

**REPORT
 HIGHLIGHTS**
 PERFORMANCE AUDIT

Subject

The Air Quality Division protects citizens and the environment by controlling sources of air pollution throughout the State. It does this by issuing permits, inspecting facilities, monitoring air quality throughout the State, and administering the vehicle emissions inspection program in Maricopa and Pima Counties.

Our Conclusion

Despite the challenges arising from Arizona's population growth, climate, and topography, the Division has improved air quality. In addition, the Division generally takes timely enforcement actions against facilities that are potentially major sources of pollution.



2004

**Division Efforts Positively
 Impact Arizona
 Air Quality**

The U.S. Environmental Protection Agency (EPA) has set air quality standards limiting the quantity of pollutants allowed in the air. Major air pollutants include carbon monoxide, ozone, and sulfur dioxide. If any area exceeds the air quality standards, the EPA designates it a nonattainment area, and the Division must take corrective action. Since the EPA established the air quality standards, Arizona has had 20 nonattainment areas.

Hayden Nonattainment Area

The EPA has designated the Hayden area (composed of portions of Gila and Pinal Counties) as a nonattainment area because of the sulfur dioxide in the air from a copper smelter. The Division has implemented a plan consisting of rules and permit conditions regulating the copper smelter's emissions to bring this area into compliance with the EPA standards and has sent the plan to the EPA.

Designation as a nonattainment area can hold significant costs, including potential health risks such as cardiovascular and respiratory damage. It can also include economic costs. For example, new industrial facilities are required to install and operate more effective and costly pollution control equipment. For the Phoenix nonattainment area, motorists must pay for vehicle emissions test every 2 years and purchase a typically more expensive gasoline blend.



Vehicle receiving emissions test.

Photo: Courtesy of the Department of Environmental Quality.

**Arizona faces significant challenges to
 improve air quality—These include:**

- A fast-growing population that leads to increased traffic and construction, which both contribute to air pollution. Arizona is the second-fastest growing state in the West, and its traffic is second only to California's.
- The State's topography and climate tend to promote pollution. Arizona is in the region with the most stagnant air, highest summer temperatures, most sunshine, and least rainfall in the U.S.
- Copper production contributes to high levels of sulfur dioxide in the air. Arizona produces two-thirds of the nation's copper. Copper smelting emits significant amounts of sulfur dioxide.

**The Division has taken steps to improve
 air quality—**The EPA has formally recognized the State for its improved air quality. The initiatives that have positively impacted air quality include:

Status of EPA-Designated Areas
As of June 2004

Status	Area	Pollutant
Attainment	Ajo	Sulfur Dioxide
	Bullhead City	Particulate Matter
	Morenci	Sulfur Dioxide
	Payson	Particulate Matter
	Tucson	Carbon Monoxide
Transitional ¹	Ajo	Particulate Matter
	Douglas	Particulate Matter
	Douglas	Sulfur Dioxide
	Hayden	Sulfur Dioxide
	Hayden/Miami	Particulate Matter
	Miami	Sulfur Dioxide
	Phoenix	Ozone/1-hour standard
	Phoenix	Carbon Monoxide
	Rillito	Particulate Matter
	San Manuel	Sulfur Dioxide
Nonattainment	Nogales	Particulate Matter
	Paul Spur	Particulate Matter
	Phoenix	Ozone/8-hour standard
	Phoenix	Particulate Matter
	Yuma	Particulate Matter

¹ The air quality in these areas meets the standards for attainment status, but the EPA and/or the Division needs to complete the redesignation process.

- Cleaner burning gasoline. An EPA official calls this Arizona's most effective program for reducing carbon monoxide and ozone. Gasoline in Maricopa County is blended to create less air pollution.
- Vehicle emissions inspection program. Designed to reduce carbon monoxide and ozone, this program operates in metropolitan Phoenix and Tucson, and requires biennial inspections of motor vehicle emission systems. EPA officials also rate this program highly.
- Visibility and air toxics monitoring networks. The Division has gone beyond the federal requirements for establishing a monitoring network in wilderness areas and increasing the network in the Phoenix area.

EPA has redesignated several areas as attainment areas—The Division's efforts to address air pollution have produced a number of successes. The EPA has redesignated 5 of Arizona's 20 nonattainment areas as attaining compliance with air quality standards. The Division and the EPA are currently in the process of redesignating 10 more of these areas. Although the air quality in the remaining 5 nonattainment areas does not yet meet the standards, the Division continues to take action in these areas.

Division Addresses Major Source Polluters in a Timely Manner

Pollution Sources

- **Major sources**—Generally, facilities with the potential of emitting 100 or more tons of conventional pollutants per year. Examples include cement plants, smelters, and electric generating stations.
- **Minor sources**—Any other source of air pollution. These include dry cleaners, mortuaries, cotton gins, and wastewater treatment plants.

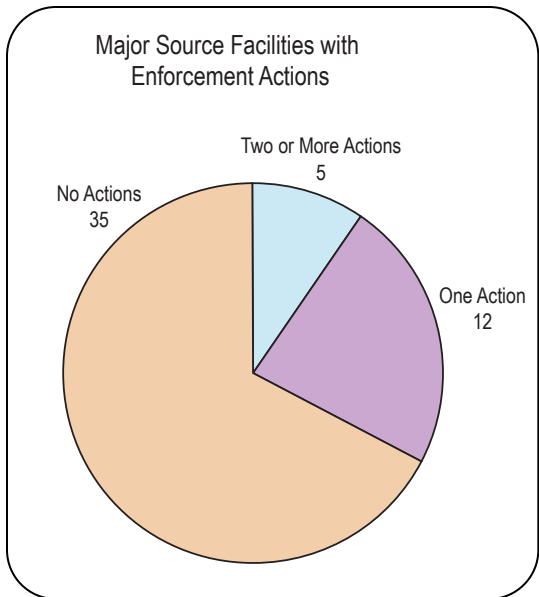
The Division regulates facilities that are major and minor sources of pollution by issuing permits, conducting inspections, reviewing technical reports, and taking enforcement actions. The type of enforcement action depends on the type of violation.

For minor violations, which pose minimal risk to human health and the environment, the Division may take informal action. This generally includes sending notice of the violation and the action that the facility needs to take to verify that it has come into compliance.

A major violation is one that poses a risk to human health and the environment. Enforcement actions for major violations include either informal or formal action,

such as an administrative order or a referral to the Attorney General for civil or criminal action.

Violations are not widespread—Most major source facilities comply with air quality laws. In calendar years 2002 and 2003, the Division issued enforcement actions to only 17 of 52 facilities. Most of the actions were for relatively minor violations, such as excessive dust.



Enforcement actions are generally issued in a timely manner—When staff identify a violation, the Department's policy is to send an enforcement action to the facility

Timeliness of issuing enforcement actions according to policy time frames:

- 18 issued within time frame.
- 5 exceeded by 1 to 30 days.
- 2 exceeded by more than 30 days.

within either 45 or 60 days, depending on whether violations are identified through inspections or report reviews. In calendar years 2002 and 2003, the Division issued most informal actions within these time frames.

While the Division issued most notices in a timely manner, it does not have timelines for each step in the enforcement action review and approval process. Establishing such time frames, as well as a report showing the status of pending enforcement cases, could further ensure the timeliness of issuing enforcement actions.

Most facilities comply in a timely manner—When the Division issues an enforcement action, it gives the facility a deadline to return to compliance. The compliance deadline usually ranges from 7 to 120 days, with the most frequent time frame being 30 days. Most facilities that had violations came back into compliance within the Division's specified time period.

Timeliness in resolving enforcement actions:

- 16 resolved within the time frame.
- 5 resolved, but exceeded the time frame.
- 4 exceeded the time frame and remain open.

When a facility does not come into compliance by the deadline, the Division may take additional enforcement action. Generally, the Division does not take further enforcement action if it believes a facility is actively working to come back into compliance. However, the Division is working with the Attorney General's Office to resolve two of the four open actions.

Recommendations

The Division should consider:

- Setting specific time frames for each step in the enforcement action review and approval process.
- Creating a status report of all pending enforcement cases for managers and staff.

TO OBTAIN
MORE INFORMATION

A copy of the full report
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Contact person for
this report:
Lisa Eddy



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Environmental Quality**
Air Quality Division

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