoenix facility at 48th Ave. and Van Buren, ADEQ discovered that EPSI was improperly handling and storing hazardous waste, failing to adequately train new employees and allowing a leak of mercury-laden phosphor powder to threaten employee safety. Under the settlement, EPSI will pay a \$40,000 cash penalty and implement a \$60,000 local Supplemental Environmental Project (SEP). The SEP will fund the Arizona Resource Exchange (AZRex) website for two years. The website, a partnership between the Arizona Environmental Strategic Alliance and Earth 911, is a web-based material exchange system for users to search for and post reusable and recyclable materials for exchange. EPSI now operates a new recycling facility in Glendale.

Heritage Environmental

In March 2006, ADEQ announced a \$166,637 settlement agreement with Heritage Environmental Services, LLC, for violations at its Coolidge hazardous waste treatment, storage and disposal facility. ADEQ conducted inspections of Heritage Environmental Services in 2002 and 2003 that resulted in Notices of Violations for failing to have a fire suppression system with adequate volume and pressure. ADEQ issued a compliance order in 2003, and Heritage installed an adequate fire suppression system in early 2004.

El Paso Natural Gas Co.

In June 2006, El Paso Natural Gas Company (EPNG) agreed to pay \$340,000 for air quality violations in Mohave County and hazardous waste violations in Pima County. Air quality violations that occurred during a pipeline renovation and removal project near Topock in 2004 included failure to notify ADEQ prior to generating regulated asbestoscontaining materials, failure to properly inspect the pipeline prior to renovation or removal activities and failure to prevent emissions. The hazardous waste violations included transporting, accepting and storing flammable sludge, used solvent and other hazardous waste at the company's Tucson facility without the necessary permit or

procedures. ADEQ inspectors discovered the violations in 2004. These activities were occurring without training, a contingency plan or an emergency preparedness plan.

Griggs Removal Action Case Study

ADEQ inspected the Griggs Paint facility in South Phoenix in May 2005 and observed an estimated 24,000 containers of flammable paint-related waste, many with damaged, leaking or missing lids. Flammable waste was stored near electrical boxes, and against walls and fences with no aisle space for fire fighting. Much of the waste had been on site for more than three years in violation of the law. On June 6, 2005, ADEQ issued a compliance order to Griggs Paint. During the cleanup, more than 845,000 pounds of flammable hazardous waste was manifested. The last shipment of waste was removed from the site in November 2005.

ADEQ also coordinated the removal of a 21-year-old one-gallon metal container of diethyl ether and a one-gallon glass jug of pentane. The container of diethyl ether was stored in a freezer at the facility and was bulging and rusting, indicating that oxygen had been introduced and was potentially forming explosive peroxides. On February 10, 2006, after extensive coordination by ADEQ, the Phoenix Bomb Squad detonated the freezer. The detonation was completed with assistance from the Department of Public Safety (DPS) Bomb Squad, Luke Air Force Base EOD, the Phoenix Fire Department, the Phoenix Police Department, and DPS Highway Patrol. The removal and detonation were completed quickly and without injury or incident.

Universal Propulsion Co., Inc (UPCO)

ADEQ announced on August 3, 2005 that UPCO would permanently stop all open burns at the company's facility in North Phoenix. UPCO informed ADEQ that after researching alternative means of disposal, the company has obtained permission from the federal Department of Transportation to ship all reactive wastes to off-site treatment, storage and disposal facilities, eliminating the need to burn the material on-site. In October 2004, UPCO entered into a Consent Order that required the company to stop open burning, submit air dispersion modeling and pursue other disposal options.

Nordic Boats, Inc.

On December 21, 2005, ADEQ announced a \$94,000 penalty against Nordic Boats for air quality violations at the company's Lake Havasu City manufacturing facility. Nordic Boats is considered a major source of styrene, a hazardous air pollutant, but was operating without a permit and had failed to meet federal monitoring, reporting and emission standards. ADEQ conducted an investigation during the summer of 2004 to identify boat builders that emit styrene in quantities that require an Arizona Air Quality Control Permit and bring them into compliance. Many of the boat builders cooperated fully with ADEQ's initiative and voluntarily identified the amounts of solvents, resins and coatings used in their operations.

The UST Inspections and Compliance Unit oversees UST owner and operator efforts to meet state and federal requirements related to UST installation, operation and closure. During Fiscal Year 2006, ADEQ conducted 701 UST facility operational compliance inspections. Of these, the USTs at 101 facilities (15 percent) were in compliance at the time of inspection; 409 (58 percent) received a Notice of Opportunity to Correct for minor infractions; and 191 (27 percent) were issued a Notice of Violation for significant violations. Since all financial responsibility (FR) documentation must be kept up to date and on file with the department, ADEQ routinely reviews the FR status of all UST owners and operators. Based upon inspection data, 77 percent of the UST owners were compliant with FR requirements at the time of inspection, and that percentage increased to 96 percent following notification of the FR non-compliant owners. During FY 2006, 701 inspections were conducted. Fifteen percent were in operational compliance and 77% were in compliance with the Financial Responsibility (FR) requirements. Seventy-seven percent of the facilities subsequently returned to FR compliance after they were notified.

Monitoring and Assessment

GIS Web Page for Environmental Information in Communities

On March 26, 2006, ADEQ announced a Geographic Information System (GIS) Web page providing environmental data and information on facilities and sites throughout Arizona. GIS is computer software that links geographic information with descriptive information, allowing the user to see not only where things are, but precisely what they are as well. Unlike a flat paper map, a GIS can present many layers of different information. The system allows users to have access to information about facilities and cleanup sites in Arizona within ADEQ's jurisdiction.

Public Outreach - Education and Outreach

ADEQ Awards \$1.64 Million in Water Quality Improvement Grants

In February 2006, ADEQ awarded \$1.64 million in grants to mitigate nonpoint source pollution to help improve water quality throughout the state. A total of 13 different grants were awarded to projects throughout Arizona as part of ADEQ's Water Quality Improvement Grant Program. Grant awards included projects to address erosion and sediment control, illegal trash dumping, upgrading or installation of waste treatment and disposal systems and stormwater management.

Nonpoint source pollution remains a top priority for ADEQ in its efforts to protect public health and the environment in Arizona. Nonpoint source pollution is caused by

pollutants that are carried into lakes, streams or groundwater resources through overland runoff and is considered one of the most significant threats to water quality nationwide.

Children's Environmental Web Site

On May 12, 2005, ADEQ announced a new environmental education and information Web site focused on the interests of Arizona youth. Called EnviroKids Canyon, the new child-friendly animated site is designed for elementary school-aged children, and provides environmental education through interactive games and graphics. Topics discussed on the site include water conservation, air quality, school bus idling, recycling and other topics, as well as information for parents and teachers.

Public Policy - Policy Development

Comments on Proposed Changes to National Ambient Air Quality Standards for Particulate Matter

On January 17, 2006, EPA proposed major changes to the National Ambient Air Quality Standards (NAAQS) for particulate matter and air quality monitoring rules. The proposals were highly complex, each one filling nearly 100 pages of the Federal Register and having 90-day comment deadlines.

Initial examination of the proposals and discussions with other air pollution control officials revealed a wide variety of issues, many of which would have significant adverse impacts on the ability of air pollution control agencies to protect public health and welfare. Major issues included elimination of monitoring and air quality protection for rural areas, failure to address haze impacts of particulate matter pollution, limitations on siting of monitors based on arbitrary population density thresholds, new procedural and paperwork burdens for state and local agencies, and shifting of federal responsibilities to states without funding.

ADEQ prepared and submitted detailed written comments on the proposed changes, including complex analyses of Arizona monitoring data, were prepared and submitted in time for consideration by EPA. EPA's final rule eliminated some of the provisions that were of concern to ADEQ and other states.

Policy to Protect Children from Toxic Facilities Near Schools

On July 13, 2005, ADEQ announced a new policy to protect Arizona children from exposure to toxic substances and air pollutants from facilities near schools. Under the policy, a facility seeking a permit or approval from ADEQ must demonstrate that children at nearby schools will be protected from any toxic releases or emissions from the facility. If children at any nearby school would not be protected, ADEQ may deny the permit or approval consistent with the department's existing authority to do so.

In November 2005, ADEQ helped organize and then participated in Governor Napolitano's Tribal Summit on Environmental Issue, which addressed the ways that ADEQ can work more closely with tribes to protect environmental conditions on reservations lands. On May 9, 2006, ADEQ held a "working summit" on tribal environmental issues to follow up on the Governor's summit. The agenda for the working summit included issues relating to air quality, waste disposal, water quality and underground storage tanks, as well as joint inspections and enforcement and compliance issues between ADEQ and the tribes. Representatives from several individual tribes, including the Ak-Chin Indian Community, the Gila River Indian Community, the Hualapai Tribe, the Navajo Nation, the Tohono O'odham Nation, the Fort McDowell Yavapai Nation, the White Mountain Apache Tribe, the Pascua Yaqui Tribe, the Fort Mojave and the Salt River Pima Maricopa Indian Community, plus the Inter-Tribal Council of Arizona attended the work session.

Public Policy - Rule Development

Arizona Hazardous Air Pollutants Program

As required by Arizona Revised Statutes § 49-426.06, rules to establish an Arizona Hazardous Air Pollutants (HAPs) Program were developed by ADEQ during FY06 and approved in June 2006 by the Governor's Regulatory Review Council (GRRC). The program requires new and modified sources of HAPs, defined as sources that emit 10 tons per year of a single HAP or 25 tons per year of a combination, to install Arizona Maximum Achievable Control Technology (AZMACT). New and modified non-major sources must comply with a less-stringent standard, Hazardous Air Pollutant Reasonably Available Control Technology (HAPRACT), if they meet two conditions: (1) they emit more than one ton per year of a single HAP or 2.5 tons per year of a combination and (2) they belong to a list of source categories included in the rule. A modified source is one that undergoes a physical or operational change that increases emissions of a HAP in amounts that will cause or contribute to adverse health effects.

Drinking Water Systems Bill

ADEQ is responsible for ensuring that Arizona's drinking water supplies comply with the federal Safe Drinking Water Act. SB 1144, passed during the 2006 Regular Session, requires ADEQ to adopt rules which prescribe minimum standards for public water systems that use chemicals, additives and system components that come into contact with drinking water. The rules will provide that those chemicals, materials or equipment that have been certified by the National Sanitation Foundation (NSF) standards automatically comply with these new statutory requirements but also outline minimum requirements to use alternative products that are not NSF-certified.

MAP Expansion Bill

The Monitoring Assistance Program (MAP), established in 1999, helps public water systems serving fewer than 10,000 persons with sampling requirements under the Safe Drinking Water Act. SB 1140, passed during the 2006 Regular Session, expands the MAP program to include nitrate to the list of covered analytes. High nitrate levels in drinking water can cause *methemoglobinemia* or blue baby syndrome, a condition to which young infants, especially those under six months, are most susceptible.

Pesticide Contamination Prevention Program Rules Updated

During FY06, the Water Quality Division completed a three-year effort to update the Pesticide Contamination Prevention Program, the first successful effort since the program started in 1987. This major stakeholder effort resulted in statutory changes to the program in 2004. Staff worked with the same stakeholders in FY05-06 to update the program rules, which became effective November 12, 2005. The new rules provide applicants with alternative data submittal options to comply with the requirements for review of the environmental fate of an agricultural-use pesticide. The new rules also allow for consideration of newer scientific approaches for evaluating the potential of agricultural use pesticides to reach and pollute groundwater. In the first six months under the new rules, 12 new pesticides' active ingredients were registered. The new rules also reduced the Groundwater Protection List (GWPL) of pesticide active ingredients, with potential to pollute groundwater, from 220 to 58 compounds. By refining the GWPL, ADEQ can better target monitoring resources to those areas and to those compounds with greatest risk of groundwater contamination.

SAF Rules and Implementation

ADEQ developed new rules for the UST State Assurance Fund (SAF) to reflect changes to the SAF made by SB 1306, passed by the Legislature in 2004.

Conclusion...

Despite challenges presented by budget limitations and reduced staffing levels, ADEQ continued to make progress in FY06 in protecting Arizona's environment and the health and safety of the people of this state. Through innovative efforts, like the School Bus Idling Program; the HAPs and mercury rules; an ongoing focus on improved and effective compliance, permitting and enforcement; and other efforts, ADEQ is committed to ensuring clean air, clean water and a healthy environment for all Arizonans.

