

Office of the Auditor General  
Performance Audit Report

---

**Septage Waste, Campground,  
Public Swimming Pool, and Onsite  
Wastewater Programs**

Office of Drinking Water and Municipal Assistance  
Department of Environmental Quality

October 2016

---

---

**The auditor general shall conduct post audits of financial transactions and accounts of the state and of all branches, departments, offices, boards, commissions, agencies, authorities and institutions of the state established by this constitution or by law, and performance post audits thereof.**

*Article IV, Section 53 of the Michigan Constitution*

---



# OAG

Office of the Auditor General

## Report Summary

### *Performance Audit*

### *Septage Waste, Campground, Public Swimming Pool, and Onsite Wastewater Programs*

### *Office of Drinking Water and Municipal Assistance (ODWMA)*

### *Department of Environmental Quality (DEQ)*

**Report Number:**  
761-0321-16

**Released:**  
October 2016

ODWMA, with the assistance of local health departments (LHDs), is responsible for licensing and monitoring the Septage Waste, Campground, Public Swimming Pool, and Onsite Wastewater Programs. At the time of our review, ODWMA licensed 375 septage waste haulers, 1,305 campgrounds, and 6,091 public swimming pools. Approximately 1.3 million onsite wastewater systems exist in Michigan. As of March 31, 2016, ODWMA had 11 full-time employees dedicated to the four Programs. In fiscal year 2015, these Programs had combined expenditures of \$1.95 million.

Audit Objective			Conclusion
Objective #1: To assess the sufficiency of ODWMA's oversight of the Septage Waste Program.			Sufficient with exceptions
Findings Related to This Audit Objective	Material Condition	Reportable Condition	Agency Preliminary Response
ODWMA did not always conduct required annual inspections of septage waste vehicles, land application sites, and septage waste receiving facilities. Completing these required inspections may reduce the possibility of septage waste exposure to the public ( <a href="#">Finding #1</a> ).		X	Agrees

Audit Objective			Conclusion
Objective #2: To assess the sufficiency of ODWMA's monitoring of LHDs' efforts to complete inspections and observe the activities of the Septage Waste, Campground, Public Swimming Pool, and Onsite Wastewater Programs.			Sufficient with exceptions
Findings Related to This Audit Objective	Material Condition	Reportable Condition	Agency Preliminary Response
ODWMA should improve its oversight of LHDs. LHDs did not document that 30 (19%) of 160 selected vehicle inspections, 5 (9%) of 58 selected land application site inspections, and 7 (13%) of 52 selected facility inspections had been completed. Also, ODWMA did not		X	Agrees

<b>Findings Related to This Audit Objective (Continued)</b>	<b>Material Condition</b>	<b>Reportable Condition</b>	<b>Agency Preliminary Response</b>
ensure that LHDs completed 33 (20%) of the 165 required inspections at 60 public swimming pools we reviewed nor confirm that water quality standards were met for 73 (55%) of the 132 inspections completed ( <u>Finding #2</u> ).		X	Agrees
<b>Observations Related to This Audit Objective</b>	<b>Material Condition</b>	<b>Reportable Condition</b>	<b>Agency Preliminary Response</b>
The information technology systems that ODWMA uses to track Septage Waste, Campground, and Public Swimming Pool Program activities are outdated and do not provide a shared database between DEQ and LHDs. Also, ODWMA does not have an automated system to store Onsite Wastewater Program information, which has prohibited the implementation of Statewide monitoring standards for the Program ( <u>Observation #1</u> ).	Not applicable	Not applicable	Not applicable

<b>Audit Objective</b>			<b>Conclusion</b>
Objective #3: To assess the adequacy of program fees to cover the cost of monitoring the Septage Waste, Campground, Public Swimming Pool, and Onsite Wastewater Programs.			Costs not covered
<b>Findings Related to This Audit Objective</b>	<b>Material Condition</b>	<b>Reportable Condition</b>	<b>Agency Preliminary Response</b>
None reported.	Not applicable	Not applicable	Not applicable
<b>Observations Related to This Audit Objective</b>	<b>Material Condition</b>	<b>Reportable Condition</b>	<b>Agency Preliminary Response</b>
DEQ's cost to monitor environmental health programs exceeded fee revenue by \$730,000 and \$668,000 in fiscal years 2014 and 2015, respectively ( <u>Observation #2</u> ).	Not applicable	Not applicable	Not applicable

A copy of the full report can be obtained by calling 517.334.8050 or by visiting our Web site at: [www.audgen.michigan.gov](http://www.audgen.michigan.gov)

Office of the Auditor General  
201 N. Washington Square, Sixth Floor  
Lansing, Michigan 48913

**Doug A. Ringler, CPA, CIA**  
Auditor General

**Laura J. Hirst, CPA**  
Deputy Auditor General



# OAG

Office of the Auditor General

201 N. Washington Square, Sixth Floor • Lansing, Michigan 48913 • Phone: (517) 334-8050 • [www.audgen.michigan.gov](http://www.audgen.michigan.gov)

**Doug A. Ringler, CPA, CIA**  
Auditor General

October 26, 2016

Ms. C. Heidi Grether, Director  
Department of Environmental Quality  
Constitution Hall  
Lansing, Michigan

Dear Ms. Grether:

I am pleased to provide this performance audit report on the Septage Waste, Campground, Public Swimming Pool, and Onsite Wastewater Programs, Office of Drinking Water and Municipal Assistance, Department of Environmental Quality.

We organize our findings and observations by audit objective. Your agency provided preliminary responses to the recommendations at the end of our fieldwork. The *Michigan Compiled Laws* and administrative procedures require an audited agency to develop a plan to comply with the recommendations and submit it within 60 days of the date above to the Office of Internal Audit Services, State Budget Office. Within 30 days of receipt, the Office of Internal Audit Services is required to review the plan and either accept the plan as final or contact the agency to take additional steps to finalize the plan.

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

Sincerely,

A handwritten signature in black ink that reads "Doug Ringler". The signature is written in a cursive, slightly slanted style.

Doug Ringler  
Auditor General



## TABLE OF CONTENTS

### SEPTAGE WASTE, CAMPGROUND, PUBLIC SWIMMING POOL, AND ONSITE WASTEWATER PROGRAMS

	<u>Page</u>
Report Summary	1
Report Letter	3
Audit Objectives, Conclusions, Findings, and Observations	
Oversight of Septage Waste Program	8
Findings:	
1. Annual inspections not always conducted for septage waste vehicles, land application sites, and receiving facilities.	9
Efforts to Monitor LHDs	10
Findings:	
2. Improved oversight of LHDs needed.	12
Observations:	
1. IT systems used to track ODWMA's environmental health program activities are outdated and require duplicate data entry.	14
Adequacy of Fees to Cover Monitoring Costs	16
Observations:	
2. Fees insufficient to cover the cost of monitoring environmental health programs.	17
Supplemental Information	
Exhibit #1 - Number of Septage Waste Haulers and Annual Fees	20
Exhibit #2 - Number of Campgrounds and Camp Sites and License Fees	21
Exhibit #3 - Number of Public Swimming Pools and Annual Fees	22
Exhibit #4 - Comparison of Fees	23
Exhibit #5 - Proposed Savings and Costs to Upgrade IT Systems	24
Description	25
Audit Scope, Methodology, and Other Information	26
Glossary of Abbreviations and Terms	30





# AUDIT OBJECTIVES, CONCLUSIONS, FINDINGS, AND OBSERVATIONS

# OVERSIGHT OF SEPTAGE WASTE PROGRAM

---

## BACKGROUND

The Septage Waste Program drives improvements in the State's water quality by providing the regulatory framework under which human waste pumped from private septic systems can be recycled onto agricultural and other lands as a fertilizer or soil amendment\*. The licensing and handling of septage waste\* is regulated under Sections 324.11701 - 324.11720 of the *Michigan Compiled Laws* (Part 117 of the Natural Resources and Environmental Protection Act, Public Act 451 of 1994, as amended).

The Office of Drinking Water and Municipal Assistance (ODWMA) contracts with local health departments (LHDs) in all but seven counties to conduct inspections of septage waste vehicles\*, land application sites, and septage waste receiving facilities\*. ODWMA staff conduct inspections required under Part 117 of licensed septage waste businesses, vehicles, land application sites, septage waste storage facilities, and septage waste receiving facilities in the seven counties.

## AUDIT OBJECTIVE

To assess the sufficiency of ODWMA's oversight of the Septage Waste Program.

## CONCLUSION

Sufficient with exceptions.

## FACTORS IMPACTING CONCLUSION

- ODWMA ensured that 94% of licensed haulers utilizing septage waste receiving facilities had written approval from the facility.
- ODWMA ensured that licensed septage waste haulers met educational requirements.
- Septage waste was properly incorporated into the soil at land application sites that were the responsibility of ODWMA.
- Reportable condition\* related to conducting annual inspections.

\* See glossary at end of report for definition.

## **FINDING #1**

---

### **Annual inspections not always conducted of septage waste vehicles, land application sites, and receiving facilities.**

---

---

39% of septage waste vehicles, 15% of land application sites, and 54% of septage waste receiving facilities not inspected annually as required by State statute.

---

ODWMA did not always conduct required annual inspections of septage waste vehicles, land application sites, and septage waste receiving facilities. Completing these required inspections may reduce the possibility of septage waste exposure to the public.

ODWMA was responsible for monitoring septage waste in seven counties. ODWMA contracted with LHDs for monitoring in the other 76 counties.

Section 324.11713 of the *Michigan Compiled Laws* requires inspections at least annually of septage waste vehicles, land application sites, and receiving facilities. Our review of inspection documentation for fiscal years 2013 through 2015 disclosed that ODWMA did not conduct:

- a. 99 (39%) of 254 inspections of septage waste vehicles. Of the 98 inspections conducted in fiscal years 2014 and 2015, 7 (7%) were completed between 499 days and 590 days after the prior inspections.
- b. 5 (15%) of 33 inspections of land application sites. Of the 18 inspections conducted in fiscal years 2014 and 2015, 3 (17%) were completed 669 days after the prior inspections.
- c. 19 (54%) of 35 inspections of receiving facilities.

## **RECOMMENDATION**

We recommend that ODWMA conduct required annual inspections of septage waste vehicles, land application sites, and receiving facilities.

## **AGENCY PRELIMINARY RESPONSE**

DEQ provided us with the following response:

*DEQ agrees with the finding and will develop a corrective action plan to meet the inspection requirements.*

## **EFFORTS TO MONITOR LHDs**

---

### **BACKGROUND**

ODWMA contracts with LHDs to monitor the Septage Waste Program in 76 of Michigan's 83 counties, the Campground Program, and the Public Swimming Pool Program. At the time of our review, ODWMA had oversight responsibility for 375 licensed septage waste haulers, of which 332 were the responsibility of LHDs; 1,305 active campgrounds; and 6,091 licensed public swimming pools\*.

ODWMA is responsible for ensuring that LHDs conduct required monitoring of the Programs, including:

- Conducting annual inspections of septage waste vehicles, land application sites, and receiving facilities within their jurisdiction.
- Investigating complaints related to septage waste, campgrounds, and public swimming pools and conducting meetings and/or conferences related to compliance issues.
- Conducting annual inspections of campgrounds.
- Collecting license fees and issuing or denying temporary campground\* licenses and forwarding a copy of the approved or denied license to the State.
- Conducting annual inspections of public swimming pools.

### **AUDIT OBJECTIVE**

To assess the sufficiency of ODWMA's monitoring of LHDs' efforts to complete inspections and observe the activities of the Septage Waste, Campground, Public Swimming Pool, and Onsite Wastewater Programs.

### **CONCLUSION**

Sufficient with exceptions.

### **FACTORS IMPACTING CONCLUSION**

- At the land application sites we visited, septage waste was properly incorporated into the soil.
- Licensed septage waste haulers met educational requirements.
- LHDs annually inspected campgrounds.

\* See glossary at end of report for definition.

- Reportable condition related to improved oversight of LHDs.
- Observation\* related to information technology (IT) systems used to track Program activities.

*\* See glossary at end of report for definition.*

## FINDING #2

---

### Improved oversight of LHDs needed to effectively monitor Septage Waste, Campground, and Public Swimming Pool Programs.

---

ODWMA should improve its oversight of LHDs to ensure effective monitoring of Septage Waste, Campground, and Public Swimming Pool Program activities.

Contracts between the Department of Environmental Quality (DEQ) and LHDs require that ODWMA provide administrative oversight of LHDs to ensure that work is performed in accordance with contract terms and conditions.

ODWMA did not ensure that LHDs:

- a. Completed annual inspections of septage waste vehicles, land application sites, and receiving facilities in accordance with Section 324.11713 of the *Michigan Compiled Laws*. Inspections help reduce the risk of public exposure to septage waste.

We reviewed inspections related to 60 vehicles, 20 land application sites, and 18 receiving facilities that LHDs were required to inspect during fiscal years 2013 through 2015. LHDs did not document that 30 (19%) of 160 vehicle inspections, 5 (9%) of 58 land application site inspections, and 7 (13%) of 52 receiving facility inspections had been completed.

- b. Verified that campground water systems were depressurized when not in use and were disinfected or flushed prior to being placed back into use.

This information is necessary for ODWMA to ensure that the water supply is safe for human consumption prior to a campground being placed back into service. We sampled 11 campgrounds and could not determine if the LHDs verified this information.

- c. Completed all required annual inspections of public swimming pools to help prevent accidents and the spread of disease.

Our review of 60 randomly selected public swimming pools for fiscal years 2013 through 2015 disclosed that LHDs did not complete or document that they completed 33 (20%) of the 165 required inspections.

- d. Confirmed and documented that public swimming pool owners regularly tested the water for disinfectant residuals and coliform bacteria.

*Michigan Administrative Code R 325.2194* requires that a swimming pool owner shall test the water before and during each period of use, at least once per day, to ensure appropriate pH and disinfectant residual levels. *Michigan Administrative Code R 325.2195* requires a public swimming pool owner to collect and examine water samples for coliform bacteria quarterly.

Our review of 132 inspection reports completed during fiscal years 2013 through 2015 that had a conditional or not approved rating or had comments associated with their inspections disclosed:

- (1) 73 (55%) inspection reports did not indicate that water quality standards had been met or were unreadable.
- (2) 102 (77%) inspection reports did not document that a bacteriological analysis had been collected or were unreadable.

- e. Conducted follow-up inspections of public swimming pools with identified violations.

Our review of 132 inspection reports completed during fiscal years 2013 through 2015 that had a conditional or not approved rating or had comments associated with their inspections identified 97 (73%) inspections with violations. LHDs completed 31 (32%) follow-up inspections related to those 97 inspections. LHDs did not document why they conducted additional inspections for some violations but not for others.

**RECOMMENDATION**

We recommend that ODWMA improve its oversight of LHDs to ensure effective monitoring of Septage Waste, Campground, and Public Swimming Pool Program activities.

**AGENCY  
PRELIMINARY  
RESPONSE**

DEQ provided us with the following response:

*DEQ agrees with the finding and will partner with LHDs and various stakeholders to develop a corrective action plan to assure inspections are completed and documented.*

## **OBSERVATION #1**

**IT systems used to track ODWMA's environmental health program activities are outdated and require duplicate data entry.**

The IT systems that ODWMA uses to track Septage Waste, Campground, and Public Swimming Pool Program activities are outdated and do not provide a shared database between DEQ and LHDs. Also, ODWMA does not have an automated system to store Onsite Wastewater Program information, which has prohibited the implementation of Statewide monitoring standards for the Program.

ODWMA partners with LHDs to monitor the activities of 375 septage waste haulers, 1,305 campgrounds, 6,091 public swimming pools, and approximately 1.3 million onsite wastewater systems\*. ODWMA and 45 LHDs compile and store septage waste, campground, and public swimming pool data within three IT systems. However, ODWMA indicated that the systems are in jeopardy of failing and are not supported by the Department of Technology, Management, and Budget (DTMB).

ODWMA identified several inefficiencies caused by the outdated systems, including:

- LHDs cannot enter inspections of septage waste haulers, land application sites, campgrounds, and public swimming pools into a system as they are completed. ODWMA must manually scan the inspections into a system when received from LHDs.
- Manual processing of paid invoices requires payment information to be manually entered into two systems.
- Manual upkeep of customer data is used for mass load invoicing.
- Lack of a shared database between ODWMA and LHDs causes inefficiencies when serving a client. Inspection data is not available to ODWMA until the hard-copy inspection forms are received from LHDs.
- Dates and other inspection data are manually entered into DEQ's IT systems to update records.
- Hard copies of inspections may be lost or misplaced during delivery and not reconciled until the end of the year payments are verified or a second request for an inspection report is made.

**Implementation of a new system could result in a net savings of \$2.95 million between fiscal years 2016 and 2021.**

DEQ submitted a proposal for a consolidated licensing and inspection system to DTMB in December 2015 that had estimated costs of \$6.51 million and identified benefits and cost savings of \$9.46 million during the first six years of operation (see Exhibit #5).

\* See glossary at end of report for definition.



ODWMA identified the following benefits of upgrading the systems:

- A real-time repository for inspection reports, licensing information, and compliance information to eliminate the need for duplicate input of information and provide customers with on-line access to their permit or inspection status.
- Increased efficiency in receipting, invoicing, and data entry.
- Improved sharing and management of data will enhance services to citizens.

As of June 2016, neither DTMB nor DEQ designated funding for a new system.

## ADEQUACY OF FEES TO COVER MONITORING COSTS

---

### BACKGROUND

Program fees for septage waste, campgrounds, and public swimming pools are established within the *Michigan Compiled Laws* or *Michigan Administrative Code* rules. These regulations allow campground and public swimming pool fees to be adjusted every three years by the State Treasurer to reflect the cumulative annual percentage change in the Detroit consumer price index. Neither the *Michigan Compiled Laws* nor *Michigan Administrative Code* rules specify the costs that the fees are to cover. The Onsite Wastewater Program does not charge or collect any fees.

### AUDIT OBJECTIVE

To assess the adequacy of program fees to cover the cost of monitoring the Septage Waste, Campground, Public Swimming Pool, and Onsite Wastewater Programs.

### CONCLUSION

Costs not covered.

### FACTORS IMPACTING CONCLUSION

- ODWMA complied with the *Michigan Compiled Laws* and *Michigan Administrative Code* rules and adjusted fees every three years for campgrounds and public swimming pools. Swimming pool licensing fees generated sufficient revenue to cover current program work effort costs.
- Michigan's fees were comparable or higher than fees charged by Illinois and Wisconsin (see Exhibit #4).
- Legislation was introduced to increase campground fees and establish fees for the Onsite Wastewater Program. DEQ indicated that the fee formulas used for the Campground and Public Swimming Pool Programs are weighted heavily on construction permit applications (whose numbers fluctuate with changes in the economy) instead of annual operating licenses.
- Observation related to fees not covering the cost of monitoring the Septage Waste, Campground, and Onsite Wastewater Programs.

\* See glossary at end of report for definition.

**OBSERVATION #2**

**Fees insufficient to cover the cost of monitoring environmental health programs.**

DEQ's cost to monitor environmental health programs exceeded total funding by \$730,000 and \$668,000 in fiscal years 2014 and 2015, respectively.

Program fees did not sufficiently cover DEQ's cost of monitoring the Septage Waste, Campground, and Onsite Wastewater Programs.

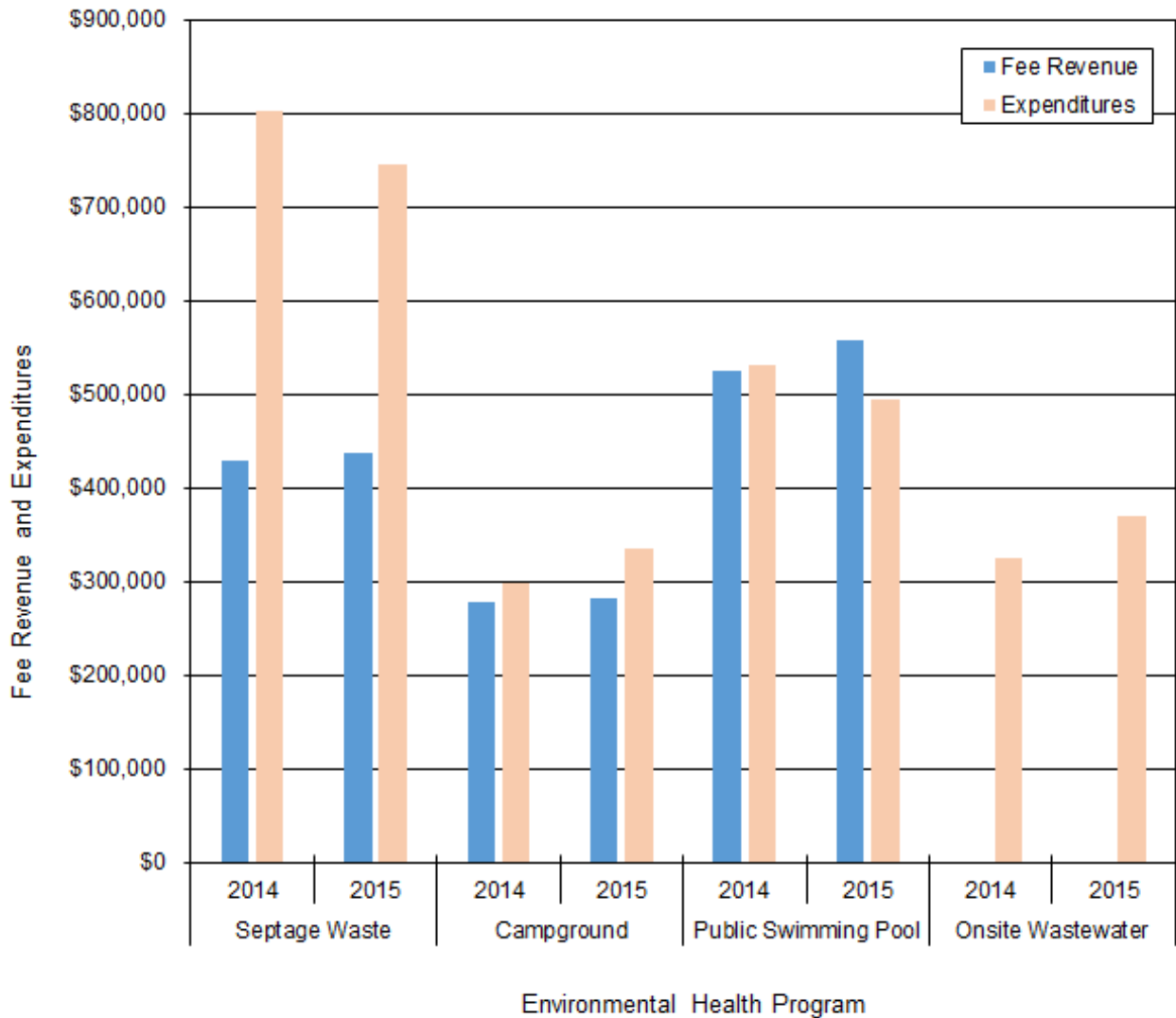
Septage waste, campground, and public swimming pool fees were established by the *Michigan Compiled Laws* (see Exhibits #1 through #3 for fees). DEQ may adjust campground and public swimming pool fees every three years by the amount determined by the State Treasurer to reflect the cumulative annual percentage change in the Detroit consumer price index. No fees are collected for the management and monitoring of the Onsite Wastewater Program.

Total expenditures for the Septage Waste, Campground, Public Swimming Pool, and Onsite Wastewater Programs exceeded fee revenue by approximately \$730,000 and \$668,000 for fiscal years 2014 and 2015, respectively. DEQ informed us that the Septage Waste, Campground, and Onsite Wastewater Programs are subsidized with federal drinking water capitalization grant funds that could be used to fund public water supply systems. DEQ also informed us that, with the current fee structure, the Public Swimming Pool Program cannot provide the service levels necessary to ensure that the health and welfare of visitors to those facilities is protected. DEQ indicated that the Program is not eligible for federal funds; therefore, monitoring efforts were reduced beginning in 2014.

The following table and graph present the variance between fee revenue and expenditures for fiscal years 2014 and 2015 for the Programs:

	Septage Waste		Campground		Public Swimming Pool		Onsite Wastewater		Total	
	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015
Fee revenue	\$ 428,646	\$ 437,849	\$277,518	\$ 282,452	\$ 524,675	\$ 558,200	\$ 0	\$ 0	\$1,230,839	\$1,278,501
Expenditures	(803,072)	(746,238)	(299,477)	(334,530)	(531,806)	(495,043)	(326,177)	(370,977)	(1,960,532)	(1,946,788)
Variance	<u>\$ (374,426)</u>	<u>\$ (308,389)</u>	<u>\$ (21,959)</u>	<u>\$ (52,078)</u>	<u>\$ (7,131)</u>	<u>\$ 63,157</u>	<u>\$ (326,177)</u>	<u>\$ (370,977)</u>	<u>\$ (729,693)</u>	<u>\$ (668,287)</u>

### Comparison of Fee Revenue and Expenditures



To increase revenue, DEQ adjusted the fees, where allowed, by the amount of the Detroit consumer price index. For the Campground Program, DEQ convened a stakeholder work group in January 2014 to update the Public Health Code and administrative rules to reflect current industry practices and adjust the fee schedules. In September 2015, this work group recommended revising the Public Health Code, including suggested fee increases and a different funding structure. Legislation (Senate Bill 952) was introduced in May 2016 to update the Public Health Code pertaining to campgrounds. DEQ informed us that, as proposed, the legislation would generate approximately the same amount of revenue as the current structure.

In addition, legislation (House Bills 5732 and 5733) was introduced in June 2016 to modify the work obligations of the Onsite Wastewater Program. As proposed, this legislation would require all onsite wastewater systems to be inspected at the point of property transfer. The legislation includes fees to generate funding to expand the Onsite Wastewater Program.

# SUPPLEMENTAL INFORMATION

---

UNAUDITED  
Exhibit #1

## SEPTAGE WASTE, CAMPGROUND, PUBLIC SWIMMING POOL, AND ONSITE WASTEWATER PROGRAMS

Office of Drinking Water and Municipal Assistance  
Department of Environmental Quality

### Number of Septage Waste Haulers and Annual Fees

#### Number of Septage Waste Haulers as of July 17, 2015:

Licensed septage haulers (businesses)	375
Licensed septage vehicles	872
Permitted land application sites	133
Licensed septage haulers that apply to land only	31
Licensed septage haulers that deposit at waste receiving facilities only	272
Licensed septage haulers that deposit at waste receiving facilities and also apply to land	71

#### Annual Fees in Place Since January 13, 2009:

Septage waste servicing license	\$ 200
Vehicle depositing into a waste receiving facility only	\$ 350
Vehicle depositing septage by land application	\$ 480
Fee to replace an existing licensed septage waste vehicle with another vehicle under the same ownership if the annual fee for that year has been paid:	
If the vehicle has been inspected during the year.	\$ 200
If the vehicle has not been inspected during the year.	\$ 150
Site permit	\$ 500

Source: The Office of the Auditor General prepared this exhibit using data from ODWMA and Section 324.11717b of the *Michigan Compiled Laws*.

SEPTAGE WASTE, CAMPGROUND, PUBLIC SWIMMING POOL, AND ONSITE WASTEWATER PROGRAMS  
Office of Drinking Water and Municipal Assistance  
Department of Environmental Quality

Number of Campgrounds and Camp Sites and License Fees  
As of November 1, 2015

Number of campgrounds	1,305
Type of Camp Site:	
Modern individual	102,753
Modern group	5,476
Primitive individual	20,795
Primitive group	<u>15,894</u>
Total camp sites	<u><u>144,918</u></u>
Fees in Place January 1, 2014 Through December 31, 2016:	
Campground Construction Permit:	
New campground construction permit	\$ 715
Addition, alteration, or modification to existing campground	\$ 268
Initial or Annual Campground License Fee:	
5 - 25 sites	\$ 89
26 - 50 sites	\$ 119
51 - 75 sites	\$ 149
76 - 100 sites	\$ 179
101 - 500 sites	\$ 268
Over 500 sites	\$ 596
Late fee after December 31	\$ 100
License transfer fee, new owner	\$ 75

Source: The Office of the Auditor General prepared this exhibit using data from ODWMA and the *Michigan Compiled Laws*.

SEPTAGE WASTE, CAMPGROUND, PUBLIC SWIMMING POOL, AND ONSITE WASTEWATER PROGRAMS

Office of Drinking Water and Municipal Assistance  
Department of Environmental Quality

Number of Public Swimming Pools and Annual Fees

<u>Pool Location</u>	<u>Number of Pools</u>	<u>Type of Pool</u>	<u>Number of Pools</u>
Outdoor	3,318	Swim	4,222
Indoor	2,739	Spa	1,337
Combination	34	Wade	171
		Therapy	60
		Spray pad	56
		Activity	37
		Other	35
		Slide	35
		Leisure	30
		Dive	24
		Lap	23
		River	16
		Cold	12
		Competition	11
		Training	11
		Wave	11
<b>Total</b>	<b>6,091</b>	<b>Total</b>	<b>6,091</b>

Fees in Place January 1, 2014 Through December 31, 2016:

<u>Swimming Pool Fee Category</u>	<u>Fee</u>
Construction Permit:	
0 - 500 sq ft	\$ 655
501 - 1,500 sq ft	\$ 835
1,501 - 2,400 sq ft	\$ 953
2,401 - 4,000 sq ft	\$ 1,549
4,001+ sq ft	\$ 2,145
Permit modification	\$ 328
Initial License:	
0 - 500 sq ft	\$ 655
501 - 1,000 sq ft	\$ 715
1,001 - 1,500 sq ft	\$ 746
1,501 - 2,000 sq ft	\$ 775
2,001 - 2,500 sq ft	\$ 835
2,501 - 3,500 sq ft	\$ 953
3,501 - 4,500 sq ft	\$ 1,073
4,501+ sq ft	\$ 1,191
Initial license modification	\$ 328
Renewal license by December 31	\$ 66
Late fee after December 31 through April 30	\$ 100
Lapsed fee after April 30	\$ 150

Source: The Office of the Auditor General prepared this exhibit using data from ODWMA and the *Michigan Compiled Laws*.



SEPTAGE WASTE, CAMPGROUND, PUBLIC SWIMMING POOL, AND ONSITE WASTEWATER PROGRAMS

Office of Drinking Water and Municipal Assistance  
Department of Environmental Quality

Comparison of Fees

**Septage Waste:**

	Michigan	Illinois	Wisconsin
Business license	\$200 per year	\$100 per year	\$50 to \$100 per vehicle for a 2-year period
Hauling vehicle	\$350 to \$480 per year	None identified	Included in business license
Land application site	\$500 one time	None identified	None identified
Ground water fee	None identified	None identified	\$100 per business

**Campgrounds:**

	Michigan	Illinois	Wisconsin
New campground construction permit	\$ 715	Construction permit \$ 100	
Addition, alteration, or modification to existing campground	\$ 268	Campground license \$ 100	
Annual renewal for 5 - 25 sites before 12/31	\$ 89	License renewal \$ 100	Annual renewal for 1 - 25 sites \$ 175
Annual renewal for 26 - 50 sites before 12/31	\$ 119		Annual renewal for 26 - 50 sites \$ 250
Annual renewal for 51 - 75 sites before 12/31	\$ 149		Annual renewal for 51 - 100 sites \$ 305
Annual renewal for 76 - 100 sites before 12/31	\$ 179		Annual renewal for 101 - 199 sites \$ 355
Annual renewal for 101 - 500 sites before 12/31	\$ 268		Annual renewal for over 200 sites \$ 410
Annual renewal for over 500 sites before 12/31	\$ 596		
Late fee after December 31 (in addition to above)	\$ 100	Late fee \$ 50	
License transfer fee, new owner	\$ 75		

**Public Swimming Pools:**

Construction Permit Fee:

	Michigan	Illinois (Private Owner)	Wisconsin
0 - 500 sq ft	\$ 655	0 - 500 sq ft \$ 625	
501 - 1,500 sq ft	\$ 835	501 - 1,000 sq ft \$ 1,250	
1,501 - 2,400 sq ft	\$ 953	1,001 - 2,000 sq ft \$ 1,500	
2,401 - 4,000 sq ft	\$ 1,549	2,001+ sq ft \$ 1,950	
4,001+ sq ft	\$ 2,145	Aquatic feature \$ 625	
		Bathing beach \$ 625	

Annual Permit Fee:

Modification construction permit	\$ 328		
Initial license 0 - 500 sq ft	\$ 655	0 - 500 sq ft \$ 150	Pool \$ 150
Initial license 501 - 1,000 sq ft	\$ 715	501 - 1,000 sq ft \$ 300	Water attraction \$ 175
Initial license 1,001 - 1,500 sq ft	\$ 746	1,001 - 2,000 sq ft \$ 400	Water attraction with up to two pool slides/waterslides per basin \$ 250
Initial license 1,501 - 2,000 sq ft	\$ 775	2,001+ sq ft \$ 500	Waterslide or pool slide per basin \$ 150
Initial license 2,001 - 2,500 sq ft	\$ 835	Aquatic feature \$ 150	
Initial license 2,501 - 3,500 sq ft	\$ 953	Bathing beach \$ 150	
Initial license 3,501 - 4,500 sq ft	\$ 1,073		
Initial license 4,501+ sq ft	\$ 1,191		
Initial license modification	\$ 328		
Renewal license by December 31	\$ 66		
Late fee after December 31 through April 30	\$ 100	Late renewal fee \$ 100	
Lapsed fee after April 30	\$ 150	Lapsed fee \$ 150	

Source: The Office of the Auditor General prepared this exhibit using data from the following sources:

Michigan	Septage Waste Campgrounds Public Swimming Pools	Section 324.11717b of the <i>Michigan Compiled Laws</i> ODWMA and the <i>Michigan Compiled Laws</i> ODWMA and the <i>Michigan Compiled Laws</i>
Illinois	Septage Waste Campgrounds Public Swimming Pools	Illinois Administrative Code 905, Section 905.200 Illinois Compiled Statute 210 ILCS 95 Illinois Compiled Statute, Swimming Facility Act, Section 8.1
Wisconsin	Septage Waste Campgrounds Public Swimming Pools	Wisconsin Administrative Code NR 113.05 Wisconsin Administrative Code, Department of Agriculture, Trade, and Consumer Protection 79.06 Wisconsin Administrative Code, Department of Agriculture, Trade, and Consumer Protection 76.06

SEPTAGE WASTE, CAMPGROUND, PUBLIC SWIMMING POOL, AND ONSITE WASTEWATER PROGRAMS

Office of Drinking Water and Municipal Assistance  
Department of Environmental Quality

Proposed Savings and Costs to Upgrade IT Systems

	Fiscal Year						Total
	2016	2017	2018	2019	2020	2021	
<u>Estimated Benefits/Cost Savings</u>							
Eliminate duplicate payment information	\$	\$ 675,000	\$	\$	\$	\$	\$ 675,000
Eliminate manual invoice processing		112,500	225,000	225,000	225,000	225,000	1,012,500
Eliminate scanning/data entry of inspection reports		675,000					675,000
Reduce mail handling		50,000	75,000	75,000	75,000	75,000	350,000
Upgrade IT systems	2,145,000	3,225,000	1,380,000				6,750,000
<b>Total</b>	<b>\$2,145,000</b>	<b>\$4,737,500</b>	<b>\$1,680,000</b>	<b>\$300,000</b>	<b>\$ 300,000</b>	<b>\$300,000</b>	<b>\$ 9,462,500</b>
<u>Costs</u>							
One-time implementation of new software	\$6,000,000	\$	\$	\$	\$	\$	\$ 6,000,000
Estimated ongoing maintenance		102,000	102,000	102,000	102,000	102,000	510,000
<b>Total</b>	<b>\$6,000,000</b>	<b>\$ 102,000</b>	<b>\$ 102,000</b>	<b>\$102,000</b>	<b>\$ 102,000</b>	<b>\$102,000</b>	<b>\$ 6,510,000</b>

Source: DEQ Fiscal Year 2016 Water Quality Licensing and Inspection Candidate Report.

## DESCRIPTION

---

The purpose of the Septage Waste Program is to protect and enhance public health and the quality of State water, agricultural lands, and the food supply by preventing the introduction of pollutants from the land application of raw sewage.

The Septage Waste Program drives improvements in the quality of the waters by providing the regulatory framework under which human waste pumped from private septic systems can be recycled onto agricultural and other lands as a fertilizer or soil amendment. As of July 17, 2015, ODWMA had licensed 375 septage waste haulers that it contracts with LHDs to monitor.

The Campground and Public Swimming Pool Programs strive to protect the health and welfare of Michigan's residents and visitors of those facilities. ODWMA staff review and approve plans for new campgrounds and public swimming pools. ODWMA staff also provide oversight to LHDs that are responsible for conducting inspections at these facilities. Over 1,300 campgrounds and approximately 6,100 public swimming pools are regulated by the ODWMA Campgrounds and Pools Unit.

The primary function of the Onsite Wastewater Program is to ensure that water supplies are protected by confirming that onsite wastewater systems are adequately designed, operated, and maintained. LHDs are responsible for conducting site visits of onsite wastewater systems during construction or prior to covering up the system. ODWMA reviews the LHDs' Onsite Wastewater Program on a three-year cycle via an accreditation process. There are approximately 1.3 million onsite wastewater systems in the State.

As of March 31, 2016, ODWMA had 11 full-time employees dedicated to the four Programs.

## AUDIT SCOPE, METHODOLOGY, AND OTHER INFORMATION

---

### AUDIT SCOPE

To examine the program and other records related to the Septage Waste, Campground, Public Swimming Pool, and Onsite Wastewater Programs. We conducted this performance audit\* 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 a 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.

### PERIOD

Our audit procedures, which included a preliminary survey, audit fieldwork, report preparation, analysis of agency responses, and quality assurance, generally covered October 1, 2012 through December 31, 2015.

### METHODOLOGY

We conducted a preliminary survey of the Septage Waste, Campground, Public Swimming Pool, and Onsite Wastewater Programs to formulate a basis for establishing our audit objectives and defining our audit scope and methodology. We:

- Interviewed ODWMA personnel to obtain an understanding of the Programs.
- Reviewed applicable laws, rules, regulations, policies, procedures, manuals, and other pertinent information.
- Reviewed DEQ's biannual analysis of internal control\* for the Programs.
- Completed limited testing of septage waste vehicle inspections, campground operations, and public swimming pool inspections and reviewed the accreditations of the Onsite Wastewater Program for five LHDs.

### OBJECTIVE #1

To assess the sufficiency of ODWMA's oversight of the Septage Waste Program.

To accomplish our first objective, we:

- Identified the licensed septage waste haulers, vehicles, land application sites, and receiving facilities that ODWMA was responsible for monitoring.

\* See glossary at end of report for definition.

- Visited and inspected 5 land application sites.
- Reviewed land application sites that ODWMA was responsible for monitoring to determine whether landowners had approved the use of their property.
- Reviewed licensed septage waste vehicles, land application sites, and receiving facilities that ODWMA was responsible for determining whether annual inspections were completed.

## **OBJECTIVE #2**

To assess the sufficiency of ODWMA's monitoring of LHDs' efforts to complete inspections and observe the activities of the Septage Waste, Campground, Public Swimming Pool, and Onsite Wastewater Programs.

To accomplish our second objective, we:

- Obtained and analyzed data regarding licensed septage waste haulers, campgrounds, and public swimming pools.
- Visited and inspected 5 septage waste land application sites that LHDs were responsible for monitoring.
- Reviewed a random sample of 38 septage waste haulers to determine whether they met educational requirements. Our sample was randomly selected to eliminate any bias and to enable us to project the results to the entire population.
- Reviewed a random sample of 60 septage waste vehicles, 20 land application sites, and 18 receiving facilities to determine whether LHDs completed annual inspections. Our sample was randomly selected to eliminate any bias and to enable us to project the results to the entire population.
- Reviewed a random and judgmental selection of 42 campgrounds to determine whether LHDs completed annual inspections.
- Reviewed a sample of 11 seasonal campgrounds to assess whether LHDs determined if the systems were depressurized and water samples were documented.
- Reviewed a random sample of 10 temporary campgrounds to determine if LHDs approved the use of the temporary campgrounds prior to their opening. Our sample was randomly selected to eliminate any bias and to enable us to project the results to the entire population.

- Reviewed a random sample of 60 public swimming pools to determine whether LHDs completed required inspections, analyzed water for disinfectant residuals and coliform bacteria, and followed up identified violations. Our sample was randomly selected to eliminate any bias and to enable us to project the results to the entire population.
- Reviewed DEQ's request to replace ODWMA's IT systems for the Septage Waste, Campground, and Public Swimming Pool Programs.

### **OBJECTIVE #3**

To assess the adequacy of program fees to cover the cost of monitoring the Septage Waste, Campground, Public Swimming Pool, and Onsite Wastewater Programs.

To accomplish our third objective, we:

- Compared fees charged to septage waste haulers, campgrounds, and public swimming pools in Michigan with fees charged by Illinois and Wisconsin (see Exhibit #4).
- Compared fee revenue with expenditures incurred for Septage Waste, Campgrounds, and Public Swimming Pool Programs for fiscal years 2014 and 2015.

### **CONCLUSIONS**

We base our conclusions on our audit efforts and any resulting material conditions\* or reportable conditions.

When selecting activities or programs for audit, we direct our efforts based on risk and opportunities to improve State government operations. Consequently, we prepare our performance audit reports on an exception basis.

### **AGENCY RESPONSES**

Our audit report contains 2 findings and 2 corresponding recommendations. DEQ's preliminary response indicates that it agrees with both of the recommendations.

The agency preliminary response that follows each recommendation in our report was taken from the agency's written comments and oral discussion at the end of our audit fieldwork. Section 18.1462 of the *Michigan Compiled Laws* and the State of Michigan Financial Management Guide (Part VII, Chapter 4, Section 100) require an audited agency to develop a plan to comply with the recommendations and submit it within 60 days after release of the audit report to the Office of Internal Audit Services, State Budget Office. Within 30 days of receipt, the Office of Internal Audit Services is required to review the plan and either accept the plan as final or contact the agency to take additional steps to finalize the plan.

\* See glossary at end of report for definition.

**PRIOR AUDIT  
FOLLOW-UP**

We released our prior performance audit of the Public Drinking Water Supply Program, Department of Environmental Quality (76-120-99), in June 2001. We released a follow-up report (761-0120-99F) of that audit in October 2011. That report did not contain recommendations related to the Septage Waste, Campground, Public Swimming Pool, or Onsite Wastewater Programs.

**SUPPLEMENTAL  
INFORMATION**

Our audit report includes supplemental information presented as Exhibits #1 through #5. Our audit was not directed toward expressing a conclusion on this information.

## **GLOSSARY OF ABBREVIATIONS AND TERMS**

---

DEQ	Department of Environmental Quality.
DTMB	Department of Technology, Management, and Budget.
internal control	The plan, policies, methods, and procedures adopted by management to meet its mission, goals, and objectives. Internal control includes the processes for planning, organizing, directing, and controlling program operations. It also includes the systems for measuring, reporting, and monitoring program performance. Internal control serves as a defense in safeguarding assets and in preventing and detecting errors; fraud; violations of laws, regulations, and provisions of contracts and grant agreements; or abuse.
IT	information technology.
LHD	local health department.
material condition	A matter that, in the auditor's judgment, is more severe than a reportable condition and could impair the ability of management to operate a program in an effective and efficient manner and/or could adversely affect the judgment of an interested person concerning the effectiveness and efficiency of the program.
observation	A commentary that highlights certain details or events that may be of interest to users of the report. An observation differs from an audit finding in that it may not include the attributes (condition, effect, criteria, cause, and recommendation) that are presented in an audit finding.
ODWMA	Office of Drinking Water and Municipal Assistance.
onsite wastewater system	A system of components used to collect and treat sewage from one or more dwellings, buildings, or structures and discharge the resulting effluent to a soil dispersal system on property owned by the individual or entity. These systems typically consist of a septic tank and subsurface sewage disposal system.
performance audit	An audit that provides findings or conclusions based on an evaluation of sufficient, appropriate evidence against criteria. Performance audits provide objective analysis to assist management and those charged with governance and oversight in using the information to improve program performance and



operations, reduce costs, facilitate decision making by parties with responsibility to oversee or initiate corrective action, and contribute to public accountability.

public swimming pool	An artificial body of water used collectively by a number of individuals for swimming, wading, recreation, or instruction and includes related equipment, structures, areas, and enclosures intended for the use of individuals using or operating the swimming pool, such as equipment, dressing, locker, shower, and toilet rooms. Public swimming pools include those that are for parks, schools, motels, camps, resorts, apartments, clubs, hotels, mobile home parks, subdivisions, and waterparks.
receiving facility	A structure designed to receive septage waste for treatment at a wastewater treatment plant or at a research, development, and demonstration project authorized to accept septage waste.
reportable condition	A matter that, in the auditor's judgment, is less severe than a material condition and falls within any of the following categories: an opportunity for improvement within the context of the audit objectives; a deficiency in internal control that is significant within the context of the audit objectives; all instances of fraud; illegal acts unless they are inconsequential within the context of the audit objectives; significant violations of provisions of contracts or grant agreements; and significant abuse that has occurred or is likely to have occurred.
septage waste	The fluid mixture of untreated and partially treated sewage solids, liquids, and sludge of human or domestic origin that is removed from a wastewater system. Septage waste consists only of food establishment septage, domestic septage, domestic treatment plant septage, or sanitary sewer cleanout septage, or any combination of these.
septage waste vehicle	A self-propelled or towed vehicle that includes a tank used to transport septage waste.
soil amendment	Elements added to the soil, such as natural fertilizer, peat moss, manure, or chemical fertilizer, to improve its capacity to support plant life.
temporary campground	A campground used on a short-term basis of not more than four weeks.





