

EXECUTIVE DIGEST

GEOLOGICAL SURVEY DIVISION

INTRODUCTION

This report, issued in March 1999, contains the results of our performance audit* of the Geological Survey Division, Department of Environmental Quality (DEQ).

AUDIT PURPOSE

This performance audit was conducted as part of the constitutional responsibility of the Office of the Auditor General. Performance audits are conducted on a priority basis related to the potential for improving effectiveness* and efficiency*.

BACKGROUND

DEQ's stated mission* is to drive improvements in environmental quality for the protection of public health and natural resources to benefit current and future generations. This is to be accomplished through effective administration of agency programs, providing for the use of innovative strategies, while helping to foster a strong and sustainable economy.

The Division regulates the extraction of oil, gas, and mineral resources through permit application reviews and conformance bonds* , field reviews, compliance inspections, report monitoring, administrative hearings,

and enforcement actions. As of June 30, 1998, the Division had 64 filled positions. Division expenditures for fiscal year 1996-97 were \$5.5 million.

**AUDIT OBJECTIVES,
CONCLUSIONS, AND
NOTEWORTHY
ACCOMPLISHMENTS**

Audit Objective: To assess the effectiveness of the Division's regulation of extractive industries of oil, gas, and metallic and nonmetallic minerals.

Conclusion: We concluded that the Division's regulatory functions were generally effective for the extractive industries of oil, gas, and metallic and nonmetallic minerals. However, we noted reportable conditions* relating to the oil and gas program, mineral well program and nonmetallic mine reclamation activities, and the information systems (Findings 1 through 4).

Noteworthy Accomplishments: The Division has worked with the Legislature to revise and implement statutes and regulations in various programs:

- a. The oil and gas regulatory fund has been established as the principal funding mechanism for administering the State's oil and gas regulatory program. Provisions in the new law (Act 252, P.A. 1998) allow the fund to accumulate up to a maximum of \$7 million, which is intended to protect DEQ against unexpected fluctuations in the price and production of oil and gas resources that have a direct impact on the revenue utilized to support the program. The legislation also created additional revenues for the fund through an increase in the oil and gas drilling permit fee from \$100 to \$300 and a new annual \$20-per-well fee for wells utilized in the gas storage operations.

- b. Act 149, P.A. 1997, requires any person who wishes to engage in surface or open pit mining for metallic minerals to obtain a mining permit from DEQ. The legislation requires the applicant to submit detailed information to DEQ, including a mining and reclamation plan. The legislation established a metallic mineral surveillance fee assessed on the metallic product produced, which will provide a user-pay system to administer the regulatory program. Prior to this effort, there was no source of funding to support enforcement, and the lack of permit requirements made regulation difficult.

- c. The Division completed a nine-year effort to revise the administrative rules for oil and gas regulation. The rules had not been significantly changed since 1954, except for hydrogen sulfide management provisions that were added in 1987. The new rules were designed to improve the protection of human health, natural resources, and the environment associated with the drilling, production, and abandonment of oil, gas, brine disposal, and gas storage wells in Michigan.

In fiscal year 1997-98, the Division initiated the conversion of the Division's data base from a mainframe computer data system to a local client server system. The system is a modification of the personal computer Risk Based Data Management System (RBDMS), which is currently being used in a number of other oil and gas producing states. The Division believes that the implementation of RBDMS will provide greatly increased efficiency in: issuing and monitoring permits to drill and operate oil and gas wells, gathering subsurface data and information, recording and tracking Statewide hydrocarbon production, tracking industry compliance with regulations, and providing for the

direct entry and retrieval of data on Division field activities. RBDMS is designed to allow for secure electronic exchange of data as well as the potential for dynamic Internet data. Management informed us that it will also be year 2000 compliant.

Audit Objective: To assess the Division's effectiveness in protecting public safety relating to oil, gas, and mineral resource contamination, reclamation of abandoned coal mines, and orphan well* plugging.

Conclusion: We concluded that the Division's public safety functions relating to oil, gas, and mineral resource contamination, reclamation of abandoned coal mines, and orphan well plugging were generally effective. However, we noted a reportable condition relating to the Orphan Well Program (Finding 5).

Noteworthy Accomplishments: The Division worked with the oil and gas industry for the passage of Act 308, P.A. 1994, which established an Orphan Well Fund within the Michigan Department of Treasury. The Act authorizes the DEQ director, as the supervisor of wells, to expend money from the fund to plug abandoned or improperly closed oil, gas, or brine disposal wells; to conduct remedial response activities; and to perform site restoration. Before initiating corrective actions, the supervisor of wells must determine that the owner is unknown or insolvent or that there exists an imminent threat to public health and safety. Revenue for the Orphan Well Program comes from a severance tax on the oil and gas industry. Two percent of the severance tax revenue, but not less than \$1 million, is credited to the fund annually.

The Division compiles a list of orphan wells for the Legislature on January 1 of each year. The list is prioritized for plugging according to the severity of leakage or potential problems. Over the 2 ½ years that funds have been available under the Act, the Division has plugged 33 abandoned wells and conducted associated site cleanups.

**AUDIT SCOPE AND
METHODOLOGY**

Our audit scope was to examine the program and other records of the Geological Survey Division. Our audit was conducted in accordance with *Government Auditing Standards* issued by the Comptroller General of the United States and, accordingly, included such tests of the records and such other auditing procedures as we considered necessary in the circumstances.

Our audit procedures included examinations of the Division's records and activities for the period October 1, 1995 through June 30, 1998.

We studied legislation, administrative rules, management plans, Division policies and procedures, and other Division reports and manuals. We interviewed program staff at both the central and district offices.

We examined a sample of records relating to permit applications and conformance bonds to determine if the permits and bonds were processed in a timely manner and in accordance with statutory requirements and Division procedures.

We evaluated inspections, complaint investigations, and violation remediations for compliance with specified requirements, established procedures, and timeliness of completion.

**AGENCY RESPONSES
AND PRIOR AUDIT
FOLLOW-UP**

Our audit report contains 5 findings and 5 corresponding recommendations. DEQ's preliminary response indicated that it agrees with 4 recommendations and partially agrees with 1 recommendation.

DEQ had complied with 6 of the 7 prior audit recommendations, and the remaining recommendation was rewritten for inclusion in this report.