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GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
LANSING



DAN WYANT
DIRECTOR

VIA E-MAIL

TO: Senate Appropriations Subcommittee on Environmental Quality Members
House Appropriations Subcommittee on Environmental Quality Members
Ellen Jeffries, Director, Senate Fiscal Agency
Mary Ann Cleary, Director, House Fiscal Agency
John Nixon, Director, State Budget Office

FROM: *JMK* James M. Kasprzak, Chief, Administration Division

DATE: June 29, 2012

SUBJECT: Report on the Implementation of the Solid Waste Policy (Policy) and Solid Waste Management Program (SWMP) Funding

In accordance with Section 601 of Article VII of the fiscal year 2011-2012 Appropriations Act, 2011 PA 63, the Department of Environmental Quality (DEQ) submits the attached executive summary and report.

This report should be viewed as a collaborative first step toward ensuring Michigan has a stable funding mechanism for the DEQ's SWMP, as well as progressing toward implementation of Michigan's Policy.

If you need further information, please contact Elizabeth Browne, Assistant Division Chief, Resource Management Division, at 517-373-6947; or you may contact me at 517-241-7427.

Attachments

cc/att: Dennis Muchmore, Governor's Office
Dick Posthumus, Governor's Office
Jacques McNeely, State Budget Office
Jennifer Harrison, State Budget Office
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EXECUTIVE SUMMARY

State of Michigan Solid Waste Management Program and Policy Implementation: Funding Report



Rick Snyder, Governor
Dan Wyant, Director

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June 29, 2012

EXECUTIVE SUMMARY

State of Michigan Solid Waste Management Program and Policy Implementation: Funding Report

Pursuant to its charge, the Department of Environmental Quality (DEQ) is required under Section 601 of Article VII of the fiscal year (FY) 2011-2012 Appropriations Act, 2011 PA 63, to report to the Legislature by June 30, 2012, on the implementation of the State's Solid Waste Policy (Policy). The DEQ created the Solid Waste Funding Workgroup (SWFW) to assist with the development of that report.

The DEQ was charged with developing a report that addresses implementation of the State's Policy. At a minimum, the report is required to do both of the following:

- Identify options for long-term funding for the Solid Waste Management Program (SWMP). For each option, the report shall take into account the extent to which additional activities or materials, or both, such as recycling, composting, and beneficial reuse would impact the long-term funding of the SWMP.
- Assess the feasibility of contracting out landfill inspections.

The SWFW met fourteen times since September 9, 2011. Additionally, a subcommittee was formed to evaluate the feasibility of contracting out landfill inspections.

The list of SWFW participants, meeting summaries and materials, and background information are posted on the Internet and can be found by navigating to <http://www.michigan.gov/deq> (Click on "Waste," "Solid Waste," and under "Information," click on "Solid Waste Funding Workgroup"). The meeting notes provide a summary of general conversations and meeting dialog. Formal minutes were not kept.

The invitations to participate on the SWFW spanned the state of Michigan geographically and represented diverse interests including business, government, and environmental organizations. The membership included all sectors of the waste utilization network, including collection, recycling, processing, manufacturing, and disposal. The SWFW is comprised of 16 members representing local governments and regions, local public health agencies, environmental associations, recyclers, waste authorities, manufacturers, reuse stores, incinerators, landfills, and DEQ staff for support.

The key findings and recommendations supported by the SWFW are:

- The current SWMP funding mechanism, the 12 cents per cubic yard disposal surcharge, is not sustainable because it relies on a continually declining revenue stream. Disposal volumes on which the surcharge is based are declining in the short term because of State economic conditions and over the long term due to waste minimization and beneficial reuse and recycling efforts.
- The SWMP and implementation of the State Policy should be funded with a stable, equitable, broad-based, long-term funding mechanism. The following

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long-term funding mechanism approaches should be considered, in order of preference:

- Sustainability fee (transaction fee)
 - Deposit law amendments (half-back deposit)
 - Dedicated general income tax or sales tax increase
 - General Fund appropriation
-
- The current SWMP has undergone significant reductions in recent years because of inadequate funding levels; reducing it to the SWMP's lowest staffing level last year (2011) at 26.4 FTEs. The 42 FTEs that were funded before the SWMP reductions were made in 2010 were inadequate to perform all of the statutory requirements of the SWMP. The 30 FTEs currently funded are not able to fulfill the duties of the core SWMP.
 - The DEQ presented information to support that the minimum amount necessary in 2014 dollars for the SWMP to implement its responsibilities as outlined in the Policy is \$7.4 million, which will fund 47.3 FTEs. The SWFW does not necessarily support or dispute this assumption.
 - As noted above, the surcharge is an inadequate funding mechanism for the SWMP because it relies on a declining revenue stream and because its revenues, now gathered exclusively from solid waste landfill fees, may only be spent on certain landfill-related activities under Section 11550(4)(a)-(k) of Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. While the surcharge is clearly an inadequate long-term funding mechanism, it is the most established funding mechanism to fill the gap for short-term funding until long-term funding can be secured. Increasing the amount of the surcharge on a per yard basis, together with expanding the reach of the surcharge to include other solid waste facilities, such as recycling centers, provides a mechanism for short-term (gap) funding. This will require amendment of Section 11550 of Part 115, to both increase the surcharge and to amend the list of regulatory activities relevant to the new revenue sources. It should be emphasized, however, that the surcharge is a user fee, and as such, other sources of revenue should also be sought to fund those regulatory functions of the SWMP that are not directly relevant to the users subject to the surcharge.
 - In addition to the cost to have an SWMP at the DEQ, the total estimated cost to fully implement the Policy is approximately \$75 million annually, almost entirely provided to local governments, businesses, and other waste utilization service providers.

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- The SWFW found that contracting out landfill inspections would not provide budgetary relief and would jeopardize the integrity of environmental oversight and accountability built into the system and, therefore, should not be supported.

This report should be viewed as a collaborative first step toward ensuring Michigan has a stable funding mechanism for the DEQ's SWMP, as well as progressing toward implementation of Michigan's Policy. This report responds to the request from the Legislature to evaluate and provide direction for solid waste management in the State of Michigan. Considerable time and deliberation was given to identifying means to advance implementation of the Policy. These efforts were coupled with the more urgent priority of identifying options to fund the statutory requirements of the SWMP.



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I. Introduction

Section 601 of Article VII of the fiscal year (FY) 2011-2012 Appropriations Act, 2011 PA 63, required the Department of Environmental Quality (DEQ) to report to the House and Senate Appropriations Subcommittees on Environmental Quality, the State Budget Director, and the House and Senate Fiscal Agencies by June 30, 2012, on the implementation of the Solid Waste Policy (Policy).

The DEQ was charged with developing a report that addresses implementation of the State's Policy. At a minimum, this report is required to do both of the following:

- Identify options for long-term funding for the Solid Waste Management Program (SWMP). For each option, the report shall take into account the extent to which additional activities or materials, or both, such as recycling, composting, and beneficial reuse would impact the long-term funding of the SWMP.
- Assess the feasibility of contracting out landfill inspections.

Meeting summaries, materials, and background information are posted on the Internet by navigating to <http://www.michigan.gov/deq> (Click on "Waste," "Solid Waste," and under "Information," click on "Solid Waste Funding Workgroup"). The meeting notes provide a summary of general conversations and meeting dialog. Formal minutes were not kept.

The DEQ created the Solid Waste Funding Workgroup (SWFW) to assist with the development of this report. The SWFW is comprised of 16 members (Appendix A) representing local governments and regions, local public health agencies, environmental associations, recyclers, waste authorities, manufacturers, reuse stores, incinerators, landfills, and DEQ staff for support. Participation on the SWFW spanned the state of Michigan geographically and represented diverse interests including business, government, and environmental organizations. The membership included all sectors of the waste utilization network, including collection, recycling, processing, manufacturing, and disposal.

The SWFW met on September 9, 2011, September 30, 2011, October 21, 2011, November 18, 2011, December 9, 2011, January 6, 2012, January 27, 2012, February 17, 2012, March 9, 2012, April 13, 2012, April 27, 2012, May 18, 2012, June 1, 2012, and June 8, 2012. Additionally, a subcommittee was formed to evaluate the feasibility of contracting out landfill and other facility inspections.

The SWFW used the following approach to address the charge. The stakeholders identified:

- The roles of State government and other stakeholders in implementing the Policy.
- A review of the total amount of funding recommended to implement the Policy.
- Which SWMP activities need to be expanded and which need to be reduced.

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- The cost for the SWMP activities.
- The need for a funding mechanism for the SWMP as well as a funding mechanism for the furtherance of the Policy.

II. Background

Michigan's first comprehensive Policy was developed by the Department of Natural Resources in 1988. The Policy was updated through a stakeholder effort in 2007. This updated Policy is intended to guide the Legislature and State government, as well as counties amending and updating their Solid Waste Management Plan. The overarching Policy statement is:

Michigan recognizes solid waste as a resource that should be managed to promote economic vitality, ecological integrity, and improved quality of life in a way that fosters sustainability.

It was envisioned by previous DEQ Directors and stated clearly in the 2007 revised Policy that the Policy be updated every five years. As proposed laws regulating solid waste have been acted upon, the Policy has been used by the Legislature and stakeholders to guide decision-making.

The updated Policy, as the one before it, does not specifically recommend any funding mechanism to implement the Policy. However, it does address the funding challenges with three recommendations:

- Identify and implement a sustainable and equitable funding mechanism(s) to provide for a minimum level of solid waste management activities identified by the State.
- Develop and encourage the use of effective local funding mechanisms.
- Encourage development of financial and other incentives to promote collaboration.

The DEQ was charged with developing a report that addresses implementation of the State's Policy, requires the identification of options for long-term funding for the SWMP, and assesses contracting landfill inspections.

The SWFW recognized that there is a difference between all of the various activities and stakeholder roles that are identified in the Policy versus the current responsibilities of the DEQ's SWMP. Therefore, the SWFW first discussed the funding required for the DEQ to fulfill its obligations to implement the Policy.

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The DEQ responsibilities for implementing the Policy include:

- Promoting waste utilization;
- Ensuring appropriate disposal capacity;
- Regulating solid waste activities;
- Providing education and outreach; and
- Monitoring, evaluating, and modifying the Policy.

These responsibilities extend beyond the activities that are currently funded and some are not specifically enumerated in Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA). Specifically, Part 115 describes the following activities for which the Staff Account of the Solid Waste Management Fund may be used; however, the SWFW determined that the statutory list will need to be amended to facilitate implementation of the Policy at such time that the revenue source for the program is changed:

- Preparing generally applicable guidance regarding the solid waste permit and license program or its implementation or enforcement.
- Reviewing and acting on any application for a permit or license, permit or license revision, or permit or license renewal, including the cost of public notice and public hearings.
- Performing an advisory analysis under Section 11510(1) of Part 115.
- General administrative costs of running the permit and license program, including permit and license tracking and data entry.
- Inspection of licensed disposal areas and open dumps.
- Implementing and enforcing the conditions of any permit or license.
- Groundwater monitoring audits at disposal areas, which are or have been licensed under this part.
- Reviewing and acting upon corrective action plans for disposal areas, which are or have been licensed under this part.
- Review of certifications of closure.
- Post-closure maintenance and monitoring inspections and review.
- Review of bonds and financial assurance documentation at disposal areas, which are or have been licensed under this part.

The DEQ also has multiple responsibilities that relate to the Policy that extend beyond the SWMP. These programs are alternately funded and, therefore, are not utilizing funds from the Staff Account of the Solid Waste Management Fund.

- Part 169, Scrap Tires, of the NREPA
- Part 173, Electronics, of the NREPA
- Part 111, Hazardous Waste Management, of the NREPA
- Part 31, Water Resources Protection, of the NREPA

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- Part 117, Septage Waste Servicers, of the NREPA
- DEQ's Office of Environmental Assistance programs

Details on these programs can be found in Appendix B.

NOTE: While many DEQ programs may conduct activities that are or could be influenced by the Policy, the SWFW reviewed the primary programs that directly impact solid waste, especially from a recycling or utilization perspective.

The responsibilities of the DEQ's SWMP include the following activities. All but recycling/composting technical assistance, which is paid for through a separate funding source, draw upon the Staff Account of the Solid Waste Management Fund to fund these activities.

- Permits/licenses
- Solid waste planning
- Technical reviews (construction certifications, new cells, and hydrogeologic reviews)
- Recycling/composting (technical assistance)
- Enforcement (escalated)
- Inspections (compliance)
- Complaint response
- Waste approvals (beneficial reuse, inert designations, etc.)
- Outreach
- Solid Waste Advisory Committee
- Policy & rule development
- Internal/external committees
- Remedial Action Plans
- Yard clippings/compost registrations
- Legislative Reports (Annual Solid Waste Landfill Report and Solid Waste Management Fund Report)
- Financial assurance reviews
- Solid Waste Alternatives Program
- Technical support for other divisions
- Solid waste surcharge collection
- Legislative assistance
- Staff training
- Legislative bill analyses
- Environmental monitoring/sampling

The SWMP has limited oversight by the United States Environmental Protection Agency (U.S. EPA) as compared to other DEQ programs. The U.S. EPA makes determinations on the adequacy of State permitting programs for municipal solid waste landfills and requires States to have a Solid Waste Management Plan. The U.S. EPA does not have a permitting program to administer in lieu of the State. The State permitting program and requirements for landfills must meet minimum federal standards.

The core DEQ SWMP consists of the EPA-required program; permitting and licensing of landfills, processing plants, and transfer stations; county solid waste management planning; the beneficial use program (inertness designations and land application); and recycling and composting regulatory and technical assistance. Additional details regarding the funding history of the SWMP can be found in Appendix C.

The Policy differentiates among the roles of businesses, institutions, local governments, individuals, and State government. As the cost of implementing the Policy was

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evaluated by the SWFW, some of the SWFW recommended that the data compiled by the Michigan Recycling Coalition (MRC) in the document "2011 State of Recycling in Michigan: A Way Forward" should be used as a reference. That report may be found at <http://www.michiganrecycles.org>. In addition to the cost to have an SWMP at the DEQ, the total estimated cost to fully implement the Policy, as estimated in 2011, is approximately \$75 million annually, the majority distributed directly at the local governmental level. Funding these activities will implement a statewide program for the following elements of a comprehensive statewide system:

- Measurement and Data Collection
- Education and Technical Assistance
- Community Services and Infrastructure
- Market and Economic Development
- County Planning
- State Policy Administration

The Policy and the SWFW clearly state that funding for the activities above would not be received by DEQ to implement the Policy, but the overwhelming majority would be directed to local governments and private businesses that currently are the leaders in providing waste utilization services at the local level.

The MRC report that cites data from a 2006 study submitted by Public Sector Consultants, Inc. (PSC), indicates the economic benefits of achieving the goals in the Policy include capturing more than 4.3 million tons of resources that are now simply buried in landfills. The immediate raw material value of those resources is estimated to be nearly \$435 million.

In other words, resources that are valued at millions of dollars are buried each year in Michigan and achieving 50 percent utilization would allow many of those resources to be recaptured so that new value-added activity could take place with those resources. According to the PSC study, merely achieving the performance level of other Great Lakes States (30 percent recycling) would produce 7,000 to 13,000 jobs; as much as \$300 million in income, \$3.9 billion in receipts, and as much as \$22 million in additional State tax revenue.

The environmental benefits of achieving the established goal are dramatic. Studies show that using recycled material in place of virgin raw material saves energy and reduces pollution. Recycling the more than 4.3 million tons of resources currently buried each year in Michigan will save more than 42 trillion British thermal units, or the annual energy equivalent of nearly 417,000 homes. Capturing those materials for recycling instead of burying them will also allow a reduction in airborne pollution emissions of more than 122,000 tons and a reduction in waterborne pollution emissions of more than 20,000 tons. In addition, greenhouse gas emissions would be reduced by nearly 2.8 million metric tons of carbon equivalent.

III. Appropriate Size of the SWMP

At the request of the SWFW, the DEQ identified the appropriate number of full-time equivalents (FTEs) and funding necessary to fulfill SWMP responsibilities as they relate to implementing the Policy (beyond maintaining the current SWMP). Given data limitations and difficulty pinpointing the amount of FTE effort necessary to complete each Policy related task, the DEQ came as close as possible to a zero-budget approach to the proposed program design. This was done by surveying staff to identify the percentage of time spent on any given Policy-related activity. This approach enabled the SWFW to see how much time is currently being spent on those activities. In some cases, the SWFW recommended reducing the level of FTEs working on those activities. In other cases, it was recognized that to be able to implement the Policy, additional resources will be necessary.

A description of the proposed FTE level, and commensurate level of funding, can be found in Appendix D. The DEQ presented that the minimum amount necessary in 2014 dollars for the SWMP to implement its responsibilities as outlined in the Policy is \$7.4 million, which will fund 47.3 FTEs. The SWFW does not necessarily support or dispute this amount. The DEQ presented information to demonstrate that this amount would be necessary for the SWMP to implement the program's core responsibilities as they relate to the implementation of the Policy.

IV. Challenges with the Current SWMP Funding Mechanism

The SWFW agreed that the current method of funding the SWMP activities is not sustainable because it relies on a continually declining revenue stream. The Policy promotes waste utilization and has the goal of utilizing 50 percent of the waste stream by 2015. It is possible that a significant portion of waste will be diverted from disposal and, therefore, will not be charged the current 12 cents per cubic yard solid waste surcharge. In fact, based on trends, the DEQ predicts that solid waste disposal will continue to decline at about five percent each year.

Relying solely on the revenue from the solid waste surcharge, as is currently the case, is not sustainable in the long term and results in revenue shortfalls.

Additionally, as waste utilization is encouraged (see the overarching Policy statement in the Background section of this report), the revenue to support that portion of the Policy declines. Furthermore, the collection of a surcharge on solid waste disposal creates an inequitable situation as it does currently, with fees generated only at disposal facilities funding the regulatory programs necessary to encourage waste utilization, recycling, and reuse.

The SWFW recognized that adequately funding the current SWMP to implement the State responsibilities as outlined in the Policy is in the best interest of Michigan citizens and businesses. This can be accomplished by expanding and establishing an equitable

surcharge to all activities/materials receiving benefit for the services provided by the DEQ as required by statute. It is also recognized that a different funding approach will be required to advance the Policy for implementation. It is likely that a phased-in approach to funding the SWMP is necessary. Furthermore, doing nothing to the funding mechanism and simply extending the current level of surcharge are not supported by the SWFW.

V. Funding Options and the Impact of Additional Activities or Materials, or Both, Such as Recycling, Composting, and Beneficial Reuse on These Long-Term Funding Options

The SWFW supports the development of a stable, equitable, broad-based, long-term funding mechanism that will fund the implementation of the Policy and fund the SWMP activities to implement the Policy at a combined level near \$75 million annually. The SWFW submits the following options, in order of preference, to the Legislature:

- Sustainability fee (transaction fee)
- Deposit law amendments (half-back deposit)
- Dedicated general income tax or sales tax increase
- General Fund appropriation

The estimated funding level for each of these options is described in Appendix E. A large increase in the solid waste surcharge was discussed as an option; however, the SWFW recognizes the inherent problems of relying on the solid waste surcharge to fund the SWMP and Policy implementation long term and, therefore, recommends alternative approaches.

The SWFW determined that the half-back deposit law approach would not meet two of the criteria set forth in identifying a stable, equitable, broad-based, long-term funding mechanism. It is neither equitable nor broad-based if it funds the entire SWMP and Policy implementation through revenue generated from container deposits.

A combination of the above funding mechanisms could also be considered.

VI. Contracting Inspections Subcommittee Report

The SWFW Contracting Inspections Subcommittee gathered information from stakeholders and trade organizations in other states. As supported by the SWFW, the subcommittee concluded that contracting out landfill inspections should not be pursued for the following reasons:

- The cost savings, if any, do not outweigh the benefit of having consistent oversight from DEQ staff.

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- Inspections need to be performed by DEQ staff because they are the primary basis of enforcement.
- Training and oversight will still be required by the DEQ.

Contracting out landfill inspections beyond what is currently allowed in Part 115 would not provide budgetary relief and would jeopardize the integrity of environmental oversight and accountability built into the system. The SWFW research did find that reduced inspection frequency, increased use of technology, and self-reporting would be options to consider for improved efficiency, thus providing budgetary relief. For additional detail, the subcommittee report can be found in Appendix F.

VII. Conclusion

This Report is a first step toward ensuring Michigan has a stable funding mechanism for the DEQ's SWMP and resources to further the discussion on moving the Policy into reality. In order to fund both the SWMP and the Policy, a stable, equitable, broad-based funding mechanism is needed. The current method of funding the SWMP does not equally include all who utilize the services of the SWMP, does not fully fund the program, and does not provide resources to implement the Policy. As it is recognized that it will likely take time to implement a broad-based funding mechanism such as those suggested above, in the interim, the current SWMP funding system should continue to be used, with significant modifications. These modifications include the amount of any surcharge, and who must pay the surcharge, to ensure funding is available to support the SWMP until such time that a long-term funding mechanism is enacted. While the surcharge should be updated and expanded to adequately cover the costs incurred in administering the activities, liabilities, and current expenditures that are currently specified in Part 115 [Section 11550(4)(a)-(k)], funds must also be found for the other SWMP activities necessary to implement the Policy.

Michigan's residents, businesses, and all levels of government share a role in creating a world-class system for managing solid waste as envisioned in the Policy. As the future SWMP funding is designed, it will be important for the DEQ to continue to show, with transparency, the value DEQ efforts have for Michigan's citizens and businesses. The resulting funding mechanism will provide stability to the SWMP and funding for implementation of the Policy. More importantly, it will provide for a solid waste management system that creates jobs, saves energy, and conserves natural resources as promoted by Michigan's Policy.

Appendix A

Name	Company Affiliation	Representing	Number of Meetings Organization was Represented
Dan Batts (replacing Tonia Olson)	Michigan Waste Industries Association	Michigan Waste Industries Association	14
James Clift	Michigan Environmental Council	Michigan Environmental Council	1
Michael Csapo	Resource Recovery and Recycling Authority of Southwest Oakland County	Waste Authorities	14
Gary Dawson	Consumers Energy Company	Type III Landfills	11
Geoffrey Donaldson	Metropolitan Planning Commission	Michigan Association of Counties	8
Tom Frazier	Michigan Townships Association	Michigan Townships Association	11
Jason Geer	Michigan Chamber of Commerce	Michigan Chamber of Commerce	8
William Hinz	Allegan County Health Department	MALEHA/MALPH – EH Forum	10
William Lobenherz	Michigan Soft Drink Association	Michigan Recycling Partnership	10
Jason Mancini	Michigan Municipal League	Michigan Municipal League	2
Patty O'Donnell	Northwest Michigan Council of Governments	Michigan Association of Regions	13
Sandy Rosen	Great Lakes Recycling	Michigan Recycling Coalition	11
Roger Simon	Louis Padnos Iron & Metal Company	Institute of Scrap Recycling Industries, Inc.	12
Andy Such	Michigan Manufacturers Association	Michigan Manufacturers Association	7
Randall Slikkers	Goodwill Association of America	Reuse Stores	12
Douglas Wood	Kent County Department of Public Works	Waste to Energy Facilities	12

Appendix B

DEQ Programs that are Influenced by the Solid Waste Policy

Scrap Tire Program

- Regulates transportation, storage, and disposal of scrap tires.
- Provides scrap tire cleanup and market development grants.
- 11 FTEs are allowed to be funded under statute in the Scrap Tire Program.
- Total annual expenditures allowed under statute are approximately \$5 million from the Scrap Tire Regulatory Fund generated by the \$1.50 fee on vehicle title transfers.

Electronics Program

- Registers manufacturers and recyclers of covered electronic devices (TVs, computers, etc.).
- Oversees takeback programs for covered electronic devices.
- 1.3 FTEs are funded in the e-waste takeback program.
- Total annual expenditures are approximately \$225,000 from the Electronic Waste Recycling Fund generated by the annual \$3,000 and \$2,000 fees on electronic manufacturers and recyclers.

Hazardous Waste Program

- Limited overlap with the SWMP for household hazardous waste, conditionally-exempt small quantity generator waste, and universal waste.

Biosolids Program

- Regulates the management of sewage sludge.
- Land application of treated sewage sludge.
- 5 FTEs funded through \$700,000 in annual fees from the sewage sludge land application fee on land-applied biosolids.

DEQ's Office of Environmental Assistance (OEA)

- OEA has 38 FTEs who broadly support pollution prevention (which includes waste reduction and recycling).
- OEA does not have staff that work exclusively on recycling or Policy activities.
- Total annual expenditures on Policy activities are approximately \$100,000 from the Pollution Prevention funds.

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Appendix B

Solid Waste Program

- 42 FTEs before December 2010.
- 26.4 FTEs after December 2010.
 - Enforcement, Inspections/Field Staff, Planning, Licensing/Permitting
 - Management, Support Staff
- 32 FTEs expected by the end of 2012 for a total cost of \$4,960,000 from the Staff Account of the Solid Waste Management Fund funded primarily from the solid waste surcharge.

Appendix C

Solid Waste Management Program Funding

Over the recent years, as the funding for the SWMP diminished, the number of staff gradually reduced to 42 FTEs in 2010. In December of 2010 the SWMP was further reduced to 26.4 FTEs. After the enactment of the current \$0.12 per cubic yard (\$0.36 per ton) surcharge, the SWMP staffing levels gradually increased and are expected to be at 32 by the end of this FY. The current breakdown in the SWMP staff includes 15.6 district staff supervisors, secretaries, field staff (enforcement, permitting, and inspection), 7.5 central program staff (planning, technical assistance, licensing, financial assurance, and permitting), 1.5 FTE charged to waste reduction fee and e-waste, 2.1 enforcement staff, and 1.2 administrative staff (management and administration/budget). It should be noted that Wayne County contributes 1-2 FTE(s) of program support without cost to the DEQ. The number of FTEs does not directly correlate to the number of staff providing program support — for example, prior to December of 2010, the 42 FTEs were spread over 68 staff positions.

Prior to 2003, the SWMP was funded primarily through a General Fund appropriation. When the \$0.07 per cubic yard solid waste surcharge was originally proposed, it was intended to be revenue neutral, thereby just covering the SWMP costs in that year. It was originally calculated by dividing the SWMP costs of \$3.9 million by the total amount of solid waste disposed in 2002, 57 million cubic yards. As waste volumes decreased, and the per-employee costs increased, the SWMP began running a deficit. The deficit was made up by \$3.5 million appropriations from the state Perpetual Care Account Funds in FY 2010 and 2011. That account, which was originally developed to fund landfill cleanups, has been depleted. The solid waste surcharge was increased to \$0.12 per cubic yard for FY 2012 and 2013 and is expected to collect \$4.7 million annually, which is enough to fund 30 FTEs through FY 2013.

The 42 FTEs that were funded before the SWMP reductions were made in 2010 were inadequate to perform all of the statutory requirements in Part 115. Some of the responsibilities that are not being fully addressed include: inspections, the Beneficial Use Program, and solid waste planning. Without an appropriately funded SWMP, further reductions will be necessary.

Appendix D

Summary of Proposed Changes to the Solid Waste Management Program to Better Implement Michigan's Solid Waste Policy

The following list of activities, staffing levels, and funding requirements represent the core SWMP. The number of DEQ staff necessary to perform any activity is an estimation based on the level of work required to perform the task. It should not be mistaken for a specific number of people, but rather represents the total number of work hours spread across a number of employees throughout the State. The funding requirements are calculated by multiplying the number of FTEs by \$155,000. This average amount per FTE includes all costs of an FTE including salary, benefits, as well as travel, computer and IT support, rent, and other related overhead expenses.

The SWFW recognized that the DEQ's role encompasses only a portion of the total activities related to implementing the State's Policy. Likewise, there are activities that the DEQ supports that are not related to the SWMP; however, they do further the Policy. The total funding necessary to implement the following solid waste activities is approximately \$7.4 million, in 2014, annually adjusted for inflation.

- Technical Reviews and Remedial Action Plans (RAPs) – The SWFW recommends a change from the current level of 6.8 FTEs to 9.8 FTEs for a total expense of \$1,519,000 per year.
- Landfill, Transfer Station, and Processing Plant Disposal Area Inspections – Inspections of these facilities are required by statute. The DEQ is not currently able to meet the requirements in Part 115 for inspection frequency. To address the staffing discrepancy, the SWFW recommends reducing the current statutory requirements for inspecting disposal areas and increasing the level of FTEs by 3, from its current level of 5.1 FTEs. The 8.1 FTEs would require \$1,255,500 per year.
- Permits and Licenses – The SWFW does not recommend any FTE change from the current level of 3.1 FTEs; therefore, no additional funds are required to accomplish these activities at the current level of funding of \$480,500 per year.
- Enforcement – Enforcement consists of administrative actions and civil litigation, settlement negotiations, etc., and is necessary to ensure consistent application of, and compliance with, the statute. It ensures a level playing field for those who voluntarily comply. Enforcement staff was reduced in recent years because of retirements and an inability to fund replacements. The SWFW recommends increasing the enforcement staff levels by 1 FTE from 2.9 to 3.9 FTEs for a total expense of \$604,500 per year.
- Internal and External Committees; Tech Support – These activities are not required by statute but enable the DEQ to run more efficiently, provide training and networking opportunities, and provide opportunities for stakeholder input. The

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SWFW does not recommend any changes to the current level of 1.9 FTEs for a total expense of \$294,500 per year.

- Office Staff Support – These activities are not required by statute but are essential activities for running an efficient SWMP. The SWFW does not recommend any changes to the current level of 1.9 FTEs for a total expense of \$294,500 per year.
- Recycling and Composting Activities – Current activities are minimal and focus on composting registration and technical assistance. Currently 1.6 FTEs perform these activities. In an effort to match staffing levels with goals of the State's Policy, the SWFW recommends adding an additional 4 FTEs to increase regulatory presence with utilization activities as well as providing an appropriate level of compliance assistance and work on beneficial use activities. The 5.6 FTEs will result in a total expense of \$868,000 per year.
- Complaint Response – While not statutorily required, it is important that the DEQ respond to complaints regarding activities that the SWMP regulates. The DEQ's current staffing levels limit the DEQ's ability to quickly and adequately respond to complaints. The SWFW recommends an increase of 1 FTE from 1.4 FTEs to 2.4 FTEs for a total expense of \$372,000 per year.
- Financial Assurance and Surcharge Collection – These duties are required by statute and were absorbed into other positions due to recent budget limitations. The SWFW recommends reestablishing that position so that the activities that were reduced in those positions can be performed adequately. Also, if the surcharge is to be collected from other facilities (e.g., recycling and composting facilities) an additional 1 FTE will be required. The SWFW recommends 2.3 FTEs for a total expense of \$356,500 per year.
- Legislative Policy and Rule Development, Legislative Assistance, and Bill Analyses – These activities are important to maintain and ensure Michigan's solid waste laws and rules are kept up to date and are consistent with the Policy. The SWFW does not recommend any FTE change from the current level of 1.2 FTEs; therefore, no additional funds are required to accomplish these activities at the current level of funding of \$186,000 per year.
- Training, Outreach, and Legislative Reports – The SWFW does not recommend any FTE change from the current level of 1.2 FTEs; however, an additional \$75,000 per year is necessary to increase training and provide a minimal level of outreach. Therefore, a total of \$261,000 per year is required to perform these activities.
- Beneficial Use – The SWFW does not recommend any FTE change from the current level of 1.1 FTEs, because the additional workload anticipated will be incorporated into the responsibilities of the additional recycling staff. Therefore, no additional

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funds are required to accomplish these activities at the current level of funding of \$170,500 per year.

- Environmental Sampling – The SWFW does not recommend any FTE change from the current level of 1 FTE; however, an additional \$30,000 per year is necessary to increase sampling efforts. Therefore, a total of \$185,000 per year is required to perform these activities.
- Solid Waste Planning – The DEQ is not currently able to meet the requirements in Part 115 for solid waste planning. The SWFW recommends increasing the level of FTEs by 3, from its current level of 0.8 FTE. The 3.8 FTEs would require \$589,000 per year.

Appendix E

Long-Term Solid Waste Management Program and Solid Waste Policy Funding Mechanism

- Sustainability Fee: (description from the MRC document titled "Sustainability Fee")

The Sustainability Fee is a concept that acknowledges the fact that virtually every product, as it is manufactured, distributed, and ultimately consumed, creates waste. It is essential to ensure that this waste is managed properly at the end of its useful life, and indeed, it is our collective responsibility. The Sustainability Fee is an assessment that would be placed on retail transactions with the express purpose of paying for the proper end-of-life management and recycling of the products and packaging purchased through those transactions. Funds generated through the Sustainability Fee would be used to firmly establish a sustainable infrastructure for recycling and other appropriate resource management purposes.

The Sustainability Fee is a flat fee of 2-5 cents that would be assessed on a total retail transaction and does not vary based on the value of the transaction. The fee would be assessed on any purchase over \$2; whether it is a \$20 tie, a \$100 grocery bill, or a \$500 mattress. The concept includes a broad base of goods to which the fee attaches. It recognizes the fact that all consumer goods generate waste in their manufacture and use and keeps the fee as low as possible for all involved. Items can be exempted in order to recognize already established public policy considerations or to recognize the complications involved in assessment. For example, exempt items could include: utilities, prescription drugs, fuels, business-to-business transactions, vended products, and services. Recognizing potential collection and assessment complications, retail locations with a minimal number of transactions per year could be exempted from the obligation to assess and collect the fee, accommodating the difficulties that could be encountered by small, seasonal, and start-up businesses. The cash register systems of larger retailers are well suited for either a relatively simple programming change or a look up key to ease the assessment and collection process. Remittance could simply be accomplished along with the filing of other State submissions.

The Sustainability Fee has several positive attributes:

- It has a direct nexus to the purchase and use of goods that create waste and assigns the cost of properly managing that waste generally across the consuming public.
- The approach does not create a disproportional cost burden to any one particular group or entity. It can be passed on to consumers (as are all taxes and fees) without harming local governments, businesses, or other organizations.
- Retailers that collect the fee can use existing administrative infrastructure and be compensated for their additional administrative burden.
- It would raise revenue from the consumptive behavior of visitors to Michigan without adversely affecting in-state spending by such visitors.

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– Previous public opinion polling has shown that the approach is viewed positively. Estimates on the total number of eligible transactions upon which the Sustainability Fee would be placed vary. Further research is necessary and underway. At this time, it is estimated that a fee of \$.01 per transaction would generate between \$22 million and \$42 million annually. The estimated annual cost per consumer for each penny of the fee is between \$3 and \$6. Further research will allow that figure to be better established and help guide setting the rate at a level that will allow the activities advocated by the MRC to be accomplished.

- Redesign Beverage Container Deposit Law into a Half-Back Deposit System: (description from the Container Recycling Institute's <http://www.bottlebill.org>)

As an example, under Nova Scotia's half-back system, deposits are paid on all containers. While deposits are refunded in full for refillable containers, only half is refunded for non-refillable containers. The province is divided into seven regions, run by regional coordinators, to facilitate recycling efforts. Revenue is used to fund local comprehensive recycling programs. If a similar system is implemented in Michigan, it would be expected to generate approximately \$200 million per year.

- Dedicated General Income Tax or Sales Tax Increase:

An increase of the income tax or sales tax to create a dedicated fund for the SWMP and implementation of the Policy.

- General Fund Appropriation:

Funds appropriated from the General Fund for the SWMP and implementation of the Policy.

Appendix F

SWFW Contracting Inspections Subcommittee Report

The SWFW recommends no change to the performance of landfill inspections by DEQ staff or a health officer or other authorized representative of a certified health department as currently provided for in Section 11502(6) of Part 115. Health officer means a full-time administrative officer of a certified city, county, or district department of health as defined in Section 11504(1) of Part 115.

This recommendation is based on a survey of the industry and environmental consultants, discussion with DEQ staff, discussion with the SWFW, and review of inspection programs in other states.

Based on this research, it appears that Massachusetts is the only state to authorize contracted services for landfill inspections.

The minimal potential cost savings, if any, that may be gained from contracting out landfill inspections are offset by the value of consistent oversight from staff with direct knowledge of landfill-specific construction permit and operating license requirements and frequent contact with landfill facilities.

There are significant challenges and process concerns related to contracting landfill inspections beyond what are currently allowed in Part 115. For example, the results of inspections may become the basis for enforcement or legal action or may be disputed by the licensee or a third party. Moreover, training, oversight, and review by DEQ staff would still be required.

Contracting out landfills inspections beyond what is currently allowed in Part 115 would not provide budgetary relief and would jeopardize the integrity of environmental oversight and accountability built into the system. The SWFW Contracting Inspections Subcommittee research did find that reduced inspection frequency, increased use of technology, and self-reporting would be options to consider for improved efficiency, thus providing budgetary relief.