

PERFORMANCE AUDIT  
OF THE  
RADIOLOGICAL PROTECTION  
AND ENVIRONMENTAL HEALTH PROGRAMS

DRINKING WATER AND RADIOLOGICAL PROTECTION DIVISION  
DEPARTMENT OF ENVIRONMENTAL QUALITY

July 2001

## EXECUTIVE DIGEST

# RADIOLOGICAL PROTECTION AND ENVIRONMENTAL HEALTH PROGRAMS

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### INTRODUCTION

This report, issued in July 2001, contains the results of our performance audit\* of the Radiological Protection and Environmental Health Programs, Drinking Water and Radiological Protection Division (DWRPD), Department of Environmental Quality (DEQ).

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### 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\*.

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### BACKGROUND

This audit addresses three programs within DWRPD.

The Radiological Protection Section monitors radioactive material sources to protect patients, employees, and the public from unnecessary exposure to ionizing radiation. DWRPD expended approximately \$1.4 million and employed 15 staff to operate the Radiological Protection Section in the fiscal year ended September 30, 2000.

The Medical Waste Regulatory Program registers certain producers of medical waste and regulates the handling

\* See glossary at end of report for definition.

and disposal of medical waste. DWRPD collected approximately \$246,600 from registered producers of medical waste, expended approximately \$189,700, and employed 2 staff in the fiscal year ended September 30, 2000.

The Dry Cleaning Program licenses, inspects, and regulates dry cleaning establishments to protect workers, the public, and the environment from overexposure to dry cleaning chemicals. DWRPD collected approximately \$320,000 from approximately 1,120 dry cleaning establishments, expended approximately \$228,800 to implement this regulatory program, and employed 5 staff in the fiscal year ended September 30, 2000.

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AUDIT OBJECTIVE,  
CONCLUSION, AND  
NOTEWORTHY  
ACCOMPLISHMENTS

**Audit Objective:** To assess DWRPD's effectiveness in protecting the public through the regulation of users of radioactive materials, producers of medical waste, and operators of dry cleaning establishments.

**Conclusion:** We concluded that DWRPD was generally effective in protecting the public through the regulation of users of radioactive materials, producers of medical waste, and operators of dry cleaning establishments. However, our assessment disclosed reportable conditions\* related to inspection of registered users of radioactive materials, the Indoor Radon Program, the Medical Waste Regulatory Program, and inspection of dry cleaning establishments (Findings 1 through 4).

**Noteworthy Accomplishments:** DWRPD revised radiological assessment procedures to address nuclear power reactor accidents to improve emergency preparedness. These changes, which focus on delivering

\* See glossary at end of report for definition.

prompt and prudent public protection, were positively recognized by the Federal Emergency Management Agency in July 2000.

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**AUDIT SCOPE AND  
METHODOLOGY**

Our audit scope was to examine the program and other records of the Radiological Protection Section and the Environmental Health Section of the Drinking Water and Radiological Protection Division, Department of Environmental Quality. 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.

We examined DWRPD records and activities for the period October 1, 1997 through September 30, 2000.

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

Our audit report contains 4 findings and 4 corresponding recommendations. The agency preliminary response indicates that DEQ agrees with 2 recommendations and that DEQ does not agree with 2 recommendations. The agency preliminary response also indicates that DEQ did not agree with part of Finding 4.

DWRPD complied with the one prior audit recommendation that was included within the scope of our current audit.

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July 6, 2001

Mr. Russell J. Harding, Director  
Department of Environmental Quality  
Hollister Building  
Lansing, Michigan

Dear Mr. Harding:

This is our report on the performance audit of the Radiological Protection and Environmental Health Programs, Drinking Water and Radiological Protection Division, Department of Environmental Quality.

This report contains our executive digest; description of programs; audit objective, scope, and methodology and agency responses and prior audit follow-up; comment, findings, recommendations, and agency preliminary responses; and a glossary of acronyms and terms.

The agency preliminary responses were taken from the agency's responses subsequent to our audit fieldwork. The *Michigan Compiled Laws* and administrative procedures require that the audited agency develop a formal response within 60 days after release of the audit report.

We appreciate the courtesy and cooperation extended to us during this audit.

AUDITOR GENERAL

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## Description of Programs

The Drinking Water and Radiological Protection Division (DWRPD) serves as a major Department of Environmental Quality (DEQ) organizational unit to reduce exposure to environmental hazards that have had an adverse effect on the environment, health, and well-being of the public. DWRPD is also responsible for regulating and overseeing public drinking water suppliers to help ensure that safe drinking water is produced and distributed in accordance with State and federal drinking water laws, rules, policies, and procedures. Drinking water programs have been included in the scope of a separate performance audit.

DWRPD's mission\* is to serve as a major DEQ organizational unit to reduce exposure to the environmental hazards which have had an adverse effect on the environment and the health and well-being of the public.

The Radiological Protection Section monitors radioactive material sources used in medical, educational, industrial, and governmental facilities to protect patients, employees, and the public from unnecessary exposure to ionizing radiation. The Radiological Protection Section is also responsible for coordinating with local health departments' implementation of a Statewide indoor radon program. Sections 333.13501 - 333.13536 of the *Michigan Compiled Laws* created the Radiological Protection Section in the Department of Public Health. Executive Order No. 1996-1 transferred this program to DEQ in April 1996. In the fiscal year ended September 30, 2000, DWRPD expended approximately \$1.4 million and employed 15 staff to operate the Radiological Protection Section and registered approximately 520 manufacturers, producers, transporters, and users of radioactive materials.

The Environmental Health Section is responsible for reducing exposure to environmental hazards that may have an adverse effect on the environment and the health and well-being of the public. The Environmental Health Section includes oversight and regulation of: campgrounds, mobile home parks, subdivisions and site condominiums, on-site sewage disposal facilities, public swimming pools, medical waste producers, and dry cleaning establishments. This audit includes the Medical Waste Regulatory Program and the Dry Cleaning Program.

\* See glossary at end of report for definition.

Sections 333.13801 - 333.13831 of the *Michigan Compiled Laws* created the Medical Waste Regulatory Program in the Department of Public Health. The Medical Waste Regulatory Program registers certain producers of medical waste and regulates the handling and disposal of medical waste. Executive Order No. 1996-1 transferred this program to DEQ in April 1996. Regulation of medical waste was designed to safeguard the public health and help prevent exposure to the risk of injury, infection, or disease from improperly disposed infectious medical waste. In the fiscal year ended September 30, 2000, DWRPD collected approximately \$246,600 from registered producers of medical waste, expended approximately \$189,700, and employed 2 staff to implement the Medical Waste Regulatory Program. Medical waste producers are registered on a three-year cycle. The Medical Waste Regulatory Program registered approximately 13,500 waste producers as of September 30, 2000.

The Medical Waste Regulatory Act requires that DWRPD carry forward the unexpended fund balance annually. The unexpended fund balance was approximately \$1.2 million on September 30, 2000.

The Dry Cleaning Program was established in the Department of Public Health by Sections 333.13301 - 333.13322 of the *Michigan Compiled Laws* and in the Michigan Department of State Police by Section 29.5i of the *Michigan Compiled Laws*. Executive Order No. 1996-1 and Executive Order No. 1997-2 transferred these regulatory programs to DEQ in April 1996 and September 1997, respectively. The Dry Cleaning Program licenses, inspects, and regulates dry cleaning establishments to protect workers, the public, and the environment from overexposure to dry cleaning chemicals. In the fiscal year ended September 30, 2000, DWRPD collected approximately \$320,000 from approximately 1,120 dry cleaning establishments, expended approximately \$228,800 to implement this regulatory program, and employed 5 staff.

## Audit Objective, Scope, and Methodology and Agency Responses and Prior Audit Follow-Up

### Audit Objective

The objective of our performance audit of the Radiological Protection Section and the regulation of medical waste producers and dry cleaning establishments by the Environmental Health Section was to assess the Drinking Water and Radiological Protection Division's (DWRPD's) effectiveness in protecting the public through the regulation of users of radioactive materials, producers of medical waste, and operators of dry cleaning establishments.

### Audit Scope

Our audit scope was to examine the program and other records of the Radiological Protection Section and the Environmental Health Section of the Drinking Water and Radiological Protection Division, Department of Environmental Quality (DEQ). 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.

### Audit Methodology

Our audit procedures, conducted during July through November 2000, included examination of program records and activities for the period October 1, 1997 through September 30, 2000.

We reviewed applicable State and federal laws, administrative rules, management plans, policies and procedures, and continuous quality improvement initiatives for all programs operated by the Radiological Protection Section and the Environmental Health Section of DWRPD. We interviewed program staff and examined program records. Based on this preliminary review, we selected radiological protection and the regulation of medical waste producers and dry cleaning establishments for review during this audit.

For the Radiological Protection Section, we identified DEQ's responsibilities and assessed DEQ's efforts to register users of radioactive materials and follow up on complaints. We reviewed DEQ's ongoing efforts to monitor and test radiation levels on and near nuclear plants in the State and DWRPD's participation in emergency

preparedness drills held in cooperation with the Michigan Department of State Police. We also reviewed DEQ's efforts to implement the Indoor Radon Program through local health departments. Finally, we reviewed DEQ's efforts for potential overlap with or duplication of services with other State programs.

For the Medical Waste Regulatory Program, we identified DEQ's responsibilities and reviewed DEQ's efforts to register and regulate certain producers of medical waste. We reviewed the fee structure for the Medical Waste Regulatory Program, the fund balance of the Medical Waste Emergency Response Fund, and expenditures by both for compliance with legislative intent. We contacted stakeholders for input on how this regulatory program is operating. We also followed up on a prior audit recommendation relating to the Medical Waste Regulatory Program. Finally, we reviewed DEQ's efforts for potential overlap with or duplication of other State programs.

For the Dry Cleaning Program, we identified DEQ's responsibilities and reviewed DEQ's efforts to license and inspect dry cleaners. We assessed whether DEQ inspected all dry cleaners annually and the outcome of these inspections. We also reviewed the assessment and collection of annual licensing fees, including follow-up on dry cleaners who did not pay these fees. Finally, we reviewed DEQ's efforts for potential overlap with or duplication of other State programs.

#### Agency Responses and Prior Audit Follow-up

Our audit report contains 4 findings and 4 corresponding recommendations. The agency preliminary response indicates that DEQ agrees with 2 recommendations and that DEQ does not agree with 2 recommendations. The agency preliminary response also indicates that DEQ did not agree with part of Finding 4.

The agency preliminary response that follows each recommendation in our report was taken from the agency's written comments and oral discussion subsequent to our audit fieldwork. Section 18.1462 of the *Michigan Compiled Laws* and Department of Management and Budget Administrative Guide procedure 1280.02 require DEQ to develop a formal response to our audit findings and recommendations within 60 days after release of the audit report.

DWRPD complied with the one prior audit recommendation that was included within the scope of our current audit.

# COMMENT, FINDINGS, RECOMMENDATIONS, AND AGENCY PRELIMINARY RESPONSES

## EFFECTIVENESS IN PROTECTING THE PUBLIC THROUGH REGULATION OF USERS OF RADIOACTIVE MATERIALS, PRODUCERS OF MEDICAL WASTE, AND OPERATORS OF DRY CLEANING ESTABLISHMENTS

### COMMENT

**Audit Objective:** To assess the Drinking Water and Radiological Protection Division's (DWRPD's) effectiveness in protecting the public through the regulation of users of radioactive materials, producers of medical waste, and operators of dry cleaning establishments.

**Conclusion:** We concluded that DWRPD was generally effective in protecting the public through the regulation of users of radioactive materials, producers of medical waste, and operators of dry cleaning establishments. However, our assessment disclosed reportable conditions related to inspection of registered users of radioactive materials, the Indoor Radon Program, the Medical Waste Regulatory Program, and inspection of dry cleaning establishments.

**Noteworthy Accomplishments:** In a major effort coordinated between the Radiological Protection Section, Department of Environmental Quality (DEQ), and the Emergency Management Division of the Michigan Department of State Police, DWRPD revised radiological assessment procedures to address nuclear power reactor accidents to improve emergency preparedness. These changes, which focus on delivering prompt and prudent public protection, were positively recognized by the Federal Emergency Management Agency in July 2000.

### FINDING

#### 1. Inspection of Registered Users of Radioactive Materials

DWRPD did not inspect registered users of radioactive materials at a frequency designated by Division management.

DWRPD management established a 3-to-5-year targeted inspection cycle for the oversight of users of radioactive materials. Based on our review of requirements of the program, requirements of the federal oversight program, and the level of reported incidents, we concluded that this inspection cycle appears reasonable.

However, DWRPD did not complete inspections on a 3-to-5-year cycle. We identified 6 (30%) of 20 registered users in our sample that had not been inspected in the last 5 years, including 3 registered users that DWRPD had no evidence of ever inspecting.

DWRPD investigated 160 incidents involving improper storage of radioactive materials, including incidents involving lost or stolen radioactive materials, during the period October 1, 1998 through August 31, 2000. Routine inspection of registered users could have identified instances involving improper storage of radioactive materials. Routine inspections may have prevented several of these incidents.

Registered users of radioactive materials are required to post notices and warnings; monitor exposure of personnel to radioactive materials; and maintain records of radiation dosage, individual exposure to radiation, and results of critical evaluations of incidents involving radioactive materials. Periodic on-site inspections can be an effective method to ensure that registered users of radioactive materials are in compliance with the administrative rules and that the public is protected from the danger of exposure to radioactive materials.

### **RECOMMENDATION**

We recommend that DWRPD inspect registered users of radioactive materials at a frequency designated by that Division management.

### **AGENCY PRELIMINARY RESPONSE**

DEQ disagrees with the recommendation.

DEQ informed us that DWRPD management has neither established nor designated a formal inspection frequency for registered users of radioactive materials. An informal inspection frequency goal has been historically

communicated orally to program staff. DEQ informed us that management goals\* are intended to challenge and motivate staff and, therefore, often are not accomplished. No law, rule, or DEQ policy or procedure currently exists to address inspection frequencies for registered users of radioactive materials in Michigan.

While DEQ does agree that inspections are one effective method of ensuring compliance with regulations, DEQ informed us that there are other activities, such as complaint investigation, that are more effective and, therefore, are a higher priority. DEQ informed us that many incidents occur as a result of activities not directly controlled by DEQ, such as radioactive material incidents that arise from shipments originating out-of-state. Any inspection frequency goal is subject to the limitations imposed by higher priority activities, such as attending to radiological incidents, emergencies, complaint investigations, and other assigned priority projects.

## **FINDING**

### **2. Indoor Radon Program**

The Radiological Protection Section needs to establish goals and measure the effectiveness of the Indoor Radon Program.

The Indoor Radon Program provides funding to local health departments to inform the public about the dangers of radon\* in the home, conduct workshops, and distribute radon test kits. The Indoor Radon Program, which has been in operation since 1990, expended approximately \$546,000 in the fiscal year ended September 30, 2000 (including approximately \$319,000 from the U.S. Environmental Protection Agency). The Radiological Protection Section administers the Indoor Radon Program, conducts workshops, develops informational items, and contracts with local health departments to disseminate information to the public. The local health departments disseminate information on the dangers of indoor radon, provide radon test kits to residents, and answer questions from the public. The local health departments received approximately \$200,500 to implement the Indoor Radon Program in the fiscal year ended September 30, 2000.

\* See glossary at end of report for definition.

The U.S. Environmental Protection Agency and DEQ established general goals for the Indoor Radon Program. However, DEQ has not established benchmarks or attempted to assess whether the Indoor Radon Program is operating in an effective and efficient manner by meeting desired outcomes\* and goals. The Indoor Radon Program staff informed us that the last attempt to measure effectiveness was a survey by the Department of Public Health in 1995 to determine if the Indoor Radon Program improved public knowledge of the dangers of indoor radon. Staff informed us that the Indoor Radon Program has never established benchmarks for the number of radon test kits to be distributed, number of radon tests to be returned for analysis, number of workshops to be held by the local health departments, or other possible measures of effectiveness.

As a result, DEQ has not assessed whether the local health departments have been effective in informing the public of the dangers of indoor radon. DEQ also has not assessed whether the Radiological Protection Section and local health departments have effectively implemented the Indoor Radon Program.

### **RECOMMENDATION**

We recommend that the Radiological Protection Section establish goals and measure the effectiveness of the Indoor Radon Program.

### **AGENCY PRELIMINARY RESPONSE**

DEQ disagrees with the recommendation.

DEQ informed us that the entire focus of the Indoor Radon Program is to promote public awareness of the radon issue among citizens and to promote voluntary testing of homes through making testing kits available to citizens. There is no requirement for citizens to test their homes, and it is up to the citizens to take appropriate action on the testing results. No current statutory or regulatory reporting requirement exists for the Indoor Radon Program.

DEQ informed us that, as stated in the summary of audit findings, the U.S. Environmental Protection Agency and DEQ have established general goals for the Indoor Radon Program. Direct measurements of the goals are difficult and prohibitively expensive given the voluntary nature of the Indoor Radon Program.

\* See glossary at end of report for definition.

DEQ informed us that such measurement would be possible only if citizens were required to provide data on their use of the tests kits and follow-up actions to DEQ. Requiring citizens to provide data to regulatory agencies on the use and results of the testing would likely negatively impact the number of citizens willing to conduct tests, which would defeat the purpose of the Indoor Radon Program. DEQ informed us that past attempts by the U.S. Environmental Protection Agency and the former Department of Public Health to conduct baseline and subsequent progress assessment of these goals resulted in large expenditures of time and budget resources with little more than large volumes of confusing information as an outcome.

DEQ informed us that, additionally, the U.S. Environmental Protection Agency is expected to issue a final rule within the next several months on a radon standard for drinking water that will significantly impact the management of the Indoor Radon Program. The final rule will require states to consider a multimedia mitigation program that would establish measures for the Indoor Radon Program. DEQ informed us that it would be premature and unproductive to establish goals or measures now in light of the major programmatic changes expected as a result of the U.S. Environmental Protection Agency's final rule impacting the Indoor Radon Program.

## **FINDING**

### **3. Medical Waste Regulatory Program**

DWRPD did not fully implement the Medical Waste Regulatory Program.

Sections 333.13801 - 333.13831 of the *Michigan Compiled Laws*, the Medical Waste Regulatory Act, outlines requirements of the Program. The Medical Waste Regulatory Act requires DEQ to create an interdepartmental medical waste advisory council, to assess Program effectiveness and make recommendations for Program changes, and to promulgate administrative rules to implement the Program.

The Program was established in June 1990 in the Department of Public Health. Executive Order No. 1996-1 transferred the Program to DEQ in April 1996. Based

on our review of Program operations, we determined that DEQ has not fully implemented requirements of the enabling legislation:

- a. DEQ was in the process of, but had not completed, promulgating administrative rules to address significant program requirements, such as training standards for medical waste producing facility employees. The lack of complete administrative rules over the 10 years that their program has been operating has prevented program managers from fully implementing the Program, including requirements for training waste producing facility employees that could help prevent the improper disposal of medical waste.
- b. DEQ eliminated the interdepartmental medical waste advisory council that was created in Section 13827 of the Medical Waste Regulatory Act. The advisory council is required to collect data pertaining to medical waste reports and investigations and to annually report to the Governor and Legislature on the number of medical waste reports received and investigations conducted, implementation and effectiveness of the Program, changes in medical waste regulation including enactment of federal law, recommendations for changes to this or any State act that pertains to medical waste, and coordination of reports between State departments. DEQ has prepared some annual program reports, but has not prepared them annually and has not consistently forwarded them to the Governor and legislative committee chairs as required by the Act.
- c. DWRPD had not implemented a program to periodically inspect significant medical waste producers to verify whether they are in compliance with significant Program requirements of the Act. The Program charges a registration fee to medical waste producers, but does not determine compliance with Program requirements until a complaint has been filed. To effectively regulate medical waste producers, DEQ should determine if medical waste producers are in compliance with requirements of the Act pertaining to packaging, transportation, and disposal of medical waste; employees of medical waste producers are properly trained; and medical waste management plans comply with requirements of the Act.
- d. Neither DEQ nor the advisory council has made recommendations to the Governor and the Legislature on changes necessary to improve the Program. For example, Program staff identified additional medical waste producers,

including tattoo parlors and home health care workers, who generate medical waste and should be included in this regulatory Program. DEQ identified provisions within the statute it believes should be revised; however, it has not yet proposed amendatory legislation.

### **RECOMMENDATION**

We recommend that DEQ fully implement the Medical Waste Regulatory Program or initiate such changes to the enabling legislation that it believes necessary to appropriately administer the Program.

### **AGENCY PRELIMINARY RESPONSE**

DEQ agrees with the recommendation.

DEQ will evaluate the Medical Waste Regulatory Program and agrees to make recommendations for Program improvements or its elimination, if it is determined that the Program is unnecessary to protect the public health.

DEQ informed us that administrative rules for the Program were adopted and became effective on November 30, 2000.

DEQ informed us that the Interdepartmental Medical Waste Advisory Council function had become repetitive and redundant, especially since the functions of the Department of Public Health were transferred to DEQ. Though several State agencies were expected to be involved with the Program, all current activities are conducted by DEQ. DEQ informed us that if issues involving other agencies arise, those can be resolved through meetings, conference calls, and joint investigations, as needed.

DEQ informed us that annual reports are prepared by the Program staff and are now being submitted as required (since 1999). A lapse in this function occurred because of a vacancy in the Program chief's position from 1996 to 1998.

### **FINDING**

#### **4. Inspection of Dry Cleaning Establishments**

The Environmental Health Section needs to improve its oversight of dry cleaning establishments by fully performing its regulatory responsibilities to inspect all dry

cleaning establishments annually and to follow up inspections of all dry cleaning establishments with deficiencies.

In our review of dry cleaner inspection activities, we noted:

- a. The Environmental Health Section did not conduct all required annual inspections of dry cleaning establishments. Section 333.13307 of the *Michigan Compiled Laws* requires that the Environmental Health Section inspect each Class IV dry cleaning establishment\* annually.

Based on a random sample of 76 dry cleaners, we determined that the Environmental Health Section did not complete 31 (41%) of 76 annual inspections that were required in 1998 and 1999, including 5 dry cleaners that had not been inspected since 1996.

Conducting annual inspections of each Class IV dry cleaning establishment helps ensure that establishments operate in accordance with State and federal environmental protection laws and helps ensure the safety of dry cleaning establishment employees and the public.

- b. The Environmental Health Section did not conduct required follow-up inspections of certain dry cleaning establishments with serious deficiencies that would require an on-site, follow-up inspection. Written Environmental Health Section policy requires dry cleaning inspectors to conduct a follow-up investigation for all inspections that noted serious deficiencies. Based on a review of 38 dry cleaner inspections during a two-year period (76 inspection files reviewed), 19 inspections required a follow-up investigation. Environmental Health Inspectors did not conduct follow-up investigations for 4 (21%) of the 19 inspections with noted deficiencies in 1998 and 1999. There are situations in which an on-site, follow-up investigation is not necessary. However, the 4 instances noted included 3 instances of dry cleaning machines with perchloroethylene\* leaks and 1 instance of additional health hazards for dry cleaning plant workers. These deficiencies, which could place dry cleaning plant workers, the public, and the environment at risk, should have received an on-site, follow-up investigation by Environmental Health inspectors.

\* See glossary at end of report for definition.

Conducting annual inspections of each Class IV dry cleaning establishment and follow-up inspections of deficiencies helps to ensure that establishments operate in accordance with State and federal environmental protection laws, that dry cleaning establishment employees and the public are safe, and that dry cleaning establishments correct deficiencies noted during inspections which violate State and federal environmental protection laws or which may endanger the safety of dry cleaning establishment employees and the public.

### **RECOMMENDATION**

We recommend that the Environmental Health Section improve its oversight of dry cleaning establishments by fully performing its regulatory responsibilities to inspect all dry cleaning establishments annually and to follow up inspections of all dry cleaning establishments with serious deficiencies.

### **AGENCY PRELIMINARY RESPONSE**

DEQ agrees with the recommendation.

DEQ agrees that the Dry Cleaning Program should conduct all of the required annual inspections as set forth in Section 333.13307 of the *Michigan Compiled Laws* (a section of the Public Health Code) that requires all Class IV dry cleaning establishments to be inspected annually. DEQ informed us that between October 1, 1997 and January 1999, the Dry Cleaning Program had only two staff to carry out the annual inspections. Since January 1999 until the end of the audit period, the Dry Cleaning Program was fully staffed with four individuals and was making progress towards meeting the required annual inspection of the establishments.

DEQ agrees that follow-up is necessary when inspections reveal serious deficiencies. DEQ disagrees with the auditors on what constitutes a "serious deficiency" and that follow-up must always involve reinspection.

There were three instances discussed in the audit of dry cleaning machines with perchloroethylene leaks. Measurements of air quality were taken in the three dry cleaning plants and found to be below the permissible exposure limit for individuals. DEQ informed us that the Dry Cleaning Program staff concluded that these leaks were not considered serious since a hazardous exposure did not occur

to plant workers, the general public, or the environment; and thus, no follow-up was necessary. Although the leaks were small, staff required the leaks to be repaired.

There was one instance discussed in the audit involving "additional health hazards." The case involved safety hazards outside DEQ's authority and did not require a follow-up inspection.

## Glossary of Acronyms and Terms

Class IV dry cleaning establishment	An establishment that uses nonflammable dry cleaning solvents in its operations.
DEQ	Department of Environmental Quality.
DWRPD	Drinking Water and Radiological Protection Division.
effectiveness	Program success in achieving mission and goals.
efficiency	Achieving the most outputs and outcomes practical for the amount of resources applied or minimizing the amount of resources required to attain a certain level of outputs or outcomes.
goals	The agency's intended outcomes or impacts for a program to accomplish its mission.
mission	The agency's main purpose or the reason the agency was established.
outcomes	The actual impacts of the program. Outcomes should positively impact the purpose for which the program was established.
perchloroethylene	A chlorinated hydrocarbon solvent commonly used in dry cleaning fluid. Health effects from exposure include irritation to the skin, eyes, and upper respiratory tract; central nervous system depression; and liver damage. Perchloroethylene is a known animal carcinogen that has caused liver cancer in mice.

performance audit	An economy and efficiency audit or a program audit that is designed to provide an independent assessment of the performance of a governmental entity, program, activity, or function to improve public accountability and to facilitate decision making by parties responsible for overseeing or initiating corrective action.
radon	A naturally occurring gas resulting from the radioactive decay of radium, which is a natural product of uranium decay, both of which are found in at least trace amounts in most kinds of soil and rock.
reportable condition	A matter coming to the auditor's attention that, in the auditor's judgment, should be communicated because it represents either an opportunity for improvement or a significant deficiency in management's ability to operate a program in an effective and efficient manner.