

STATE OF MICHIGAN



JOHN ENGLER, Governor

**DEPARTMENT OF ENVIRONMENTAL QUALITY**

*"Better Service for a Better Environment"*

HOLLISTER BUILDING, PO BOX 30473, LANSING MI 48909-7973

INTERNET: [www.deq.state.mi.us](http://www.deq.state.mi.us)

RUSSELL J. HARDING, Director

February 9, 2001

Mr. David J. Domas, Chairperson  
Livingston County Board of Commissioners  
304 East Grand River Avenue  
Howell, Michigan 48843

Dear Mr. Domas:

The Department of Environmental Quality (DEQ) received the locally approved update to the Livingston County Solid Waste Management Plan (Plan) on August 30, 2000. Except for the items indicated below, the Plan is approvable. As outlined in the October 17, 2000 letter to Mr. John P. Hanifan, Solid Waste Management Coordinator, Livingston County Solid Waste Coordination Department, from Ms. Lynn Dumroese, DEQ, Waste Management Division, and as confirmed by Livingston County Board of Commissioners' Resolution Number 1100-320, as transmitted from you on November 20, 2000, to Ms. Dumroese, the DEQ makes the following modifications to the Plan:

On page [III-39](#) and page [III-53](#), the Plan states Type II Sanitary Landfills, Type III Sanitary Landfills, and Municipal Solid Waste Incinerators are not authorized to be sited; however, there is a conflict with this statement because the Plan provides a means for siting these facilities in Appendix E. Livingston County (County) does not intend on siting any of these facilities because the County has sufficient capacity for the planning period; however, in order to reflect the County's intent, the following sentence is added to this section:

The County may refuse to utilize its siting mechanism for Type II Landfills, Type III Landfills, and Municipal Solid Waste Incinerators if the County can demonstrate it has at least 66 months of available capacity in accordance with Section 11537a of Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451).

With this modification, the following additional items are also modified in [Appendix E](#):

- [Page E-1](#), the first paragraph states, "All landfill proposals are then subject to the following siting criteria." The information that follows

this sentence are not siting criteria, but, rather, the requirements for an administratively complete application. In order to clarify that items A-J are not siting criteria, this sentence shall state, "All landfill proposals are then subject to the siting criteria contained in Section E-2."

- [Page E-4](#), item number 1 in the Landfill Siting Criteria section discusses the opportunity for the County to refuse siting of a facility as long as 66 months of available capacity has been established. As written, the requirement to have 66 months of disposal capacity is a siting criterion. As previously mentioned, Section 11537a of Part 115 states, "If any county is able to demonstrate to the department that it has at least 66 months of available capacity, that county may refuse to utilize its siting mechanism until the county is no longer able to demonstrate 66 months of capacity or..." The decision is to refuse the use of the siting mechanism, which means this decision cannot be part of the siting mechanism itself; therefore, item number 1 is deleted from the siting criteria.
- [Page E-5](#), the first sentence in criterion number 5 states wellhead protection areas are "defined" by the DEQ. The DEQ approves wellhead protection areas; therefore, the term "approved by" shall replace the term "defined by." Additionally, this criterion is very general in defining a wellhead protection area. In order to alleviate any discrepancy, the definition of a wellhead protection area as written in the Plan is deleted.
- [Page E-6](#), criterion number 11 states the developer must include a signed statement agreeing to provide appropriate bonding to the road agency. Although the criterion requires the developer to submit a signed statement, the term "appropriate" leaves room for interpretation. In order to alleviate any discrepancy, the term "appropriate" is deleted from this sentence.
- [Page E-7](#), the question associated with criterion number 16 states, "Is specific documentation included?" The criterion designates which zoning areas are acceptable for the location of a landfill and does not ask for documentation to be provided. The question should reflect the requirement of the criterion; therefore, the question is changed to state, "Is the site proposed in one of the approvable zoning classifications as outlined above?"
- [Page E-7](#), the question corresponding to criterion number 17 states, "Is specific documentation included?" Once again, the question should reflect the criterion. As written, this criterion is whether or not the proposal is located on land enrolled under Part 361, Farmland

and Open Space Preservation, of Act 451. The question is changed to read, "Is the proposal located on land enrolled under Part 361?"

- [Page E-8](#), criterion number 24 states the Michigan Department of Health will provide a written demonstration that a contamination situation exists. There is no Michigan Department of Health; therefore, the Plan does not assign a party responsible for making this determination. In order to make this criterion objective and measurable, the County identified the specific parties who are responsible for making the determination. This sentence now reads, "Upon determination by the Livingston County Department of Environmental Health, Livingston County Drain Commissioner, or the Department of Environmental Quality..."
- [Page E-12](#), item number 2 and item number 3 state, "The developer may choose to provide site specific hydrogeological data which indicates that the upper most aquifer is not in direct contact with the aquifer supplying the public well(s)." Item number 2 states the developer will receive 100 points for submitting this data; however, item number 3 states the developer will only receive 80 points. The County's intent was for the developer to receive 100 points if the developer chooses to provide this site specific data. In order to alleviate any discrepancy regarding the awarded point value, this sentence is deleted from item number 3. Reference to the number of points awarded regarding this criterion is reiterated on page E-13. For the reasons outlined above, the second paragraph in item number 3 is also deleted from the Plan.

[On page III-40](#), the first paragraph states, "If Livingston County has more than 10 years of disposal capacity available for all waste in the County, no proposed solid waste landfill or incinerator will be sited or found consistent with this plan." Section 11537a of Part 115 of Act 451 allows the County to not use the siting mechanism as long as the County can demonstrate it has at least 66 months of available capacity; however, if the Plan sets the threshold at ten years, the siting process will be operable at that threshold instead of 66 months. The County did not intend to set the threshold at ten years; therefore, the reference to ten years of disposal capacity is replaced with 66 months. This comment also applies to step number 2 on page [III-43](#) and the first paragraph on page [III-53](#).

On [page III-54](#), criterion number 1 identifies specifications for transfer stations regarding collection and storage of waste. As written, there is room for interpretation should the County evaluate the material submitted. The County intended on requiring the developer to submit information regarding the specifications; however, the County did not intend on evaluating the information. In order to clarify the County's intent, criterion 1 shall read as follows:

The developer shall submit data that indicates the proposed collection, storage, and processes for the removal of liquid waste resulting from the operation of the facility will be contained in a building. The developer shall also submit information indicating floors will be sealed and sloped away from the entrance to prevent the unauthorized discharge of liquids to groundwater, and collection systems shall be double contained.

The question for criterion number 1 is also changed to state, "Has the developer submitted the above information?" These modifications also apply to [criterion number 1 on page III-57](#).

On [page III-55](#), the question associated with item number 9 states, "Does the proposal include staging and parking areas as specified above?" As written, there is room for interpretation regarding how much staging and parking space will be needed in order to satisfy this criterion. Section 11538 (3) of Part 115 of Act 451 states siting criteria cannot be subject to interpretation or discretionary acts and, if met by an applicant, will guarantee a finding of consistency with the Plan. In order to make this criterion objective and measurable, the requirement shall be the submittal of a signed statement that indicates the developer agrees to provide staging and parking areas such that access roads remain free of waiting vehicles. In addition, the question associated with item number 9 is changed to state, "Has the signed statement been submitted that indicates the developer's willingness to provide staging and parking areas as specified above?" This comment also applies to criterion number 9 on page [III-58](#) and [criterion number 14 on page E-6](#).

On [page III-55](#), the question associated with criterion number 11 states, "Is the site proposed in a 100 year flood plain?" The Plan states a proposal must receive a "yes" response for all of the questions associated with the siting criteria in order to be found consistent with the Plan. As written, this question does not reflect the requirement of the criterion and would result in a proposal receiving a "no" if it is not located in a 100-year flood plain. The question is modified to read, "Does the proposal specify the facility is not in a 100-year flood plain?"

On [page III-64](#), item number 8 in the Local Ordinances section, as written, provides overly broad authority for adoption and enforcement of local regulations and is not approvable. Section 11538(8) of Part 115 of Act 451 preempts enforcement of all local regulation of disposal area location, development, and operation except to the degree approved by the DEQ as part of the Plan. Item [number 8](#) in the Local Ordinances section is deleted from the Plan.

With these modifications, the County's updated Plan is hereby approved, and the County now assumes responsibility for the enforcement and implementation of this Plan. Please ensure that a copy of this letter is included with copies of the approved Plan distributed by the County.

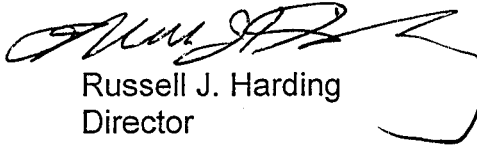


By approving the Plan with modifications, the DEQ has determined that it complies with the provisions of Part 115 of Act 451 and the Part 115 administrative rules concerning the required content of solid waste management plans. Specifically, the DEQ has determined that the Plan identifies the enforceable mechanisms that authorize the state, a county, a municipality, or a person to take legal action to guarantee compliance with the Plan, as required by Part 115. The Plan is enforceable, however, only to the extent the County properly implements these enforceable mechanisms under applicable enabling legislation. The Plan itself does not serve as such underlying enabling authority, and DEQ approval of the Plan neither restricts nor expands County authority to implement these enforceable mechanisms.

The Plan may also contain other provisions that are neither required nor expressly authorized for inclusion in a solid waste management plan. The DEQ approval of the Plan does not extend to any such provisions. Under Part 115 of Act 451, the DEQ has no statutory authority to determine whether such provisions have any force or effect.

The DEQ applauds your efforts and commitment in addressing the solid waste management issues in Livingston County. If you have any questions, please contact Ms. Joan Peck, Chief, Solid Waste Program Section, at 517-335-3383.

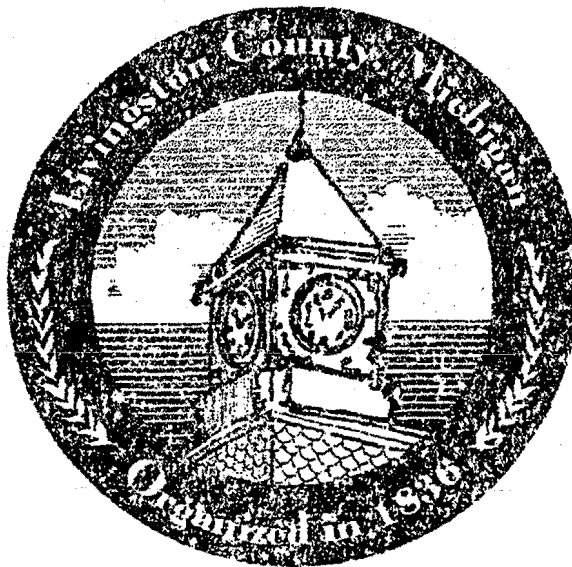
Sincerely,



Russell J. Harding  
Director  
517-373-7917

cc: Staff of 26<sup>th</sup> Senate District  
Representative Judith L. Scranton  
Representative Paul N. DeWeese  
Mr. Arthur R. Nash Jr., Deputy Director, DEQ  
Mr. Timothy R. Sowton, Legislative Liaison, DEQ  
Mr. Jim Sygo, DEQ  
Ms. Joan Peck, DEQ  
Mr. Seth Phillips, DEQ - Shiawassee  
Ms. Lynn Dumroese, DEQ  
Livingston County File

LIVINGSTON COUNTY  
SOLID WASTE MANAGEMENT PLAN  
FIVE YEAR UPDATE  
(1998-2002)





## LIVINGSTON COUNTY, MICHIGAN

November 20, 2000

Ms. Lynn Dumroese  
Waste Management Division  
Michigan Department of Environmental Quality (MDEQ)  
P.O. Box 30241  
Lansing, Michigan 48909

**Subject: Livingston County Solid Waste Management Plan - Approval Request**

Dear Ms. Dumroese;

In response to your letter dated October 17, 2000, the Livingston County Board of Commissioners respectfully requests the Department of Environmental Quality (DEQ) to approve the Livingston County Solid Waste Management Plan with the modifications recommended in your letter. Attached is an approved resolution of the Livingston County Board of Commissioners stating concurrence with the recommended changes and requesting plan approval.

It is our understanding that the modifications to the plan, based on your October 17, 2000 letter would be as follows:

On Page III-39 and III-59 the Plan would specify that "...the County may refuse to utilize its siting mechanism for Type II landfills, Type III landfills, and Municipal Solid Waste Incinerators if the County can demonstrate it has at least 66 months of capacity in accordance with Section 11537a of Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended."

Page E-1, the sentence "All landfill proposals are then subject to the following siting criteria." would be modified to read "All landfill proposals are then subject to the siting criteria in Section E-2".

Page E-4, item number 1 would be deleted.

Page E-5, the definition of a wellhead area as written in the plan would be deleted.

Page E-6, criterion number 11, the word "appropriate" would be deleted.

Page E-7, the question associated with criterion number 16 would read  
"Is the site proposed in one of the approvable zoning classifications as outlined above?"

Page E-7, the question corresponding to criterion number 17 would be changed to read:  
"Is the proposal located on land enrolled under Part 361?"

Page E-8, criterion number 24 would be changed to read: "Upon determination by the

November 20, 2000

Livingston County Department of Environmental Health, Livingston County Drain Commissioner, or the Department of Environmental Quality..."

Page E-12, in items number 2 and 3, the second paragraph would be deleted.

Page III-40 the first paragraph including the reference to 10 years of capacity as a siting threshold would be changed to 66 months. In addition, other references to 10 years of capacity on pages III-43, step number 2 and page III-53, paragraph two would be changed to 66 months.

Page III-54, criterion 1 shall read as follows:

The developer shall submit data which indicates the proposed collection, storage, and processes for the removal of liquid waste resulting from the operation of the facility will be contained in a building. The developer shall also submit information indicating floors will be sealed and sloped away from the entrance to prevent the unauthorized discharge of liquids to groundwater, and collection systems shall be double contained.

The question for criterion number 1 shall also read: "Has the developer submitted the above information?" These modifications also apply to criterion number 1 on page III-57.


Page III-55 the question associated with criterion number 9 shall state "Has the signed statement been submitted which indicates the developers willingness to provide staging and parking areas as specified above?" This change shall also apply to criterion number 9 on page III-58 and criterion number 14 on page E-6.

Page III-55 the question associated with criterion number 11 shall state "Does the proposal specify the facility is not in a 100 year flood plain?"

Page III-64, item number 8 shall be deleted.

Livingston County looks forward to the Department of Environmental Quality's approval of its Solid Waste Management Plan. Please don't hesitate to contact Livingston County if you have any questions.

Sincerely,



David J. Domas,  
Chairperson  
Livingston County Board of Commissioners

Enclosure



RESOLUTION

NO: 1100-320

LIVINGSTON COUNTY

DATE: November 20, 2000

**RESOLUTION AUTHORIZING DEQ TO MAKE MODIFICATIONS TO SOLID WASTE  
MANAGEMENT PLAN UPDATE - DRAIN COMMISSIONER**

**WHEREAS,** the Michigan Department of Environmental Quality (MDEQ) reviewed the locally approved Livingston County Solid Waste Plan; and

**WHEREAS,** the MDEQ supplied comments in a letter dated October 17, 2000 to the Solid Waste Coordinator about the plan that needed addressing before the plan could be approved; and

**WHEREAS,** the Solid Waste Coordinator reviewed the comments and is recommending the Board of Commissioners concur with the MDEQ recommended modifications and allow the MDEQ to administratively make the modifications referred to in the letter date October 17, 2000; and

**WHEREAS,** making the modifications will have no significant impact on the original intent of the Locally Approved Plan and will allow the Livingston County Solid Waste Plan to be approved by the MDEQ

**THEREFORE BE IT RESOLVED** that the Livingston County Board of Commissioners agrees to have the MDEQ include the modifications referred to in the letter dated October 17, 2000, so that the Livingston County Solid Waste Plan can be approved by the DEQ.

**BE IT FURTHER RESOLVED** that the Chairman is authorized to sign the MDEQ response letter dated for inclusion in the Solid Waste Management Plan upon review and approval of civil counsel.

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**MOVED:** Commissioner Rogers

**SUPPORTED:** Commissioner LaBelle

**CARRIED:** 7-0-2 absent

**cc:** Drain Commissioner

CLERK'S CERTIFICATE  
STATE OF MICHIGAN County of Livingston  
I, Margaret M. Dunleavy, Clerk  
of said County and Clerk of the  
44th Circuit Court, do hereby certify  
this copy as a correct and true  
record of the original document  
remaining on file in my office.  
Dated and sealed: NOVEMBER 21, 2000.  
Margaret M. Dunleavy, County Clerk

Ann B. Utter, Deputy

WASTE MANAGEMENT DIVISION

NOV 27 2000

**RECEIVED**



# LIVINGSTON COUNTY, MICHIGAN

## Solid Waste Coordination Department

304 E. Grand River Avenue, Howell, MI 48843

Tel (517) 545-9609 Fax (517) 546-6657

email: lcswh@ismmi.net

John P. Hanifan  
Coordinator

### MEMORANDUM

**TO:** Lynn Dumroese,  
Waste Management Division  
Department of Environmental Quality  
P.O. Box 30241  
Lansing, Michigan 48909

**FROM:** John P. Hanifan   
Livingston County Solid Waste Coordinator

**RE:** Submission of Locally Approved Plan

**DATE:** August 28, 2000

Enclosed is the locally approved Livingston County Solid Waste Management Plan Update. I look forward to receiving the Department of Environmental Quality's approval of Livingston County's Plan. Please don't hesitate to contact me if you have any questions.

Enclosure

**cc:(cover letter only)**

Livingston County Board of Commissioners  
All Livingston County Local Governments  
Livingston County Solid Waste Planning Committee  
Livingston County Solid Waste Management Committee  
Robert Block, Livingston County Administrator

**"REDUCE . . . . REUSE . . . . RECYCLE . . . . RETHINK"**

## 1997 PLAN UPDATE COVER PAGE

The Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), Part 115, Solid Waste Management, and its Administrative Rules, requires that each County have a Solid Waste Management Plan Update (Plan) approved by the Michigan Department of Environmental Quality (DEQ). Section 11539a requires the DEQ to prepare and make available a standardized format for the preparation of these Plan updates. This document is that format. The Plan should be prepared using this format without alteration. Please refer to the document entitled "Guide to Preparing the Solid Waste Management Plan Update" for assistance in completing this Plan format.

DATE SUBMITTED TO THE DEQ: *Locally Approved Plan submitted August 25, 2000*

If this Plan includes more than a single County, list all counties participating in this Plan.

*Not Applicable*

The following lists all the municipalities from outside the County who have requested and have been accepted to be included in the Plan, or municipalities within the County that have been approved to be included in the Plan of another County according to Section 11536 of Part 115 of the NREPA. Resolutions from all involved County boards of commissioners approving the inclusion are included in Appendix E.

*Not Applicable*

### DESIGNATED PLANNING AGENCY PREPARING THIS PLAN UPDATE:

Livingston County Solid Waste Coordination Department  
304 E. Grand River Avenue  
Howell, MI 48843

### CONTACT PERSON:

John P. Hanifan,  
Solid Waste Management Coordinator

### ADDRESS:

Livingston County Solid Waste Coordination Department  
304 E. Grand River Avenue  
Howell, MI 48843

### PHONE:

(517) 545-9609

### FAX:

(517) 546-6657

### E-MAIL:

[lcsw@ismi.net](mailto:lcsw@ismi.net)

CENTRAL REPOSITORY LOCATION(S): Solid Waste Coordination Department, 304 E. Grand River, Howell, MI 48843

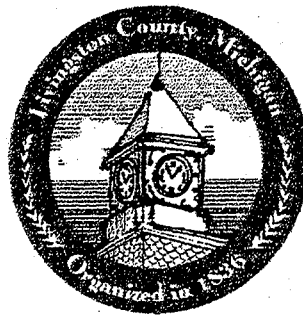


## TABLE OF CONTENTS

EXECUTIVE SUMMARY .....	I- 1
CONCLUSIONS .....	I- 2
SELECTED ALTERNATIVES .....	I- 2
OVERALL VIEW OF THE COUNTY .....	I- 3
INTRODUCTION & GOALS AND OBJECTIVES .....	I- 4
DATABASE .....	II- 1
SOLID WASTE DISPOSAL AREAS .....	II- 2
FACILITY DESCRIPTIONS .....	II- 4
SOLID WASTE COLLECTION & TRANSPORTATION INFRASTRUCTURE .....	II-18
EVALUATION OF DEFICIENCIES & PROBLEMS .....	II-21
DEMOGRAPHICS .....	II-22
LAND DEVELOPMENT .....	II-24
SOLID WASTE MANAGEMENT ALTERNATIVES .....	II-26
SELECTED SOLID WASTE MANAGEMENT SYSTEM .....	III- 1
IMPORT/EXPORT AUTHORIZATIONS .....	III- 2
SOLID WASTE DISPOSAL AREAS .....	III- 6
FACILITY DESCRIPTIONS .....	III- 8
SOLID WASTE COLLECTION & TRANSPORTATION INFRASTRUCTURE .....	III-22
RESOURCE CONSERVATION EFFORTS .....	III-23
WASTE REDUCTION, RECYCLING & COMPOSTING PROGRAMS .....	III-24
EDUCATIONAL AND INFORMATIONAL PROGRAMS .....	III-37
TIMETABLE FOR SELECTED SYSTEM IMPLEMENTATION .....	III-38
SITING PROCEDURE .....	III-39
MANAGEMENT COMPONENT .....	III-60
LOCAL ORDINANCES & REGULATIONS .....	III-63
CAPACITY CERTIFICATION .....	IV-1
APPENDIX A- ADDITIONAL INFORMATION REGARDING THE SELECTED SYSTEM .....	
EVALUATION OF RECYCLING .....	A-1
DETAILED FEATURES OF RECYCLING & COMPOSTING PROGRAMS .....	A-2
COORDINATION EFFORTS .....	A-3
COSTS & FUNDING .....	A-4
EVALUATION SUMMARY OF THE SELECTED SYSTEM .....	A-5
ADVANTAGES & DISADVANTAGES .....	A-7
APPENDIX B- NON-SELECTED SYSTEMS .....	
NON SELECTED SYSTEMS .....	B-1
EVALUATION OF THE NON-SELECTED SYSTEM .....	B-4
ADVANTAGES & DISADVANTAGES .....	B-5
APPENDIX C- PUBLIC PARTICIPATION .....	
PUBLIC PARTICIPATION & APPROVAL .....	C-1
MINUTES FROM PUBLIC MEETING .....	C-9
APPENDIX D- ATTACHMENTS .....	
PLAN IMPLEMENTATION STRATEGY .....	D-2
ATTACHMENTS .....	D-4
APPENDIX E-SITING CRITERIA FOR LANDFILLS .....	E-1

# SECTION I

## EXECUTIVE SUMMARY



## **EXECUTIVE SUMMARY**

**The following summarizes the solid waste management system selected to manage solid waste within the County. In case of conflicting information between the executive summary and the remaining contents of the Plan update, the information provided in the main body of the Plan update found on the following pages will take precedence over the executive summary.**

This Plan has been prepared on behalf of Livingston County and its municipalities under the provisions of Part 115 of Act No. 451 of the Public Acts of 1994, as amended, known as the Natural Resources and Environmental Protection Act. This Plan addresses the solid waste management needs of Livingston County for the five-year planning period and ensures that all non-hazardous waste generated is collected, recovered, processed and disposed of in a manner consistent with state law.

The planning area includes all of the municipalities in Livingston County.

The Plan was developed to meet three primary goals:

### **GOAL 1**

Develop and implement an integrated solid waste management program which protects public health by maximizing environmental and economic benefits.

### **GOAL 2**

Develop and implement mechanisms to control illegal dumping by providing incentives and education to prevent illegal dumping from occurring.

### **GOAL 3**

Build an educated public where citizens are informed about and understand solid waste management issues and concerns.

The current population of Livingston County is estimated at 144,000 people. The population is expected to increase over the next ten years to approximately 180,000. Livingston County is currently generating 385,000 cu/yds of residential, commercial and industrial waste. This figure is expected to increase to 498,000 by the year 2008. Waste projections were based on waste generation rates developed during previous planning periods, actual Livingston County waste hauler data and EPA waste generation factors.

Currently, all waste is exported to neighboring counties that host large, regional landfills. Major waste generation centers in Livingston County include the Grand River Corridor, traveling southeast of the City of Howell, along Grand River Avenue through Genoa Township and into the City of Brighton. This area is the most densely populated and contains the largest commercial and industrial developments in Livingston County. Also, the growing townships of Hamburg, Green Oak and Brighton are significant waste generation centers.

Livingston County is centrally located to most of the major urban areas in Michigan: Wayne County (City of Detroit), Oakland County, Genesee County (City of Flint), Washtenaw County (Cities of Ann Arbor and Ypsilanti) and Ingham County (City of Lansing); and is bisected by major highways: I-96, US-23, and M-59. Therefore, it is a desirable commuter location.

Livingston County has experienced an increase in the number of communities involved in recycling and

waste reduction programs since the 1992 Plan Update. Five communities have a waste hauling contract which includes curbside recycling. The remaining communities rely on subscription services for curbside waste collection. Twelve communities conduct clean-up days collecting white goods, tires, bulk items and scrap metal.

The Livingston County Solid Waste Coordination Department conducted a pilot program for Household Hazardous Waste Collection in 1998. This program is funded by the Livingston County Board of Commissioners and will continue in 1999.

## **CONCLUSIONS**

This plan concludes that the existing solid waste management system is a cost-effective and environmentally sound system that serves the needs of Livingston County's residents, businesses and industry. The plan did identify that an increase in resource recovery and waste reduction can further increase the economic and environmental benefits of the selected system. As communities continue to grow, it is anticipated that more communities will opt for contracted waste collection services, therefore increasing the number and kind of recycling and/or composting programs in Livingston County.

## **SELECTED ALTERNATIVE**

The Selected Alternative consists of private collection of residential, commercial and industrial wastes through contracts with municipalities, businesses or directly with individual county residences. Private companies also provide recycling and/or composting services in the same manner.

Livingston County will maintain its current system of waste management, while attempting to increase waste reduction and resource recovery efforts.

Waste that is not recovered or diverted is disposed of in licensed sanitary landfills in adjoining counties where significant landfill capacity exists. Solid wastes disposal facilities in Southeast and Mid-Michigan have sufficient regional capacity. Consequently, many counties are expanding their allowable import/export of solid waste. The opening of the marketplace and facility expansions will allow Livingston County to exceed the capacity requirements of Act 451 for the current five year planning period and beyond.



OVERALL VIEW OF THE COUNTY (attach additional pages as necessary)

Township or Municipality Name	Population	% Land Use		% of Economic Base*				
		Rural	Urban	Ag	For	Ind	Com	Other
<u>Brighton, City of</u>	<u>6,690</u>	<u>55</u>	<u>45</u>	<u>0</u>	<u>0</u>	<u>9</u>	<u>52</u>	<u>39</u>
<u>Brighton Township</u>	<u>15,689</u>	<u>63</u>	<u>37</u>	<u>3</u>	<u>0</u>	<u>25</u>	<u>26</u>	<u>46</u>
<u>Cohoctah Township</u>	<u>3,161</u>	<u>93</u>	<u>7</u>	<u>37</u>	<u>0</u>	<u>8</u>	<u>37</u>	<u>16</u>
<u>Conway Township</u>	<u>2,227</u>	<u>96</u>	<u>4</u>	<u>65</u>	<u>0</u>	<u>9</u>	<u>10</u>	<u>15</u>
<u>Deerfield Township</u>	<u>3,566</u>	<u>93</u>	<u>7</u>	<u>45</u>	<u>0</u>	<u>0</u>	<u>37</u>	<u>18</u>
<u>Fowlerville, Village of</u>	<u>2,734</u>	<u>62</u>	<u>38</u>	<u>1</u>	<u>0</u>	<u>10</u>	<u>40</u>	<u>49</u>
<u>Genoa Township</u>	<u>12,769</u>	<u>78</u>	<u>22</u>	<u>2</u>	<u>0</u>	<u>7</u>	<u>39</u>	<u>52</u>
<u>Green Oak Township</u>	<u>14,000</u>	<u>76</u>	<u>24</u>	<u>1</u>	<u>0</u>	<u>34</u>	<u>25</u>	<u>41</u>
<u>Hamburg Township</u>	<u>16,587</u>	<u>78</u>	<u>22</u>	<u>2</u>	<u>0</u>	<u>41</u>	<u>33</u>	<u>24</u>
<u>Handy Township</u>	<u>3,807</u>	<u>93</u>	<u>7</u>	<u>8</u>	<u>0</u>	<u>30</u>	<u>12</u>	<u>50</u>
<u>Hartland Township</u>	<u>7,926</u>	<u>83</u>	<u>17</u>	<u>9</u>	<u>0</u>	<u>3</u>	<u>28</u>	<u>61</u>
<u>Howell, City of</u>	<u>9,415</u>	<u>50</u>	<u>50</u>	<u>0</u>	<u>0</u>	<u>20</u>	<u>15</u>	<u>65</u>
<u>Howell Township</u>	<u>5,036</u>	<u>85</u>	<u>15</u>	<u>10</u>	<u>0</u>	<u>39</u>	<u>27</u>	<u>25</u>
<u>Iosco Township</u>	<u>2,186</u>	<u>95</u>	<u>5</u>	<u>58</u>	<u>0</u>	<u>6</u>	<u>28</u>	<u>9</u>
<u>Marion Township</u>	<u>5,838</u>	<u>88</u>	<u>12</u>	<u>23</u>	<u>0</u>	<u>13</u>	<u>21</u>	<u>43</u>
<u>Oceola Township</u>	<u>5,812</u>	<u>87</u>	<u>13</u>	<u>33</u>	<u>0</u>	<u>6</u>	<u>26</u>	<u>35</u>
<u>Pinckney, Village</u>	<u>1,694</u>	<u>65</u>	<u>35</u>	<u>0</u>	<u>0</u>	<u>4</u>	<u>66</u>	<u>30</u>
<u>Putnam Township</u>	<u>5,137</u>	<u>90</u>	<u>10</u>	<u>1</u>	<u>0</u>	<u>2</u>	<u>16</u>	<u>81</u>
<u>Tyrone Township</u>	<u>8,002</u>	<u>81</u>	<u>19</u>	<u>50</u>	<u>0</u>	<u>6</u>	<u>20</u>	<u>24</u>
<u>Unadilla Township</u>	<u>3,282</u>	<u>94</u>	<u>6</u>	<u>13</u>	<u>0</u>	<u>9</u>	<u>34</u>	<u>44</u>

\* Ag = Agriculture; For = Forestry; Ind = Industry; Com = Commercial; Oth = All Other Economic Bases Additional listing, if necessary, are listed on an attached page.

Source: Southeast Michigan Council of Governments (SEMCOG); Livingston County Dept of Planning

## **EXECUTIVE SUMMARY**

### **INTRODUCTION**

#### **GOALS AND OBJECTIVES**

To comply with Part 115 and its requirements, each Plan must be directed toward goals and objectives based on the purposes stated in Part 115, Sections 11538.(1)(a), 11541.(4) and the State Solid Waste Policy adopted pursuant to this Section, and Administrative Rules 711(b)(i) and (ii). At a minimum, the goals must reflect two major purposes of Solid Waste Management Plans:

- (1) To utilize to the maximum extent possible the resources available in Michigan's solid waste stream through source reduction, source separation, and other means of resource recovery and;
- (2) to prevent adverse effects on the public health and the environment resulting from improper solid waste collection, transportation, processing, or disposal, so as to protect the quality of the air, the land, and ground and surface waters.

This Solid Waste Management Plan works toward the following goals through actions designed to meet the objectives described under the respective goals which they support:

#### **GOAL 1**

**Develop and implement an integrated solid waste management program which protects public health by maximizing environmental and economic benefits.**

#### ***OBJECTIVES:***

1. Provide technical assistance to communities choosing waste hauling contracts.
2. Continue County participation and/or coordination of a household hazardous waste collection and education program.
3. Develop a model "Volume-Based" pricing ordinance and encourage local municipalities to adopt it.
4. Encourage the County and local governments to support recycling through policy actions, funding and their own purchasing and waste disposal activities.
5. Encourage community specific pilot start-up programs as a vehicle for starting waste reduction, composting and recycling in the county.
6. Assist the commercial and industrial sector by conducting free and voluntary waste audits and by implementing pollution prevention programs.
7. Encourage and assist communities in participating in Michigan's "Wellhead Protection Program".
8. Develop landfill and facility siting criteria that emphasize issues of local concern such as planning, zoning and land use patterns rather than technical and physical criteria.
9. Continue to fund and support a full-time County Solid Waste Coordinator
10. Continue the roll of the Solid Waste Management Committee.

## **GOAL 2**

**Develop and implement mechanisms to control illegal dumping provide incentives and education to prevent illegal dumping from occurring.**

### ***OBJECTIVES:***

1. Continue to provide technical and financial support for communities that host large-item drop-offs and tire collections.
2. Develop a county-wide illegal dumping task force consisting of community leaders, public and private sector and law enforcement officials.
3. Improve the enforcement of illegal dumping by developing model ordinances which provide for fines and other penalties and encourage local communities to adopt and enforce it.

## **GOAL 3**

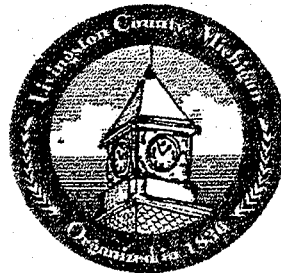
**Build an educated public where citizens are informed about and understand solid waste management issues and concerns.**

### ***OBJECTIVES***

1. Encourage the County to maintain and expand a comprehensive education and information campaign to improve public awareness of solid waste management and household hazardous waste.
2. Expand the educational campaign efforts of the Solid Waste Coordination Department through a comprehensive waste reduction guide, radio, newspapers, flyers and other media.
3. Encourage backyard composting by developing a comprehensive training and education program through the Master Composters program.
4. Educate residents about the existing composting programs available in Livingston County.

# SECTION II

## DATABASE





Identification of sources of waste generation within the county, total quantity of solid waste generated to be disposed, and sources of information. (Attach additional pages as necessary)

Residential, commercial and industrial waste projections were based on waste generation rates developed during previous planning periods, actual Livingston County waste hauler data and EPA waste generation factors. Wastewater treatment sludges are not included because they are land applied in Livingston County.

**Table II-1**  
**Livingston County**  
**Solid Waste Disposal Volume Estimates**

WASTE TYPE	CURRENT ANNUAL VOLUME (yds <sup>3</sup> )  (1998)	5 YEAR ANNUAL VOLUME (yds <sup>3</sup> )  (2003)	10 YEAR ANNUAL VOLUME (yds <sup>3</sup> )  (2008)
RESIDENTIAL	252,815	286,436	316,249
COMMERCIAL	97,235	118,301	143,520
INDUSTRIAL	34,767	36,649	38,446
<b>TOTAL WASTE GENERATED</b>	<b>384,817</b>	<b>441,386</b>	<b>498,215</b>

Note: 1 ton = 3 cubic yards. Source: MDEQ Plan Format Guidebook, 1997.

Residential waste calculated using a multiplier of 3.2 lbs/person/day (365 days/year)

Commercial waste calculated using a multiplier of 5.76 lbs/employee/day (260 days/year)

Industrial waste calculated using a multiplier of 10.6 lbs per employee per day (260 days/year)

Livingston County does not anticipate major problems associated with managing the solid waste generated within the county. There is a considerable amount of landfill capacity in Southeast and Mid-Michigan. It is anticipated that as Livingston County grows, the number and kind of recycling, composting and resource recovery programs will also grow, helping to offset the increase in population and waste generated.

**TOTAL QUANTITY OF SOLID WASTE GENERATED:**

384,817 ☐ Tons or ☒ Cubic Yards in 1998 (identify unit of time)

**TOTAL QUANTITY OF SOLID WASTE NEEDING DISPOSAL\***

304,885 ☐ Tons or ☒ Cubic Yards in 1998 (identify unit of time)

\*See Page III-23 for resource conservation efforts, equal to 79,932 cubic yards.

## **SOLID WASTE DISPOSAL AREAS**

**Inventory and description of all solid waste disposal areas within the County or to be utilized by the County to meet its disposal needs for the planning period.**

The following is a summary of those licensed solid waste disposal facilities, including transfer stations, processing facilities and landfills that are serving or may serve Livingston County's solid waste disposal needs. For more specific information, please refer to the Facility Description Section.

### **Livingston County Licensed Disposal Facilities**

Two licensed solid waste facilities exist in Livingston County:

**Mister Rubbish Resource Recovery Facility:** The Mister Rubbish Facility is a privately owned and operated material recovery facility and transfer station located in Green Oak Township. The facility processes and transfer residential, commercial, industrial and construction/demolition waste. The facility began operating in 1991. The facility receives approximately 120,000 tons of waste annually from all sources, including 60,000 tons of Livingston County Waste. Waste is then transferred to either Arbor Hills in Washtenaw County or Woodland Meadows in Wayne County.

**Len's Rubbish Material Recovery Facility:** The Len's Rubbish Facility is a privately owned and operated construction and demolition waste processing and transfer facility located in Hamburg Township. The facility is licensed to process and transfer construction and demolition waste only. The facility opened in 1997. The facility receives approximately 20,000 yds<sup>3</sup> of waste per year. Waste is then transferred to Arbor Hills in Washtenaw County.

### **Disposal Facilities utilized in other Counties**

**Washtenaw County:** The Arbor Hills Landfill located in Salem Township is authorized to receive up to 750,000 yds<sup>3</sup> per year of solid waste from Livingston County. This is a 936-acre site with a permitted area of 217 acres. Based on a remaining capacity of 30,500,000 cubic yards, the landfill has 17.6 years of life remaining.

**Shiawassee County:** The Venice Park Landfill located in Venice Township in Shiawassee County is authorized to receive up to 750,000 cubic yards of solid waste per year from Livingston County. This site currently has 2,000,000 cubic yards of capacity pending expansion plans that will increase the capacity an additional 13,000,000 cubic yards. The expansion will increase the life of the facility from 2 years to 25 years.

**Genesee County:** Genesee County is authorized to receive waste from Livingston County. There are two disposal sites in Genesee County which could receive Livingston County waste: 1) Brent Run, with 14,000,000 cubic yards of capacity or 30+ years of life remaining. 2) Citizens' Disposal, with 5,300,000 cubic yards of capacity or 25 years of life remaining.

**Lenawee County:** The Adrian Landfill in Lenawee County is authorized to receive waste from Livingston County. The Adrian Landfill has approximately 1,540,000 cubic yards of permitted airspace and an estimated lifespan of approximately 7 years. An expansion is being proposed that would increase the life span to 23 years.

Oakland County      Oakland County is authorized to receive up to 174,500 cubic yards of solid waste per year. The Eagle Valley Recycle and Disposal Facility landfill currently has 4,700,000 cubic yards or 5.5 years of capacity remaining.

Clinton/Ingham\*      The two landfills in Clinton County are currently authorized to receive up to 20,000 cubic yards of solid waste per year from Livingston County. The Granger Watertown facility has a current capacity of 7,617,000 cubic yards or 32 years of estimated remaining life. The Granger Wood Street landfill has a current capacity of 10,981,000 cubic yards of capacity or 34 years of remaining life.

**\*Because one of the disposal facilities contains property in both Ingham and Clinton, both counties are listed.**

Wayne:      Woodland Meadows in Wayne County is authorized to receive Livingston County Waste. Woodland Meadows has approximately 26,520,800 cubic yards of capacity or 19.8 years of remaining life.

Jackson County:      The McGill Road Landfill has approximately 3,700,000 cubic yards of permitted airspace and an expected lifespan of 15 years. This facility would be available for Livingston County waste, provided a contingency agreement is reached with Jackson County.

Calhoun County:      The C & C Landfill in Calhoun County is authorized to receive Livingston County Waste in the event of a shortfall in capacity at the primary facilities/authorized counties listed above. C&C has approximately 7,600,000 cubic yards of airspace or 7 years of life remaining.

Monroe County:      The Vienna Junction Landfill in Monroe County is authorized to receive Livingston County Waste in the event of a shortfall in capacity at the primary facilities/authorized counties listed above. Vienna Junction has approximately 11,400,000 cubic yards of capacity or 25 years of remaining life.

## FACILITY DESCRIPTIONS

Facility Type: Type II Processing And Transfer

Facility Name: Mister Rubbish Recycling Facility

County: Livingston Location: Town: 1 Range: 6E Section(s): 32

Map identifying location included in Attachment Section: ☒ Yes ☐ No

If facility is an Incinerator or a Transfer Station, list the final disposal site and location for Incinerator ash or Transfer Station wastes : Arbor Hills, Woodland Meadows

☐ Public ☒ Private Owner: Waste Management, Inc

### Operating Status (check)

- ☒ open
- ☐ closed
- ☒ licensed
- ☐ unlicensed
- ☐ construction permit
- ☐ open, but closure
- ☐ pending

### Waste Types Received (check all that apply)

- ☒ residential
- ☒ commercial
- ☒ industrial
- ☒ construction & demolition
- ☐ contaminated soils
- ☐ special wastes \*
- ☐ other: \_\_\_\_\_

\* Explanation of special wastes, including a specific list and/or conditions:

### Site Size:

Total area of facility property: 35 acres

Total area sited for use 12.15 acres

Total area permitted: 12.15 acres

Operating: \_\_\_\_\_ acres

Not excavated: n/a acres

Current capacity: \_\_\_\_\_ ☐ tons or ☐ yds<sup>3</sup>

Estimated lifetime: n/a years

Estimated days open per year: 300 days

Estimated yearly disposal volume: 120,000 ☒ tons or ☐ yds<sup>3</sup>

(if applicable)

Annual energy production:

Landfill gas recovery projects: n/a megawatts

Waste-to-energy incinerators: n/a megawatts

## FACILITY DESCRIPTIONS

Facility Type: Type III Transfer and Processing Facility

Facility Name: Len's Rubbish Material Recovery Facility

County: Livingston Location: Town: 1N Range: 5E Section(s): 25

Map identifying location included in Attachment Section: ☒ Yes ☐ No

If facility is an Incinerator or a Transfer Station, list the final disposal site and location for Incinerator ash or Transfer Station wastes : Arbor Hills

☐ Public ☒ Private Owner: Len's Rubbish

### Operating Status (check)

- ☒ open
- ☐ closed
- ☒ licensed
- ☐ unlicensed
- ☐ construction permit
- ☐ open, but closure
- ☐ pending

### Waste Types Received (check all that apply)

- ☒ residential
- ☒ commercial
- ☒ industrial
- ☒ construction & demolition
- ☐ contaminated soils
- ☐ special wastes \*
- ☐ other: \_\_\_\_\_

\* Explanation of special wastes, including a specific list and/or conditions:

Facility to accept construction material only.

### Site Size:

Total area of facility property: 2 acres

Total area sited for use 2 acres

Total area permitted: 2 acres

Operating: 2 acres

Not excavated: n/a acres

Current capacity: \_\_\_\_\_ ☐ tons or ☐ yds<sup>3</sup>

Estimated lifetime: n/a years

Estimated days open per year: 300 days

Estimated yearly disposal volume: 20,000 ☐ tons or ☒ yds<sup>3</sup>

(if applicable)

Annual energy production:

Landfill gas recovery projects: n/a megawatts

Waste-to-energy incinerators: n/a megawatts

## FACILITY DESCRIPTIONS

Facility Type: Type II Landfill

Facility Name: Arbor Hills Landfill

County: Washtenaw Location: Town: Salem Range:    Section(s): 23

Map identifying location included in Attachment Section: ☒ Yes ☐ No

If facility is an Incinerator or a Transfer Station, list the final disposal site and location for Incinerator ash or Transfer Station wastes : \_\_\_\_\_

☐ Public ☒ Private Owner: BFI Waste Systems of North America, Inc

### Operating Status (check)

- ☒ open
- ☐ closed
- ☒ licensed
- ☐ unlicensed
- ☐ construction permit
- ☐ open, but closure
- ☐ pending

### Waste Types Received (check all that apply)

- ☒ residential
- ☐ commercial
- ☐ industrial
- ☐ construction & demolition
- ☐ contaminated soils
- ☐ special wastes \*
- ☐ other: \_\_\_\_\_

\* Explanation of special wastes, including a specific list and/or conditions:

### Non-Hazardous solid and semi-solid wastes, no hazardous or liquid wastes

#### Site Size:

Total area of facility property:	<u>936</u>	acres
Total area sited for use	<u>356</u>	acres
Total area permitted:	<u>217</u>	acres
Operating:	<u>113</u>	acres
Not excavated:	<u>104</u>	acres

Current capacity: 30,500,000 ☐ tons or ☒ yds<sup>3</sup> Airspace or 61.5 million yds<sup>3</sup> of capacity

Estimated lifetime: 17.6 years

Estimated days open per year: 265 days

Estimated yearly disposal volume: 3,500,000 ☐ tons or ☒ yds<sup>3</sup>

(if applicable)

Annual energy production:

Landfill gas recovery projects: 18 megawatts

Waste-to-energy incinerators: \_\_\_\_\_ megawatts

## FACILITY DESCRIPTIONS

Facility Type: Type II Landfill

Facility Name: Venice Park Recycling and Disposal Facility

County: Shiawassee

Location: Town: 7N Range: 4E Section(s): 27

Map identifying location included in Attachment Section: ☒ Yes ☐ No

If facility is an Incinerator or a Transfer Station, list the final disposal site and location for Incinerator ash or Transfer Station wastes : \_\_\_\_\_

☐ Public ☒ Private

Owner: Waste Management of Michigan, Inc.

### Operating Status (check)

- ☒ open
- ☐ closed
- ☒ licensed
- ☐ unlicensed
- ☐ construction permit
- ☐ open, but closure
- ☐ pending

### Waste Types Received (check all that apply)

- ☒ residential
- ☒ commercial
- ☒ industrial
- ☒ construction & demolition
- ☒ contaminated soils
- ☒ special wastes \*
- ☒ other: \_\_\_\_\_

\* Explanation of special wastes, including a specific list and/or conditions:

Contaminated soils, sludges, filter cake, process wastes, coal ash, foundry sand, chemical containing equipment, used containers, treated medical waste, contaminated demolition debris, street sweeping, sediment trap materials, asbestos.

### Site Size:

Total area of facility property:	<u>331</u>	acres
Total area sited for use	<u>80</u>	acres
Total area permitted:	<u>69</u>	acres
Operating:	<u>41</u>	acres
Not excavated:	<u>2.5</u>	acres

Current capacity:	<u>1,300,000</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds <sup>3</sup>
Estimated lifetime:	<u>2.5</u>	years
Estimated days open per year:	<u>286</u>	days
Estimated yearly disposal volume:	<u>526,000</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds <sup>3</sup>

(if applicable)

Annual energy production:

Landfill gas recovery projects:	<u>12,500</u>	megawatts
Waste-to-energy incinerators:	<u>n/a</u>	megawatts

## FACILITY DESCRIPTIONS

Facility Type: Type II Landfill

Facility Name: Brent Run Landfill

County: Genesee Location: Town: 6 Range: 5e Section(s): 23

Map identifying location included in Attachment Section: ☒ Yes ☐ No

If facility is an Incinerator or a Transfer Station, list the final disposal site and location for Incinerator ash or Transfer Station wastes : \_\_\_\_\_

☐ Public ☒ Private Owner: Republic Waste Services, Inc.

### Operating Status (check)

- ☒ open
- ☐ closed
- ☒ licensed
- ☐ unlicensed
- ☐ construction permit
- ☐ open, but closure
- ☐ pending

### Waste Types Received (check all that apply)

- ☒ residential
- ☒ commercial
- ☒ industrial
- ☒ construction & demolition
- ☒ contaminated soils
- ☒ special wastes \*
- ☒ other: \_\_\_\_\_

\* Explanation of special wastes, including a specific list and/or conditions:

### Sludge, asbestos

#### Site Size:

Total area of facility property:	<u>500</u>	acres
Total area sited for use	<u>350</u>	acres
Total area permitted:	<u>106.5</u>	acres
Operating:	<u>38.91</u>	acres
Not excavated:	<u>67.56</u>	acres

Current capacity:	<u>14,000,000</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds <sup>3</sup>
Estimated lifetime:	<u>30</u>	years
Estimated days open per year:	<u>286</u>	days
Estimated yearly disposal volume:	<u>400,000</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds <sup>3</sup>

(if applicable)

Annual energy production:

Landfill gas recovery projects:	<u>2</u>	megawatts ( <i>under development</i> )
Waste-to-energy incinerators:	_____	megawatts



## FACILITY DESCRIPTIONS

Facility Type: Type II Landfill

Facility Name: Citizens Disposal, Inc.

County: Genesee Location: Town: 6 Range: 6 Section(s): 23

Map identifying location included in Attachment Section: ☒ Yes ☐ No

If facility is an Incinerator or a Transfer Station, list the final disposal site and location for Incinerator ash or Transfer Station wastes : \_\_\_\_\_

☐ Public ☒ Private Owner: Allied Waste Industries

### Operating Status (check)

- ☒ open
- ☐ closed
- ☒ licensed
- ☐ unlicensed
- ☐ construction permit
- ☐ open, but closure
- ☐ pending

### Waste Types Received (check all that apply)

- ☒ residential
- ☒ commercial
- ☒ industrial
- ☒ construction & demolition
- ☒ contaminated soils
- ☒ special wastes \*
- ☒ other: \_\_\_\_\_

\* Explanation of special wastes, including a specific list and/or conditions:

All special waste requires prior review and approval including analytical data and waste profile - Non Hazardous Only

### Site Size:

Total area of facility property:	<u>300</u>	acres
Total area sited for use	<u>300</u>	acres
Total area permitted:	<u>52</u>	acres
Operating:	<u>52</u>	acres
Not excavated:	<u>80</u>	acres

Current capacity:	<u>5,300,000</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds <sup>3</sup>
Estimated lifetime:	<u>25</u>	years
Estimated days open per year:	<u>300</u>	days
Estimated yearly disposal volume:	<u>500,000</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds <sup>3</sup>

(if applicable)

Annual energy production:

Landfill gas recovery projects:	<u>2.4</u>	megawatts
Waste-to-energy incinerators:	_____	megawatts

## FACILITY DESCRIPTIONS

Facility Type: Type II Landfill

Facility Name: Adrian Landfill

County: Lenawee Location: Town: 7,8 Range: 4E Section(s): 6, 7

Map identifying location included in Attachment Section: ☒ Yes ☐ No

If facility is an Incinerator or a Transfer Station, list the final disposal site and location for Incinerator ash or Transfer Station wastes : \_\_\_\_\_

☐ Public ☒ Private Owner: Great Lakes Waste Services

### Operating Status (check)

- ☒ open
- ☐ closed
- ☒ licensed
- ☐ unlicensed
- ☐ construction permit
- ☐ open, but closure
- ☐ pending

### Waste Types Received (check all that apply)

- ☒ residential
- ☐ commercial
- ☐ industrial
- ☐ construction & demolition
- ☐ contaminated soils
- ☐ special wastes \*
- ☐ other: \_\_\_\_\_

\* Explanation of special wastes, including a specific list and/or conditions:

Asbestos and sludges per operating policy.

### Site Size:

Total area of facility property:	<u>421</u>	acres
Total area sited for use	<u>287</u>	acres
Total area permitted:	<u>40</u>	acres
Operating:	<u>19</u>	acres
Not excavated:	<u>20</u>	acres

Current capacity:	<u>2,002,000</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds <sup>3</sup>
Estimated lifetime:	<u>6.8</u>	years
Estimated days open per year:	<u>307</u>	days
Estimated yearly disposal volume:	<u>97,731</u>	<input checked="" type="checkbox"/> tons or <input type="checkbox"/> yds <sup>3</sup>

(if applicable)

Annual energy production:

Landfill gas recovery projects:	<u>20,148</u>	megawatts
Waste-to-energy incinerators:	_____	megawatts

## FACILITY DESCRIPTIONS

Facility Type: Type II Landfill

Facility Name: Eagle Valley Recycle and Disposal Facility

County: Oakland Location: Town: 4N Range: 10E Section(s): 26, 27, 35

Map identifying location included in Attachment Section: ☒ Yes ☐ No

If facility is an Incinerator or a Transfer Station, list the final disposal site and location for Incinerator ash or Transfer Station wastes : \_\_\_\_\_

☐ Public ☒ Private Owner: Waste Management of Michigan, Inc.

### Operating Status (check)

- ☒ open
- ☐ closed
- ☒ licensed
- ☐ unlicensed
- ☐ construction permit
- ☐ open, but closure
- ☐ pending

### Waste Types Received (check all that apply)

- ☒ residential
- ☒ commercial
- ☒ industrial
- ☒ construction & demolition
- ☒ contaminated soils
- ☒ special wastes \*
- ☒ other: \_\_\_\_\_

\* Explanation of special wastes, including a specific list and/or conditions:

Contaminated soils, sludges, filter cake, process wastes, coal ash, chemical containing equipment, used containers, treated medical waste, contaminated demolition debris, street sweeping, sediment trap materials.

### Site Size:

Total area of facility property:	<u>330</u>	acres
Total area sited for use	<u>330</u>	acres
Total area permitted:	<u>89</u>	acres
Operating:	<u>75.7</u>	acres
Not excavated:	<u>7.8</u>	acres

Current capacity:	<u>4,800,000</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds <sup>3</sup>
Estimated lifetime:	<u>5.5</u>	years
Estimated days open per year:	<u>286</u>	days
Estimated yearly disposal volume:	<u>870,000</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds <sup>3</sup>

(if applicable)

Annual energy production:

Landfill gas recovery projects: 233,000 megawatts

Waste-to-energy incinerators: \_\_\_\_\_ megawatts

## FACILITY DESCRIPTIONS

Facility Type: Type II Landfill

Facility Name: Granger Grand River Avenue Landfill

County: Clinton Location: Town: 5N Range: 3W Section(s): 29

Map identifying location included in Attachment Section: ☒ Yes ☐ No

If facility is an Incinerator or a Transfer Station, list the final disposal site and location for Incinerator ash or Transfer Station wastes : \_\_\_\_\_

☐ Public ☒ Private

Owner: Granger Land Development Company

### Operating Status (check)

- ☒ open
- ☐ closed
- ☒ licensed
- ☐ unlicensed
- ☐ construction permit
- ☐ open, but closure
- ☐ pending

### Waste Types Received (check all that apply)

- ☒ residential
- ☒ commercial
- ☒ industrial
- ☒ construction & demolition
- ☒ contaminated soils
- ☒ special wastes \*
- ☒ other: \_\_\_\_\_

\* Explanation of special wastes, including a specific list and/or conditions:

### All as authorized

#### Site Size:

Total area of facility property:	<u>180.9</u>	acres
Total area sited for use	<u>120.9</u>	acres
Total area permitted:	<u>85.7</u>	acres
Operating:	<u>54.1</u>	acres
Not excavated:	<u>31.6</u>	acres

Current capacity:	<u>7,617,000</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds <sup>3</sup>
Estimated lifetime:	<u>32</u>	years
Estimated days open per year:	<u>300</u>	days
Estimated yearly disposal volume:	<u>600,000</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds <sup>3</sup>

(if applicable)

Annual energy production:

Landfill gas recovery projects:	<u>4.0</u>	megawatts
Waste-to-energy incinerators:	_____	megawatts

## FACILITY DESCRIPTIONS

Facility Type: Type II Landfill

Facility Name: Granger Wood Street Landfill

County: Clinton/Ingham Location: Town: 5N, 4N Range: 2W Section(s): 34, 3

Map identifying location included in Attachment Section: ☒ Yes ☐ No

If facility is an Incinerator or a Transfer Station, list the final disposal site and location for Incinerator ash or Transfer Station wastes: \_\_\_\_\_

☐ Public ☒ Private Owner: Granger Land Development Company

### Operating Status (check)

- ☒ open
- ☐ closed
- ☒ licensed
- ☐ unlicensed
- ☐ construction permit
- ☐ open, but closure
- ☐ pending

### Waste Types Received (check all that apply)

- ☒ residential
- ☒ commercial
- ☒ industrial
- ☒ construction & demolition
- ☒ contaminated soils
- ☒ special wastes \*
- ☒ other: \_\_\_\_\_

\* Explanation of special wastes, including a specific list and/or conditions:

All as authorized

### Site Size:

Total area of facility property:	<u>302.8</u>	acres
Total area sited for use	<u>194.8</u>	acres
Total area permitted:	<u>104.3</u>	acres
Operating:	<u>49.5</u>	acres
Not excavated:	<u>54.8</u>	acres

Current capacity:	<u>10,981,000</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds <sup>3</sup>
Estimated lifetime:	<u>34</u>	years
Estimated days open per year:	<u>360</u>	days
Estimated yearly disposal volume:	<u>600,000</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds <sup>3</sup>

(if applicable)

Annual energy production:

Landfill gas recovery projects:	<u>3.2</u>	megawatts
Waste-to-energy incinerators:	_____	

## FACILITY DESCRIPTIONS

Facility Type: Type II Landfill

Facility Name: Woodland Meadows Recycling and Disposal Facility

County: Wayne Location: Town: 3S Range: 8E Section(s): 1

Map identifying location included in Attachment Section: ☒ Yes ☐ No

If facility is an Incinerator or a Transfer Station, list the final disposal site and location for Incinerator ash or Transfer Station wastes : \_\_\_\_\_

☐ Public ☒ Private Owner: Waste Management of Michigan, Inc.

### Operating Status (check)

- ☒ open
- ☐ closed
- ☒ licensed
- ☐ unlicensed
- ☐ construction permit
- ☐ open, but closure
- ☐ pending

### Waste Types Received (check all that apply)

- ☒ residential
- ☒ commercial
- ☒ industrial
- ☒ construction & demolition
- ☒ contaminated soils
- ☒ special wastes \*
- ☒ other: \_\_\_\_\_

\* Explanation of special wastes, including a specific list and/or conditions:

Sludges - provided they are at least 30% Solids

### Site Size:

Total area of facility property:	<u>214</u>	acres
Total area sited for use	<u>214</u>	acres
Total area permitted:	<u>148</u>	acres
Operating:	<u>70</u>	acres
Not excavated:	<u>78</u>	acres

Current capacity:	<u>26,520,800</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds <sup>3</sup>
Estimated lifetime:	<u>19.8</u>	years
Estimated days open per year:	<u>305</u>	days
Estimated yearly disposal volume:	<u>1,340,200</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds <sup>3</sup>

(if applicable)

Annual energy production:

Landfill gas recovery projects:	<u>400,000</u>	megawatts
Waste-to-energy incinerators:	_____	megawatts

## FACILITY DESCRIPTIONS

Facility Type: Type II Landfill

Facility Name: McGill Rd. Landfill

County: Jackson Location: Town: 2S Range: 1W Section(s): 24

Map identifying location included in Attachment Section: ☒ Yes ☐ No

If facility is an Incinerator or a Transfer Station, list the final disposal site and location for Incinerator ash or Transfer Station wastes : \_\_\_\_\_

☐ Public ☒ Private Owner: Waste Management of Michigan, Inc.

### Operating Status (check)

- ☒ open
- ☐ closed
- ☒ licensed
- ☐ unlicensed
- ☐ construction permit
- ☐ open, but closure
- ☐ pending

### Waste Types Received (check all that apply)

- ☒ residential
- ☒ commercial
- ☒ industrial
- ☒ construction & demolition
- ☒ contaminated soils
- ☒ special wastes \*
- ☒ other: \_\_\_\_\_

\* Explanation of special wastes, including a specific list and/or conditions:

### Incinerator Ash

#### Site Size:

Total area of facility property:	<u>50.5</u>	acres
Total area sited for use	<u>41.8</u>	acres
Total area permitted:	<u>18.7</u>	acres
Operating:	<u>7.8</u>	acres
Not excavated:	<u>17.5</u>	acres

Current capacity:	<u>1,236,000</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds <sup>3</sup>
Estimated lifetime:	<u>15</u>	years
Estimated days open per year:	<u>310</u>	days
Estimated yearly disposal volume:	<u>63,226</u>	<input checked="" type="checkbox"/> tons or <input type="checkbox"/> yds <sup>3</sup>

(if applicable)

Annual energy production:

Landfill gas recovery projects:	_____	megawatts
Waste-to-energy incinerators:	_____	megawatts

## FACILITY DESCRIPTIONS

Facility Type: Type II Landfill

Facility Name: C & C Landfill

County: Calhoun Location: Town: 1S Range: 6W Section(s): 28

Map identifying location included in Attachment Section: ☒ Yes ☐ No

If facility is an Incinerator or a Transfer Station, list the final disposal site and location for Incinerator ash or Transfer Station wastes : \_\_\_\_\_

☐ Public ☒ Private Owner: BFI Waste Systems of North America, Inc

### Operating Status (check)

- ☒ open
- ☐ closed
- ☒ licensed
- ☐ unlicensed
- ☐ construction permit
- ☐ open, but closure
- ☐ pending

### Waste Types Received (check all that apply)

- ☒ residential
- ☒ commercial
- ☒ industrial
- ☒ construction & demolition
- ☒ contaminated soils
- ☒ special wastes \*
- ☒ other: \_\_\_\_\_

\* Explanation of special wastes, including a specific list and/or conditions:

non-hazardous solid and sem-solid wastes, no hazardous or liquid wastes

### Site Size:

Total area of facility property: 224 acres

Total area sited for use \_\_\_\_\_ acres

Total area permitted: 154 acres

Operating: 33 acres

Not excavated: 21 acres

Current capacity: 3,360,000 ☐ tons or ☒ yds<sup>3</sup>

Estimated lifetime: 7 years

Estimated days open per year: 286 days

Estimated yearly disposal volume: 1,100,000 ☐ tons or ☒ yds<sup>3</sup>

(if applicable)

Annual energy production:

Landfill gas recovery projects: n/a megawatts

Waste-to-energy incinerators: n/a megawatts



## FACILITY DESCRIPTIONS

Facility Type: Type II Landfill

Facility Name: Vienna Junction Industrial Park Sanitary Landfill

County: Monroe Location: Town: 9S, 8S Range: 8E, 8E Section(s): 5&6, 31&32

Map identifying location included in Attachment Section: ☒ Yes ☐ No

If facility is an Incinerator or a Transfer Station, list the final disposal site and location for Incinerator ash or Transfer Station wastes : \_\_\_\_\_

☐ Public ☒ Private Owner: Allied Waste Industries

### Operating Status (check)

- ☒ open
- ☐ closed
- ☒ licensed
- ☐ unlicensed
- ☐ construction permit
- ☐ open, but closure
- ☐ pending

### Waste Types Received (check all that apply)

- ☒ residential
- ☒ commercial
- ☒ industrial
- ☒ construction & demolition
- ☒ contaminated soils
- ☒ special wastes \*
- ☒ other: \_\_\_\_\_

\* Explanation of special wastes, including a specific list and/or conditions:

### Site Size:

Total area of facility property:	<u>226</u>	acres
Total area sited for use	<u>149</u>	acres
Total area permitted:	_____	acres
Operating:	<u>56</u>	acres
Not excavated:	<u>40</u>	acres

Current capacity:	<u>11,400,000</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds <sup>3</sup>
Estimated lifetime:	<u>25</u>	years
Estimated days open per year:	<u>280</u>	days
Estimated yearly disposal volume:	<u>1,000,000</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds <sup>3</sup>

(if applicable)

Annual energy production:

Landfill gas recovery projects: \_\_\_\_\_ megawatts

Waste-to-energy incinerators: \_\_\_\_\_ megawatts

## **SOLID WASTE COLLECTION SERVICES AND TRANSPORTATION INFRASTRUCTURE**

The following describes the solid waste collection services and transportation infrastructure which will be utilized within the County to collect and transport solid waste.

None of the municipalities in Livingston County own or operate solid waste hauling operations or transfer stations. Every facet of collection and transportation is handled by the private sector, either through subscription service or through contracts with local governments. Waste handled by the private sector is generally hauled to those landfills in neighboring counties which are closest to the waste generation point of origin. Livingston County is centrally located to several landfills which allows for the efficient export of waste. Also, four major roadways: I -96, US-23, M-36 and M-59 cross through Livingston County providing an adequate transportation route to several solid waste disposal facilities.

The Mister Rubbish Solid Waste Processing and Recycling Facility located in the Southeast corner of Livingston County allows for Mister Rubbish to collect waste in virtually every township in Livingston County and transfer it to their facility in Green Oak Township. Waste is then transferred to Arbor Hills (Washtenaw County.) or Woodland Meadows (Wayne County).

Also, on a smaller scale, Len's Rubbish Material Recovery Facility collects construction and demolition debris for processing and transferring.

Livingston County is served by large, national waste haulers: BFI, Great Lakes, Waste Management (locally known as Mister Rubbish); and by local waste haulers: Len's Rubbish, Monroe's Rubbish Removal, Alchin's Disposal.

**Table II-2  
Solid Waste Service Providers**

SERVICE PROVIDER	SERVICE AREA	PAYMENT	DISPOSAL FACILITY
<b>Alchin's</b>	Cohoctah Twp Conway Twp Deerfield Twp Handy Twp Howell Twp <i>Iosco Twp</i> Marion Twp Fowlerville Villge City of Howell	Customer Customer Customer Customer Customer <i>General Fund</i> Customer Customer Customer	Venice Park Venice Park Venice Park Granger Granger Granger Granger Granger Granger
<b>BFI</b>	Brighton Twp Deerfield Twp GreenOak Twp Marion Twp <i>Pinckney Village</i> Hamburg Twp Hartland Twp Oceola Twp Putnam Twp Tyrone Twp Unadilla Twp	Customer Customer Customer Customer <i>General Fund</i> Customer Customer Customer Customer Customer Customer	All waste hauled to Arbor Hills
<b>Great Lakes</b>	Brighton Twp Deerfield Twp GreenOak Twp Hamburg Twp Hartland Twp Howell Twp Tyrone Twp	Customer Customer Customer Customer Customer Customer Customer	Citizen's Disposal
<b>Len's Rubbish</b>	<i>commercial only-</i> A l l o f Livingston County except Cohoctach Twp & Conway Twp	Customer	Len's Rubbish Material Recovery Facility

**Table II-2  
Solid Waste Service Providers**

<b>SERVICE PROVIDER</b>	<b>SERVICE AREA</b>	<b>PAYMENT</b>	<b>DISPOSAL FACILITY</b>
<b>Mister Rubbish (Waste Management)</b>	Brighton Twp City of Brighton Deerfield Twp Fowlerville Village Genoa Twp Green Oak Hamburg Twp Handy Twp Hartland Twp Howell Twp City of Howell Marion Twp Oceola Twp Putnam Twp P i n c k n e y Village Tyrone Twp	Customer General Fund Customer General Fund General Fund Customer Customer Customer Customer Customer General Fund Customer Customer Customer Customer Customer	<b>All waste transferred to:</b>  <b>Mister Rubbish Material Recovery Facility</b>
<b>Monroe's Rubbish Removal</b>	Brighton Twp C i t y o f Brighton Deerfield Twp Fowlerville Genoa Twp Green Oak Hamburg Twp Handy Twp Hartland Twp Howell Twp City of Howell Marion Twp Oceola Twp Putnam Twp P i n c k n e y Village Tyrone Twp	Customer Customer Customer Customer Customer Customer Customer Customer Customer Customer Customer Customer Customer Customer Customer Customer	<b>All waste transferred to:</b>  <b>Mister Rubbish Material Recovery Facility</b>

## **EVALUATION OF DEFICIENCIES AND PROBLEMS**

The following is a description of problems or deficiencies in the existing solid waste system.

Livingston County's deficiencies and problems are detailed below.

Few recycling opportunities in rural areas. A large portion of the county is rural in nature. Curbside collection may be available through subscription service, but is relatively expensive. Pilot programs for recycling drop-offs have been attempted but with a moderate amount of success.

Commercial Waste Reduction/Recycling. An educational program targeted specifically to the commercial and industrial sector is currently not available. Recycling and waste reduction does take place to some extent at virtually every business in the county, but a comprehensive campaign is needed to make the business community aware of programs such as waste minimization for packaging and shipping and material exchange programs.

Public education efforts still in development phase. Because Livingston County is changing rapidly, education efforts are needed to make residents aware of the solid waste management system. Many new residents come from more urban areas where recycling, large item pick up, yard waste collection and other programs are provided. Opportunities for residents are emerging in Livingston County, but a comprehensive education campaign is needed to raise levels of awareness. Also, a no specific multifamily education efforts for recycling/waste reduction are currently available.

Household Hazardous Waste. The current pilot program does not allow storage or accumulation of materials, which would lower disposal costs. Also, it can only serve a limited number of households per year.

Lack of Central Compost Facility The rapid growth of subdivision developments creating more yard waste, specifically grass clippings. There is a lack of general public education on backyard composting. Currently, only 4 communities provide some form of yard waste collection. In addition, downed limbs and trees from storms create disposal problem for cities/townships. An increase in illegally dumped yard waste might occur over time if programs are not developed to keep pace with county growth patterns.

Subscription Service vs. Community Contracts. Some large townships still have subscription service. A contract could offer more services at a reduced cost. Additional programs available through Subscription service are limited or relatively expensive. i.e. Recycling, Yard waste collection, large-item pick-ups. The public perception of "five different garbage trucks coming through my neighborhood..." is a consistent complaint of residents in several areas of Livingston County. While the right for customers to choose who provides their service cannot be overlooked, it may not be the most efficient system in the long-term.

Illegal dumping Due to the rural nature of Livingston County, illegal dumping may always, to some extent, be problematic. Even though many townships and cities/villages offer free or low cost collections, illegal dumping occurs. This could be due to a lack of consistency for ordinances and enforcement. A county wide program using education combined with consistent enforcement and prosecution is needed to curb illegal dumping.

### Construction and Demolition Waste

While the collection and disposal is not necessarily a problem, the recovery of C&D waste in Livingston County is still minimal.

## DEMOGRAPHICS

The following presents the current and projected population densities and centers for five and ten year periods, identification of current and projected centers of solid waste generation including industrial solid waste for five and ten year periods as related to the Selected Solid Waste Management System for the next five and ten year periods. Solid waste generation data is expressed in tons or cubic yards, and if it was extrapolated from yearly data, it was calculated by using 365 days per year, or another number of days as indicated.

Population centers include the cities of Brighton and Howell, the Villages of Fowlerville and Pinckney, and the Townships of Hamburg, Green Oak and Genoa. These areas are well served by interstate and state highways which increase their accessibility to the metropolitan areas of Detroit, Ann Arbor, Flint and Lansing. Projected population growth is identified in the following table:

**Table II-3**  
**Livingston County Projected Population Growth\***

Municipality	1995	2000	2005	2010
Brighton, City of	6901	7,241	7,424	7,409
Brighton Township	15,689	17,151	18,160	19,177
Cohoctah Township	3,161	3,606	4,005	4,387
Conway Township	2,227	2,576	2,935	3,307
Deerfield Township	3,566	4,057	4,538	4,937
Fowlerville, Village of	2,734	2,882	2,981	3,092
Genoa Township	12,769	14,854	16,924	18,862
Green Oak Township	14,000	16,011	18,089	20,573
Hamburg Township	16,587	19,440	22,517	25,390
Handy Township	3,807	4,686	5,512	6,273
Hartland Township	7,926	8,990	9,909	10,859
Howell, City of	9,415	10,345	10,622	10,592
Howell Township	5,036	5,800	6,679	7,835
Iosco Township	2,186	2,719	3,232	3,843
Marion Township	5,838	6,836	8,055	9,776
Oceola Township	5,812	6,710	7,364	7,843
Pinckney, Village	1,694	1,802	1,850	1,893
Putnam Township	5,137	5,693	6,174	6,509
Tyrone Township	8,002	9,097	10,053	11,047
Unadilla Township	3,282	3,565	3,830	4,121
<b>TOTAL</b>	<b>135,558</b>	<b>154,061</b>	<b>170,853</b>	<b>187,725</b>

\*Source: Livingston County Department of Planning, 1998.

The major centers of waste generation and population density are located along the Grand River corridor extending from Howell in the northwest, through Genoa Township, to the City of Brighton. Also, the growing Townships of Brighton, Hamburg and Green Oak are significant centers of population/waste generation.

Major Commercial retail/office centers include Fowlerville, Howell, Brighton, the Grand River Corridor in Genoa Township between Howell and Brighton, and the M-59/US 23 intersection in Hartland Township.

Major centers of Industrial development occur in and around the City of Howell; Marion, Howell and Genoa Townships; and along US-23 in Green Oak Township. Other significant Industrial centers are in Pinckney, Fowlerville; and along I-96 and Grand River in Brighton and Genoa Townships.

## **LAND DEVELOPMENT**

**The following describes current and projected land development patterns, as related to the Selected Solid Waste Management System, for the next five and ten year periods.**

The future growth and changing land use pattern in Livingston County will be influenced by many factors. A healthy economy has and will promote faster growth and an influx of business, industry and residential development.

Based on past trends, a future development pattern for Livingston County can be reasonably predicted. Assuming that the growth relationships of the past 20 years extend into the future, Livingston County should experience a pattern of:

- Increased non-farm residential development in the portions of the county, specifically in the Townships of Hamburg, Hartland, Brighton, Green Oak and Putnam.
- Expansion of the major activity centers for business and industry in the intensity, diversity and land area used;
- Decrease in agricultural use in the north and west, and an increase in non-farm residential development.
- Changing community identity as the population density in the townships increases and margins of the cities and villages blur. This could increase the demand for the of waste collection and recycling services as communities seek to reduce costs by combining and/or sharing services.



**Table II-4  
Existing Generalized Land Use  
Livingston County\***

Developed Land Use	Acres	% of County
Residential	48,862	13
Commercial	1,333	<1
Industrial	4,214	1
Transportation & Utilities	3,155	<1
<b>Total Developed Area</b>	<b>57,564</b>	<b>15</b>
Undeveloped Land Use Categories	Acres	% of County
Extractive	1,846	<1
Agriculture	123,635	33
Water	11,816	3
Wooded	45,704	12
Wetlands	56,825	15
Vacant	73,388	20
<b>Total Undeveloped Area</b>	<b>313,214</b>	<b>85</b>
<b>TOTAL AREA</b>	<b>374,315</b>	<b>100</b>

Source: Livingston County Department of Planning, 1998

## **SOLID WASTE MANAGEMENT ALTERNATIVES**

The following briefly describes the solid waste management systems considered by Livingston County and how each alternative will meet the needs of the County. The manner of evaluation and ranking of each alternative is also described. Details regarding each non-selected alternatives are located in Appendix B.

The criteria used to evaluate the alternative systems include: technical feasibility, economic feasibility, energy consumption/production, land access/transportation, environmental impacts, public health effects and public acceptability. Points were awarded a scale of 1 to 4, with 4 being the high and 1 the low. Also, the committee used a weighting factor to emphasize the importance of some criteria over others.

### System A. Current Solid Waste Management System

The current solid waste management system consists of private collection of residential, commercial and industrial waste through contracts with municipalities, commercial/industrial users or through subscription service for individual homeowners. Disposal of collected waste is exported to existing landfills in neighboring counties, particularly Southeast Michigan.

### System B. Current System with Increased Emphasis on Resource Recovery Efforts

Emphasis placed on increasing the number and kind of resource recovery efforts which will help decrease the dependency on land filling in other counties. An increase in education for businesses and residents would be an area of concentration. The current export of waste system (System A) would continue.

### System C. Regional Solid Waste Transfer Station sited in Livingston County

A regional transfer station would be sited in order to enhance the export of waste to disposal sites in other counties. The practice of exporting waste will most likely occur for the near future. A large facility capable of receiving and transferring nearly all of the county's waste would allow disposal capacity to be tied to private contracts with one or more companies.

### System D. Regional Solid Waste Landfill Sited in Livingston County

A solid waste landfill would be sited by the private sector. This would provide additional solid waste disposal capacity for the planning period and beyond and provide opportunities for the importation of waste from other counties.

**Table II-5  
Alternative Systems Evaluation**

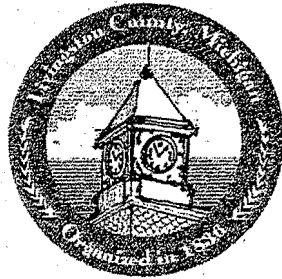
<b>Criteria</b>	<b>Weighting Factor</b>	<b>System A</b>	<b>System B</b>	<b>System C</b>	<b>System D</b>
Technical feasibility	5.0	17.08	16.67	15.42	11.67
Economic Feasibility	5.0	17.50	15.00	14.58	8.75
Energy Consumption/ Production	1.0	2.00	2.92	2.58	2.67
Land Access/Transportation	1.0	2.50	2.83	2.50	2.08
Environmental Impacts	5.0	14.58	17.92	13.33	9.58
Public Health Effects	5.0	15.83	16.67	15.00	9.17
Public Acceptability	2.5	9.38	8.54	5.63	3.96
<b>*TOTAL POINTS</b>		78.87	80.54	69.04	47.88
<b>RANKING ORDER</b>		2	1	3	4

\* The individual score sheets for each committee member are on file at the DPA repository.

Based on this scoring system, the Selected System was System B, Current System with Increased Emphasis on Resource Recovery Efforts. Additional information regarding the Selected System is contained in Appendix A.

## SECTION III

### SELECTED SOLID WASTE MANAGEMENT SYSTEM



## THE SELECTED SOLID WASTE MANAGEMENT SYSTEM

**The Selected Solid Waste Management System (Selected System) is a comprehensive approach to managing the County's solid waste and recoverable materials. The Selected System addresses the generation, transfer and disposal of the County's solid waste. It aims to reduce the amount of solid waste sent for final disposal by volume reduction techniques and by various resource conservation and resource recovery programs. It also addresses collection processes and transportation needs that provide the most cost effective, efficient service. Proposed disposal areas locations and capacity to accept solid waste are identified as well as program management, funding, and enforcement roles for local agencies. Detailed information on recycling programs, evaluation, and coordination of the Selected System is included in Appendix A. Following is an overall description of the Selected System:**

The Selected Solid Waste Management System consists of private collection of residential, commercial and industrial waste through contracts with municipalities, subscription service with residents and private sector contracts. Waste is either transferred to the two licensed transfer and processing facilities in the county-Mister Rubbish in Green Oak Township, Len's Rubbish in Hamburg Township-or directly exported to plan authorized landfills or transfer stations in other counties. The import/export arrangement with other counties provides waste haulers with the opportunity to dispose of waste in the most economical and operationally practical areas while meeting the provisions of Part 115 of Act 451, P.A. 1994 as amended..

Private companies provide recycling services through drop-offs or curbside recycling. Non-profit Recycle Livingston also provides recycling drop-off service. Several townships provide for bulk item collection of furniture, appliances, tires and white goods on a seasonal basis. Livingston County also conducts household hazardous waste collections periodically throughout the year. The Solid Waste Coordination Department (SWCD) is the education focal point for the various programs in Livingston County. The SWCD uses a variety of media: newspapers, radio, public access television, school presentations and public events to promote waste reduction, recycling and proper waste disposal.

Waste that is not recycled or composted is disposed in licensed solid waste disposal facilities (landfills) in other counties. Livingston County is authorized to use landfills in other counties, therefore, Livingston County has sufficient landfill capacity to meet its needs for the five and ten year planning periods.

The following section details the Selected Solid Waste Management System.

## IMPORT AUTHORIZATION

If a Licensed solid waste disposal area is currently operating within the County, disposal of solid waste generated by the EXPORTING COUNTY is authorized by the IMPORTING COUNTY up to the AUTHORIZED QUANTITY according to the CONDITIONS AUTHORIZED in Table 1-A.

**Table 1-A**  
**CURRENT IMPORT VOLUME AUTHORIZATION OF SOLID WASTE**

<u>IMPORTING COUNTY</u>	<u>EXPORTING COUNTY</u>	<u>FACILITY NAME<sup>1</sup></u>	<u>AUTHORIZED QUANTITY/ DAILY</u>	<u>AUTHORIZED QUANTITY/ ANNUAL</u>	<u>AUTHORIZED CONDITIONS<sup>2</sup></u>
<u>LIVINGSTON</u>	<u>WASHTENAW</u>	_____	_____	_____	<u>TRANSFER and/or PROCESSING ONLY</u>
"	<u>OAKLAND</u>	_____	_____	_____	"
"	<u>SHIAWASSEE</u>	_____	_____	_____	"
"	<u>CLINTON</u>	_____	_____	_____	"
"	<u>INGHAM</u>	_____	_____	_____	"
"	<u>GENESEE</u>	_____	_____	_____	"
"	<u>WAYNE</u>	_____	_____	_____	"
"	<u>LENAWEE</u>	_____	_____	_____	"
"	<u>JACKSON</u>	_____	_____	_____	"
"	<u>MONROE</u>	_____	_____	_____	"
"	<u>CALHOUN</u>	_____	_____	_____	"

<sup>1</sup> Facilities are only listed if the exporting county is restricted to using specific facilities within the importing county.

<sup>2</sup> Authorization indicated by P = Primary Disposal; C = Contingency Disposal; \* = Other conditions exist and detailed explanation is included in the Attachment Section.

If a new solid waste disposal area is constructed and operating in the future in the County, then disposal of solid waste generated by the EXPORTING COUNTY is authorized by the IMPORTING COUNTY up to the AUTHORIZED QUANTITY according to the AUTHORIZED CONDITIONS in Table 1-B.

**Table 1-B**  
**FUTURE IMPORT VOLUME AUTHORIZATION OF SOLID WASTE**  
**CONTINGENT ON NEW FACILITIES BEING SITED**

<u>IMPORTING COUNTY</u>	<u>EXPORTING COUNTY</u>	<u>FACILITY NAME<sup>1</sup></u>	<u>AUTHORIZED QUANTITY/ DAILY</u>	<u>AUTHORIZED QUANTITY/ ANNUALLY</u>	<u>AUTHORIZED CONDITIONS<sup>2</sup></u>
LIVINGSTON	<u>WASHTENAW</u>	_____	_____	_____	_____
"	<u>OAKLAND</u>	_____	_____	_____	_____
"	<u>SHIAWASSEE</u>	_____	_____	_____	_____
"	<u>GENESEE</u>	_____	_____	_____	_____
"	<u>CLINTON</u>	_____	_____	_____	_____
"	<u>INGHAM</u>	_____	_____	_____	_____
"	<u>JACKSON</u>	_____	_____	_____	subject to contingency agreement with Jackson County

☐ Additional authorizations and the above information for those authorizations are listed on an attached page.

<sup>1</sup> Facilities are only listed if the exporting county is restricted to using specific facilities within the importing county.

<sup>2</sup> Authorization indicated by P = Primary Disposal; C = Contingency Disposal; \* = Other conditions exist and detailed explanation is included in the Attachment Section.

## EXPORT AUTHORIZATION

If a Licensed solid waste disposal area is currently operating within another County, disposal of solid waste generated by the EXPORTING COUNTY is authorized up to the AUTHORIZED QUANTITY according to the CONDITIONS AUTHORIZED in Table 2-A if authorized for import in the approved Solid Waste Management Plan of the receiving County.

**Table 2-A**  
**CURRENT EXPORT VOLUME AUTHORIZATION OF SOLID WASTE**

<u>EXPORTING COUNTY</u>	<u>IMPORTING COUNTY</u>	<u>FACILITY NAME<sup>1</sup></u>	<u>AUTHORIZED QUANTITY/ DAILY</u>	<u>AUTHORIZED QUANTITY/ ANNUAL</u>	<u>AUTHORIZED CONDITIONS<sup>2</sup></u>
LIVINGSTON	WASHTENAW	_____	_____	_____	P
"	OAKLAND	_____	_____	_____	P
"	SHIAWASSEE	_____	_____	_____	P
"	CLINTON	_____	_____	_____	P
"	INGHAM	_____	_____	_____	P
"	GENESEE	_____	_____	_____	P
"	WAYNE	_____	_____	_____	P
"	LENAWEE	_____	_____	_____	P
"	JACKSON	_____	_____	_____	P
"	MONROE	_____	_____	_____	P
"	CALHOUN	_____	_____	_____	P

☐ Additional authorizations and the above information for those authorizations are listed on an attached page.

<sup>1</sup> Facilities are only listed if the exporting county is restricted to using specific facilities within the importing county.

Authorization indicated by P = Primary Disposal; C = Contingency Disposal; \* = Other conditions exist and detailed explanation is included in the Attachment Section.



If a new solid waste disposal area is constructed and operates in the future in another County, then disposal of solid waste generated by the EXPORTING COUNTY is authorized up to the AUTHORIZED QUANTITY according to the AUTHORIZED CONDITIONS in Table 2-B if authorized for import in the approved Solid Waste Management Plan of the receiving County.

**Table 2-B  
FUTURE EXPORT VOLUME AUTHORIZATION OF SOLID WASTE  
CONTINGENT ON NEW FACILITIES BEING SITED**

<u>EXPORTING COUNTY</u>	<u>IMPORTING COUNTY</u>	<u>FACILITY NAME<sup>1</sup></u>	<u>AUTHORIZED QUANTITY/ DAILY</u>	<u>AUTHORIZED QUANTITY/ ANNUAL</u>	<u>AUTHORIZED CONDITIONS<sup>2</sup></u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

<sup>1</sup> Facilities are only listed if the exporting county is restricted to using specific facilities within the importing county.

<sup>2</sup> Authorization indicated by P = Primary Disposal; C = Contingency Disposal; \* = Other conditions exist and detailed explanation is included in the Attachment Section.

## **SOLID WASTE DISPOSAL AREAS**

The following identifies the names of existing disposal areas which will be utilized to provide the required capacity and management needs for the solid waste generated within the County for the next five years and, if possible, the next ten years. Pages III-8 through III-21 contain descriptions of the solid waste disposal facilities which are located within the County and the disposal facilities located outside of the County which will be utilized by the County during the planning period. Additional facilities within the County with applicable permits and licenses may be utilized as they are sited by this Plan, or amended into this Plan, and become available for disposal. If this Plan update is amended to identify additional facilities in other counties outside the County, those facilities may only be used if such import is authorized in the receiving County's Plan. Facilities outside of Michigan may also be used if legally available for such use.

### **Type II Landfill:**

Arbor Hills  
Washtenaw County

Venice Park  
Shiawassee County

Woodland Meadows  
Wayne County

Granger Companies/Wood Rd  
Clinton/Ingham Counties

Granger Companies/Watertown Twp  
Clinton County

Eagle Valley  
Oakland County

Brent Run  
Genesee County

Citizen's Disposal  
Genesee County

Adrian Landfill  
Lenawee County

C&C Landfill  
Calhoun County

Vienna Junction  
Monroe County

McGill Road  
Jackson County

### **Type A Transfer Facility:**

Mister Rubbish  
Green Oak Twp  
Livingston County

Len's Rubbish  
Hamburg Twp  
Livingston County

### **Type B Transfer Facility:**

N/A

### **Processing Plant:**

Mister Rubbish  
Green Oak Twp  
Livingston County

Len's Rubbish  
Hamburg Twp  
Livingston County

Additional facilities are listed on an attached page. Letters from or agreements with the listed disposal areas owners/operators stating their facility capacity and willingness to accept the County's solid waste are in the Attachment Section.

The following table is a summary of those landfills that are currently authorized to serve Livingston County's solid waste disposal needs. The facilities listed below are for capacity purposes only and does not restrict the flow of waste to other solid waste disposal facilities, unless specified in Table 2-A, CURRENT EXPORT VOLUME AUTHORIZATION OF SOLID WASTE, page III-4. Detailed facility descriptions are included on Pages III-8 through III-21.

<b>FACILITY</b>	<b>LOCATION</b>	<b>ANNUAL DISPOSAL VOLUME (yds<sup>3</sup>)</b>	<b>CURRENT CAPACITY (yds<sup>3</sup>)</b>	<b>ESTIMATED CAPACITY REMAINING</b>
<b>Arbor Hills</b>	Washtenaw	4,500,000	30,500,000	17.6 years
<b>Brent Run</b>	Genesee	400,000	14,000,000	30 years
<b>Citizen's Disposal</b>	Genesee	500,000	5,300,000	25 years
<b>Eagle Valley</b>	Oakland	870,000	4,800,000	5.5 years
<b>Granger - Watertown</b>	Clinton	600,000	7,617,000	32 years
<b>Granger - Wood Rd.</b>	Clinton/Ingham	600,000	10,981,000	34 years
<b>Adrian Landfill</b>	Lenawee	293, 193	2,002,000	7 years
<b>Venice Park</b>	Shiawassee	526,000	1,300,000 <i>expansion will yield an additional 15,000,000 yds<sup>3</sup></i>	2.5 years/ <i>expansion pending, which will increase capacity remaining to 30 years</i>
<b>Woodland Meadows</b>	Wayne	1,340,200	26,520,800	19.8 years
<b>McGill Road</b>	Jackson	190,000	1,236,000	15 years
<b>C &amp; C</b>	Calhoun	1,100,000	3,360,000	7 years
<b>Vienna Junction</b>	Monroe	1,000,000	11,400,000	25 years

## FACILITY DESCRIPTIONS

Facility Type: Type II Processing And Transfer

Facility Name: Mister Rubbish Recycling Facility

County: Livingston Location: Town: 1 Range: 6E Section(s): 32

Map identifying location included in Attachment Section: ☒ Yes ☐ No

If facility is an Incinerator or a Transfer Station, list the final disposal site and location for Incinerator ash or Transfer Station wastes : Arbor Hills, Woodland Meadows

☐ Public ☒ Private Owner: Waste Management, Inc

### Operating Status (check)

- ☒ open
- ☐ closed
- ☒ licensed
- ☐ unlicensed
- ☐ construction permit
- ☐ open, but closure
- ☐ pending

### Waste Types Received (check all that apply)

- ☒ residential
- ☒ commercial
- ☒ industrial
- ☒ construction & demolition
- ☐ contaminated soils
- ☐ special wastes \*
- ☐ other: \_\_\_\_\_

\* Explanation of special wastes, including a specific list and/or conditions:

### Site Size:

Total area of facility property:	<u>35</u>	acres
Total area sited for use	<u>12.15</u>	acres
Total area permitted:	<u>12.15</u>	acres
Operating:	—	acres
Not excavated:	<u>n/a</u>	acres

Current capacity:	—	<input type="checkbox"/> tons or <input type="checkbox"/> yds <sup>3</sup>
Estimated lifetime:	<u>n/a</u>	years
Estimated days open per year:	<u>300</u>	days
Estimated yearly disposal volume:	<u>120,000</u>	<input checked="" type="checkbox"/> tons or <input type="checkbox"/> yds <sup>3</sup>

(if applicable)

Annual energy production:

Landfill gas recovery projects:	<u>n/a</u>	megawatts
Waste-to-energy incinerators:	<u>n/a</u>	megawatts

## FACILITY DESCRIPTIONS

Facility Type: Type III Transfer and Processing Facility

Facility Name: Len's Rubbish Material Recovery Facility

County: Livingston Location: Town: 1N Range: 5E Section(s): 25

Map identifying location included in Attachment Section: ☒ Yes ☐ No

If facility is an Incinerator or a Transfer Station, list the final disposal site and location for Incinerator ash or Transfer Station wastes : Arbor Hills

☐ Public ☒ Private Owner: Len's Rubbish

### Operating Status (check)

- ☒ open
- ☐ closed
- ☒ licensed
- ☐ unlicensed
- ☐ construction permit
- ☐ open, but closure
- ☐ pending

### Waste Types Received (check all that apply)

- ☒ residential
- ☒ commercial
- ☒ industrial
- ☒ construction & demolition
- ☐ contaminated soils
- ☐ special wastes \*
- ☐ other: \_\_\_\_\_

\* Explanation of special wastes, including a specific list and/or conditions:

Facility to accept construction material only.

### Site Size:

Total area of facility property:	<u>2</u>	acres
Total area sited for use	<u>2</u>	acres
Total area permitted:	<u>2</u>	acres
Operating:	<u>2</u>	acres
Not excavated:	<u>n/a</u>	acres

Current capacity:	_____	<input type="checkbox"/> tons or <input type="checkbox"/> yds <sup>3</sup>
Estimated lifetime:	<u>n/a</u>	years
Estimated days open per year:	<u>300</u>	days
Estimated yearly disposal volume:	<u>20,000</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds <sup>3</sup>

(if applicable)

Annual energy production:

Landfill gas recovery projects:	<u>n/a</u>	megawatts
Waste-to-energy incinerators:	<u>n/a</u>	megawatts

## FACILITY DESCRIPTIONS

Facility Type: Type II Landfill

Facility Name: Arbor Hills Landfill

County: Washtenaw Location: Town: Salem Range:    Section(s): 23

Map identifying location included in Attachment Section: ☒ Yes ☐ No

If facility is an Incinerator or a Transfer Station, list the final disposal site and location for Incinerator ash or Transfer Station wastes : \_\_\_\_\_

☐ Public ☒ Private Owner: BFI Waste Systems of North America, Inc

### Operating Status (check)

- ☒ open
- ☐ closed
- ☒ licensed
- ☐ unlicensed
- ☐ construction permit
- ☐ open, but closure
- ☐ pending

### Waste Types Received (check all that apply)

- ☒ residential
- ☒ commercial
- ☒ industrial
- ☒ construction & demolition
- ☒ contaminated soils
- ☒ special wastes \*
- ☒ other: \_\_\_\_\_

\* Explanation of special wastes, including a specific list and/or conditions:

### Non-Hazardous solid and semi-solid wastes, no hazardous or liquid wastes

#### Site Size:

Total area of facility property: 936 acres

Total area sited for use 356 acres

Total area permitted: 217 acres

Operating: 113 acres

Not excavated: 104 acres

Current capacity: 30,500,000 ☐ tons or ☒ yds<sup>3</sup> Airspace or 61.5 million yds<sup>3</sup> of capacity

Estimated lifetime: 17.6 years

Estimated days open per year: 265 days

Estimated yearly disposal volume: 3,500,000 ☐ tons or ☒ yds<sup>3</sup>

(if applicable)

Annual energy production:

Landfill gas recovery projects: 18 megawatts

Waste-to-energy incinerators: \_\_\_\_\_ megawatts

## FACILITY DESCRIPTIONS

Facility Type: Type II Landfill

Facility Name: Venice Park Recycling and Disposal Facility

County: Shiawassee Location: Town: 7N Range: 4E Section(s): 27

Map identifying location included in Attachment Section: ☒ Yes ☐ No

If facility is an Incinerator or a Transfer Station, list the final disposal site and location for Incinerator ash or Transfer Station wastes : \_\_\_\_\_

☐ Public ☒ Private Owner: Waste Management of Michigan, Inc.

### Operating Status (check)

- ☒ open
- ☐ closed
- ☒ licensed
- ☐ unlicensed
- ☐ construction permit
- ☐ open, but closure
- ☐ pending

### Waste Types Received (check all that apply)

- ☒ residential
- ☒ commercial
- ☒ industrial
- ☒ construction & demolition
- ☒ contaminated soils
- ☒ special wastes \*
- ☒ other: \_\_\_\_\_

\* Explanation of special wastes, including a specific list and/or conditions:

Contaminated soils, sludges, filter cake, process wastes, coal ash, foundry sand, chemical containing equipment, used containers, treated medical waste, contaminated demolition debris, street sweeping, sediment trap materials, asbestos.

### Site Size:

Total area of facility property:	<u>331</u>	acres
Total area sited for use	<u>80</u>	acres
Total area permitted:	<u>69</u>	acres
Operating:	<u>41</u>	acres
Not excavated:	<u>2.5</u>	acres
Current capacity:	<u>1,300,000</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds <sup>3</sup>
Estimated lifetime:	<u>2.5</u>	years
Estimated days open per year:	<u>286</u>	days
Estimated yearly disposal volume:	<u>526,000</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds <sup>3</sup>

(if applicable)

Annual energy production:

Landfill gas recovery projects:	<u>12,500</u>	megawatts
Waste-to-energy incinerators:	<u>n/a</u>	megawatts

## FACILITY DESCRIPTIONS

Facility Type: Type II Landfill

Facility Name: Brent Run Landfill

County: Genesee Location: Town: 6 Range: 5e Section(s): 23

Map identifying location included in Attachment Section: ☒ Yes

☐ No

If facility is an Incinerator or a Transfer Station, list the final disposal site and location for Incinerator ash or Transfer Station wastes : \_\_\_\_\_

☐ Public ☒ Private

Owner: Republic Waste Services, Inc.

### Operating Status (check)

- ☒ open
- ☐ closed
- ☒ licensed
- ☐ unlicensed
- ☐ construction permit
- ☐ open, but closure
- ☐ pending

### Waste Types Received (check all that apply)

- ☒ residential
- ☒ commercial
- ☒ industrial
- ☒ construction & demolition
- ☒ contaminated soils
- ☒ special wastes \*
- ☒ other: \_\_\_\_\_

\* Explanation of special wastes, including a specific list and/or conditions:

Sludge, asbestos

### Site Size:

Total area of facility property:	<u>500</u>	acres
Total area sited for use	<u>350</u>	acres
Total area permitted:	<u>106.5</u>	acres
Operating:	<u>38.91</u>	acres
Not excavated:	<u>67.56</u>	acres

Current capacity:	<u>14,000,000</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds <sup>3</sup>
Estimated lifetime:	<u>30</u>	years
Estimated days open per year:	<u>286</u>	days
Estimated yearly disposal volume:	<u>400,000</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds <sup>3</sup>

(if applicable)

Annual energy production:

Landfill gas recovery projects:	<u>2</u>	megawatts ( <i>under development</i> )
Waste-to-energy incinerators:	_____	megawatts



## FACILITY DESCRIPTIONS

Facility Type: Type II Landfill

Facility Name: Citizens Disposal, Inc.

County: Genesee Location: Town: 6 Range: 6 Section(s): 23

Map identifying location included in Attachment Section: ☒ Yes ☐ No

If facility is an Incinerator or a Transfer Station, list the final disposal site and location for Incinerator ash or Transfer Station wastes : \_\_\_\_\_

☐ Public ☒ Private Owner: Allied Waste Industries

### Operating Status (check)

- ☒ open
- ☐ closed
- ☒ licensed
- ☐ unlicensed
- ☐ construction permit
- ☐ open, but closure
- ☐ pending

### Waste Types Received (check all that apply)

- ☒ residential
- ☒ commercial
- ☒ industrial
- ☒ construction & demolition
- ☒ contaminated soils
- ☒ special wastes \*
- ☒ other: \_\_\_\_\_

\* Explanation of special wastes, including a specific list and/or conditions:

All special waste requires prior review and approval including analytical data and waste profile - Non Hazardous Only

### Site Size:

Total area of facility property: 300 acres

Total area sited for use 300 acres

Total area permitted: 52 acres

Operating: 52 acres

Not excavated: 80 acres

Current capacity: 5,300,000 ☐ tons or ☒ yds<sup>3</sup>

Estimated lifetime: 25 years

Estimated days open per year: 300 days

Estimated yearly disposal volume: 500,000 ☐ tons or ☒ yds<sup>3</sup>

(if applicable)

Annual energy production:

Landfill gas recovery projects: 2.4 megawatts

Waste-to-energy incinerators: \_\_\_\_\_ megawatts

## FACILITY DESCRIPTIONS

Facility Type: Type II Landfill

Facility Name: Adrian Landfill

County: Lenawee Location: Town: 7,8 Range: 4E Section(s): 6,7

Map identifying location included in Attachment Section: ☒ Yes ☐ No

If facility is an Incinerator or a Transfer Station, list the final disposal site and location for Incinerator ash or Transfer Station wastes : \_\_\_\_\_

☐ Public ☒ Private Owner: Great Lakes Waste Services

### Operating Status (check)

- ☒ open
- ☐ closed
- ☒ licensed
- ☐ unlicensed
- ☐ construction permit
- ☐ open, but closure
- ☐ pending

### Waste Types Received (check all that apply)

- ☒ residential
- ☒ commercial
- ☒ industrial
- ☒ construction & demolition
- ☒ contaminated soils
- ☒ special wastes \*
- ☒ other: \_\_\_\_\_

\* Explanation of special wastes, including a specific list and/or conditions:

### Asbestos and sludges per operating policy.

#### Site Size:

Total area of facility property:	<u>421</u>	acres
Total area sited for use	<u>287</u>	acres
Total area permitted:	<u>40</u>	acres
Operating:	<u>19</u>	acres
Not excavated:	<u>20</u>	acres

Current capacity:	<u>2,002,000</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds <sup>3</sup>
Estimated lifetime:	<u>6.8</u>	years
Estimated days open per year:	<u>307</u>	days
Estimated yearly disposal volume:	<u>97,731</u>	<input checked="" type="checkbox"/> tons or <input type="checkbox"/> yds <sup>3</sup>

(if applicable)

Annual energy production:

Landfill gas recovery projects:	<u>20,148</u>	megawatts
Waste-to-energy incinerators:	_____	megawatts

## FACILITY DESCRIPTIONS

Facility Type: Type II Landfill

Facility Name: Eagle Valley Recycle and Disposal Facility

County: Oakland Location: Town: 4N Range: 10E Section(s): 26, 27, 35

Map identifying location included in Attachment Section: ☒ Yes ☐ No

If facility is an Incinerator or a Transfer Station, list the final disposal site and location for Incinerator ash or Transfer Station wastes : \_\_\_\_\_

☐ Public ☒ Private Owner: Waste Management of Michigan, Inc.

### Operating Status (check)

- ☒ open
- ☐ closed
- ☒ licensed
- ☐ unlicensed
- ☐ construction permit
- ☐ open, but closure
- ☐ pending

### Waste Types Received (check all that apply)

- ☒ residential
- ☒ commercial
- ☒ industrial
- ☒ construction & demolition
- ☒ contaminated soils
- ☒ special wastes \*
- ☒ other: \_\_\_\_\_

\* Explanation of special wastes, including a specific list and/or conditions:

Contaminated soils, sludges, filter cake, process wastes, coal ash, chemical containing equipment, used containers, treated medical waste, contaminated demolition debris, street sweeping, sediment trap materials.

### Site Size:

Total area of facility property:	<u>330</u>	acres
Total area sited for use	<u>330</u>	acres
Total area permitted:	<u>89</u>	acres
Operating:	<u>75.7</u>	acres
Not excavated:	<u>7.8</u>	acres

Current capacity:	<u>4,800,000</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds <sup>3</sup>
Estimated lifetime:	<u>5.5</u>	years
Estimated days open per year:	<u>286</u>	days
Estimated yearly disposal volume:	<u>870,000</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds <sup>3</sup>

(if applicable)

Annual energy production:		
Landfill gas recovery projects:	<u>233,000</u>	megawatts
Waste-to-energy incinerators:	_____	megawatts

## FACILITY DESCRIPTIONS

Facility Type: Type II Landfill

Facility Name: Granger Grand River Avenue Landfill

County: Clinton Location: Town: 5N Range: 3W Section(s): 29

Map identifying location included in Attachment Section: ☒ Yes ☐ No

If facility is an Incinerator or a Transfer Station, list the final disposal site and location for Incinerator ash or Transfer Station wastes : \_\_\_\_\_

☐ Public ☒ Private

Owner: Granger Land Development Company

### Operating Status (check)

- ☒ open
- ☐ closed
- ☒ licensed
- ☐ unlicensed
- ☐ construction permit
- ☐ open, but closure
- ☐ pending

### Waste Types Received (check all that apply)

- ☒ residential
- ☒ commercial
- ☒ industrial
- ☒ construction & demolition
- ☒ contaminated soils
- ☒ special wastes \*
- ☒ other: \_\_\_\_\_

\* Explanation of special wastes, including a specific list and/or conditions:

### All as authorized

#### Site Size:

Total area of facility property:	<u>180.9</u>	acres
Total area sited for use	<u>120.9</u>	acres
Total area permitted:	<u>85.7</u>	acres
Operating:	<u>54.1</u>	acres
Not excavated:	<u>31.6</u>	acres
Current capacity:	<u>7,617,000</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds <sup>3</sup>
Estimated lifetime:	<u>32</u>	years
Estimated days open per year:	<u>300</u>	days
Estimated yearly disposal volume:	<u>600,000</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds <sup>3</sup>

(if applicable)

Annual energy production:

Landfill gas recovery projects:	<u>4.0</u>	megawatts
Waste-to-energy incinerators:	_____	megawatts

## FACILITY DESCRIPTIONS

Facility Type: Type II Landfill

Facility Name: Granger Wood Street Landfill

County: Clinton/Ingham Location: Town: 5N, 4N Range: 2W Section(s): 34, 3

Map identifying location included in Attachment Section: ☒ Yes ☐ No

If facility is an Incinerator or a Transfer Station, list the final disposal site and location for Incinerator ash or Transfer Station wastes : \_\_\_\_\_

☐ Public ☒ Private Owner: Granger Land Development Company

### Operating Status (check)

- ☒ open
- ☐ closed
- ☒ licensed
- ☐ unlicensed
- ☐ construction permit
- ☐ open, but closure
- ☐ pending

### Waste Types Received (check all that apply)

- ☒ residential
- ☒ commercial
- ☒ industrial
- ☒ construction & demolition
- ☒ contaminated soils
- ☒ special wastes \*
- ☒ other: \_\_\_\_\_

\* Explanation of special wastes, including a specific list and/or conditions:

All as authorized

### Site Size:

Total area of facility property: 302.8 acres

Total area sited for use 194.8 acres

Total area permitted: 104.3 acres

Operating: 49.5 acres

Not excavated: 54.8 acres

Current capacity: 10,981,000 ☐ tons or ☒ yds<sup>3</sup>

Estimated lifetime: 34 years

Estimated days open per year: 360 days

Estimated yearly disposal volume: 600,000 ☐ tons or ☒ yds<sup>3</sup>

(if applicable)

Annual energy production:

Landfill gas recovery projects: 3.2 megawatts

Waste-to-energy incinerators: \_\_\_\_\_

## FACILITY DESCRIPTIONS

Facility Type: Type II Landfill

Facility Name: Woodland Meadows Recycling and Disposal Facility

County: Wayne Location: Town: 3S Range: 8E Section(s): 1

Map identifying location included in Attachment Section: ☒ Yes ☐ No

If facility is an Incinerator or a Transfer Station, list the final disposal site and location for Incinerator ash or Transfer Station wastes : \_\_\_\_\_

☐ Public ☒ Private Owner: Waste Management of Michigan, Inc.

### Operating Status (check)

- ☒ open
- ☐ closed
- ☒ licensed
- ☐ unlicensed
- ☐ construction permit
- ☐ open, but closure
- ☐ pending

### Waste Types Received (check all that apply)

- ☒ residential
- ☒ commercial
- ☒ industrial
- ☒ construction & demolition
- ☒ contaminated soils
- ☒ special wastes \*
- ☒ other: \_\_\_\_\_

\* Explanation of special wastes, including a specific list and/or conditions:

Sludges - provided they are at least 30% Solids

### Site Size:

Total area of facility property:	<u>214</u>	acres
Total area sited for use	<u>214</u>	acres
Total area permitted:	<u>148</u>	acres
Operating:	<u>70</u>	acres
Not excavated:	<u>78</u>	acres

Current capacity:	<u>26,520,800</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds <sup>3</sup>
Estimated lifetime:	<u>19.8</u>	years
Estimated days open per year:	<u>305</u>	days
Estimated yearly disposal volume:	<u>1,340,200</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds <sup>3</sup>

(if applicable)

Annual energy production:		
Landfill gas recovery projects:	<u>400,000</u>	megawatts
Waste-to-energy incinerators:	_____	megawatts

## FACILITY DESCRIPTIONS

Facility Type: Type II Landfill

Facility Name: McGill Rd. Landfill

County: Jackson Location: Town: 2S Range: 1W Section(s): 24

Map identifying location included in Attachment Section: ☒ Yes ☐ No

If facility is an Incinerator or a Transfer Station, list the final disposal site and location for Incinerator ash or Transfer Station wastes : \_\_\_\_\_

☐ Public ☒ Private Owner: Waste Management of Michigan, Inc.

### Operating Status (check)

- ☒ open
- ☐ closed
- ☒ licensed
- ☐ unlicensed
- ☐ construction permit
- ☐ open, but closure
- ☐ pending

### Waste Types Received (check all that apply)

- ☒ residential
- ☒ commercial
- ☒ industrial
- ☒ construction & demolition
- ☒ contaminated soils
- ☒ special wastes \*
- ☒ other: \_\_\_\_\_

\* Explanation of special wastes, including a specific list and/or conditions:

### Incinerator Ash

#### Site Size:

Total area of facility property: 50.5 acres

Total area sited for use 41.8 acres

Total area permitted: 18.7 acres

Operating: 7.8 acres

Not excavated: 17.5 acres

Current capacity: 1,236,000 ☐ tons or ☒ yds<sup>3</sup>

Estimated lifetime: 15 years

Estimated days open per year: 310 days

Estimated yearly disposal volume: 63,226 ☒ tons or ☐ yds<sup>3</sup>

(if applicable)

Annual energy production:

Landfill gas recovery projects: \_\_\_\_\_ megawatts

Waste-to-energy incinerators: \_\_\_\_\_ megawatts

## FACILITY DESCRIPTIONS

Facility Type: Type II Landfill

Facility Name: C & C Landfill

County: Calhoun Location: Town: 1S Range: 6W Section(s): 28

Map identifying location included in Attachment Section: ☒ Yes ☐ No

If facility is an Incinerator or a Transfer Station, list the final disposal site and location for Incinerator ash or Transfer Station wastes : \_\_\_\_\_

☐ Public ☒ Private Owner: BFI Waste Systems of North America, Inc

### Operating Status (check)

- ☒ open
- ☐ closed
- ☒ licensed
- ☐ unlicensed
- ☐ construction permit
- ☐ open, but closure
- ☐ pending

### Waste Types Received (check all that apply)

- ☒ residential
- ☒ commercial
- ☒ industrial
- ☒ construction & demolition
- ☒ contaminated soils
- ☒ special wastes \*
- ☒ other: \_\_\_\_\_

\* Explanation of special wastes, including a specific list and/or conditions:

non-hazardous solid and sem-solid wastes, no hazardous or liquid wastes

### Site Size:

Total area of facility property:	<u>224</u>	acres
Total area sited for use		acres
Total area permitted:	<u>.154</u>	acres
Operating:	<u>33</u>	acres
Not excavated:	<u>21</u>	acres

Current capacity:	<u>3,360,000</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds <sup>3</sup>
Estimated lifetime:	<u>7</u>	years
Estimated days open per year:	<u>286</u>	days
Estimated yearly disposal volume:	<u>1,100,000</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds <sup>3</sup>

(if applicable)

Annual energy production:

Landfill gas recovery projects:	<u>n/a</u>	megawatts
Waste-to-energy incinerators:	<u>n/a</u>	megawatts



## FACILITY DESCRIPTIONS

Facility Type: Type II Landfill

Facility Name: Vienna Junction Industrial Park Sanitary Landfill

County: Monroe Location: Town: 9S, 8S Range: 8E, 8E Section(s): 5&6, 31&32

Map identifying location included in Attachment Section: ☒ Yes ☐ No

If facility is an Incinerator or a Transfer Station, list the final disposal site and location for Incinerator ash or Transfer Station wastes : \_\_\_\_\_

☐ Public ☒ Private Owner: Allied Waste Industries

### Operating Status (check)

- ☒ open
- ☐ closed
- ☒ licensed
- ☐ unlicensed
- ☐ construction permit
- ☐ open, but closure
- ☐ pending

### Waste Types Received (check all that apply)

- ☒ residential
- ☒ commercial
- ☒ industrial
- ☒ construction & demolition
- ☒ contaminated soils
- ☒ special wastes \*
- ☒ other: \_\_\_\_\_

\* Explanation of special wastes, including a specific list and/or conditions:

### Site Size:

Total area of facility property:	<u>226</u>	acres
Total area sited for use	<u>149</u>	acres
Total area permitted:	_____	acres
Operating:	<u>56</u>	acres
Not excavated:	<u>40</u>	acres
Current capacity:	<u>11,400,000</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds <sup>3</sup>
Estimated lifetime:	<u>25</u>	years
Estimated days open per year:	<u>280</u>	days
Estimated yearly disposal volume:	<u>1,000,000</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds <sup>3</sup>

(if applicable)

Annual energy production:

Landfill gas recovery projects: \_\_\_\_\_ megawatts

Waste-to-energy incinerators: \_\_\_\_\_ megawatts

## **SOLID WASTE COLLECTION SERVICES AND TRANSPORTATION**

**The following describes the solid waste collection services and transportation infrastructure which will be utilized within the County to collect and transport solid waste.**

None of the municipalities in Livingston County own or operate solid waste hauling operations or transfer stations. Every facet of collection and transportation is handled by the private sector, either through subscription service or through contracts with local governments. The Cities of Brighton and Howell, the Villages of Pinckney and Fowlerville and the Townships of Cohoctah, Genoa and Iosco have waste hauling contracts.

Waste handled by the private sector is generally hauled to those landfills in neighboring counties which are closest to the waste generation point of origin. Livingston County is centrally located to several landfills which allows for the efficient export of waste. Simply stated, waste is directly hauled to those landfills closest to the collection point. For example, waste generated in Tyrone Township (in the northeast section of Livingston County) is likely hauled to Citizen's Disposal in Genesee County.

The County has several private haulers that provide adequate collection services throughout the county for both commercial and residential solid waste. Please refer to Table II-2, in the DATABASE section, Page II-18.

## RESOURCE CONSERVATION EFFORTS

The following describes the selected system's proposed conservation efforts to reduce the amount of solid waste generated throughout the County. The annual amount of solid waste currently or proposed to be diverted from landfills and incinerators is estimated for each effort to be used, if possible. Since conservation efforts are provided voluntarily and change with technologies and public awareness, it is not this Plan update's intention to limit the efforts to only what is listed. Instead citizens, businesses, and industries are encouraged to explore the options available to their lifestyles, practices, and processes which will reduce the amount of materials requiring disposal.

Effort Description	Est. Diversion Tons/yr		
	<u>Current</u>	<u>5<sup>th</sup> yr</u>	<u>10<sup>th</sup> yr</u>
Waste Reduction Education/Promotion <sup>1</sup>	6,585	14,730	24,938
Recycle Livingston Drop-off <sup>2</sup>	500	550	600
Community White Goods/Scrap Metal drop-offs <sup>2</sup>	260	300	330
Community Tire Collections <sup>2</sup>	50	55	60
Curbside Recycling <sup>3</sup>	1000	1500	2250
Composting Programs <sup>4</sup> (Includes curbside collections and estimates for backyard composting and grasscycling)	19,299	21,506	23,939

1 Assumes current waste reduction is 5%, and a 5% increase per five year period.

2 Assumes a 10% increase in recovery per five year period

3 Assumes a 50% increase attributed to more communities utilizing hauling contracts

4 Assumes 100% diversion of yard waste attributed to yard waste disposal ban

**Note:** Specific program information used in estimation is available at the DPA office on request.

## WASTE REDUCTION, RECYCLING, & COMPOSTING PROGRAMS:

### Volume Reduction Techniques

The following describes the techniques utilized and proposed to be used throughout the County which reduce the volume of solid waste requiring disposal. The annual amount of landfill air space not used as a result of each of the techniques is estimated. Since volume reduction is practiced voluntarily and because technologies change and equipment may need replacing, it is not this Plan update's intention to limit the techniques to only what is listed. Persons within the County are encouraged to utilize the technique that provides the most efficient and practical volume reduction for their needs. Documentation explaining achievements of implemented programs or expected results of proposed programs is attached.

Technique Description	Est. Air Space Conserved Yds <sup>3</sup> /Yr		
	<u>Current</u> <u>yr</u>	<u>5<sup>th</sup> yr</u>	<u>10<sup>th</sup></u>
N/A			

## **Overview of Resource Recovery Programs:**

The following describes the type and volume of material in the County's waste stream that may be available for recycling or composting programs. How conditions in the County affect or may affect a recycling or composting program and potential benefits derived from these programs is also discussed. Impediments to recycling or composting programs which exist or which may exist in the future are listed, followed by a discussion regarding reducing or eliminating such impediments.

Recycling and resource recovery programs are increasing in Livingston County. Paper, plastics, glass and metals are the primary items collected for recycling. Leaves and grass make up the bulk of materials that are composted.

Curbside recycling and yard waste collection provided by the private sector are the key components to resource recovery programs in the county. Also, drop-off recycling opportunities provide additional programs.

Education is an integral part of any recycling program. The Solid Waste Coordination Department will continue to serve as the education focal point for the various programs in Livingston County. A lack of awareness or apathy is an impediment that the SWCD will focus on by increasing educational efforts.

An impediment to recycling is the lack of community-wide service contracts for garbage hauling, and/or recycling service. While recycling is offered as a subscription service, it can be cost prohibitive when compared to those communities in Livingston County that have one waste hauler. The increasing density of some townships will likely drive the demand for contracts or minimum service levels that will allow residents more recycling and composting options.

- ☒ Recycling programs within the County are feasible. Details of existing and planned programs are included on the following pages.
- ☐ Recycling programs for the County have been evaluated and it has been determined that it is not feasible to conduct any programs because of the following:

Several Municipalities have composting operations and special collections for yard waste, leaves, and brush/limbs. As with recycling programs, the growth and privatization of waste services will increase the number and kind of programs available for Livingston County residents.

Also, Tuthill Farms and Composting in Green Oak Township provides a drop-off outlet for grass clippings, leaves, brush and stumps. Backyard composting has been underutilized and will be emphasized during this planning period. A home composting bin distribution was conducted in Howell and Brighton in May 1999. Educating residents on backyard composting as an economical alternative to paid collection/disposal will also be stressed.

- ☒ **Composting programs within the County are feasible. Details of existing and planned programs are included on the following pages.**
- ☐ **Composting programs for the County have been evaluated and it has been determined that it is not feasible to conduct any programs because of the following:**

The feasibility of source separation of potentially hazardous wastes is being investigated by the pilot Household Hazardous Waste Collections being conducted by the Solid Waste Coordination Department. Educational efforts are also conducted to reduce the amount of potentially hazardous wastes being disposed, to properly dispose of hazardous waste and to list alternative products that are non-hazardous. The SWCD promotes the recycling of used motor oil at several service stations and oil change establishments.

- ☒ **Programs for source separation of potentially hazardous materials are feasible. Details of existing and planned programs are included on the following pages.**
- ☐ **Programs for source separation of potentially hazardous materials have been evaluated and it has been determined that it is not feasible to conduct any programs because of the following:**

## **RECYCLING AND COMPOSTING**

The following is a brief analysis of the recycling and composting programs selected for the County in this Plan. Additional information on operation of recycling and composting programs is included in Appendix A. The analysis covers various factors within the County and the impacts of these factors on recycling and composting. Following the written analysis the tables on pages III-28, 29, & 30 list the existing recycling, composting, and source separation of hazardous materials programs that are currently active in the County and which will be continued as part of this Plan. The second group of three tables on pages III-31, 32, & 33 list the recycling, composting, and source separation of hazardous materials programs that are proposed in the future for the County. It is not this Plan update's intent to prohibit additional programs or expansions of current programs to be implemented beyond those listed.

Recycling and composting programs continue to grow in Livingston County as the population increases. Currently, five communities: City of Brighton, Village of Fowlerville, Genoa Township, City of Howell and the Village of Pinckney have curbside recycling contracts. Also, these five communities have yard waste collection for most of the year.

Recycling and yard waste subscription services are available to roughly 80% of Livingston County residents. As larger townships continue to grow, particularly those in the Southeast section of the county including; Green Oak, Brighton and Hamburg, it is anticipated that these townships will seek to implement a standard waste hauling contract that includes recycling and composting services.

Drop-off recycling opportunities have declined due to the increase in curbside programs. Recycle Livingston, located in Howell, is a permanent recycling drop-off center. Recycling Drop-off is also available at the Mister Rubbish Processing Facility in Green Oak Township. Regal Recycling, in Howell is a scrap metal and white goods recycling drop-off.

A pilot program for the collection of Household Hazardous Waste was conducted in 1998. Additional collections will take place in 1999. The program is funded by the County Board of Commissioners. It is anticipated that the program will continue as a county funded program or through a cost share program with individual municipalities. Also, several service stations and oil change shops collect used motor oil and filters.

The County provided grant funding in 1998 for new or innovative solid waste and resource recovery programs. It is anticipated this program will continue in 1999. The County has also assisted local units of government in establishing special collections for bulk items, white goods, scrap metal and tire collections. Several townships have programs which are seasonal and occur one or two times per year.

Existing programs are detailed on the following Tables III-1 through III-3. Future or proposed programs are detailed on Tables III-4 through III-6.

RECYCLING

<u>Program Name:</u>	<u>Service Area<sup>1</sup></u>	<u>Public or Private</u>	<u>Collection Point<sup>3</sup></u>	<u>Collection Frequency<sup>4</sup></u>	<u>Materials Collected<sup>5</sup></u>	<u>Program Management Responsibilities<sup>2</sup></u>		
						<u>Development</u>	<u>Operation</u>	<u>Evaluation</u>
<u>City of Brighton</u>	<u>City of Brighton</u>	<u>Public</u>	<u>c</u>	<u>w</u>	<u>A,B,C,D,E,F</u>	<u>3</u>	<u>5</u>	<u>1,3,5</u>
<u>Deerfield Twp</u>	<u>Deerfield Twp</u>	<u>Public</u>	<u>d</u>	<u>Sp</u>	<u>K,F</u>	<u>3,5</u>	<u>3,5</u>	<u>3,5</u>
<u>Village of Fowlerville</u>	<u>Village of Fowlerville</u>	<u>Public</u>	<u>c</u>	<u>w</u>	<u>A,B,C,D,E,F</u>	<u>3</u>	<u>5</u>	<u>1,3,5</u>
<u>Genoa Twp</u>	<u>Genoa Twp</u>	<u>Public</u>	<u>c</u>	<u>w</u>	<u>A,B,C,D,E,F</u>	<u>3</u>	<u>5</u>	<u>1,3,5</u>
<u>City of Howell</u>	<u>City of Howell</u>	<u>Public</u>	<u>c</u>	<u>w</u>	<u>A,B,C,D,E,F</u>	<u>3</u>	<u>5</u>	<u>1,3,5</u>
<u>Howell Twp</u>	<u>Howell Twp</u>	<u>Public</u>	<u>d</u>	<u>Su</u>	<u>K,F</u>	<u>1,3,5</u>	<u>1,3,4</u>	<u>1,3,5</u>
<u>Recycle Livingston</u>	<u>Livingston County</u>	<u>Private</u>	<u>d</u>	<u>w</u>	<u>A,B,C,D,E,F</u>	<u>4</u>	<u>4</u>	<u>4</u>
<u>Regal Recycling</u>	<u>Livingston County</u>	<u>Private</u>	<u>d</u>	<u>w</u>	<u>K,F</u>	<u>5</u>	<u>5</u>	<u>5</u>
<u>Len's Rubbish</u>	<u>Livingston County</u>	<u>Private</u>	<u>d</u>	<u>*</u>	<u>J</u>	<u>5</u>	<u>5</u>	<u>5</u>
<u>Oceola Twp</u>	<u>Oceola Twp</u>	<u>Public</u>	<u>d</u>	<u>Sp,Fa</u>	<u>K,F</u>	<u>1,3,5</u>	<u>1,3,5</u>	<u>1,3,5</u>
<u>Pinckney, Village of</u>	<u>Pinckney, Village of</u>	<u>Public</u>	<u>c</u>	<u>b</u>	<u>A,B,C,D,E,F</u>	<u>3</u>	<u>5</u>	<u>1,3,5</u>
<u>Putnam Twp</u>	<u>Putnam Twp</u>	<u>Public</u>	<u>d</u>	<u>Su,F</u>	<u>K,F</u>	<u>1,3,5</u>	<u>1,3,4</u>	<u>1,3,5</u>
<u>Unadilla Twp</u>	<u>Unadilla Twp</u>	<u>Public</u>	<u>d</u>	<u>Fa</u>	<u>K,F</u>	<u>1,3,5</u>	<u>1,3,5</u>	<u>1,3,5</u>
<u>Mister Rubbish</u>	<u>Livingston County</u>	<u>Private</u>	<u>d</u>	<u>w</u>	<u>A,B,C,D,E,F</u>	<u>5</u>	<u>5</u>	<u>5</u>
<u>Community Recycles</u>	<u>Livingston County</u>	<u>Private</u>	<u>w</u>		<u>B, D</u>	<u>5</u>	<u>5</u>	<u>5</u>

<sup>1</sup>Identified by where the program will be offered. It throughout the planning area, then listed by planning area; if only in specific counties then listed by county; if only in specific municipalities, then listed by its name and respective county.

<sup>2</sup>Identified by 1 = Designated Planning Agency; 2 = County Board of Commissioners; 3 = Department of Public Works; 4 = Environmental Group  
5 = Private Owner Operator; 6 = Other

<sup>3</sup> Identified by c = curbside; d = drop-off; o = onsite; and if other, explained

<sup>4</sup>Identified by d = daily; w = weekly; b = biweekly; m = monthly; and if seasonal service also indicated by Sp = Spring; Su = Summer; Fa = Fall;  
Wi = Winter.

<sup>5</sup>Identified by the materials collected by listing of the letter located by that material type. A = Plastics; B = Newspapers; c = Corrugated Containers;  
D = Other Paper; E = Glass; F = Metals; P = Pallets; J = Construction/Demolition; K = Tires; L1, L2 etc. = as identified on page 25.



## COMPOSTING

TABLE III-2

<u>Program Name:</u>	<u>Service Area<sup>1</sup></u>	<u>Public or Private</u>	<u>Collection Point<sup>3</sup></u>	<u>Collection Frequency<sup>4</sup></u>	<u>Materials Collected<sup>5</sup></u>	<u>Program Management Responsibilities<sup>2</sup></u>		
						<u>Development</u>	<u>Operation</u>	<u>Evaluation</u>
<u>City of Brighton</u>	<u>City of Brighton</u>	<u>Public</u>	<u>c</u>	<u>w. Sp. Su. Fa</u>	<u>G.L</u>	<u>3</u>	<u>5</u>	<u>1,3,5</u>
<u>Village of Fowlerville</u>	<u>Village of Fowlerville</u>	<u>Public</u>	<u>d</u>	<u>w. Sp. Su. Fa</u>	<u>G.L</u>	<u>3</u>	<u>5</u>	<u>1,3,5</u>
<u>Genoa Township</u>	<u>Genoa Township</u>	<u>Public</u>	<u>d</u>	<u>Sp. Su. Fa</u>	<u>G.L</u>	<u>3</u>	<u>5</u>	<u>1,3,5</u>
<u>City of Howell</u>	<u>City of Howell</u>	<u>Public</u>	<u>c</u>	<u>w. Sp. Su. Fa</u>	<u>G.L</u>	<u>3</u>	<u>5</u>	<u>1,3,5</u>
<u>Village of Pinckney</u>	<u>Village of Pinckney</u>	<u>Public</u>	<u>d</u>	<u>Sp. Su. Fa</u>	<u>G.L</u>	<u>3</u>	<u>5</u>	<u>1,3,5</u>
<u>Tuthill Farms Composting</u>	<u>Livingston County</u>	<u>Private</u>	<u>d</u>	<u>d</u>	<u>G.L</u>	<u>5</u>	<u>5</u>	<u>5</u>

- <sup>1</sup> Identified by where the program will be offered. It throughout the planning area, then listed by planning area; if only in specific counties then listed by county; if only in specific municipalities, then listed by its name and respective county.
- <sup>2</sup> Identified by 1 = Designated Planning Agency; 2 = County Board of Commissioners; 3 = Department of Public Works; 4 = Environmental Group; 5 = Private Owner Operator; 6 = Other
- <sup>3</sup> Identified by c = curbside; d = drop-off; o = onsite; and if other, explained
- <sup>4</sup> Identified by d = daily; w = weekly; b = biweekly; m = monthly; and if seasonal service also indicated by Sp = Spring; Su = Summer; Fa = Fall; Wi = Winter.
- <sup>5</sup> Identified by the materials collected by listing of the letter located by that material type. G = Grass Clippings; L = Leaves; F = Food; W = Wood; P = Paper; S = Municipal Sewage Sludge; A = Animal Waste/Bedding; M = Municipal Solid Waste; L1, L2 etc. as identified on page 25.

TABLE III-3

**SOURCE SEPARATION OF POTENTIALLY HAZARDOUS MATERIALS**

<u>Program Name</u>	<u>Service Area<sup>1</sup></u>	<u>Public or Private</u>	<u>Collection Point<sup>3</sup></u>	<u>Collection Frequency<sup>4</sup></u>	<u>Materials Collected<sup>5</sup></u>	<u>Program Management Responsibilities<sup>2</sup></u>		
						<u>Development</u>	<u>Operation</u>	<u>Evaluation</u>
Household Hazardous Waste Collection	Livingston County	Public	d	Su, Fa	AR, A, C, H, P, PS, AN	1.2	1.5	1.2
<i>The following are located in Brighton:</i>								
Autoworks	Available to all customers	Private	d	d	U	5	5	5
BC Marathon Oil	Available to all customers	Private	d	d	U	5	5	5
CARS Plus Marathon	Available to all customers	Private	d	d	U	5	5	5
Victory Lane Quick Lube	Available to all customers	Private	d	d	U	5	5	5
<i>The following are located in Howell:</i>								
Cruz-n	Available to all customers	Private	d	d	U	5	5	5
Howell Auto Center	Available to all customers	Private	d	d	U	5	5	5
Jim Moore's Auto Service	Available to all customers	Private	d	d	U	5	5	5
Pardiac Shell	Available to all customers	Private	d	d	U	5	5	5
Tractor Supply Co	Available to all customers	Private	d	d	U	5	5	5
Victory Lane Quick Lube	Available to all customers	Private	d	d	U	5	5	5
<i>The following located in Fowlerville:</i>								
Fowlerville Exit Shell	Available to all customers	Private	d	d	U	5	5	5
<i>The following located in Pinckney:</i>								
John Colone Chrysler	Available to all customers	Private	d	d	U	5	5	5

- <sup>1</sup> Identified by where the program will be offered. It throughout the planning area, then listed by planning area; if only in specific counties then listed by county; if only in specific municipalities, then listed by its name and respective county.
- <sup>2</sup> Identified by 1 = Designated Planning Agency; 2 = County Board of Commissioners; 3 = Department of Public Works; 4 = Environmental Group; 5 = Private Owner Operator; 6 = Other
- <sup>3</sup> Identified by c = curbside; d = drop-off; o = onsite; and if other, explained
- <sup>4</sup> Identified by d = daily; w = weekly; b = biweekly; m = monthly; and if seasonal service also indicated by Sp = Spring; Su = Summer; Fa = Fall; Wi = Winter.
- <sup>5</sup> Identified by the materials collected by listing of the letter located by that material type. AR = Aerosol Cans; A = Automotive Products; AN = Antifreeze; B1 = Lead Acid Batteries; B2 = Household Batteries; C = Cleaners; OF = Used Oil Filters; P = Paints and Solvents; PS = Pesticides and Herbicides; U = Used Oil; .

# PROPOSED RECYCLING

Program Name:

Service Area<sup>1</sup>

Public or  
Private

Collection  
Point<sup>3</sup>

Collection  
Frequency<sup>4</sup>

Materials  
Collected<sup>5</sup>

Program Management Responsibilities<sup>2</sup>  
Development   Operation   Evaluation

Recycle Livingston

Livingston County

Private

d

w

shoes, textiles

4

4

4

TABLE III-4

- <sup>1</sup> Identified by where the program will be offered. It throughout the planning area, then listed by planning area; if only in specific counties then listed by county; if only in specific municipalities, then listed by its name and respective county.
- <sup>2</sup> Identified by 1 = Designated Planning Agency; 2 = County Board of Commissioners; 3 = Department of Public Works; 4 = Environmental Group (identified on Page 24); 5 = Private Owner Operator; 6 = Other
- <sup>3</sup> Identified by c = curbside; d = drop-off; o = onsite; and if other, explained
- <sup>4</sup> Identified by d = daily; w = weekly; b = biweekly; m = monthly; and if seasonal service also indicated by Sp = Spring; Su = Summer; Fa = Fall; Wi = Winter.
- <sup>5</sup> Identified by the materials collected by listing of the letter located by that material type. A = Plastics; B = Newspapers; c = Corrugated Containers; D = Other Paper; E = Glass; F = Metals; P = Pallets; J = Construction/Demolition; K = Tires; L1, L2 etc.

TABLE III-5

PROPOSED COMPOSTING

<u>Program Name:</u>	<u>Service Area</u> <sup>1</sup>	<u>Public or Private</u>	<u>Collection Point</u> <sup>3</sup>	<u>Collection Frequency</u> <sup>4</sup>	<u>Materials Collected</u> <sup>5</sup>	<u>Program Management Responsibilities</u> <sup>2</sup>		
						<u>Development</u>	<u>Operation</u>	<u>Evaluation</u>
NONE								

- 
- 1 Identified by where the program will be offered. It throughout the planning area, then listed by planning area; if only in specific counties then listed by county; it only in specific municipalities, then listed by its name and respective county.
- 2 Identified by 1 = Designated Planning Agency; 2 = County Board of Commissioners; 3 = Department of Public Works; 4 = Environmental Group (identified on Page 24); 5 = Private Owner Operator; 6 = Other
- 3 Identified by c = curbside; d = drop-off; o = onsite; and if other, explained
- 4 Identified by d = daily; w = weekly; b = biweekly; m = monthly; and if seasonal service also indicated by Sp = Spring; Su = Summer; Fa = Fall; Wi = Winter.
- 5 Identified by the materials collected by listing of the letter located by that material type. G = Grass Clippings; L = Leaves; F = Food; W = Wood; P = Paper; S = Municipal Sewage Sludge; A = Animal Waste/Bedding; M = Municipal Solid Waste; L1, L2 etc. as identified

TABLE III-6

**PROPOSED SOURCE SEPARATION OF POTENTIALLY HAZARDOUS MATERIALS**

<u>Program Name:</u>	<u>Service Area<sup>1</sup></u>	<u>Public or Private</u>	<u>Collection Point<sup>3</sup></u>	<u>Collection Frequency<sup>4</sup></u>	<u>Materials Collected<sup>5</sup></u>	<u>Program Management Responsibilities<sup>2</sup></u> <u>Development</u> <u>Operation</u> <u>Evaluation</u>
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*While no new programs are currently proposed, the Livingston County Solid Waste Coordination Department will continue to assist local communities with designing and implementing their own programs.*

- 
- <sup>1</sup> Identified by where the program will be offered. It throughout the planning area, then listed by planning area; if only in specific counties then listed by county; if only in specific municipalities, then listed by its name and respective county.
- <sup>2</sup> Identified by 1 = Designated Planning Agency; 2 = County Board of Commissioners; 3 = Department of Public Works; 4 = Environmental Group (identified on Page 24); 5 = Private Owner Operator; 6 = Other
- <sup>3</sup> Identified by c = curbside; d = drop-off; o = onsite; and if other, explained
- <sup>4</sup> Identified by d = daily; w = weekly; b = biweekly; m = monthly; and if seasonal service also indicated by Sp = Spring; Su = Summer; Fa = Fall; Wi = Winter.
- <sup>5</sup> Identified by the materials collected by listing of the letter located by that material type. G = Grass Clippings; L = Leaves; F = Food; W = Wood; P = Paper; S = Municipal Sewage Sludge; A = Animal Waste/Bedding; M = Municipal Solid Waste; L1, L2 etc. as identified on page 25.

## **IDENTIFICATION OF RESOURCE RECOVERY MANAGEMENT ENTITIES:**

The following identifies those public and private parties, and the resource recovery or recycling programs for which they have management responsibilities:

### **Environmental Groups:**

Livingston County Board of Commissioners, through the Solid Waste Management Committee and the Solid Waste Coordination Department: Local Grants Program, HHW Collection and educational efforts.

Recycle Livingston: Recycle Livingston Drop-off Center in Howell.

Boys Scouts of Brighton: Monthly Newspaper and Recycling Drop-off

### **Municipal Programs**

City of Brighton: Curbside Recycling and Yard Waste Program

Village of Fowlerville: Curbside Recycling Program

Genoa Township: Curbside Recycling Program, yard waste drop-off

City of Howell: Curbside Recycling and Yard Waste Program

Village of Pinckney: Curbside Recycling Program, Yard waste drop-off

Deerfield Twp: White Goods, Scrap Metal and Tire Recycling

Cohoctah Twp: White Goods, Scrap Metal and Tire Recycling

Howell Twp: White Goods, Scrap Metal and Tire Recycling

Marion Twp: White Goods, Scrap Metal and Tire Recycling

Oceola Twp: White Goods, Scrap Metal and Tire Recycling

Putnam Twp: White Goods, Scrap Metal and Tire Recycling

Unadilla Twp: White Goods, Scrap Metal and Tire Recycling

### **Private Industry**

Regal Recycling: Scrap metal drop-off.

Mister Rubbish Material Recovery Facility: Collects and process commercial, industrial and construction material. Curbside recycling programs. Commercial Recycling programs.

Len's Rubbish Construction Material Recovery Facility: C & D recovery operation.

Tuthill Farms Composting: Yard waste compost facility

Community Recyclers: Commercial Recycling Business

BFI: curbside recycling and/or yard waste collection.

Great Lakes: curbside recycling and/or yard waste collection.

Any or all of the waste haulers providing curbside recycling and/or yard waste collection.

## PROJECTED DIVERSION RATES:

The following estimates the annual amount of solid waste which is expected to be diverted from landfills and incinerators as a result of the current resource recovery programs and in five and ten years.

<u>Collected Material</u>	<u>Projected Annual Tons Diverted:</u>			<u>Collected Material:</u>	<u>Projected Annual Tons Diverted:</u>		
	<u>Current</u>	<u>5th Yr</u>	<u>10th Yr</u>		<u>Current</u>	<u>5th Yr</u>	<u>10th Yr</u>
A. TOTAL PLASTICS:	<u>80</u>	<u>120</u>	<u>180</u>	G. GRASS AND LEAVES:	<u>19,229</u>	<u>21,506</u>	<u>23,939</u>
B. NEWSPAPER:	<u>135</u>	<u>200</u>	<u>300</u>	H. TOTAL WOOD WASTE:	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
C. CORRUGATED CONTAINERS:	<u>135</u>	<u>200</u>	<u>300</u>	I. CONSTRUCTION AND DEMOLITION	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
D. TOTAL OTHER PAPER:	<u>225</u>	<u>340</u>	<u>510</u>	J. FOOD AND FOOD PROCESSING:	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
E. TOTAL GLASS:	<u>165</u>	<u>247</u>	<u>470</u>	K. TIRES:	<u>50</u>	<u>55</u>	<u>60</u>
F. OTHER MATERIALS:				L. TOTAL METALS:	<u>60</u>	<u>90</u>	<u>135</u>
F1. <u>TEXTILES</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	F3. <u>_____</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>

## MARKET AVAILABILITY FOR COLLECTED MATERIALS:

The following identifies how much volume that existing markets are able to utilize of the recovered materials which were diverted from the County's solid waste stream.

<u>Collected Material:</u>	<u>In-State Markets</u>	<u>Out-of-State Markets</u>	<u>Collected Material</u>	<u>In-State Markets</u>	<u>Out-of-State Markets</u>
A. TOTAL PLASTICS:	<u>_____</u>	<u>_____</u>	G. GRASS AND LEAVES:	<u>_____</u>	<u>_____</u>
B. NEWSPAPER:	<u>_____</u>	<u>_____</u>	H. TOTAL WOOD WASTE:	<u>_____</u>	<u>_____</u>
C. CORRUGATED CONTAINERS:	<u>_____</u>	<u>_____</u>	I. CONSTRUCTION AND DEMOLITION:	<u>_____</u>	<u>_____</u>
D. TOTAL OTHER PAPER:	<u>_____</u>	<u>_____</u>	J. FOOD AND FOOD PROCESSING	<u>_____</u>	<u>_____</u>
E. TOTAL GLASS:	<u>_____</u>	<u>_____</u>	K. TIRES:	<u>_____</u>	<u>_____</u>
F. OTHER MATERIALS:			L. TOTAL METALS:	<u>_____</u>	<u>_____</u>
F1. <u>_____</u>	<u>_____</u>	<u>_____</u>	F3. <u>_____</u>	<u>_____</u>	<u>_____</u>
F2. <u>_____</u>	<u>_____</u>	<u>_____</u>	F4. <u>_____</u>	<u>_____</u>	<u>_____</u>

While specific numbers are not available, the following local markets should be able to process all material recovered by the various Recycling and/or Composting programs in Livingston County.

Plastics: Michigan Polymer Reclaim, Inc.

Metals: Regal Recyclers

Glass: Strategic Glass Recycler's

Office paper: Great Lakes, GBA Enterprise

Newspapers: Applegate Insulation, GBA Enterprise

Corrugated Containers: Great Lakes

Textiles: MH Textiles, Inc.

Tires: Environmental Rubber Recycling

Polystyrene: Dart Container Corporation

Yard waste: Tuthill Farms & Composting



## EDUCATIONAL AND INFORMATIONAL PROGRAMS

It is often necessary to provide educational and informational programs regarding the various components of a solid waste management system before and during its implementation. These programs are offered to avoid miscommunication which results in improper handling of solid waste and to provide assistance to the various entities who participate in such programs as waste reduction and waste recovery. Following is a listing of the programs offered or proposed to be offered in this County.

*The following programs are ongoing and will be continued through the 5 year planning period:*

<u>Program Topic<sup>1</sup></u>	<u>Delivery Medium<sup>2</sup></u>	<u>Targeted Audience<sup>3</sup></u>	<u>Program Provider<sup>4</sup></u>
<u>1 Recycling</u>	<u>r, f, n, o, e</u>	<u>p, b, i, s</u>	<u>DPA</u>
<u>1 Recycling</u>	<u>r, f, n, o, e</u>	<u>p, b, i, s</u>	<u>EG (Recycle Livingston)</u>
<u>2 Home Composting</u>	<u>r, f, n, o, e</u>	<u>p, s</u>	<u>DPA</u>
<u>2 Composting</u>	<u>r, f, n, o, e</u>	<u>p, s</u>	<u>O/O (Tuthill Farms)</u>
<u>3 HHW</u>	<u>r, f, n, o, e</u>	<u>p</u>	<u>DPA</u>
<u>3 HHW</u>	<u>r, f, n, o, e</u>	<u>p, b, i, s</u>	<u>(Huron River EG Watershed Council)</u>
<u>3 HHW</u>	<u>f, o, e(home show)</u>	<u>p</u>	<u>HD (Lvngstm Co. EnvHealth)</u>
<u>4 Resource Con.</u>	<u>r, f, n, o, e</u>	<u>p, b, i, s</u>	<u>EG (Recycle Livingston)</u>
<u>5 Waste redux Presentations</u>	<u>f, e, n, w</u>	<u>p, b, i, s (grades 1-5)</u>	<u>DPA</u>

*The following programs are proposed to be offered and will be implemented during the next 5 year planning period:*

<u>Program Topic<sup>1</sup></u>	<u>Delivery Medium<sup>2</sup></u>	<u>Targeted Audience</u>	<u>Program Provider<sup>4</sup></u>
<u>6-Wellhead Protection</u>	<u>f, e, n, w</u>	<u>p, b, i, s</u>	<u>DPA</u>
<u>6 Illegal Dumping</u>	<u>f, e, n, w</u>	<u>p, b, i</u>	<u>DPA</u>

<sup>1</sup> Identified by 1 = recycling; 2 = composting; 3 = household hazardous waste; 4 = resource conservation; 5 = volume reduction; 6 = other which is explained.

<sup>2</sup> Identified by w = workshop; r = radio; t = television; n = newspaper; o = organizational newsletters; f = flyers; e = exhibits and locations listed; and ot = other which is explained.

<sup>3</sup> Identified by p = general public; b = business; i = industry; s = students with grade levels listed. In addition if the program is limited to a geographic area, then that county, city, village, etc. is listed.

<sup>4</sup> Identified by EX = MSU Extension; EG = Environmental Group (Identify name); OO = Private Owner/Operator (Identify name); HD = Health Department (Identify name); DPA = Designated Planning Agency; Cu = College/University (Identify name); LS = Local School (Identify name); ISD = Intermediate School District (Identify name); O = Other which is explained.

☐ Additional efforts and the above information for those efforts are listed in Appendix E.

## TIMETABLE FOR SELECTED SYSTEM IMPLEMENTATION

This timetable is a guideline to implement components of the Selected System. The Timeline gives a range of time in which the component will be implemented such as "1995-1999" or "On-going". Timelines may be adjusted later, if necessary.

TABLE III-7

Management Components	Timeline
Recycling	On going
Composting	On going
Household Hazardous Waste Pilot Program	1998-1999, with continuation possible for 2000 and beyond
Education	On going
Township Clean-up Programs	On-going
Illegal Dumping Task Force	Begin 1999, then on-going
Wellhead Protection	Begin 1999, then on-going
Volume Based Pricing Ordinance Development	Begin 1999, then on-going
Commercial Education and Waste Audits/Pollution Prevention	Begin 1999, then on-going

## **SITING REVIEW PROCEDURES**

### **AUTHORIZED DISPOSAL AREA TYPES**

#### **LIVINGSTON COUNTY SOLID WASTE FACILITY EVALUATION SITING PROCESS**

### **INTRODUCTION**

It is an objective of the Livingston County Solid Waste Plan to provide for proper disposal of all solid waste generated in Livingston County. Any facility requiring a new construction or operating permit from the Department of Environmental Quality, including but not limited to new facilities, expansions of existing facilities or changes in use of facilities must be evaluated for consistency with the Solid Waste Plan. This section presents criteria for evaluating solid waste management facilities for their consistency with the Plan.

Facilities subject to the facility evaluation siting process include:

1. Solid waste processing facilities
2. Transfer stations
3. Combinations of 1. - 2. above, and
4. New or experimental technologies resulting in solid waste disposal, processing or reduction facilities.

### **CURRENTLY AUTHORIZED DISPOSAL AREA TYPES**

The Livingston County Solid Waste Management Plan may prohibit certain types of solid waste disposal facilities, as long as the county's disposal needs are met. The following disposal areas are authorized to be sited:

1. Transfer Stations
2. Processing Facilities

### **CURRENTLY UNAUTHORIZED DISPOSAL AREA TYPES:**

The Livingston County Solid Waste Management Plan may prohibit certain types of solid waste disposal facilities, as long as the county's disposal needs are met. The following disposal areas are not authorized to be sited:

1. Type II Sanitary Landfill
2. Type III Sanitary Landfill
3. Municipal Solid Waste Incinerator.

In the event Livingston County is forced to site a Type II sanitary landfill, Type III landfill or Municipal Solid Waste Incinerator, criteria for evaluating these facility types are included in Appendix E.

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If Livingston County has more than 10 years of disposal capacity available for all waste in the County, no proposed solid waste landfill or incinerator will be sited or found consistent with this plan. Available disposal capacity is defined as:

1. Under a construction permit either in the County or in another county(ies);
2. Under an operating license either in the county or in another county(ies); or
3. An area that is identified as consistent with the Livingston County Plan or solid waste management plan of the host county (ies)
4. Capacity in other states or countries that is legally available.

In accordance with Act 451, Part 115, the availability of disposal capacity in other counties is subject to explicit authorization in the exporting and importing county solid waste management plans. A calculation of disposal capacity is included in part IV of this plan update.

Requests for determination of consistency must be submitted to the Solid Waste Management Committee for a determination of consistency by the County Board of Commissioners. It should be noted that the final determination of consistency with this Plan Update shall be made by the Director of the Department of Environmental Quality (DEQ) as part of the review of a construction permit application by the proposer. The DEQ shall review the determination by the County to determine that the criteria have been appropriately applied and that the review procedure was adhered to properly.

## OVERVIEW

A Solid Waste Management Committee (SWMC), appointed by the County Board of Commissioners will evaluate the project and its compliance and consistency with the criteria established in the Plan.

The SWMC shall evaluate the proposal for consistency or inconsistency with the Plan and forward their findings to the County Board of Commissioners.

The County Board of Commissioners is responsible for verifying that the SWMC reviewed the proposal (s) in accordance with the siting mechanism contained in the Plan. The County Board of Commissioners is responsible for making a determination of consistency or inconsistency in accordance with the siting mechanisms contained in the Plan. A final determination of consistency is made by the Director of the DEQ. Proposals found consistent by the Director of the DEQ are thereby included within the Plan. Inconsistent projects are not included within the Plan.

The Facility Evaluation Process applies to proposal generated by the public sector, private sector, or by not-for-profit groups. Section 2 defines the procedures for review of proposals by the Solid Waste Management Committee and the County Board of Commissioners. Section 3 lists the information required for an administratively complete proposal and Section 4 contains the criteria against which all proposal shall be reviewed. Appendix E contains siting criteria for landfills that will be used only if the county is forced to site a facility.

At the time a developer submits a proposal for review, all documents needed to demonstrate compliance with the informational requirements and the siting criteria detailed in Sections 3 and 4 must be submitted.

## SECTION 2

### REVIEW PROCEDURE FACILITY EVALUATION PROCESS

This Section establishes the procedures that must be followed by the Solid Waste Management Committee and the County Board of Commissioners during the review of proposals submitted for a determination of consistency with County Solid waste Management Plan.

#### I. REVIEW AUTHORITIES

It is the responsibility of the Solid Waste Management Committee (SWMC) to review proposals for consistency with the County's Solid Waste Management Plan. The SWMC then forwards their recommendation to the County Board of Commissioners for a determination of consistency. Final determination of consistency are made by the Director of the DEQ in accordance with the provisions of Act 451, Part 115. If the project is found consistent with the Plan by the Director, it is automatically included in the Plan.

#### II. APPOINTMENT AND SUPPORT STAFF

The SWMC is appointed by the Livingston County Board of Commissioners. Appointments to the Committee are staggered three-year terms. The procedures for staggering terms shall be established by resolution of the County Board of Commissioners. Membership of this Committee includes:

- |  |                             |
|--|-----------------------------|
| 1 - Solid Waste Industry                                   | 1 - Environmental Interests |
| 1 - City/village Representative                            | 1 - Health Interests        |
| 3 - Township Representatives<br>(from different townships) | 2 - General Public          |

If a proposed host community is not already represented by one or more of the appointments listed above, one member from the proposed host community will be appointed by the host community to participate in the review process and replace one of the General Public Seats, subject to County Board of Commissioners approval. The Host Community representative's term shall last for the duration of the facility review.

### III: DECISION MAKING

1. The SWMC will adopt its own by-laws and establish its own Chair. At the time the SWMC begins its deliberations, the project proposal (s) may not be amended or altered. However, the Committee or the County Board of Commissioners may request additional information, but only for the purpose of clarification. The SWMC and the County Board of Commissioners shall not add to or alter in any way the criteria and procedures detailed in the Facility Siting/Evaluation Process.
2. If, at the time a proposal (s) is submitted to the County, Livingston County can demonstrate 10 years of solid waste disposal capacity available for all waste in the County, no proposed solid waste disposal area will be sited (found consistent) with this Plan. The County Board of Commissioners shall make the demonstration that the County has 10 years of capacity. The Director of the DEQ shall make a final decision regarding the 10-year capacity demonstration as part of a construction permit application.
3. If, at the time a proposal is submitted to the County, a SWMC has not been appointed, the County Board of Commissioners will have 30 calendar days to appoint the members of the Committee. If, at the end of this 30-day period a Committee has not been appointed, the County Board of Commissioners will proceed with the review of the proposal as defined in Section IV, Item 16.

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### IV: PROCEDURE

1. A Request for a Determination of Consistency with the Livingston County Solid Wastes Management Plan shall be submitted to the staff of the SWMC, the Solid Waste Coordination Department, in accordance with the time frames presented in this Section. If a staff person to the SWMC has not been hired or appointed at the time a proposal is submitted, then that proposal shall be submitted to the SWMC.

To be considered administratively complete, the proposal shall include all of the information required in Section 3, all necessary documentation demonstrating compliance with the criteria listed in Section 4 and a written description of the proposal facility and its intended use. The developer may include additional information highlighting significant features of the proposal.

2. The SWMC staff shall, within 15 calendar days after receipt of a proposal, determine if the Consistency Determination is administratively complete. If a proposal does not contain the information or documentation required in Sections 3 and 4 and a written description of the proposed facility and its intended use, it shall be returned to the developer as administratively incomplete. Written notification, listing all missing items, must be sent by the SWMC staff to the developer. All fees paid to the County by the developer for consistency review shall also be refunded.

The developer may resubmit a completed proposal and the application fee within 15 calendar days with no penalties and shall be considered under the current review

process and evaluated along with any competing proposals which may have been submitted in accordance with the procedures in this Section.

3. If staff fails to determine within 15 calendar days that the request is administratively complete, the request shall be considered to be administratively complete. The developer shall not be penalized for missing information that is subsequently identified by the County unless the developer fails to submit the additional information in accordance with the following procedures.

The SWMC must inform the developer in writing, listing all items identified as missing from the proposal. While the review process shall continue, all missing information identified after the 15-day period shall be submitted by the developer within 10 calendar days of the identification of any missing item(s). The SWMC shall then incorporate this information into the review process. If information is determined to be missing at the end of the 60 day SWMC review period, the developer still has 10 days to submit the information and the SWMC shall have no more than 5 working days to evaluate the material for consistency. If the developer fails to submit the additional information within the prescribed time limits, the proposal shall be determined administratively incomplete in accordance with the procedures in Item 2 above. The developer may resubmit in accordance with the procedures in Item 2.

4. The SWMC staff shall, upon receipt of a Request for Consistency Determination, inform the SWMC and the County Board of Commissioners of the receipt of a proposal. The County Board of Commissioners shall, at the next meeting of the County Ways and Means Committee of the Board of Commissioners publically announce the receipt of a proposal.

If a regular meeting of the County Ways and Means Committee or the Board of Commissioners is not scheduled within seven (7) calendar days of the receipt of a proposal, the County shall immediately post a public notice of the receipt of the application in an area near the offices of the County Board of Commissioners accessible to the public during normal business hours. An identical notice shall also be immediately posted in the Solid Waste Coordination Department.

5. In order for competing proposals to be considered, all information required in Sections 3 and 4 must be submitted by competitors within 15 calendar days after the announcement or public notice by the County of receipt of the first proposal. If a proposal received during this period is determined to be administratively incomplete, the developer may resubmit in accordance with the provisions of Item 2, above.
6. Within 5 calendar days of receipt of the proposal by County Staff, staff shall notify the host community. A host community is defined as any Livingston County township, city or village within which property is owned by or is under option to the project proponent and which is incorporated in the total site of the proposed project. Townships, cities, or villages adjacent to the site of the proposed project may also be notified.



7. Fifteen (15) copies of the proposal and an application fee must be submitted by the developer to the SWMC staff with the proposal. Once a proposal is considered Administratively Complete, an additional 15 copies may be requested from the developer.
8. Application fees (not to exceed \$2500 per application) shall be established by resolution. The fee schedule shall be available at the Solid Waste Coordination Office and at the Office of the County Board of Commissioners. The application fee will be used for the project review. Any portion of the fee not used in the review will be returned to the applicant. Application fees for proposals found to be administratively incomplete shall be fully refunded to the developer.
9. The review period for a proposal begins on the day the proposal is determined to be administratively complete by County staff, or at the end of 15 calendar days after receipt of proposal if County Staff fails to act as specified above. The host community, the SWMC, and the County Board of Commissioners shall be informed of the starting date of the review period within five working days of the initiation of the period.

In the case of multiple proposals, the SWMC review period for the proposals shall commence no later than 15 calendar days after receipt by County Staff of the last of multiple requests for a Determination of Consistency with the Plan.

10. The SWMC review period shall not exceed 60 calendar days unless an extension is agreed to by the SWMC and the developer. No more than one extension, of 15 calendar days duration is allowed. In the case of multiple proposals, all developers must agree to any extension of the review period.
11. Within the first 21 calendar days of the review period, an informational meeting shall be scheduled by the SWMC. The meeting shall take place within the first 30 days of the review period. To the extent possible, the meeting shall be set in a location convenient for the community where the project is proposed. The purpose of the informational meeting is to present the proposal as submitted to orient citizens and participants to the process. No formal testimony in support or opposing the proposal will be received. An opportunity for public comment may be provided by the SWMC at the beginning or the end of the meeting.
12. Notice of the meeting shall be published no less than seven calendar days before the meeting. Every municipality in the County shall receive a notice of the meeting no less than seven calendar days before the meeting. At least seven calendar days prior to the meeting, SWMC staff will attempt to notify all property owners and building occupants within 300 feet of all properties owned by or under option to the proponent that are part of the proposal.
13. Within seven calendar days after the end of the review period, the SWMC shall forward their recommendation for consistency or inconsistency, based solely on the siting criteria contained in the Plan, to the County Board of Commissioners. The

County Board of Commissioners shall begin review of the proposals (s) at the end of the seven day period.

14. Notice of the SWMC's decision shall be transmitted to every community in the County and the developer within five working days of the action.
15. If the SWMC fails to make a recommendation to the County Board of Commissioners on consistency of the proposal(s) within the seven day time period, then the County Board of Commissioners shall review the proposal(s) in accordance with the provisions of the siting mechanism in the Plan, and within 45 calendar days, find the proposal (s) consistent or inconsistent with the Plan.
16. If the SWMC fails to execute any of the assigned responsibilities or misses any of the established deadlines, the process immediately proceeds to the County Board of Commissioners for completion. If, because of the failure by the SWMC to act in accordance with their deadlines, the County Board of Commissioners assumes responsibility for reviewing a proposal (s), then the remaining deadlines and procedures imposed on the SWMC are transferred to the Board of Commissioners. The County Board of Commissioners will have 15 calendar days to set schedules necessary to complete the remaining responsibilities for proposal (s) review.
17. Within 45 calendar days after the County Board of Commissioners receives a recommendation from the SWMC on a proposal's consistency with the Livingston County Solid Waste Management Plan, the Board of Commissioners shall find the proposal (s) consistent or inconsistent with the Plan in accordance with the procedures approved as part of this Plan. If the County Board of Commissioners fails to act within that time, the proposal(s) shall be considered by the County to be consistent with the Plan. Final determination of consistency shall be made by the Director of the DEQ.
18. In the event multiple landfill proposals are received, one informational meeting will be conducted at a centrally located site convenient for the communities. The landfill proposal scoring the highest AND receiving at least 80% in each of the four categories in Section 5, Landfill Scoring Matrix would be the facility selected as consistent with the Livingston County Solid Waste Management Plan.

**SECTION 3**  
**REQUIREMENTS FOR AN ADMINISTRATIVELY COMPLETE PROPOSAL**

At the time a developer submits a proposal for review, all documentation needed to demonstrate compliance with the informational requirements and the siting criteria detailed in Sections 3 and 4 must be submitted. Competing landfill proposals will also be evaluated by the Landfill Scoring Matrix in Section 5.

All proposals submitted to the SWMC shall contain, at a minimum, the information listed below. This data is for informational purposes only. The submittal of the information is sufficient for the purposes of administrative completeness. Neither the SWMC nor the County Board of Commissioners may evaluate the adequacy of the information required in this Section. The SWMC and/or the County Board of Commissioners may not require additional information or alter this list of items in any way.

Developers must submit this information for the proposal to be considered administratively complete. Evaluation of a proposal's consistency with County Solid Waste Management Plan will be based on the Criteria in Section 4, and in the case of multiple landfill proposals, the additional criteria in Section 5.

Submitted proposals must be

1. typewritten using a 10 or 12 pt font on standard letter size (8 1/2" by 11") paper
2. Bound and/or stapled
3. Contain a table of contents, identifying all sections, appendices and attachments.

The proposal submitted by the developers includes:

**A. Name, Address & Telephone for**

1. Applicant
2. Property owner of site
3. Consulting engineers
4. Designated project contact

Does the proposal contain the information specified above?

YES \_\_\_\_\_ NO \_\_\_\_\_

**B. Site Location & Orientation**

1. Legal Description of Project Area

Does the proposal contain the information specified above?

YES \_\_\_\_\_ NO \_\_\_\_\_

2. Site Location Map

Does the proposal contain the information specified above?

YES \_\_\_\_\_ NO \_\_\_\_\_

3. Topographic Map - A contour map at 1 inch = 200 feet scale for the operation area and a contour map at 1 inch = 400 feet scale for the entire site.

Does the proposal contain the information specified above?

YES \_\_\_\_\_ NO \_\_\_\_\_

4. Site Size

Does the proposal contain the information specified above?

YES \_\_\_\_\_ NO \_\_\_\_\_

5. Access Roads

- a. Location
- b. Surface condition and material
- c. Proposed access point to facility

Does the proposal contain the information specified above?

YES \_\_\_\_\_ NO \_\_\_\_\_

6. Location of the well heads of private water wells within one mile and public water systems within three miles of the site.

Does the proposal contain the information specified above?

YES \_\_\_\_\_ NO \_\_\_\_\_

C. Land Use and Cover

1. Site Land Use and Cover

Does the proposal contain the information specified above?

YES \_\_\_\_\_ NO \_\_\_\_\_

2. Locations of following within One Mile Radius -  
Provide individual locations:

- a. Residences

- b. Commercial establishments
- c. Industries
- d. Institutions including schools, churches, hospitals, etc.

Does the proposal contain the information specified above?

YES \_\_\_\_\_ NO \_\_\_\_\_

3. Location of Existing Utilities and Utilities to be moved

Does the proposal contain the information specified above?

YES \_\_\_\_\_ NO \_\_\_\_\_

4. Location of any public use of airport licensed by the Bureau of Aeronautics, Michigan Department of Transportation that is within 10,000 feet of the active fill area.

Does the proposal contain the information specified above?

YES \_\_\_\_\_ NO \_\_\_\_\_

5. Location of flood plains on the site and within 1000 feet of the active fill area or work area as identified on DNR prepared flood plain maps and as defined in the Act 451 Administrative Rules. If DNR flood plain maps are not available, the developer may submit information from an alternate source selected by the developer.

Does the proposal contain the information specified above?

YES \_\_\_\_\_ NO \_\_\_\_\_

6. Wetlands determination from the DNR or by and independent consulting firm hired by the developer.

Does the proposal contain the information specified above?

YES \_\_\_\_\_ NO \_\_\_\_\_

7. General soil characteristics

Does the proposal contain the information specified above?

YES \_\_\_\_\_ NO \_\_\_\_\_

D. Proposed Site & Facility Design

1. Overview of Proposal

Does the proposal contain the information specified above?

YES \_\_\_\_\_ NO \_\_\_\_\_

2. Location and Size

*Use the applicable subsection for the proposed facility*

**Type II and Type III Landfills in Appendix E**

**Transfer Stations and Processing Facilities**

A. A narrative description detailing the following:

- a. Proposed service area
- b. Any plans for recycling and composting at the facility
- c. Capacity
- d. Proposed Work Area
- e. On-site roads
- f. Structures
- g. Proposed leachate collection systems

Does the proposal contain the information specified above?

YES \_\_\_\_\_ NO \_\_\_\_\_

B. Proposed Design

Does the proposal contain the information specified above?

YES \_\_\_\_\_ NO \_\_\_\_\_

C. Proposed Leachate Collection, Disposal and Monitoring Systems

Does the proposal contain the information specified above?

YES \_\_\_\_\_ NO \_\_\_\_\_

D. Expected Roadway Traffic

- a. Expected number of vehicles per day using the site
- b. Expected size of vehicles using site

Does the proposal contain the information specified above?

YES \_\_\_\_\_ NO \_\_\_\_\_

E. Time frames for Development, Use and Closure

Does the proposal contain the information specified above?

YES \_\_\_\_\_ NO \_\_\_\_\_

F. Odor Control Program

Odor control program for use. The program must outline:

- a. Control Measures
- b. Monitoring process & response thresholds

Does the proposal contain the information specified above?

YES \_\_\_\_\_ NO \_\_\_\_\_

G. Fugitive Dust Control Program

Fugitive dust control program for use under daily operation. The program should outline:

- a. Control Measures
- b. Monitoring process & response thresholds

Does the proposal contain the information specified above?

YES \_\_\_\_\_ NO \_\_\_\_\_

H. Inter-county transfer of waste

- a. Indicate the geographic areas, by county, from which waste will be drawn and the intended disposal site/method in Livingston County. Inter-county transportation of waste must be in compliance with the provisions authorized by the Livingston County Solid Waste Management Plan

Does the proposal contain the information specified above?

YES \_\_\_\_\_ NO \_\_\_\_\_

I. Other

The developer may submit additional information highlighting significant or unique features of the proposal.

Does the proposal contain the information specified above?

YES \_\_\_\_\_ NO \_\_\_\_\_


## ADMINISTRATIVE COMPLETENESS DETERMINATION

The SWMC and the Livingston County Board of Commissioners shall review the proposal to determine if each of the items listed above have been addressed by the developer. If the developer has referenced or included specific information addressing each of the items above, the proposal shall be considered administratively complete. This process does not provide an opportunity for evaluation of the adequacy of the material submitted nor does this process allow for discretionary decision making on the part of the SWMC or the Livingston County Board of Commissioners.



## SECTION 4 FACILITY SITING CRITERIA

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If Livingston County has demonstrated 10 years of disposal capacity available for all waste in the County, no proposed solid waste landfill may be sited (found consistent) with this Plan. Available disposal capacity is defined as: 

- 1) Under a construction permit either in the County or in another County(ies);
- 2) Under an operating license;
- 3) An area that is identified as consistent with the Livingston County Plan or the Plan of the host County(ies).
- 4) Available in other states an/or countries.


In accordance with Act 451, Part 115, the availability of disposal capacity in other counties is subject to explicit authorization in the importing and exporting county solid waste management plans.

### CURRENTLY AUTHORIZED DISPOSAL AREA TYPES

The Livingston County Solid Waste Management Plan may prohibit certain types of solid waste disposal facilities, as long as the county's disposal needs are met. The following disposal areas are subject to the facility review process, authorized to be sited:

1. Transfer Stations
2. Processing Facilities

### CURRENTLY UNAUTHORIZED DISPOSAL AREA TYPES:

The Livingston County Solid Waste Management Plan may prohibit certain types of solid waste disposal facilities, as long as the county's disposal needs are met. The following disposal areas are not authorized to be sited: 

1. Type II Sanitary Landfill
2. Type III Sanitary Landfill
3. Municipal Solid Waste Incinerator.

## TRANSFER STATION CRITERIA

The following criteria shall be used to determine the consistency of a transfer station proposal with the Plan.

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1. Collection, storage and processes for the removal of liquid waste resulting from the operation of the facility shall be contained in a building. Floors must be sealed and sloped away from the entrance to prevent the unauthorized discharge of liquids to groundwater. All collection systems shall be double contained.

Does the proposal include the above specifications?

YES \_\_\_\_\_ NO \_\_\_\_\_

2. The transfer facility building(s) shall not be located within 300 feet of adjacent property lines, road right-of-way, or lakes and perennial streams. Transfer facilities may be located closer than 300 feet to adjacent property lines if the affected property owner has provided a written waiver consenting to activities closer than 300 feet.

Does the proposal maintain the isolation distances listed above?

YES \_\_\_\_\_ NO \_\_\_\_\_

If no, are the appropriate waivers attached?

YES \_\_\_\_\_ NO \_\_\_\_\_

3. The transfer facility building(s) shall not be located within 300 feet of any existing public park, recreation area or school grounds.

Does the proposal maintain the above isolation distances?

YES \_\_\_\_\_ NO \_\_\_\_\_

4. The transfer facility shall be located on an all-weather road. The developer shall provide a signed statement agreeing to upgrade the present road to all-weather status or to provide bonding to the road authority.

Is a signed statement included? YES \_\_\_\_\_ NO \_\_\_\_\_

5. The developer must provide written abatement plans for the control of noise, vibration, odor and litter.

Are the above stipulated plans included? YES \_\_\_\_\_ NO \_\_\_\_\_

6. A written and detailed plan to control storm water runoff must be submitted.

Is the stipulated storm water runoff plan included? YES \_\_\_\_\_ NO \_\_\_\_\_

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7. The developer must provide a traffic safety study, including traffic flow patterns and possible disruptions for all access roads to the facility. Hazardous conditions must be discussed by the developer in the proposal.

Is a traffic safety study included? YES \_\_\_\_\_ NO \_\_\_\_\_

8. Access to the site by truck traffic shall not be directly through a residential subdivision in which the roads were constructed primarily for local traffic.

Does the proposal identify access to the site that avoids direct routing through residential subdivisions as specified above?

YES \_\_\_\_\_ NO \_\_\_\_\_

9. The site must provide staging and parking areas for trucks, employees and visitors such that access roads remain free of waiting vehicles. Documentation identifying the number of trucks entering the site in correlation with the procedures and areas defined to process the materials coming into the facility must be provided by the developer.  

Does the proposal include staging and parking areas as specified above?


YES \_\_\_\_\_ NO \_\_\_\_\_

Is the required documentation included? YES \_\_\_\_\_ NO \_\_\_\_\_

10. The proposed site must be located in an area zoned for any of the following general uses: industrial, commercial, agricultural, or mixed agricultural zoned areas.

Is the site proposed in one of the above identified zoning classifications?

YES \_\_\_\_\_ NO \_\_\_\_\_

11. The transfer station shall not be located in a 100 year flood plain.  
Is the site proposed in a 100 year flood plain? 

YES \_\_\_\_\_ NO \_\_\_\_\_

Is the required documentation included? YES \_\_\_\_\_ NO \_\_\_\_\_

12. Landscaping, including shrubbery and trees, shall be provided and maintained to beautify the view of the facility in accordance with local zoning requirements. The developer must include a signed statement agreeing to this stipulation.

Is a signed statement included?

YES \_\_\_\_\_ NO \_\_\_\_\_

13. Hours of operation to receive and transfer wastes are no earlier than 7:00 am and no later than 8:00 PM, Monday through Friday, and 8:00 am to 3:00 PM Saturday. Hours of operation may be altered at the mutual agreement of the host community and a developer. The developer must include a signed statement agreeing to this stipulation.

Is a signed statement included?

YES \_\_\_\_\_ NO \_\_\_\_\_

14. No solid waste receiving or transferring activity may occur on any Sunday or Holidays, including New Year's Day, Memorial Day, 4<sup>th</sup> of July, Labor Day, Thanksgiving Day and Christmas Day. The developer must include a signed statement agreeing to this stipulation.

Is a signed statement included?

YES \_\_\_\_\_ NO \_\_\_\_\_

15. All operators of solid waste facilities permitted and licensed under Act 451 (formerly Act 451) in Livingston County must provide a written statement agreeing to submit to the Solid Waste Management Committee and the clerk of the host community in which the facility is located on or before the 20<sup>th</sup> day of March, the 20<sup>th</sup> day of June, the 20<sup>th</sup> day of September and the 20<sup>th</sup> day of December, a quarterly report which covers the preceding three-month period ending on the 20<sup>th</sup> day of the preceding month which includes the following information:

- A. Name, location and permit number of the facility;
- B. Name, address and telephone number of the facility owner;
- C. Name, address and telephone number of the facility operator;
- D. Total quantity of waste received at the facility during the past three months in cubic gate yards;
- E. Total quantity of waste received at the facility during the past three months originating from out-county sources in cubic gate yards by county of origin;

Is a signed statement included? YES \_\_\_\_\_ NO \_\_\_\_\_

If a developer submitted the information required under the item, or the proposed design of the facility includes the standard identified in the criterion, the SWMC and the County Board of Commissioners shall accept the information as fully compliant with the criterion in question. This procedure does not allow any discretionary evaluation or discretionary decision making on the part Of the SWMC or the County Board of Commissioners. A proposal receiving a "YES" response for each of the items listed above shall be determined to be consistent with the Livingston County Solid Waste Management Plan. Proposals that receive a "NO" response for any of the items listed are inconsistent with the Livingston County Solid Waste Management Plan

## PROCESSING FACILITY CRITERIA

The following criteria shall be used to determine the consistency of a processing facility proposal with the Plan.

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1. Collection, storage and processes for the removal of liquid waste resulting from the operation of the facility shall be contained in a building. Floors must be sealed and sloped away from the entrance to prevent the unauthorized discharge of liquids to groundwater. All collection systems shall be double contained.

Does the proposal include the above specifications?

YES \_\_\_\_\_ NO \_\_\_\_\_

2. The processing facility building(s) shall not be located within 300 feet of adjacent property lines, road right-of-way, or lakes and perennial streams. Processing facilities may be located closer than 300 feet to adjacent property lines if the affected property owner has provided a written waiver consenting to activities closer than 300 feet.

Does the proposal maintain the isolation distances listed above?

YES \_\_\_\_\_ NO \_\_\_\_\_

If no, are the appropriate waivers attached?

YES \_\_\_\_\_ NO \_\_\_\_\_

3. The processing facility building(s) shall not be located within 300 feet of any existing public park, recreation area or school grounds.

Does the proposal maintain the above isolation distances?

YES \_\_\_\_\_ NO \_\_\_\_\_

4. The processing facility shall be located on an all-weather road. The developer shall provide a signed statement agreeing to upgrade the present road to all-weather status or to provide bonding to the road authority.

Is a signed statement included? YES \_\_\_\_\_ NO \_\_\_\_\_

5. The developer must provide written abatement plans for the control of noise, vibration, odor and litter.

Are the above stipulated plans included? YES \_\_\_\_\_ NO \_\_\_\_\_

6. A written and detailed plan to control storm water runoff must be submitted.

Is the stipulated storm water runoff plan included?

YES \_\_\_\_\_ NO \_\_\_\_\_



7. The developer must provide a traffic safety study, including traffic flow patterns and possible disruptions for all access roads to the facility. Hazardous conditions must be discussed by the developer in the proposal.

Is a traffic safety study included? YES \_\_\_\_\_ NO \_\_\_\_\_

8. Access to the site by truck traffic shall not be directly through a residential subdivision in which the roads were constructed primarily for local traffic.

Does the proposal identify access to the site that avoids direct routing through residential subdivisions as specified above?

YES \_\_\_\_\_ NO \_\_\_\_\_

9. The site must provide staging and parking areas for trucks, employees and visitors such that access roads remain free of waiting vehicles. Documentation identifying the number of trucks entering the site in correlation with the procedures and areas defined to process the materials coming into the facility must be provided by the developer.  

Does the proposal include staging and parking areas as specified above?

YES \_\_\_\_\_ NO \_\_\_\_\_

Is the required documentation included?

YES \_\_\_\_\_ NO \_\_\_\_\_

10. The proposed site must be located in an area zoned for any of the following general uses:  
industrial, commercial, agricultural, or mixed agricultural zoned areas.

Is the site proposed in one of the above identified zoning classifications?

YES \_\_\_\_\_ NO \_\_\_\_\_

11. The processing facility shall not be located in a 100 year flood plain.

Does the site contain documentation specifying the facility is not in the 100 year flood plain?

YES \_\_\_\_\_ NO \_\_\_\_\_

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12. Landscaping, including shrubbery and trees, shall be provided and maintained to beautify the view of the facility in accordance with local zoning requirements. The developer must include a signed statement agreeing to this stipulation.

Is a signed statement included?

YES \_\_\_\_\_ NO \_\_\_\_\_

13. Hours of operation to process, receive and transfer wastes are no earlier than 7:00 am and no later than 8:00 PM, Monday through Friday; and 8:00 am to 3:00 PM Saturday. No solid waste processing, receiving or transferring activity may occur on any Sunday or Holidays, including New Year's Day, Memorial Day, 4<sup>th</sup> of July, Labor Day, Thanksgiving Day and Christmas Day. The developer must include a signed statement agreeing to this stipulation. Hours of operation may be altered at the mutual agreement of the host community and a developer.

Is a signed statement included?

YES \_\_\_\_\_ NO \_\_\_\_\_

14. All operators of solid waste facilities permitted and licensed under Act 451 in Livingston County must provide a written statement agreeing to submit to the Solid Waste Management Committee and the clerk of the host community in which the facility is located on or before the 20<sup>th</sup> day of March, the 20<sup>th</sup> day of June, the 20<sup>th</sup> day of September and the 20<sup>th</sup> day of December, a quarterly report which covers the preceding three-month period ending on the 20<sup>th</sup> day of the preceding month which includes the following information:

- A. Name, location and permit number of the facility;
- B. Name, address and telephone number of the facility owner;
- C. Name, address and telephone number of the facility operator;
- D. Total quantity of waste received at the facility during the past three months in cubic gate yards;
- E. Total quantity of waste received at the facility during the past three months originating from out-county sources in cubic gate yards by county of origin;

Is a signed statement included? YES \_\_\_\_\_ NO \_\_\_\_\_

If a developer submitted the information required under the item, or the proposed design of the facility includes the standard identified in the criterion, the SWMC and the County Board of Commissioners shall accept the information as fully compliant with the criterion in question. This procedure does not allow any discretionary evaluation or discretionary decision making on the part Of the SWMC or the County Board of Commissioners. A proposal receiving a "YES" response for each of the items listed above shall be determined to be consistent with the Livingston County Solid Waste Management Plan. Proposals that receive a "NO" response for any of the items listed are inconsistent with the Livingston County Solid Waste Management Plan

## **SOLID WASTE MANAGEMENT COMPONENTS**

**The following identifies the management responsibilities and institutional arrangements necessary for the implementation of the Selected Waste Management System. Also included is a description of the technical, administrative, financial and legal capabilities of each identified existing structure of persons, municipalities, counties and state and federal agencies responsible for solid waste management including planning, implementation, and enforcement.**

The Livingston County Board of Commissioners is the legislative, administrative and policy-making body of Livingston County government. Therefore, the Livingston County Board of Commissioners have the ultimate management responsibilities over the Solid Waste Management Plan. The Board creates and implements policy using input from the Solid Waste Management Committee and the Solid Waste Coordination Department (SWCD). The Solid Waste Coordination Department is charged with the daily work activities specified by the Board.

The goal of the Livingston County Commissioners is develop an integrated system of solid waste management by allowing the twenty local units of government to select programs which are technically and financially feasible. Livingston County's approach is one that seeks cooperation of efforts, rather than mandates. The Solid Waste Coordinator exists to facilitate this cooperation and help local municipalities assess their individual solid waste management needs and implement programs that fit into the "big picture" of the overall County Solid Waste Management Plan.

In addition, the County provides technical assistance to communities for solid waste programs, conducts education programs and funds and operates pilot programs for household hazardous waste.

Individual municipalities are encouraged to implement programs that are consistent with the County Solid Waste Management Plan. Those municipalities that implement solid waste programs become responsible for the management and funding of their efforts, with the County providing technical assistance through the Solid Waste Coordination Department. Therefore, the SWCD functions as related to this plan is detailed below:



## **IDENTIFICATION OF RESPONSIBLE PARTIES**

**Document which entities within the County will have management responsibilities over the following areas of the Plan.**

### **Resource conservation**

Source or Waste Reduction - The Solid Waste Coordination Department will assist all local units of government, non-profit groups and the private sector to implement programs.

Product Reuse - The Solid Waste Coordination Department will assist all local units of government, non-profit groups and the private sector to implement programs.

Reduced Material Volume - The Solid Waste Coordination Department will assist all local units of government, non-profit groups and the private sector to implement programs.

Increase Product Lifetime - The Solid Waste Coordination Department

Decreased Consumption - The Solid Waste Coordination Department

### **Resource Recovery Programs:**

Composting - The Solid Waste Coordination Department will assist all local units of government, non-profit groups and the private sector to implement programs.

Recycling - The Solid Waste Coordination Department will assist all local units of government, non-profit groups and the private sector to implement programs.

Energy Production: N/A

### **Volume Reduction Techniques:** Private Waste Haulers

### **Collection Processes:** Private Waste Haulers

### **Transportation:** Private Waste Haulers

**Disposal Areas:** - The Solid Waste Coordination Department and the Solid Waste Management Committee are responsible for reviewing proposals for new facilities for the following:

(The management and operation of existing facilities is the responsibility of private companies.)

Processing Plants: Private Waste Haulers

Incineration: N/A

Transfer Stations: Private Companies

Sanitary Landfills: Private Companies

**Ultimate Disposal Area Uses:** Private Companies

**Local Responsibility for Plan Update Monitoring & Enforcement**

Livingston County Board of Commissioners, through the Solid Waste Management Committee and the Solid Waste Coordination Department.

**Educational and Informational Programs:**

Solid Waste Coordination Department, in cooperation with the local units of government, non-profit organizations and private haulers.

## LOCAL ORDINANCES AND REGULATIONS AFFECTING SOLID WASTE DISPOSAL

This Plan update's relationship to local ordinances and regulations within the County is described in the option(s) marked below:

- ☐ 1. Section 11538.(8) and rule 710 (3) of Part 115 prohibits enforcement of all County and local ordinances and regulations pertaining to solid waste disposal areas unless explicitly included in an approved Solid Waste Management Plan. Local regulations and ordinances intended to be part of this Plan must be specified below and the manner in which they will be applied described.

\_\_\_\_\_

- ☐ 2. This Plan recognizes and incorporates as enforceable the following specific provisions based on existing zoning ordinances:

A. Geographic area/Unit of government: \_\_\_\_\_

Type of disposal area affected: \_\_\_\_\_

Ordinance or other legal basis: \_\_\_\_\_

Requirement/restriction: \_\_\_\_\_

B. Geographic area/Unit of government: \_\_\_\_\_

Type of disposal area affected: \_\_\_\_\_

Ordinance or other legal basis: \_\_\_\_\_

Requirement/restriction: \_\_\_\_\_

C. Geographic area/Unit of government: \_\_\_\_\_

Type of disposal area affected: \_\_\_\_\_

Ordinance or other legal basis: \_\_\_\_\_

Requirement/restriction: \_\_\_\_\_

D. Geographic area/Unit of government: \_\_\_\_\_

Type of disposal area affected: \_\_\_\_\_

Ordinance or other legal basis: \_\_\_\_\_

## SELECTED SYSTEM

Requirement/restriction: \_\_\_\_\_

E. Geographic area/Unit of government: \_\_\_\_\_

Type of disposal area affected: \_\_\_\_\_

Ordinance or other legal basis: \_\_\_\_\_

Requirement/restriction: \_\_\_\_\_

- ☒ 3. This Plan authorizes adoption and implementation of local regulations governing the following subjects by the indicated units of government without further authorization from or amendment to the Plan.

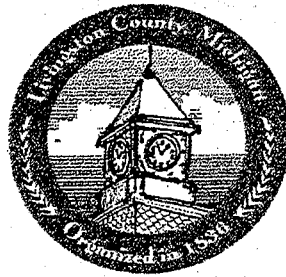
1. Certain ancillary construction details, such as landscaping and screening;
2. Hours of operation;
3. Noise, litter, odor and dust control;
4. Operating records and reports;
5. Facility security;
6. Monitoring of wastes accepted and prohibited;
7. Composting and recycling;
8. Other provisions intended to protect the health, safety and welfare of the concerned community.



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- ☐ Additional listings are on attached pages.

**SECTION IV**  
**CAPACITY CERTIFICATIONS**



# CAPACITY CERTIFICATIONS

Every County with less than ten years of capacity identified in their Plan is required to annually prepare and submit to the DEQ an analysis and certification of solid waste disposal capacity validly available to the County. This certification is required to be prepared and approved by the County Board of Commissioners.

- ☒ This County has more than ten years capacity identified in this Plan and an annual certification process is not included in this Plan.
- ☐ Ten years of disposal capacity has not been identified in this Plan. The County will annually submit capacity certifications to the DEQ by June 30 of each year on the form provided by DEQ. The County's process for determination of annual capacity and submission of the County's capacity certification is as follows:

Livingston County, through authorized import/export with surrounding counties and through capacity agreements with solid waste disposal facilities has more than 10 years of solid waste capacity. Arbor Hills, in Washtenaw County, has notified Livingston County that part of its listed capacity is available for all communities in the Livingston County planning area. Specifically, up to 750,000 cubic yards are available for Livingston County for the five year planning period and beyond. See pages IV-2 and IV-3 for a calculation of disposal capacity. Additional documentation is included in Appendix D, Listed Capacity.

## Disposal Volume Calculation

**TABLE IV-1**  
**Livingston County Estimated Solid Waste Generation**  
**1999-2008**

<b>Year</b>	<b>Estimated Solid Waste Volume</b>
1999	395,143
2000	410,592
2001	420,574
2002	430,835
2003	441,386
2004	452,236
2005	463,393
2006	474,868
2007	486,671
2008	498,215
<b>TEN YEAR TOTAL</b>	<b>4,447,000</b>

### Calculation of Available Capacity

Livingston County's contract with BFI for capacity at the Arbor Hills reserves approximately 5,000,000 over the ten year period from 1999 to 2008 (see page D-5).

The 9 facilities listed in Table IV-2 provide approximately 101,000,000 cy of disposal capacity over varying time periods, which exceeds Livingston County's estimated 10 year disposal volume by approximately 95,000,000 cy. The average annual disposal volume for these facilities is 9,629,000. This equals 4,814,000 compacted air yards once disposed of in a facility. The yearly disposal volume for all facilities is greater than Livingston County's *total* ten year solid waste generation. The facilities listed are also in counties that allow the import and/or export of waste with Livingston County. (See Table 2-A, CURRENT EXPORT VOLUME AUTHORIZATION OF SOLID WASTE, Pg III-4).

Additional capacity is also available if the Venice Park Landfill in Shiawassee County receives approval for its proposed expansion. The expansion will provide an additional 15 million cubic yards of capacity, of which Livingston County will have authorization to ship up to 100% of its total waste volume for the planning period. Inclusion of any facility in a county authorized to receive Livingston County waste will only increase available solid waste disposal capacity. Additional capacity can be included using C&C Landfill, Vienna Junction and McGill Road.

**TABLE IV-2**  
**Available Solid Waste Disposal Capacity**

<b>FACILITY</b>	<b>LOCATION</b>	<b>ANNUAL DISPOSAL VOLUME (yds<sup>3</sup>)</b>	<b>CURRENT CAPACITY (yds<sup>3</sup>)</b>	<b>ESTIMATED CAPACITY REMAINING</b>
<b>Arbor Hills</b>	Washtenaw	4,500,000	30,500,000	17.6 years
<b>Brent Run</b>	Genesee	400,000	14,000,000	30 years
<b>Citizen's Disposal</b>	Genesee	500,000	5,300,000	25 years
<b>Eagle Valley</b>	Oakland	870,000	4,800,000	5.5 years
<b>Granger - Watertown</b>	Clinton	600,000	7,617,000	32 years
<b>Granger - Wood Rd.</b>	Clinton/ Ingham	600,000	10,981,000	34 years
<b>Adrian Landfill</b>	Lenawee	293, 193	2,002,000	7 years
<b>Venice Park</b>	Shiawassee	526,000	1,300,000 <i>expansion will yield an additional 15,000,000 yds<sup>3</sup></i>	2.5 years/ <i>expansion pending, which will increase capacity remaining to 30 years</i>
<b>Woodland Meadows</b>	Wayne	1,340,200	26,520,800	19.8 years



The following facilities could provide additional solid waste disposal capacity:

Table IV-2 cont.

FACILITY	LOCATION	ANNUAL DISPOSAL VOLUME (yds <sup>3</sup> )	CURRENT CAPACITY (yds <sup>3</sup> )	ESTIMATED CAPACITY REMAINING
McGill Road	Jackson	190,000	1,236,000	15 years
C & C	Calhoun	1,100,000	3,360,000	7 years
Vienna Junction	Monroe	1,000,000	11,400,000	25 years

# APPENDIX A

## ADDITIONAL INFORMATION REGARDING THE SELECTED SYSTEM



## **APPENDIX A - ADDITIONAL INFORMATION REGARDING THE SELECTED SYSTEM**

### **EVALUATION OF RECYCLING**

The following provides additional information regarding implementation and evaluations of various components of the Selected System.

The majority of Recycling and Composting programs in Livingston County consist of private companies providing services to local governments through contracts. This system provides cost effective services and the economies of scale necessary for recycling and composting. A detailed listing of programs is included in Tables III-1 through III-6. The Selected System will continue this practice, while attempting to improve existing programs and encourage new programs in those communities that do not have recycling and composting services.

Livingston County, through the Solid Waste Coordination Department and the Solid Waste Management Committee intends to fund a Household Hazardous Waste Program in 1999 and evaluate the success and/or need for a County HHW program for the planning period.

### **DETAILED FEATURES OF RECYCLING AND COMPOSTING**

List below the types and volumes of material available for recycling or composting.

The following table lists the type and amount of material available for recycling and/or composting. Waste Composition Data (% by material type) was multiplied by the total amount of waste generated (see page II-1).

<b>CATEGORY</b>	<b>% of<sup>1</sup> Municipal Solid Waste</b>	<b>1998 yards<sup>3</sup></b>	<b>2003 yards<sup>3</sup></b>	<b>2008 yards<sup>3</sup></b>
Paper and Paperboard	38.9%	149,694	171,699	193,806
Glass	6.3%	24,243	27,807	31,388
Yard Waste	14.6%	56,183	64,442	72,739
Metals	7.6%	29,246	33,545	37,864
Plastic	9.5%	36,558	41,932	47,330
Other	16.4%	63,110	72,387	81,707

<sup>1</sup> Source: 1997 EPA, *Waste Characterization Report*

The following briefly describes the processes used or to be used to select the equipment and locations of the recycling and composting programs included in the Selected System. Difficulties encountered during past selection processes are also summarized along with how those problems were addressed:

### **Equipment Selection**

**Existing programs:** The communities in Livingston County use private waste haulers or non-profits to provide recycling and composting service. Private entities have developed their own facilities selected their own equipment.

**Proposed Programs:** Livingston County will continue to use private companies to provide services and no county programs are proposed that would require Equipment. A local grants program exists to assist communities if they desire to purchase equipment for recycling or composting.

### **Site Availability & Selection**

**Existing Programs:** The communities in Livingston County use private waste haulers or non-profits to provide recycling and composting service. Private entities have developed their own facilities and selected their own sites.

**Proposed Programs:** Livingston County will continue to use private companies to provide services and no county programs are proposed that would require Site Availability & Selection. A local grants program exists to assist communities if they desire to develop a site for recycling or composting.

## **COORDINATION OF EFFORTS WITH RELATED PLANS & PROGRAMS**

Ultimate responsibility for implementing the Solid Waste Management Plan rests with the County Board of Commissioners as part of its duties of general governance. The Board has charged the Solid Waste Management Committee and the Solid Waste Coordination Department to be cognizant of any pertinent ordinances or approved and use plans or wellhead protection plans within the county, and on pertinent restrictions or ongoing commitments contained in plans for waste management which may be required to meet state or federal standards.

Any county level decisions affecting current or anticipated programs for solid waste management will be made only after thorough consultation with the Solid Waste Management Committee and the Solid Waste Coordination Department.

In order to implement the Selected System, certain contacts and/or arrangements are necessary.

The following local governments have arrangements (contracts) with hauling companies for solid waste and/or recycling services: City of Brighton, City of Howell, Village of Fowlerville, Village of Pinckney, and Genoa, Iosco and Cohoctah Townships. Various townships contract with waste service providers for tire scrap metal and white goods collections.

Livingston County has a contract with BFI guaranteeing solid waste disposal capacity. Also, the county has contracted with City Environmental to conduct household hazardous waste programs in the 1998 and will rebid for the same contract services in 1999.

## **COSTS & FUNDING**

The following estimates the necessary management, capital and operational and maintenance requirements for each applicable component of the solid waste management system. In addition, potential funding sources have been identified to support those components.

Management, capital and operational and maintenance costs for the selected system are included in municipal budgets, hauling contracts, disposal fees, subscription waste service fees and private sector budgets.

The following identifies Livingston County's general funding commitments for the selected system.

<b>System Component<sup>1</sup></b>	<b>Estimated Costs</b>	<b>Potential Funding Sources</b>
<u>Resource Conservation Efforts</u>	see education/information programs	County General Fund
<u>Resource Recovery Programs</u> (Includes budget for County Solid Waste Coordination Department)	\$85,000	County General Fund
<u>Volume Reduction Techniques</u>	n/a	private companies
<u>Collection Processes</u>	n/a	private companies
<u>Transportation</u>	n/a	private companies
<u>Disposal Areas</u>	n/a	private companies
<u>Future Disposal Area Uses</u>	n/a	private companies
<u>Management Arrangements</u>	n/a	
<u>Educational &amp; Informational Programs</u>	\$5,000/yr	County General Fund

<sup>1</sup> These components and their subcomponents may vary with each system

## **EVALUATION OF THE SELECTED SYSTEM:**

The solid waste management system has been evaluated for anticipated positive and negative impacts on the public health, economics, environmental conditions, siting considerations, existing disposal areas, and energy consumption and production which would occur as a result of implementing this Selected System. In addition, the Selected System was evaluated to determine if it would be technically and economically feasible, whether the public would accept this Selected System, and the effectiveness of the educational and informational programs. Impacts to the resource recovery programs created by the solid waste collection system, local support groups, institutional arrangements, and the population in the County in addition to market availability for the collected materials and the transportation network were also considered. Impediments to implementing the solid waste management system are identified and proposed activities which will help overcome those problems are also addressed to assure successful programs. The Selected System was also evaluated as to how it relates to the Michigan Solid Waste Policy's goals. The following summarizes the findings of this evaluation and the basis for selecting this system:

The selected system is technically and economically feasible. All of the major components including collection, transportation, disposal, recycling, composting, household hazardous waste collection and education have been accepted by the general public.

### **Public Health**

The selected system includes landfilling wastes at Type II disposal facilities. Properly sited, constructed and operated landfills will minimize public health threats.

Programs such as recycling, composting and household hazardous waste collection can reduce public health impacts by reducing and/or removing the amount of material that needs disposal.

### **Economics**

In the short term, landfilling is the most economical method of disposal. However, in the long term, it may have increased costs due to failure in environmental control systems or operating parameters resulting in air or water pollution.

Recycling can be a cost effective system in the long term.

Waste reduction is the most cost effective component of any waste management system. For this reason, waste reduction/minimization is stressed in this plan's goals and objectives (see page I-4).

### **Environmental Conditions**

Recycling and composting reduce the environmental effects of landfills by minimizing the amount of material being disposed. Also, the Selected System includes a Household Hazardous Waste Collection Program, which can lessen the toxicity of material that is landfilled.

### **Siting Conditions**

Solid waste disposal areas including large scale recycling and composting operations are difficult to site in any community. The Selected System does not propose any new facilities to be sited. However, this plan update does include siting criteria for any proposed transfer station or processing facility that must be met.

### **Existing Disposal Areas**

There are two licensed solid waste facilities in the County: Len's Rubbish and Mister Rubbish's Material Recovery Facility. These facilities process and transfer solid waste to disposal areas in other counties. Livingston County has disposal capacity for the five and ten year planning periods through authorized Solid Waste Plans in other counties.

### **Energy Consumption and Production**

By placing an emphasis on resource recovery and waste reduction, the Selected System will have a positive effect on the consumption of natural resources. Materials captured through recycling programs: tin, paper, aluminum, plastics, etc can be used as substitutes for raw materials in the overall production of goods.

### **Impediments to Current System**

There are no major impediments to the Selected System that would hinder its implementation. Apathy or lack of information regarding resource recovery initiatives is a minor impediment. The Solid Waste Coordination Department will increase outreach efforts to inform Livingston County residents and increase participation in available programs.

### **Relationship to Michigan Solid Waste Policy**

The Selected System will attempt to place emphasis on education of businesses and residents to promote alternatives to landfilling or incineration. Livingston County has more recycling, composting and waste reduction programs available than ever before and will attempt to add programs to meet the goals of Michigan Solid Waste Policy. Also, volume based pricing or "pay as you throw" programs will be piloted during the planning period.



## **ADVANTAGES AND DISADVANTAGES OF THE SELECTED SYSTEM:**

### **ADVANTAGES:**

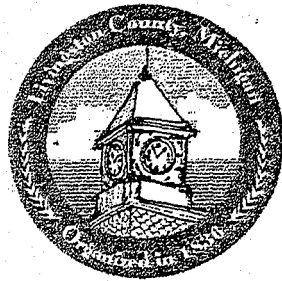
1. Selected System is publicly acceptable and expansion of resource recovery efforts will enhance the public appeal of the system.
2. Local governments are increasing large item recycling/collection efforts and reducing illegal dumping.
3. There is no sanitary landfill operating which reduces potential for groundwater contamination.
4. County government, along with local government and the private sector are providing education efforts to reduce waste and/or increase resource recovery.
5. There are more resource recovery programs and opportunities available for Livingston County residents in this planning period than previous plans.
6. Solid waste services are provided at a reasonable cost to residents and businesses.

### **DISADVANTAGES:**

1. Landfilling is predominant disposal method.
2. Lack of community contract for waste services in some communities is not always most efficient system.
3. Dependency on export relationships with other counties and/or facilities.

# APPENDIX B

## NON-SELECTED SYSTEMS



# APPENDIX B

## NON-SELECTED SYSTEMS

**Before selecting the solid waste management system contained within this Plan update, the County developed and considered other alternative systems. The details of the non-selected systems are available for review in the County's repository. The following section provides a brief description of these non-selected systems and an explanation why they were not selected. Complete one evaluation summary for each non-selected alternative system.**

---

## **SYSTEM COMPONENTS:**

The following briefly describes the various components of the non-selected system.

## **RESOURCE CONSERVATION EFFORTS:**

System A has resource conservation components but are not operating at a significantly high level.

System C could incorporate a material recovery facility as part of the overall transfer station operation.

System D while providing funding for programs, could provide an overall disincentive to recycle due to low disposal fees.

## **VOLUME REDUCTION TECHNIQUES:**

System A currently incorporates volume reduction due to compaction for transfer.

System C could possibly incorporate volume reduction due to compaction for transfer. However, the Selected System incorporates volume reduction, so change would not be significant.

System D could possibly incorporate volume reduction due to compaction for transfer. However, the Selected System incorporates volume reduction, so change would not be significant. Volume reduction could possibly occur at a landfill.

## **RESOURCE RECOVERY PROGRAMS:**

System A has many resource recovery programs available. However, existing programs need improvement to maximize recovery. Also, resource recovery programs are not currently available or convenient for residents in rural areas away from the cities and/or villages.

System C could incorporate a material recovery facility as part of the overall transfer station operation.

System D could provide funding for programs; however, it could provide an overall disincentive to recycle due to low disposal fees.

## **COLLECTION PROCESSES:**

System A collection processes consists of individual trucks collecting waste from business and residential customers.

System C collection process would involve individual trucks collecting waste and tipping at a central transfer station.

System D would consist of individual trucks collecting waste from business and residential customers and tipping directly at landfill in Livingston County.

### **TRANSPORTATION:**

System A of individual trucks collecting waste from business and residential customers and tipping either at private transfer stations or directly at private landfills.

System C collection process would involve individual trucks collecting waste and tipping at a central transfer station. Waste would then be transferred to a landfill. Capacity arrangements with landfills in other counties would be a critical component.

System D would consist of individual trucks collecting waste from business and residential customers and tipping directly at landfill in Livingston County. Flow control issues and the amount of waste allowed to be imported/exported would be a major concern.

### **DISPOSAL AREAS:**

Under System A, waste would be disposed of in licensed Type II landfills outside of Livingston County.

In System C, waste would be disposed of in licensed Type II landfills outside of Livingston County.

In System D, waste would be disposed of in licensed Type II landfill sited in Livingston County.

### **INSTITUTIONAL ARRANGEMENTS:**

System A involves institutional arrangements through local government contracts with private waste haulers.

System C would require a contract and/or host community agreement between the county and an operator of the transfer station. System C would also include local government contracts with private waste haulers.

System D would require a contract and/or host community agreement between the county and an owner / operator of a landfill. System D would also include local government contracts with private waste haulers.

### **EDUCATIONAL AND INFORMATIONAL PROGRAMS:**

System A includes educational programs, but they are not reaching a county-wide audience. Also, more education is needed in the rural areas to increase recycling.

System C would include educational programs similar to System A.

System D would include educational programs related to resource recovery. Also, System D would require significant education and information about the Type II landfill to mitigate local concerns.

**CAPITAL, OPERATIONAL, AND MAINTENANCE COSTS:**

System A does not require significant capital operational or maintenance costs.

System C would require a significant capital cost: between \$750,000 and \$2 million to obtain land and construct a transfer station. Operational and maintenance costs would also be significant.

System D would involve a major capital investment to acquire land, design a site and operate a Type II solid waste landfill. Long-term operating costs would also be incurred, as well as any closure costs or environmental mitigation.

## **EVALUATION SUMMARY OF NON-SELECTED SYSTEMS:**

**The non-selected system was evaluated to determine its potential of impacting human health, economics, environmental, transportation, siting and energy resources of the County. In addition, it was reviewed for technical feasibility, and whether it would have public support. Following is a brief summary of that evaluation along with an explanation why this system was not chosen to be implemented.**

Four systems were evaluated and scored using the following criteria: technical feasibility, economic feasibility, energy consumption/production, land access/transportation, environmental impacts, public health effects and public acceptability. System B, current system with increased resource recovery scored the highest, followed by System C, System A and System D.

Because it received the highest score, System 2 is the Selected System. In general, the other systems had the following shortcomings:

- 1) System A does not attempt to maximize resource recovery.
- 2) Systems C and D require significant capital to implement.
- 3) Systems C and D have local siting concerns which would be difficult to mitigate.
- 4) Systems C and D may have increased environmental concerns associated with disposal areas.

An in-depth evaluation of advantages and disadvantages of each system can be found on page B-6, **ADVANTAGES AND DISADVANTAGES OF THE NON-SELECTED SYSTEM (S):**

## **ADVANTAGES AND DISADVANTAGES OF THE NON-SELECTED SYSTEMS:**

Each solid waste management system has pros and cons relating to its implementation within the County. Following is a summary of the major advantages and disadvantages for the non-selected systems.

### **System A : Current Solid Waste Management System**

#### **ADVANTAGES:**

1. Current System is publicly acceptable.
2. Local governments are increasing large item recycling/collection efforts and reducing illegal dumping.
3. There is no sanitary landfill operating which reduces potential for groundwater contamination.
4. There are more resource recovery programs and opportunities available for Livingston County residents in this planning period than previous plans.
5. Solid waste services are provided at a reasonable cost to residents and businesses.

#### **DISADVANTAGES:**

1. Landfilling is predominant disposal method.
2. Lack of standardization of waste services in some communities is not always most efficient system.
3. Dependency on export relationships with other counties and/or facilities.
4. Public education efforts need to increase to maximize resource recovery.



**System C : Siting of Transfer Station in Livingston County**

**ADVANTAGES:**

1. Could provide disposal capacity through contract for several years.
2. Could incorporate material recovery facility (MRF) to increase resource recovery

**DISADVANTAGES:**

1. Local Concern over development of a siting of large transfer station
2. Environmental considerations
3. Would still rely on export relationship with other counties
4. Capital cost
5. Issue of public versus private ownership of facility.
6. Could increase disposal costs to residents and businesses.

**System D : Siting of Type II Landfill in Livingston County**

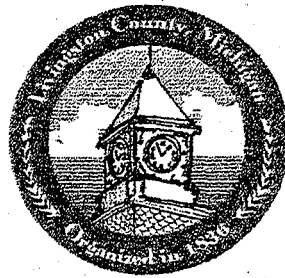
**ADVANTAGES:**

1. Provide disposal capacity for several years.
2. Provide funding or host community fees for resource recovery .

**DISADVANTAGES:**

1. Local Concern over development of a sanitary landfill
2. Nuisance considerations, including odor, noise and pests.
3. Does not maximize opportunity for resource recovery
4. Lack of emphasis on alternative disposal methods (recycling and/or composting)
5. Potential for groundwater contamination due to liner failure
6. Issue of public versus private ownership of facility
7. Public perception of the county as an importer of solid waste

APPENDIX C  
PUBLIC PARTICIPATION  
&  
RECORD OF MEETINGS



# APPENDIX C

## PUBLIC PARTICIPATION AND APPROVAL

**The following summarizes the processes which were used in the development and local approval of the Plan including a summary of public participation in those processes, documentation of each of the required approval steps, and a description of the appointment of the solid waste management planning committee along with the members of that committee.**

Notices were published in newspapers having major circulation in the County (see Affidavit of Publication). Any and all interested parties were included on the mailing list for agendas and minutes. Each local unit of government in Livingston County received the agenda and minutes at least 10 days prior to each meeting.

Each local unit received a copy of the draft plan for comment and final plan for approval or denial.

**PUBLIC INVOLVEMENT PROCESS:** A description of the process used, including dates of public meetings, of public notices, documentation of approval from solid waste planning committee, County board of commissioners, and municipalities.

#### **SOLID WASTE PLANNING COMMITTEE MEETING SCHEDULE**

<b>DATE</b>	<b>TIME</b>	<b>LOCATION</b>
April 8, 1998	7:00 PM	Admin Building*
May 10, 1998	7:00 PM	"
June 12, 1998	7:00 PM	"
July 8, 1998	7:00 PM	"
September 9, 1998	7:00 PM	"
October 14, 1998	7:00 PM	"
November 18, 1998	7:00 PM	"
February 9, 1999	7:00 PM	"
June 9, 1999	8:00 AM	"
November 17, 1999	8:00 AM	"

\*County Administration Building: 304 E. Grand River, Howell, MI.

LIVINGSTON COUNTY

DATE: March 16, 1998

RESOLUTION TO APPOINT SOLID WASTE PLANNING COMMITTEE

WHEREAS, Livingston County is updating its Solid Waste Management Plan, and

WHEREAS, Livingston County must appoint a fourteen member Solid Waste Planning Committee; and

WHEREAS, each member appointed will serve a two-year term, effective immediately and expiring March 31, 2000.

WHEREAS, the following individuals have been recommended for appointment:

Solid Waste Management Industry (4 members)

Steve Dawdy, Mister Rubbish/Contractor's Container  
Stephanie Glysson, Browning-Ferris Industries  
Bob Josephson, Lens Rubbish  
Vacant seat

Environmental Interest Group (2 members)

Phil Smith, Executive Director, Recycle Livingston  
Julie Woodward, Treasurer, Recycle Livingston

County Government (1 member)

Richard Andersen, County Commissioner

City Government (1 member)

Paul Rogers, Mayor of City of Howell, who has designated  
Terry Wilson, Director of Department of Public Works,  
City of Howell

Township Government (1 member)

William Miller, Iosco Township Supervisor, who has designated  
Donna Waldo, Iosco Township Planning Commission

Regional Solid Waste Planning Agency (1 member)

Ted Starbuck, Southeast Michigan Council of Governments (SEMCOG)

Industrial Waste Generators (1 member)

Don Tinson, General Motors

RESOLUTION NO. 398-052  
PAGE TWO

General Public (3 members)

Karen Clute, resident of Deerfield Township

Matthew Germaine, resident of Hartland Township

Sandra Tuthill, resident of Green Oak Township

THEREFORE BE IT RESOLVED that the Livingston County Board of Commissioners hereby  
appoint the above-stated individuals to the Livingston County Solid Waste  
Planning Committee for a two-year term, expiring March 31, 2000.

MOVED: Commissioner Andersen

SUPPORTED: Commissioner Domas

CARRIED: 7-0-2 absent

cc: ✓ Solid Waste Coordinator  
Health Dept.-Environmental  
Howell City Clerk  
Iosco Township  
SEHCOG

C-4

CLERK'S CERTIFICATE

STATE OF MICHIGAN

COUNTY OF LIVINGSTON

I, Margaret M. Dunleavy Clerk of said County of Livingston and Clerk of the Circuit Court for said County, do hereby certify that I have compared the foregoing with the original record thereof, now remaining in my office and that it is a true and correct transcript therefrom, and of the whole of such original record.

In Testimony Whereof, I have hereunto set my hand and affixed the seal of said Court and County this 17th day of March A.D., 1998.

MARGARET M. DUNLEAVY,  
COUNTY CLERK

Ann S. Utter DEPUTY

RESOLUTION

NO. 299-026

LIVINGSTON COUNTY

DATE: February 1, 1999

RESOLUTION TO APPROVE COMMITTEE/AGENCY APPOINTMENTS - SOLID  
WASTE PLANNING COMMITTEE

WHEREAS, a Solid Waste Industry seat is vacant on the Solid Waste Planning Committee, and

WHEREAS, the following appointment has been recommended:

SOLID WASTE PLANNING COMMITTEE

Dawn D. New - Solid Waste Industry Seat - Term expiring March 31, 2000.

THEREFORE BE IT RESOLVED that the Livingston County Board of Commissioners hereby  
approves the above-stated appointment.

MOVED: Commissioner Andersen

SUPPORTED: Commissioner Domas

CARRIED: 8-0-1 absent

cc: ✓ Solid Waste Mgmt.  
Accounting

CLERK'S CERTIFICATE

STATE OF MICHIGAN  
COUNTY OF LIVINGSTON

I, Margaret M. Dunleavy Clerk of said County of Livingston and Clerk of the Circuit Court for said County, do hereby certify that I have compared the foregoing with the original record thereof, now remaining in my office and that it is a true and correct transcript therefrom, and of the whole of such original record.

In Testimony Whereof, I have hereunto set my hand and affixed the seal of said Court and County this 3<sup>rd</sup> day of February A.D., 1999.

MARGARET M. DUNLEAVY,

Ronn S. Utter COUNTY CLERK  
DEPUTY



STATE OF MICHIGAN

SS.

COUNTY OF LIVINGSTON  
AFFIDAVIT OF PUBLICATION

Michael Preville being duly sworn, deposes and says that he is one of the printers and publishers of the Livingston County Press & Brighton Argus in said state, that the annexed printed notice has been duly published in said newspapers at least 1 week(s) successively, and that the first insertion thereof was on the 25th day of March, A.D., 1998 and the last insertion on the 25th day of March, A.D., 1998.

Subscribed and sworn to before me this 26th day of March, A.D., 1998.

Denise L. Sepulveda  
Denise L. Sepulveda, Notary Public, Livingston County, State of Michigan.  
My commission expires March 23, 2000.

**SOLID WASTE PLANNING COMMITTEE  
NOTICE TO THE PUBLIC**

Pursuant to Act 267, Public Act of Michigan, notice is hereby given by the Livingston County Solid Waste Coordination Department that the SOLID WASTE PLANNING COMMITTEE (SWPC) will hold regular monthly meetings during 1998 on the following dates:

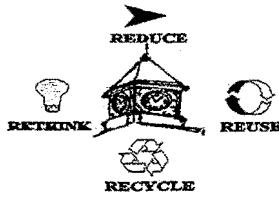
April 8	July 8	October 7
May 13	August 12	November 11
June 10	September 9	December 9

All regular meetings will be held at 7:00 p.m. at the Livingston County Administration Building, 304 E. Grand River Ave., Howell, MI, Conference Room A.

Questions regarding any aspect of the Solid Waste Planning Committee are welcome. All questions should be directed to:

Livingston County Solid Waste Coordination Department  
304 East Grand River Ave.,  
Howell, Michigan 48843  
Phone: (517) 545-9609  
Fax: (517) 546-7266

(3-25-98 BALCP 822920)



## **Livingston County Solid Waste Coordination Department**

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**TO:** All Local Officials  
**FROM:** John P. Hanifan, Solid Waste Management Coordinator  
**DATE:** June 21, 1999  
**RE:** 1999 Solid Waste Plan Draft - Public Hearing

### **SOLID WASTE PLANNING COMMITTEE NOTICE TO THE PUBLIC**

Pursuant to Act 267, Public Act of Michigan, and in accordance with Act 451, Part 115, as amended notice is hereby given by the Livingston County Solid Waste Coordination Department that the SOLID WASTE PLANNING COMMITTEE (SWPC) Will hold a public hearing on the Livingston County Solid Waste Management Plan.

Wednesday, July 28, 1999, at 7:00 PM at the Livingston County Administration Building,  
304 E. Grand River Ave, Howell, MI, Conference Room A

Draft Plans are available for public review at the Solid Waste Coordination Department in the County Administration Building; each township, city and village hall; and the Howell, Brighton and Cromaine Libraries. Questions regarding any aspect of the Solid Waste Planning Committee are welcome. All questions should be directed to:

Livingston County  
Solid Waste Coordination Department  
304 East Grand River Ave.  
Howell, Michigan 48843  
phone: (517) 545-9609  
fax: (517) 546-6657

RESOLUTION

NO: 200-031

LIVINGSTON COUNTY

DATE: February 14, 2000

**RESOLUTION APPROVING AND ADOPTING SOLID WASTE MANAGEMENT PLAN UPDATE**

WHEREAS, the Livingston County Solid Waste Planning Committee unanimously approved the Solid Waste Management Plan Update prepared by the Solid Waste Management Coordinator; and

WHEREAS, the Livingston County Solid Waste Planning Committee is recommending the Board of County Commissioners approve and adopt the Solid Waste Management Plan Update; and

WHEREAS, approval of the Board of Commissioners is necessary for a locally approved Solid Waste Management Plan; and

WHEREAS, once approved by the Board of Commissioners, the approved plan is sent to all cities, villages and townships in Livingston County for their approval, and

WHEREAS, a locally approved plan is in the best interest of all Livingston County municipalities and the Board of County Commissioners encourages all local municipalities to approve and adopt the Solid Waste Management Plan Update Plan.

**THEREFORE BE IT RESOLVED** that the Livingston County Board of Commissioners hereby approves and adopts the Solid Waste Management Plan Update and encourages all Livingston County municipalities to approve and adopt the Solid Waste Management Plan Update.

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MOVED: Commissioner LaBelle

SUPPORTED: Commissioner Chrysler

CARRIED: 8-0-1 Roll call vote

Ayes: LaBelle, Chrysler,  
Belser, Domas, Andersen,  
Linksz, Rogers, Hamilton  
Nays: None  
Absent: Reader

cc: ✓ Solid Waste Mgmt.  
Planning

C-8

**CLERK'S CERTIFICATE**

STATE OF MICHIGAN County of Livingston  
I, Margaret M. Dunleavy, Clerk  
of said County and Clerk of the  
44th Circuit Court, do hereby certify  
this copy as a correct and true  
record of the original document  
remaining on file in my office.

Dated and sealed: FEBRUARY 16, 2000.

Margaret M. Dunleavy, County Clerk

Ann D. Utter, Deputy

**MINUTES FROM PUBLIC MEETINGS OF THE  
SOLID WASTE PLANNING COMMITTEE**

**LIVINGSTON COUNTY  
SOLID WASTE PLANNING COMMITTEE  
RECORD OF MEETING**

Wednesday, April 8, 1998 7:00 PM  
County Administration Building  
Conference Room A

**I. Roll and Introduction of Guests**

Members Present

Steve Dawdy  
Karen Clute  
Donna Waldock  
Julie Woodward  
Ted Starbuck  
Don Tinson  
Terry Wilson  
Stephanie Glysson  
Rich Andersen  
Bob Josephson  
Matt Germaine

Staff Present

John Hanifan

Guests Present

Diane Brady, Handy Twp  
Harry Brown, Howell

Members Absent

Sandra Tuthill  
Phil Smith-

**II. General Business**

Meeting called to Order at 7:00 PM

- A. Approval of Agenda. Motion by Wilson, support by Woodward to approve agenda
- B. Correspondence: **NONE**
- C. Call to the Public: **NONE**

**III. By-Laws & Election of Officers**

The adoption of By-Laws and election of officers was tabled until the next meeting.

**IV. Orientation: Process-Timetable-Responsibilities**

Discussion on responsibilities of the SWPC. Staff said the major responsibilities of the SWPC are the Goals & Objectives, Import/Export authorization and Siting Criteria. The data collection activities of the plan will be conducted by Staff and submitted to the SWPC for their comments and/or approval.

Discussion of the timeline took place. Staff said that it is a Draft timeline, and will likely be adjusted over the next few meetings. Staff said that it is his intent to release a draft in September for public comment and review.

Discussion took place about the timeline. Questions were raised about releasing a draft plan before approval by the Livingston County Board of Commissioners.

Staff said his intent is to send a draft plan to the municipalities in order to keep them involved in the process as the plan is developed.

#### V. Goals and Objectives

Staff said that the committee will be responsible for developing the Goals and Objectives of the Plan. Staff said that the goals need to be reasonably attainable and it is better to have fewer, realistic goals than to have several that are not attainable. He cited household hazardous waste collection and wellhead protection as obtainable goals.

Starbuck said the Plan should contain an update of how and if the goals of the old Plan were met.

Staff said he will prepare a concise summary of old goals and objectives for the next meeting.

#### VI. Intercounty Flow of Waste

Discussion on intercounty flow of waste. Staff presented a table depicting the counties where Livingston waste was authorized to be exported to per the 1992 Solid Waste Plan.

Staff recommended that either himself or the committee should draft a letter to the authorized counties to request the same flow situation for this Plan update.

Starbuck suggested contacting Wayne County in addition to the others. Woodward said the letter should go out as soon as possible in order for the committee to discuss at the May meeting.

The committee generally agreed that Staff should draft letters and send out as soon as possible. Staff agreed and will send letters ASAP.

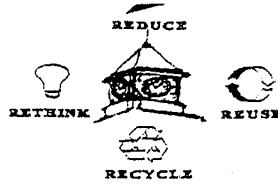
#### VII. Capacity

A brief discussion of capacity took place. Staff said that Livingston County has approximately 17 years remaining on the capacity agreement with BFI, which satisfies the DEQ requirement.

Contingency disposal was discussed. Staff said the old Plan's contingency disposal option was the shifting of waste to one or more of the counties authorized to receive waste from Livingston to make up for lost capacity due to facility closure. Staff said this may be the case again for this update of the Plan and will be discussed at future meetings.

#### VIII. Public Comments

IX. Motion by Starbuck, support by Glysson to adjourn. Meeting Adjourned at 8:00 PM.



# Livingston County Solid Waste Coordination Department

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## RECORD OF MEETING LIVINGSTON COUNTY SOLID WASTE PLANNING COMMITTEE MEETING

Wednesday, May 13, 1998- 7:00 PM  
Livingston County Administration Building  
304 E. Grand River  
Howell, MI 48843

Wednesday, May 13, 1998 7:00 PM  
County Administration Building  
Conference Room A

### I. Roll and Introduction of Guests

#### Members Present

Phil Smith  
Karen Clute  
Donna Waldoek  
Julie Woodward  
Ted Starbuck  
Don Tinson  
Terry Wilson  
Stephanie Glysson  
Rich Andersen  
Bob Josephson  
Sandra Tuthill

#### Staff Present

John Hanifan

#### Guests Present

Terry Guerin,  
Granger Co.

#### Members Absent

Steve Dawdy  
Matt Germaine

### II. General Business

Meeting called to Order at 7:00 PM

A. Approval of Agenda. Motion by Wilson, support by Woodward to approve agenda.

**MOTION CARRIED**

B. Approval of April 8, 1998 minutes. Motion by Woodward, support by Starbuck, to approve minutes. **MOTION CARRIED**

C. Correspondence: NONE

D. Call to the Public:

Terry Guerin, Granger Co. gave a brief overview of the proposed Ingham Co. surcharge.

Guerin stated that Ingham Co. does not have the authority to implement the surcharge beyond its borders.

### III. By-Laws & Election of Officers

Staff presented a revised copy of By-Laws. Discussion took place regarding the possible removal of a SWPC member for missing three consecutive meetings.

Woodward suggested approving the by-laws, but amending them to read "Final authority to remove and/or replace a committee member shall be made by the County Board of Commissioners."

Staff said he would make the changes.

**Motion by Woodward, support by Wilson to adopt amended by-laws.**

**MOTION CARRIED.**

### IV. Core County surcharge

Staff said that Ingham County has proposed implementing a \$0.25 surcharge on waste generated in a defined "core county" area to be used for county programs. Staff said that Ingham had approached several counties including Livingston, Clinton, Eaton, Gratiot, Washtenaw, Ionia, Kent, Shiawassee and a few others to become part of the "Core County" region.

Smith asked if the surcharge could help prevent Canadian waste from coming in to Michigan.

General discussion took place regarding the surcharge. Staff said that a DEQ staffer had called and asked if Livingston County had agreed to become a "core county". Staff told the DEQ that Livingston County had not agreed to anything and that the surcharge was only mentioned in concept at a meeting of Designated Planning Agencies.

It was generally agreed that Staff would keep the SWPC informed about the surcharge, but the surcharge is not an option that Livingston County is currently considering.

### V. Siting Criteria

General discussion about siting criteria. Staff asked the SWPC to review the current criteria for all facilities to discuss possible changes at the next meeting. Staff said that he will compare current criteria to other counties and incorporate sections that are beneficial to Livingston County.

Andersen said that this section of the Plan is critical and needs to be carefully written.

Glysson suggested removing all reference to incinerators so that it was clear that one could not be sited under any circumstances.

### VI. Goals and Objectives

Staff presented 32 goals and objectives from the old Plan. Discussion took place about which goals have been met, which haven't and possible additions. Staff said the committee needs to think about what Goals & Objectives they would like to see implemented.

Andersen asked staff to send out the original 60 position statements from the old plan to see what the SWPC may have missed.

### VII. Intercounty Flow Provisions

Staff distributed copies of letters sent to communities that are identified in the old Plan as authorized to receive Livingston County Waste. Staff said that none of the communities have responded yet, but he had spoken to Oakland & Washtenaw Counties and they will respond in the near future.

Tinson asked if a letter was sent to Wayne County. Staff said he had not sent a letter yet, but will send one now that a contact person at Wayne County has been identified.



Staff said that the Intercounty flow situation needs to be carefully looked at and that it is important for Livingston to keep options open.

VIII. Database

Staff said that he is still in the process of preparing the required database information. To date, all of the communities with contracts with Mister Rubbish had responded except one. Once the final community submits their information, he will be able to complete the waste generation methodology and will present a draft at the June meeting for SWPC review and/or approval.

Staff also said that he has received some of the required facility descriptions from landfills receiving Livingston County waste and expects to have all of them for the June meeting.

IX. Other Business

Clute asked how the townships, cities and villages are being kept informed about the plan update. Staff said that he sends every municipality the meeting Agenda & minutes for all meetings of the SWPC.

Clute said that it was important to keep the townships informed as we move along in the process.

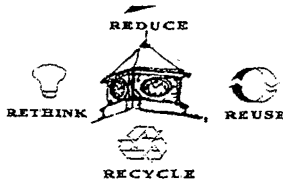
X. Public Comments

Terry Guerin, Granger Co. said that Representative Hale has written legislation -HB-5401-regarding illegal dumping.

Guerin also stated that Wayne County's plan does not explicitly authorize the flow of waste from anywhere and that the Wayne County plan is not recognized by the state as "legal".

XI. Adjournment

**Motion by Wilson, support by Woodward to adjourn. MOTION CARRIED. Meeting adjourned at 8:30 PM.**



# Livingston County Solid Waste Coordination Department

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## RECORD OF MEETING LIVINGSTON COUNTY SOLID WASTE PLANNING COMMITTEE MEETING Wednesday, June 10, 1998- 7:00 PM Livingston County Administration Building 304 E. Grand River Howell, MI 48843

Wednesday, June 10, 1998 7:00 PM  
County Administration Building  
Conference Room B

### I. Roll and Introduction of Guests

#### Members Present

Phil Smith  
Karen Clute  
Donna Waldock  
Julie Woodward  
Rich Andersen  
Don Tinson  
Bob Josephson  
Sandra Tuthill  
Steve Dawdy  
Matt Germaine

#### Staff Present

John Hanifan

#### Guests Present

Terry Guerin,  
Granger Co.

#### Members Absent

Ted Starbuck  
Terry Wilson  
Stephanie Glysson

### II. General Business

Meeting called to Order at 7:07 PM

A. Approval of Agenda.

Staff amended Agenda by adding Deficiencies/Problems under Goal and Objectives

Motion by Woodward, support by Dawdy to approve amended agenda. **MOTION CARRIED**

B. Approval of May 13, 1998 minutes. Motion by Woodward, support by Waldock, to approve minutes. **MOTION CARRIED**

C. Correspondence: **NONE**

D. Call to the Public: **NONE**

### III. Time line- *Where we're at/Where we should be*

Staff gave a brief overview of how things were progressing as related to the original time-line. Staff said that the SWPC is about where it should be when compared to other counties. Staff also said some counties plan on having drafts finished in August, while others have yet to meet.

Tinson said it appears as if the committee is about two months behind based on the original time-line.

Staff agreed that the SWPC is behind the original time line, but does he feels that the SWPC is making good progress towards completing a draft plan in the next three or four months.

### IV. Siting Criteria

General discussion about siting criteria. Staff said that the basic checklist format in the current siting criteria is similar to other counties plans. Staff will send out a revised set of criteria with additions highlighted in the document. Staff will incorporate criteria that other counties have in their criteria that Livingston County might not have.

Tinson asked if the review of other county plans is going to be handled internally by staff and if it is, could staff send the committee examples of criteria from other counties plans that the committee might consider adding.

Discussion took place about the scoring system to review landfill proposals and whether a scoring system is used as primary siting criteria. Staff will contact DEQ to determine if a scoring system is acceptable as primary criteria.

It was generally agreed that Staff will conduct internal review of criteria, add criteria from other plans and send only certain sections of other counties siting criteria as reference material.

### V. Goals and Objectives

Staff presented a revised set of Goals and Objectives (G&O). Staff said that it appears the original 60 position statements were used to generate the 32 objectives discussed at the May meeting.

Woodward asked if staff could identify which of the 32 staff used for the revised G&O. Staff said that he had taken the 32 into account when developing the new Goals, but could not verify "line by line" which were incorporated. Staff said the SWPC has to realistically think about what can be accomplished based on the Solid Waste Management needs of the county to develop the G&O.

The SWPC reviewed each of the revised G &O. Dawdy asked to have the licensing objective to be removed from the illegal dumping Goal. After discussion, the licensing objective was removed.

Woodward recommended to add that the County will continue to fund a Solid Waste Coordinator and to have a Solid Waste Management Committee.

Andersen said the wording of the HHW Goal needs to be changed from "fund" to "support". After discussion, the wording was changed accordingly.

Tuthill said that there needs to be more emphasis on an overall education of County residents.

Staff will make revisions to G&O and mail to SWPC. It was generally agreed that the G&O are complete, but the opportunity still exists to revisit them prior to plan approval if the SWPC deems it necessary.

Staff handed out a draft of Deficiencies and Problems and asked the SWPC to review the list for discussion at the July meeting.

### VI. Intercounty Flow Provisions

Staff distributed copies of letters sent to Wayne County. Nothing further to report

VII. Database

Staff said that he is still in the process of preparing the required database information. Staff distributed several draft items. Staff intends to send out database sections for SWPC to review and approve at the July meeting.

Staff distributed the required facility descriptions from landfills receiving Livingston County waste. Staff needs descriptions from the licensed facilities in Livingston County and expects to have them for the July meeting.

VIII. Other Business  
NONE

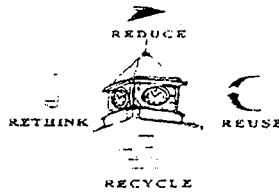
IX. Call to the Public

Terry Guerin, Granger Co. said that the Williamston transfer station is a Waste Management Facility and does not transfer waste to the Granger Landfill.

Guerin also said Representative Hale's HB-5401-regarding illegal dumping-is attempting to give municipalities more empowerment to enforce illegal dumping

X. Adjournment

**Motion by Woodward, support by Andersen to adjourn. MOTION CARRIED. Meeting adjourned at 8:45 PM.**



# Livingston County Solid Waste Coordination Department

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## RECORD OF MEETING LIVINGSTON COUNTY SOLID WASTE PLANNING COMMITTEE MEETING

Wednesday, July 8, 1998- 7:00 PM  
Livingston County Administration Building  
304 E. Grand River  
Howell, MI 48843

Wednesday, July 8, 1998 7:00 PM  
County Administration Building  
Conference Room A

### I. Roll and Introduction of Guests

#### Members Present

Steph Glysson  
Karen Clure  
Donna Waldock  
Julie Woodward  
Steve Dawdy  
Matt Germaine  
Terry Wilson  
Ted Starbuck

#### Staff Present

John Hanifan

#### Guests Present

Terry Guerin,  
Granger Co.

#### Members Absent

Sandra Tuthill  
Phil Smith  
Rich Andersen  
Bob Josephson  
Don Tinson

### II. General Business

Meeting called to Order at 7:10 PM

#### A. Approval of Agenda.

Staff amended Agenda by adding Correspondence and deleting Election of Officers

Motion by Woodward, support by Wilson to approve amended agenda. **MOTION CARRIED**

B. Approval of June 10, 98 minutes. Motion by Woodward, support by Waldock, to approve minutes. **MOTION CARRIED**

C. Correspondence: Staff distributed letter from Jackson County and said the letter refers to the current flow situation with Jackson and the possibility for an intercounty agreement.

D. Call to the Public: **NONE**

#### IV Siting Criteria

##### General discussion about siting criteria

Discussion took place about the scoring system to review landfill proposals and whether a scoring system is used as primary siting criteria. Staff will contact DEQ to determine if a scoring system is acceptable as primary criteria.

Glysson said that Monroe County is considering a scoring system for their criteria. She also said that DEQ staff were present when the Monroe Committee discussed the scoring system and the DEQ staff were generally agreeable to the scoring system as primary siting criteria.

Discussion on Item 21 (hours of operation) of the Siting Criteria and whether to remove it. After discussion, Staff asked for a motion to remove or include item 21 so the committee could proceed.

**Motion by Woodward, 2<sup>nd</sup> by Clute to include item 21. Motion carried, with Dawdy voting no.**

It was generally agreed that Staff will conduct internal review of criteria, add criteria from other plans and send only certain sections of other counties siting criteria as reference material. Staff will also put together a Siting Criteria Timeline to be included in the Plan.

#### V. Evaluations of Deficiencies and Problems (EDP)

Brief discussion on EDP. Staff said he had taken outline and put it into narrative format. The SWPC generally agreed that the EDP were acceptable.

Glysson suggested adding Enforcement and funding as a separate section. Staff will add Enforcement and funding.

Staff said that EDP section is complete and will not be discussed in future meetings unless requested by the SWPC. The SWPC generally agreed that the EDP were acceptable and complete.

#### VII. Database

Staff gave an update on the Database section of the Plan. Staff discussed the Solid Waste Generation Tables and said that there are several ways to calculate. Staff was still trying to determine the most accurate way. Staff referred to Washtenaw and Ionia Counties handouts as possible ways to calculate waste generation.

Staff distributed several draft items, including Tables III-1 through III-5, and Page III-26. Staff said that these are actual pages of the plan format and the SWPC should review for discussion/approval in August.

Staff intends to send out more database sections for SWPC to review and approve at the August meeting.

#### VIII. Other Business

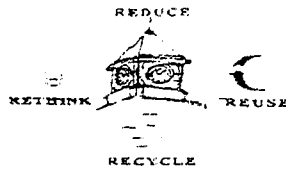
Wilson asked Staff to include a date on each handout and also to identify revised documents as such. Staff to include date and *REVISED*, where relevant on future documents.

#### IX. Call to the Public

Terry Guerin, Granger Co. requested a copy of the Jackson County letter. Guerin also said that he believes the DEQ will be more conservative this time with approving plan language.

#### X. Adjournment

**Motion by Woodward, support by Wilson adjourn. MOTION CARRIED. Meeting adjourned at 9:05 PM.**



# Livingston County Solid Waste Coordination Department

## RECORD OF MEETING LIVINGSTON COUNTY SOLID WASTE PLANNING COMMITTEE MEETING

Wednesday, September 9, 1998- 7:00 PM  
Livingston County Administration Building  
304 E. Grand River  
Howell, MI 48843

### I. Roll and Introduction of Guests

#### Members Present

Donna Waldock  
Julie Woodward  
Steve Dawdy  
Matt Germaine  
Rich Andersen  
Ted Starbuck  
Sandra Tuthill  
Bob Josephson  
Don Tinson

#### Staff Present

John Hanifan

#### Guests Present

Terry Guerin,  
Granger Co.

#### Members Absent

Phil Smith  
Steph Glysson  
Terry Wilson

### II. General Business

Meeting called to Order at 7:10 PM

A. Approval of Agenda. Motion by Woodward, support by Tuthill to approve agenda. **MOTION CARRIED**

B. Approval of July 9, 1998 minutes. Motion by Woodward, support by Waldock, to approve minutes. **MOTION CARRIED**

C. Correspondence: Staff distributed letter from Washtenaw County and said the letter refers to the current flow situation with Washtenaw and the possibility for an intercounty agreement.

D. Call to the Public: **NONE**

### III. Election of Officers

Motion by Andersen, support by Tinson, to nominate Julie Woodward as Chairperson. Motion by Dawdy, support by Andersen, to nominate Terry Wilson as Vice-Chair. Motion carried unanimously. Woodward is Chairperson, Wilson Vice-Chair.

IV. Database/Selected System

General Discussion about the Database and Selected System sections of the plan.

Staff said that the document mailed to the committee is a "draft, draft" of the format required by the DEQ.

Tinson asked about Page 1, Executive Summary and the accuracy of the percentages. Staff said that the data was given to him from the Planning Department. General discussion about the percentages on Page 1. Staff will revise for next meeting.

Discussion took place regarding the Selected System scoring matrix. Staff said the committee should rank the alternatives using the ranking system and send the results to him prior to the next meeting.

General discussion about the Centers of Solid Waste Generation Map and Generalized Land Use Map. Andersen said the word "Generalized" should be added to the title of the map.

Discussion about the Ordinance Section of the Plan. Andersen asked Staff to get a legal opinion from the County's contracted legal office about the relationship of local ordinance to the plan.

IV. Siting Criteria

Staff said he did not prepare a time line yet. Staff will do so when the Scoring Matrix is complete.

General discussion about revised siting criteria. Germaine said the word "developer" should be changed to "proposer". Committee generally agreed to this change.

The committee reviewed the revised criteria and generally agreed that the primary criteria checklist is complete. Staff said that the committee could still revise the criteria before final approval, or by asking this item to be put on future agendas, otherwise this section is "done" and will not be discussed again until final approval. The committee generally agreed that once Staff makes the edits from tonight's meeting, that the primary checklist is complete.

Staff said that the Scoring Matrix has not been completed and he hopes to have draft ready for the next meeting.

VI. Other Business

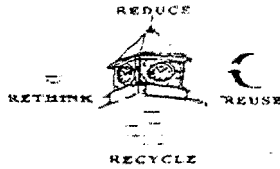
VII. Call to the Public

Terry Guerin, Granger Co., discussed local ordinances, and the financial assurance of solid waste facilities. Guerin also discussed legislation (HB-5284) that will be discussed at a House of Reps subcommittee meeting the following week.

VIII. Adjournment

Motion by Dawdy, support by Woodward adjourn. **MOTION CARRIED.** Meeting adjourned at 9:05 PM.





# Livingston County Solid Waste Coordination Department

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## RECORD OF MEETING LIVINGSTON COUNTY SOLID WASTE PLANNING COMMITTEE MEETING Wednesday, October 14, 1998- 7:00 PM Livingston County Administration Building 304 E. Grand River Howell, MI 48843

### I. Roll and Introduction of Guests

#### Members Present

Donna Waldock  
Julie Woodward  
Steve Dawdy  
Steph Glysson  
Rich Andersen  
Ted Starbuck  
Sandra Tuthill  
Bob Josephson  
Don Tinson  
Terry Wilson

#### Staff Present

John Hanifan

#### Guests Present

Terry Guerin.  
Granger Co.

#### Members Absent

Phil Smith  
Matt Germaine  
Karen Clute

### II. General Business

Meeting called to Order at 7:05 PM

A. Approval of Agenda. Motion by Waldock, support by Starbuck to approve agenda. **MOTION CARRIED**

B. Approval of July 9, 1998 minutes. Motion by Starbuck, support by Tinson, to approve minutes. **MOTION CARRIED**, with Glysson abstaining

C. Correspondence: Staff distributed letter from Genesee County and said the letter states that Genesee has not addressed intercounty flow yet in their plan.

D. Call to the Public: **NONE**

### III. Executive Summary

General discussion about the percentages on Page I-1. Staff used land use classifications to determine rural and urban percentages. After much discussion, Tinson suggested adding single family residential to be used

in calculating the urban category. The committee generally agreed to this stipulation. Staff will recalculate based on Tinson's recommendation.

#### IV Database Section

Staff is still compiling waste generation numbers, which impact several of the tables in the Plan. Staff hopes to send out numbers and finished tables for the next meeting.

Discussion took place regarding the Selected System scoring matrix. Staff provided a table with a weighted scoring systems. The committee generally agreed that the weighted system was acceptable.

Staff said that only a few committee members completed ranking the alternatives and provided Staff with the results. The committee agreed to score the proposals at the meeting. Staff collected the finished scoring system and will compile the results for discussion at the next meeting.

#### V Selected System Section

Staff said this section is nearly complete. Only a few tables remain to be completed (Tables are dependant on info from Database Section).

Staff said it has been difficult to get answers on intercounty flow situation. However, staff does not anticipate and changes to current system with counties that are currently authorized to receive Livingston County waste.

#### VI Siting Criteria

Discussion about the use of scoring matrix as primary criteria. Staff said that the matrix must be designed using a graduated scoring system. For example, if a developer proposes a liner system that meets the minimum requirements, they receive 10 points. If they go above the minimum they would receive 15 points. If they don't meet minimum requirements, they receive 0 points. Staff said that in conversations with DEQ staff that the scoring matrix must be designed this way, or DEQ will not accept it.

Staff asked the committee if he should continue developing a Scoring Matrix. **Motion by Tinson, support by Andersen, to have staff continue developing a Scoring Matrix to be used as part of Primary Siting Criteria. MOTION CARRIED, with Dawdy and Glysson Voting NO.**

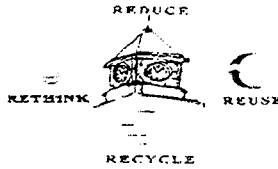
#### VII Other Business

#### VIII Call to the Public

Terry Guerin, Granger Co. discussed siting criteria that other counties are considering, and the basis of isolation distances for facilities.

#### IX Adjournment

**Motion by Wilson, support by Waldock to adjourn. MOTION CARRIED. Meeting adjourned at 8:05 PM.**



# Livingston County Solid Waste Coordination Department

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## RECORD OF MEETING LIVINGSTON COUNTY SOLID WASTE PLANNING COMMITTEE MEETING Wednesday, November 11, 1998- 7:00 PM Livingston County Administration Building 304 E. Grand River Howell, MI 48843

### I. Roll and Introduction of Guests

#### Members Present

Matt Germaine  
Julie Woodward  
Steve Dawdy  
Steph Glysson  
Karen Clute  
Don Tinson  
Bob Josephson

#### Staff Present

John Hanifan

#### Guests Present

Terry Guerin.  
Granger Co.  
Dave Herberholz

#### Members Absent

Ted Starbuck  
Phil Smith  
Rich Andersen  
Donna Waldock  
Sandra Tuthill  
Terry Wilson

### II. General Business

Meeting called to Order at 7:04 PM

A. Approval of Agenda. Motion by Glysson, support by Dawdy to approve agenda. **MOTION CARRIED**

B. Approval of July 9, 1998 minutes. Motion by Dawdy, support by Tinson, to approve minutes. **MOTION CARRIED**, with Glysson abstaining

C. Correspondence: Staff distributed letter from Lenawee County and said the letter states that Lenawee wishes to be added to the list of counties that are authorized to receive Livingston County waste.

D. Call to the Public: NONE

### III. Executive Summary

Staff reiterated that the Executive Summary is an overview of the plan and that Page I-1 was a required table in the DEQ plan format.

A revised Page I-1 was handed out, which includes single family residential as part of the urban classification. Staff said the Executive Summary is basically finished and the committee should review it to recommend any changes.

IV. Database Section

Staff said he will provide a finished Database section to SWPC to review before the next meeting.

V. Selected System Section

Discussion took place regarding the Selected System scoring matrix. Staff provided a table with a weighted scoring systems. Staff said that System 2, current system with increased resource recovery received the most points under the matrix and was the "selected system". Staff will include compiled results in the plan and send to Committee.

VI. Siting Criteria

Staff distributed a draft of the Scoring Matrix for Landfill proposals. General discussion about the matrix. Staff said this was the framework for the scoring system and was a first draft. Staff said he strongly urged the committee to carefully review this section because of the importance of this section in relation to the rest of the plan.

VII. Appendices A - D

Staff discussed the preparation of the appendices. Discussion of Appendix A took place. Dawdy had concerns about the Advantages/Disadvantages section. Staff recommended faxing comments to him to use in completing both Appendix A & B. Staff said Appendix B is an overview of the Non-selected system. Staff will mail completed A & B to committee.

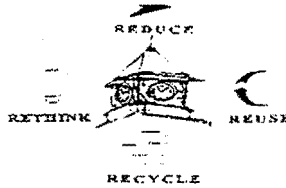
Staff said Appendix C is the documentation of public participation, and Appendix D is the attachment section, so no separate action is required to complete C and D.

VIII. Call to the Public

Terry Guerin, Granger Co. said that an appeal to the Saginaw County decision is probable. Herberholz also stated that an appeal would take place.

IX. Adjournment

Motion by Tinson, support by Glysson to adjourn. MOTION CARRIED. Meeting adjourned at 7:45 PM.



## Livingston County Solid Waste Coordination Department

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### RECORD OF MEETING LIVINGSTON COUNTY SOLID WASTE PLANNING COMMITTEE MEETING

Wednesday, February 10, 1999- 7:00 PM  
Livingston County Administration Building  
304 E. Grand River  
Howell, MI 48843

#### I. Roll and Introduction of Guests

##### Members Present

Matt Germaine  
Dawn New  
Steve Dawdy  
Steph Glysson  
Karen Clute  
Don Tinson  
Sandra Tuthill  
Rich Andersen  
Ted Starbuck  
Donna Waldock

##### Staff Present

John Hanifan

##### Guests Present

Terry Guerin  
Granger Co.

##### Members Absent

Phil Smith  
Terry Wilson  
Bob Josephson  
Julie Woodward

#### II. General Business

Meeting called to Order at 7:10 PM

A. Approval of Agenda. Motion by Glysson, support by Andersen to approve agenda.

**MOTION CARRIED**

B. Introduction of Dawn New, new SWPC member. New gave a brief introduction of her experience followed by brief introductions of the other members of the SWPC.

C. Approval of November, 11 1998 minutes. Motion by Dawdy, support by Germaine, to approve minutes. **MOTION CARRIED**, with Glysson, New, Waldock and Andersen abstaining

D. Correspondence: NONE

E. Call to the Public: NONE

III. Overview of Sections II and III.

Staff said these sections are basically complete and the SWPC will receive these as part of the draft plan. Staff reminded the committee that any or all of the information in the plan can be revised, edited, etc. if the SWPC desires.

VI. Siting Criteria

Discussion about the Scoring Matrix. There were general concerns about the technical criteria, including the liner thickness. Staff agreed to cite the sections of Part 115 when technical criteria are used in the Scoring Matrix.

After much discussion, Staff said he would forward a copy to the DEQ to review before the SWPC took any more action on the scoring matrix.

V. Appendices A - D

Staff discussed the preparation of the appendices. Discussion of Appendix B is an overview of the Non-selected system. Glysson said she did not like the one of the Advantages in the Non-selected System. Clute said she disagreed and felt it was an appropriate statement. After much discussion, Staff asked if anyone wanted to make a motion to modify appendix B. Because no motion was made, Staff said Appendix B is finished.

VI. Other Business

Staff presented a page of the plan which authorizes local units to implement ordinances pertaining to solid waste disposal areas.

After much discussion, there was a Motion by Glysson, Support by Dawdy to have the ordinance section page read:

*"Any of the 20 municipalities in Livingston County may adopt and implement local regulations pertaining to solid waste disposal areas that protect the public health, safety and welfare of a respective community."* and to eliminate 1. through 6. Motion carried unanimously.

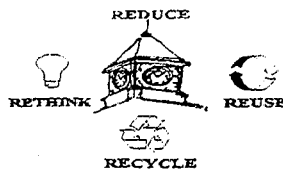
After discussion, the SWPC decided to meet again on April 14. Staff said he would mail a first draft of the plan, but it would probably not contain the scoring matrix. The SWPC generally agreed that staff should send out the draft for their review prior to the April meeting.

VII. Call to the Public

Terry Guerin, Granger Co. said it was his understanding that a state approved plan means the plan is complete per the DEQ requirements but does not necessarily hold up when weighed against parts of the statute.

VIII. Adjournment

Motion by Starbuck, support by Tinson to adjourn. MOTION CARRIED. Meeting adjourned at approximately 8:15 PM.



# Livingston County Solid Waste Coordination Department

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## RECORD OF MEETING LIVINGSTON COUNTY SOLID WASTE PLANNING COMMITTEE MEETING Wednesday, June 9, 1999- 8:00 AM Livingston County Administration Building 304 E. Grand River Howell, MI 48843

### I. Roll and Introduction of Guests

#### Members Present

Matt Germaine  
Dawn New  
Steve Dawdy  
Karen Clute  
Julie Woodward  
Rich Andersen  
Ted Starbuck  
Donna Waldock  
Terry Wilson

#### Staff Present

John Hanifan

#### Guests Present

Dianne Brady

#### Members Absent

Phil Smith  
Bob Josephson  
Don Tinson  
Stephanie Glysson  
Sandra Tuthill

### II. General Business

Meeting called to Order at 8:10 AM

A. Approval of Agenda. Motion by Dawdy, support by Clute to approve agenda.

**MOTION CARRIED**

B. Approval of February, 10 1999 minutes. Motion by Andersen, support by Wilson, to approve minutes. **MOTION CARRIED.**

C. Correspondence: **NONE**

D. Call to the Public: **NONE**

III. Discussion of Draft Plan.

The committee reviewed comments by Dawdy and Germaine to edit sections of the plan. The committee generally agreed to have Staff make the suggested changes because they did not substantially change the Plan content. **Motion by Wilson, Support by Andersen to release the Draft Plan for the Public Comment period. MOTION CARRIED.**

Discussion took place regarding when and if the local units of government would receive a draft. Brady (guest) said that Handy Township is very interested and hoped to receive a draft prior to the public hearing. Staff said he would send out draft to communities and other interested parties approximately one week from today.

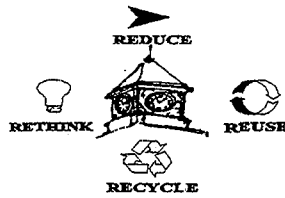
IV. Public Hearing Dates.

The SWPC generally agreed the public hearing would be scheduled for July 28, at 7 PM, at the County Administration Building.

VIII. Adjournment

**Motion by Dawdy, support by Clute to adjourn. MOTION CARRIED. Meeting adjourned at approximately 9:00 AM.**





# Livingston County Solid Waste Coordination Department

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## RECORD OF MEETING LIVINGSTON COUNTY SOLID WASTE PLANNING COMMITTEE MEETING Wednesday, November 17, 1999- 8:00 AM Livingston County Administration Building 304 E. Grand River Howell, MI 48843

### I. Roll and Introduction of Guests

#### Members Present

Phil Smith  
Dawn New  
Steve Dawdy  
Karen Clute  
Stephanie Glysson  
Rich Andersen  
Ted Starbuck  
Donna Waldock  
Terry Wilson  
Don Tinson

#### Staff Present

John Hanifan

#### Guests Present

Ray Bennett, Hamburg Twp.  
Terry Guerin, Granger Co.

#### Members Absent

Bob Josephson  
Julie Woodward  
Sandra Tuthill  
Matt Germaine

### II. General Business

Meeting called to Order at 8:10 AM

A. Approval of Agenda. Motion by Wilson, support by Waldock to approve agenda.  
**MOTION CARRIED**

B. Approval of June, 9 1999 minutes. Motion by Andersen, support by Wilson, to approve minutes. **MOTION CARRIED.**

C. Correspondence: **NONE**

D. Call to the Public: **NONE**

III. Discussion of Draft Plan

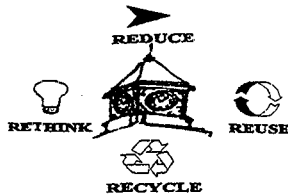
Discussion of siting criteria took place. Glysson said a substantial amount of work was put into the development of the criteria and it should remain. Staff said that a motion would be necessary to remove the criteria and there wasn't the need to pass a motion to keep it in the plan. The committee generally agreed to leave the criteria in the plan with some edits, including a **Motion by New, Support by Starbuck to require "any facility requiring a new construction or operating permit to be subject to the facility review process."** **MOTION CARRIED, with Dawdy voting NO.**

The committee generally agreed to have Staff make the any minor edits or suggested changes because they did not substantially change the Plan content. Staff will send a finished, bound version of the Plan to the Committee when complete.

**Motion by Andersen, Support by Tinson to release the Committee Approved Plan to the Livingston County Board of Commissioners. MOTION CARRIED.**

IV. Adjournment

**Motion by Andersen, support by Wilson to adjourn. MOTION CARRIED. Meeting adjourned at approximately 9:00 AM.**



# Livingston County Solid Waste Coordination Department

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## RECORD OF PUBLIC HEARING LIVINGSTON COUNTY SOLID WASTE PLANNING COMMITTEE

Wednesday, July 28, 1999- 7:00 PM  
Livingston County Administration Building  
304 E. Grand River  
Howell, MI 48843

### PUBLIC HEARING ON SOLID WASTE MANAGEMENT PLAN

1. Call to Order
2. Public Comments: **NONE**
3. Draft Plan: Staff gave presentation on A-C below.
  - A. What Plan Will Do:
  - B. What Plan Won't Do
  - C. What Next
5. Public Comments: **NONE**
6. Adjournment

### Record of Attendance at Public Hearing:

Richard P. Andersen,  
County Commissioner

Holly Andersen,  
388 W. Bonnie Circle  
Howell, MI 48843

Steve Dawdy,  
Solid Waste Planning Committee

Don Tinson  
Solid Waste Planning Committee

Terry Wilson,  
Solid Waste Planning Committee

Julie Woodward,  
Solid Waste Planning Committee

Donna Waldock,  
Solid Waste Planning Committee

Staff  
John P. Hanifan

### **Solid Waste Management Plan**

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- State Required
- Must Identify Capacity
- Must Specify Goals & Objectives

### **What the Plan WILL DO**

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- Provide Disposal Capacity
- Provide Criteria for Siting of Transfer Stations
- Continue to Export Waste to Landfills in Other Counties

### **What the Plan WILL DO** *continued:*

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- Attempt to increase Resource Recovery
- Continue Support of the HHW Program
- Develop an Illegal Dumping Task Force

### **What the Plan WON'T DO:**

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- Mandatorily Site a Landfill or Incinerator
- Mandate Programs

### **What Next?**

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- Approved Plan sent to all municipalities
- Need 2/3 to approve: 14 out of 20
- Locally approved Plan sent to Dept of Environmental Quality for final approval

## Local Community Approval Resolutions

(14 affirmatives, 6 not responding)

# COHOCTAH TOWNSHIP

LIVINGSTON COUNTY, MICHIGAN

RESOLUTION

NO.

LIVINGSTON COUNTY

DATE : April 13, 2000

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## RESOLUTION APPROVING AND ADOPTING SOLID WASTE MANAGEMENT PLAN UPDATE

**WHEREAS**, the Livingston County Solid Waste Planning Committee and the Board of County Commissioners unanimously approved the Solid Waste Management Plan Update prepared by the Solid Waste Management Coordinator; and

**WHEREAS**, the Livingston County Solid Waste Planning Committee and the Board of County Commission is recommending Cohoctah Township approve and adopt the Solid Waste Management Plan Update; and

**WHEREAS**, Cohoctah Township's approval of the Plan is necessary for a locally approved Solid Waste Management Plan; and

**WHEREAS**, a locally approved plan is in the best interest of all Livingston County municipalities and the Board of County Commissioners encourages all local municipalities to approve and adopt the Solid Waste Management Plan Update.

**NOW, THEREFORE BE IT RESOLVED** that Cohoctah Township hereby approves and adopts the Solid Waste Management Plan Update and encourages all local municipalities to approve and adopt the Solid Waste Management Update.

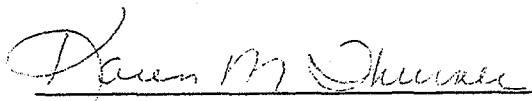
**MOVED:** J Miesle

**SUPPORTED:** M Forbush

**AYES:** M Forbush, K Thurner, W Thurner, J Miesle, R Smith

**NAYS:** none

I, Karen M Thurner, clerk of Cohoctah Township, Michigan, hereby certifies that the above is a true copy of a resolution adopted by the Cohoctah Township Board at a regular meeting held April 13, 2000.

  
Karen M Thurner, clerk

4/13/00  
date

**HARTLAND TOWNSHIP**

3191 Hartland Road

Hartland, MI 48353

(810) 632-7498

FAX (810) 632-6950

Gregory T. Bogdanski  
SupervisorGary J. Polakowski  
TrusteeLynn L. Meissner  
ClerkRobert A. Bulloch  
TrusteeKatherine J. Moravec  
TreasurerVictoria J. Phillips  
TrusteeDonald A. Hill  
Trustee**RESOLUTION 00-08-01**

At a regular meeting of the Township Board of the Township of Hartland, Livingston County, Michigan, (the "Township") held at the Township Offices on August 1, 2000 at 7:30 p.m., there were

**PRESENT:** G. BOGDANSKI, K. MORAVEC, L. MEISSNER, V. PHILLIPS, G. POLAKOWSKI, R. BULLOCH AND D. HILL

**ABSENT:** NONE

The following preamble and resolution were offered by K. Moravec and  
Seconded by V. Phillips

**RESOLUTION TO APPROVE AND ADOPT SOLID WASTE MANAGEMENT**

**WHEREAS**, the Livingston County Solid Waste Planning Committee and the Board of County Commissioners unanimously approved the Solid Waste Management Plan Update prepared by the Solid Waste Management Coordinator; and

**WHEREAS**, the Livingston County Solid Waste Planning Committee and the Board of County Commissioners is recommending (YOUR COMMUNITY) approve and adopt the Solid Waste Management Plan Update; and

**WHEREAS**, (YOUR COMMUNITY'S) approval of the Plan is necessary for a locally approved Solid Waste Management Plan; and

**WHEREAS**, a locally approved plan is in the best interest of all Livingston County municipalities and the Board of County Commissioners encourages all local municipalities to approve and adopt the Solid Waste Management Plan Update

**NOW, THEREFORE, BE IT RESOLVED THAT:**

Post-it® Fax Note	7671	Date	8/5/00	# of pages	2
To	John Hanifan	From	Salma		
Co./Dept.		Co.	Hartland Twp		
Phone #		Phone #	810 632 7498		
Fax #	517 546 6657	Fax #			

(YOUR COMMUNITY) HEREBY APPROVES AND ADOPTS THE solid Waste Management Plan Update and encourages all local municipalities to approve and adopt the Solid Waste Management Plan Update.

A vote on the foregoing resolution was taken and was as follows:

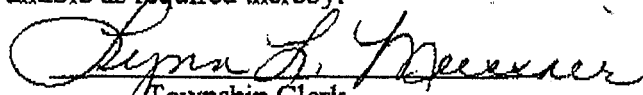
YES: BULLOCH, POLAKOWSKI, MEISSNER, MORAVEC,  
PHILLIPS AND HILL

NO: NONE

ABSENT: NONE

CLERK'S CERTIFICATE

The undersigned, being the duly qualified and acting Clerk of the Township hereby certifies that (1) the foregoing is a true and complete copy of a resolution duly adopted by the Township Board at a meeting of the Township Board, at which meeting a quorum was present and remained throughout; (2) the original thereof is on file in the records in my office; (3) the meeting was conducted, and public notice thereof was given, pursuant to and in full compliance with the Open Meetings Act (Act No. 267, Public Acts of Michigan, 1976, as amended); and (4) minutes of such meeting were kept and will be or have been made available as required thereby.

  
Township Clerk  
Lynn L. MEISSNER



TOWNSHIP OF GREEN OAK  
COUNTY OF LIVINGSTON, STATE OF MICHIGAN

RESOLUTION NO. 11-00

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RESOLUTION APPROVING AND ADOPTING  
THE LIVINGSTON COUNTY  
SOLID WASTE MANAGEMENT PLAN UPDATE

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Minutes of a regular meeting of the Township Board for the Township of Green Oak, County of Livingston, State of Michigan, held in the Township Hall in said Township on June 21, 2000 at <sup>7:00</sup>~~7:30~~ p.m., Eastern Daylight Time.

PRESENT: Members William Palmer, Mark St. Charles, Matt Ikle,  
Randall Schonfield, Rollin Green, Marlyne McKim, Jan Plas

ABSENT: Members None

The following preamble and resolution were offered by Member \_\_\_\_\_  
Ikle and supported by Member Schonfield.

WHEREAS, the Livingston County Solid Waste Planning Committee and the Board of County Commissioners unanimously approved the Solid Waste Management Plan Update prepared by the Solid Waste Management Coordinator; and

WHEREAS, the Livingston County Solid Waste Planning Committee and the Board of County Commissioners is recommending that Green Oak Township approve and adopt the Solid Waste Management Plan Update; and

WHEREAS, Green Oak Township's approval of the Solid Waste Management Plan Update is necessary for a locally approved Solid Waste Management Plan; and

WHEREAS, a locally approved Solid Waste Management Plan is in the best interest of all Livingston County municipalities, and the Board of County Commissioners encourages all local municipalities to approve and adopt the Solid Waste Management Plan Update.

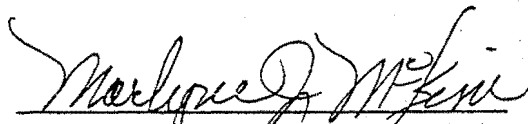
NOW, THEREFORE, BE IT RESOLVED BY THE TOWNSHIP BOARD OF GREEN OAK TOWNSHIP AS FOLLOWS:

1. The Township of Green Oak hereby approves and adopts the Solid Waste Management Plan Update and encourages all local municipalities to approve and adopt the Solid Waste Management Plan Update.

AYES: Members Palmer, St. Charles, Ikle, Schonfield, Green,  
McKim, Plas

NAYS: Members None

**RESOLUTION DECLARED ADOPTED.**

  
Marlyne J. McKim, Township Clerk

CERTIFICATION OF CLERK:

I hereby certify that the foregoing is a true and complete copy of a resolution adopted by the Township Board of the Township of Green Oak, County of Livingston, State of Michigan at a regular meeting of Township Board duly called and held on the 21<sup>st</sup> day of June, 2000.

  
Marlyne J. McKim, Township Clerk

WHEREAS, the Livingston County solid Waste Planning Committee and the Board of County Commissioners unanimously approved the Solid Waste Management Plan Update prepared by the Solid Wasted Management Coordinator; and

WHEREAS, the Livingston County solid Waste Planning Committee and the Board of County Commissioners are recommending the City of Brighton approve and adopt the Solid Waste Management Plan Update; and

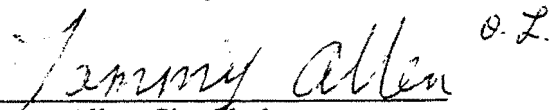
WHEREAS, the City of Brighton's approval of the Plan is necessary for a locally approved Solid Waste Management Plan; and

WHEREAS, a locally approve plan is in the best interest of all Livingston County municipalities and the Board of County Commissioners encourages all local municipalities to approve and adopt the Solid Waste Management Plan Update.

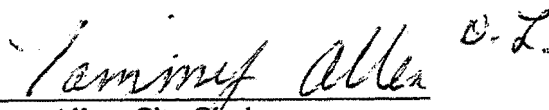
NOW, THEREFORE, BE IT RESOLVED, that the City of Brighton hereby approves and adopts the Solid Waste Management Plan Update and encourages all local municipalities to approve and adopt the Solid Waste Management Plan Update.

ADOPTED, by the Brighton City Council at its regularly scheduled meeting on July 6, 2000.

  
Kate Lawrence, Mayor

  
Tammy Allen, City Clerk

I, Tammy Allen, City Clerk for the City of Brighton, do hereby certify that the foregoing is a true and complete copy of a resolution adopted by the Brighton City Council at its regular meeting held on July 6, 2000.

  
Tammy Allen, City Clerk

AYES: Jones, Schillinger, Rahilly, Monet  
NAYS: None  
ABSTAIN: None  
ABSENT: Lawrence, Gienapp, Stoppels

## HAMBURG TOWNSHIP

### RESOLUTION APPROVING & ADOPTING SOLID WASTE MANAGEMENT PLAN UPDATE

At a regular meeting of the Township Board of the Township of Hamburg, Livingston County, State of Michigan, held at the Hamburg Senior Community Center on Tuesday, June 27, 2000, beginning at 8:00 p.m. Eastern Daylight Savings Time, there were:

PRESENT: Everett, Majoros, Hohl, Bennett, Hardesty, Timassey, Dillman

ABSENT: \_\_\_\_\_

and the following preamble and resolution were moved for adoption by \_\_\_\_\_  
supported by \_\_\_\_\_.

**WHEREAS**, the Livingston County Solid Waste Planning Committee and the Board of County Commissioners unanimously approved the Solid Waste Management Plan Update prepared by the Solid Waste Management Coordinator, and

**WHEREAS**, the Livingston County Solid Waste Planning Committee and the Board of County Commissioners is recommending Hamburg Township approve and adopt the Solid Waste Management Plan Update; and

**WHEREAS**, Hamburg Township's approval of the plan is necessary for a locally approved Solid Waste Management Plan; and

**WHEREAS**, a locally approved plan is in the best interest of all Livingston County municipalities and the Board of County Commissioners encourages all local municipalities to approve and adopt the Solid Waste Management Plan Update.

**NOW, THEREFORE BE IT RESOLVED**, that Hamburg Township hereby approves and adopts the Solid Waste Management Plan Update and encourages all local municipalities to approve and adopt the Solid Waste Management Plan Update.

Upon a roll call vote of the Board, the following voted:

AYES: Everett, Majoros, Hohl, Bennett, Hardesty, Timassey, Dillman

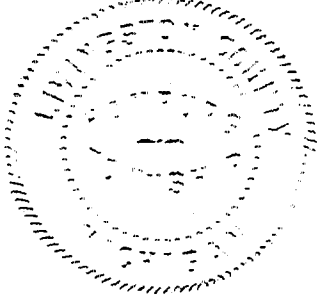
NAYS: \_\_\_\_\_

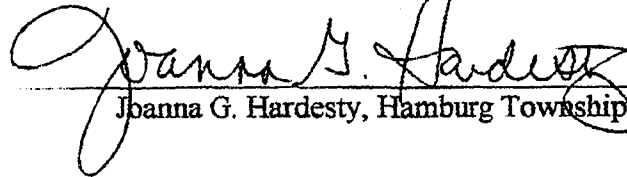
ABSENT: \_\_\_\_\_

Resolution Declared Adopted.

## CERTIFICATION

I, Joanna G. Hardesty, the duly elected and acting Clerk of the Township of Hamburg, Livingston, County, Michigan, hereby certify that (1) the foregoing is a true and complete copy of a resolution adopted by the Township Board at a regular meeting held on June 27, 2000; (2) the original of such resolution is on file in the records of the Clerk's office; (3) the meeting was conducted, and public notice thereof was given, pursuant to and in full compliance with the Open Meetings Act (Act No. 267, Public Acts of Michigan, 1976, as amended); and (4) minutes of such meeting were kept and have been (or will be) made available as required by the Open Meetings Act.



  
Joanna G. Hardesty, Hamburg Township Clerk

## RESOLUTION 00-10

WHEREAS, the Livingston County Solid Waste Planning Committee and the Board of County Commissioners unanimously approved the Solid Waste Management Plan Update prepared by the Solid Waste Management Coordinator; and

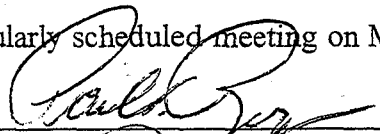
WHEREAS, the Livingston County Solid Waste Planning Committee and the Board of County Commissioners are recommending the City of Howell approve and adopt the Solid Waste Management Plan Update; and

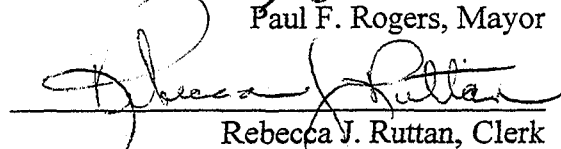
WHEREAS, the City of Howell's approval of the Plan is necessary for a locally approved Solid Waste Management Plan; and

WHEREAS, a locally approved plan is in the best interest of all Livingston County municipalities and the Board of County Commissioners encourages all local municipalities to approve and adopt the Solid Waste Management Plan Update.

NOW, THEREFORE, BE IT RESOLVED, that the City of Howell hereby approves and adopts the Solid Waste Management Plan Update and encourages all local municipalities to approve and adopt the Solid Waste Management Plan Update.

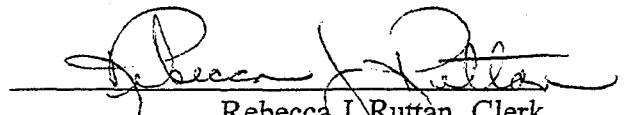
ADOPTED by the Howell City Council at its regularly scheduled meeting on March 27, 2000.

  
Paul F. Rogers, Mayor

  
Rebecca J. Ruttan, Clerk

### CERTIFICATION

I certify this is a true and accurate copy of Resolution No. 00-10 adopted by the Howell City Council at its regular meeting of March 27, 2000.

  
Rebecca J. Ruttan, Clerk

RESOLUTION

NO.

LIVINGSTON COUNTY

DATE: April 10, 2000

**RESOLUTION APPROVING AND ADOPTING SOLID WASTE MANAGEMENT PLAN UPDATE**

**WHEREAS**, the Livingston County Solid Waste Planning Committee and the Board of County Commissioners unanimously approved the Solid Waste Management Plan Update prepared by the Solid Waste Management Coordinator; and

**WHEREAS**, the Livingston County Solid Waste Planning Committee and the Board of County Commissioners is recommending Howell Township approve and adopt the Solid Waste Management Plan Update; and

**WHEREAS**, Howell Township's approval of the Plan is necessary for a locally approved Solid Waste Management Plan; and

**WHEREAS**, a locally approved plan is in the best interest of all Livingston County municipalities and the Board of County Commissioners encourages all local municipalities to approve and adopt the Solid Waste Management Plan Update.


**NOW, THEREFORE BE IT RESOLVED** that Howell Township hereby approves and adopts the Solid Waste Management Plan Update and encourages all local municipalities to approve and adopt the Solid Waste Management Plan Update.

**MOVED:** Cartwright

**SUPPORTED:** Hubbel

**CARRIED:** Unanimously

I, the undersigned, the duly qualified and acting clerk of Howell Township, Livingston County, Michigan, DO HEREBY CERTIFY that the foregoing is a true and complete copy of certain proceedings taken by the Howell Township Board at a regular meeting held on the 10th day of April, 2000, and further certify that the above Resolution was adopted at said meeting.

  
Jane Cartwright, Howell Township Clerk

**VILLAGE OF PINCKNEY  
LIVINGSTON COUNTY SOLID WASTE RESOLUTION  
MAY 08, 2000**

Resolution approving and adopting solid waste management plan update

**WHEREAS**, the Livingston County Solid Waste Planning Committee and the Board of County Commissioners unanimously approved the Solid Waste Management Plan update prepared by the Solid Waste Management Coordinator; and

**WHEREAS**, the Livingston County Solid Waste Planning Committee and the Board of County Commissioners is recommending the Village of Pinckney approve and adopt the Solid Waste Management Plan Update; and

**WHEREAS**, the Village of Pinckney's approval of the Plan is necessary for a locally approved Solid Waste Management Plan; and

**WHEREAS**, a locally approved plan is in the best interest of all Livingston County municipalities and the Board of County Commissioners encourages all local municipalities to approve and adopt the Solid Waste Plan Update.

**NOW, THEREFORE BE IT RESOLVED** that the Village of Pinckney hereby approves and adopts the Solid Waste Management Plan Update and encourages all local municipalities to approve and adopt the Solid Waste Management Plan Update.

**MOVED:** *Doherty*

**SUPPORTED:** *Shay*

**CARRIED:** 6-0: Keeney, Shay, Doherty, MacDonald, Dewey, and Langbehn. **ABSTAIN:** Teachout  
**Resolution duly approved and adopted.**

Michele A. Bury, Village Clerk

*Michele A. Bury*

I do hereby swear and affirm that this is a true copy, 5/8, 2000.

Michele A. Bury, Village Clerk

*Michele A. Bury*



**RESOLUTION**

**NO:**

**LIVINGSTON COUNTY**

**DATE:** March 21, 2000

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**RESOLUTION APPROVING AND ADOPTING SOLID WASTE MANAGEMENT PLAN  
UPDATE**

**WHEREAS**, the Livingston County Solid Waste Planning Committee and the Board of County Commissioners unanimously approved the Solid Waste Management Plan Update prepared by the Solid Waste Management Coordinator; and

**WHEREAS**, the Livingston County Solid Waste Planning Committee and the Board of County Commissioners is recommending Brighton Township approve and adopt the Solid Waste Management Plan Update; and

**WHEREAS**, Brighton Township's approval of the Plan is necessary for a locally approved Solid Waste Management Plan; and

**WHEREAS**, a locally approved plan is in the best interest of all Livingston County municipalities and the Board of County Commissioners encourages all local municipalities to approve and adopt the Solid Waste Management Plan Update.

**NOW, THEREFORE BE IT RESOLVED** that Brighton Township hereby approves and adopts the Solid Waste Management Plan Update and encourages all local municipalities to approve and adopt the Solid Waste Management Plan Update.

**MOVED:** C. Ward

**SUPPORTED:** M. Wenzel


**CARRIED:**

Ayes: Rogers, Wenzel, Wardach, Ward, Mitsopoulos, Slaton.

Nays: None.

Absent: Harmon.

The Resolution was declared adopted.

  
Chris Ward, Clerk

**RESOLUTION  
LIVINGSTON COUNTY**

**NO. 172  
DATE APRIL 13, 2000**

**RESOLUTION APPROVING AND ADOPTING SOLID WASTE  
MANAGEMENT PLAN UPDATE**

WHEREAS, the Livingston County Solid Waste Planning Committee and the Board of Commissioners unanimously approved the Solid Waste Management Plan Update prepared by the Solid Waste Management Coordinator; and

WHEREAS, the Livingston County Solid Waste Planning Committee and the Board of County Commissioners is recommending Deerfield Township approve and adopt the Solid Waste Management Plan Update; and

WHEREAS, Deerfield Township approval of the Plan is necessary for a locally approved Solid Waste Management Plan; and

WHEREAS, a locally approved plan is in the best interest of all Livingston County municipalities and the Board of County Commissioners encourages all local to approve and adopt the solid Waste Management Plan Update.

**NOW, THEREFORE BE IT RESOLVED** that Deerfield Township hereby approves and adopts the Solid Waste Management Plan update and encourages all local municipalities to approve and adopt the Solid Waste Management Plan Update.

MOVED: Tom Green

SUPPORTED: Nancy Laier

ROLL CALL VOTE: Jim McCarthy, Tom Green, Earl Grimshaw, Nancy Laier Aye

Absent: Art Houghton

CARRIED: Four to Zero

I, the undersigned, the duly qualified and acting Clerk of the Township of Deerfield of hereby certifies that the fore-going is a true and complete copy of the resolution adopted by the Board of the Township of Deerfield at a regular meeting held on the 13th day of April, 2000.

Nancy Laier  
Nancy Laier, Deerfield Township Clerk

**GENOA TOWNSHIP RESOLUTION  
NO. 20000320**

**LIVINGSTON COUNTY  
DATE: MARCH 20, 2000**

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**RESOLUTION APPROVING AND ADOPTING SOLID WASTE MANAGEMENT PLAN  
UPDATE.**

**WHEREAS**, the Livingston County Solid Waste Planning Committee and the Board of County Commissioners unanimously approved the Solid Waste Management Plan Update prepared by the Solid Waste Management Coordinator, and

**WHEREAS**, the Livingston County Solid Waste Planning Committee and the Board of County Commissioners is recommending GENOA TOWNSHIP approve and adopt the Solid Waste Management Plan Update; and

**WHEREAS**, GENOA TOWNSHIP'S approval of the Plan is necessary for a locally approved Solid Waste Management Plan; and

**WHEREAS**, a locally approved plan is in the best interest of all Livingston County Municipalities and the Board of County Commissioners encourages all local Municipalities to approve and adopt the Solid Waste Management Plan Update:

**NOW, THEREFORE BE IT RESOLVED** that GENOA TOWNSHIP hereby approves and adopts the Solid Waste Management Plan Update and encourages all local municipalities to approve and adopt the Solid Waste Management Plan Update.

**MOVED:** McCririe

**SUPPORTED:** Robertson

**CARRIED:** Motion carried unanimously by roll call vote as follows:  
Ledford, McCririe, Hunt, Robertson, Mortensen, Skolarus, and Murray.

Signed: Paulette A. Skolarus  
Paulette A. Skolarus, Genoa Township Clerk

RESOLUTION

HANDY TOWNSHIP BOARD OF TRUSTEES

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RESOLUTION APPROVING AND ADOPTING SOLID WASTE MANAGEMENT PLAN UPDATE

WHEREAS, the Livingston County Solid Waste Planning Committee and the Board of County Commissioners unanimously approved the Solid Waste Management Plan Update prepared by the Solid Waste Management Coordinator; and

WHEREAS, the Livingston County Solid Waste Planning Committee and the Board of County Commissioners is recommending Handy Township approve and adopt the Solid Waste Management Plan Update; and

WHEREAS, Handy Township's approval of the Plan is necessary for a locally approved Solid Waste Management Plan; and

WHEREAS, a locally approved plan is in the best interest of all Livingston County municipalities and the Board of County Commissioners encourages all local municipalities to approve and adopt the Solid Waste Management Plan Update.

NOW THEREFORE BE IT RESOLVED that Handy Township hereby approves and adopts the Solid Waste Management Plan Update and encourages all local municipalities to approve and adopt the Solid Waste Management Plan Update.

Moved: Vaupel

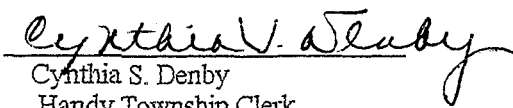
Supported: Denby

Ayes: Mills, Denby, Slanker, Krebs, Vaupel  
Nays:

Resolution Adopted: 5-0

I hereby certify that the above Resolution is a true and complete copy of the Resolution adopted by the Handy Township Board of Trustees at a regular meeting on April 11, 2000 at 7:30 p.m.

Date: 4-28-00

  
Cynthia S. Denby  
Handy Township Clerk

**RESOLUTION APPROVING AND ADOPTING SOLID WASTE MANAGEMENT  
PLAN**

**WHEREAS**, the Livingston County Solid Waste Planning Committee and the Board of County Commissioners unanimously approved the Solid Waste Management Plan Update prepared by the Solid Waste Management Coordinator; and

**WHEREAS**, the Livingston County Solid Waste Planning Committee and the Board of County Commissioners is recommending Tyrone Township approve and adopt the Solid Waste Management Plan Update; and

**WHEREAS**, Tyrone Township's approval of the Plan is necessary for a locally approved Solid Waste Management Plan;

**WHEREAS**, a locally approved plan is in the best interest of all Livingston County municipalities and the Board of County Commissioners encourages all local municipalities to approve and adopt the Solid Waste Management Plan Update;

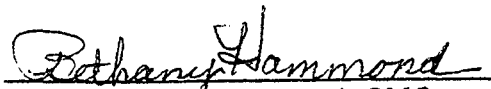
**NOW, THEREFORE, BE IT RESOLVED** that Tyrone Township hereby approves and adopts the Solid Waste Management Plan Update and encourages all local municipalities to approve and adopt the Solid Waste Management Plan Update.

● \*\*\*\*\*

**RESOLVED BY:** Kurnik  
**SUPPORTED BY:** Hammond  
**VOTE:** Hering, yes; Hammond, yes; Van Leuven, yes; Kuzner, yes; Kurnik, yes; Hyde, absent; Schumacher, absent  
**ADOPTION DATE:** March 21, 2000

**CERTIFICATION OF THE CLERK**

I, Bethany Hammond, do hereby certify this to be a true copy of a resolution duly adopted by the Tyrone Township Board at a regular meeting held March 21, 2000, in witness thereof, I have set my hand and my seal this Twenty-Seventh Day of March, Two Thousand.

  
Bethany Hammond, CMC  
Tyrone Township Clerk

**RESOLUTION**

**NO.**

**LIVINGSTON COUNTY**

**DATE:** 4-13-2000

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**RESOLUTION APPROVING AND ADOPTING SOLID WASTE MANAGEMENT  
PLAN UPDATE**

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**WHEREAS,** the Livingston County Solid Waste Planning Committee and the Board of County Commissioners unanimously approved the Solid Waste Management Plan Update prepared by the Solid Waste Management Coordinator; and

**WHEREAS,** the Livingston County Solid Waste Planning Committee and the Board of County Commissioners is recommending UNADILLA TOWNSHIP approve and adopt the Solid Waste Management Plan Update; and

**WHEREAS,** UNADILLA TOWNSHIP'S approval of the Plan is necessary for a locally approved Solid Waste Management Plan; and

**WHEREAS,** a locally approved plan is in the best interest of all Livingston County municipalities and the Board of County Commissioners encourages all local municipalities to approve and adopt the Solid Waste Management Plan Update.

**NOW, THEREFORE BE IT RESOLVED** that UNADILLA TOWNSHIP hereby approves and adopts Solid Waste Management Plan Update and encourages all local municipalities to approve and adopt the Solid Waste Management Plan Update.

**MOVED:** CROSS

**SUPPORTED:** KRUEGER

**CARRIED:** MAHLER, TOPPING, WILLIAMS

*Linda Topping, Clerk*

## 1997 PLAN UPDATE COVER PAGE

The Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), Part 115, Solid Waste Management, and its Administrative Rules, requires that each County have a Solid Waste Management Plan Update (Plan) approved by the Michigan Department of Environmental Quality (DEQ). Section 11539a requires the DEQ to prepare and make available a standardized format for the preparation of these Plan updates. This document is that format. The Plan should be prepared using this format without alteration. Please refer to the document entitled "Guide to Preparing the Solid Waste Management Plan Update" for assistance in completing this Plan format.

DATE SUBMITTED TO THE DEQ: *Locally Approved Plan submitted August 25, 2000*

If this Plan includes more than a single County, list all counties participating in this Plan.

*Not Applicable*

The following lists all the municipalities from outside the County who have requested and have been accepted to be included in the Plan, or municipalities within the County that have been approved to be included in the Plan of another County according to Section 11536 of Part 115 of the NREPA. Resolutions from all involved County boards of commissioners approving the inclusion are included in Appendix E.

*Not Applicable*

### DESIGNATED PLANNING AGENCY PREPARING THIS PLAN UPDATE:

Livingston County Solid Waste Coordination Department  
304 E. Grand River Avenue  
Howell, MI 48843

### CONTACT PERSON:

John P. Hanifan,  
Solid Waste Management Coordinator

### ADDRESS:

Livingston County Solid Waste Coordination Department  
304 E. Grand River Avenue  
Howell, MI 48843

### PHONE:

(517) 545-9609

### FAX:

(517) 546-6657

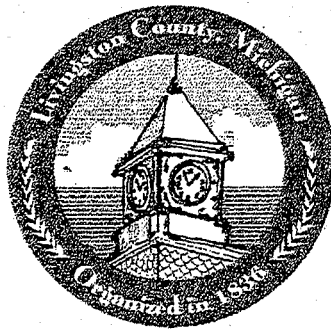
### E-MAIL:

lcswh@ismmi.net

CENTRAL REPOSITORY LOCATION(S): Solid Waste Coordination Department, 304 E. Grand River, Howell, MI 48843

# APPENDIX D

## ATTACHMENTS





# APPENDIX D

## Plan Implementation Strategy & Attachments

## ATTACHMENTS

### APPENDIX D

#### Plan Implementation Strategy

The following discusses how the County intends to implement the plan and provides documentation of acceptance of responsibilities from all entities that will be performing a role in the Plan.

The implementation of the Plan will focus on increasing efforts in resource recovery and waste reduction. Ultimate responsibility for plan implementation lies with the Livingston County Board of Commissioners. The Solid Waste Coordination Department will be the agency that implements the plan with the guidance and assistance of the Solid Waste Management Committee.

As stated in the implementation timetable in the Selected System portion of the Plan, most of the components will operate on an "on-going" basis. Enhancements of the systems' waste reduction component, such as increasing frequency of curb-side collections, adding materials to existing programs, volume-based pricing, etc. will take place during the next five-year planning period as a result of standardization of services and on-going public education and information programs.

---

ATTACHMENTS

Resolutions

The following are resolutions from county board of commissioners approving municipality's request to be included in an adjacent county's plan.

---

ATTACHMENTS

Listed Capacity

Documentation from landfills that the county has access to their listed capacity.



March 10, 1998

Mr. John Hanifan  
Livingston County Solid Waste Coordinator  
200 East Grand River Avenue  
Howell, Michigan 48843

Re: Agreement for Disposal of Livingston County Waste

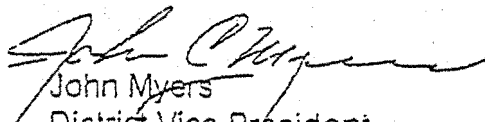
Dear Mr. Hanifan,

We refer to the Agreement dated August 10, 1992, between Browning-Ferris Industries of Southeastern Michigan, Inc and Livingston County, as amended by the First Amendment to the Agreement for Disposal of Solid Waste dated February 22, 1993 and amended by the Letter of Consent to transfer said contract to BFI Waste Systems of North America, Inc, a Delaware corporation, agreed and accepted on the 25th day of September, 1997 (collectively, the "Agreement").

I wish to reaffirm that the Agreement is in full force and effect and that BFI Waste Systems of North America, Inc fully intends to carry out each and every provision of the Agreement. We are aware that Livingston County is currently preparing an update to its Solid Waste Management Plan and that under the applicable solid waste management law, Livingston County has an obligation to provide for disposal of solid waste for a period of ten years. Under the Agreement, BFI has agreed to provide for disposal of solid waste for the twenty-three year period beginning February 22, 1993. Consequently, BFI's obligation to provide for Livingston County's disposal needs runs until February 22, 2016. It therefore appears that the Agreement fully satisfies the County's obligation to plan for disposal of solid waste during the next ten years. In fact, it appears that the County has a margin of safety of at least seven years (provided the plan is approved by the end of this calendar year).

We look forward to servicing the needs of Livingston County in the coming years. Please do not hesitate to contact Stephanie Glysson, of the BFI Public Sector at (248) 349-7230 or myself, if you need further assistance.

Respectfully,

  
John Myers  
District Vice President  
BFI Arbor Hills Landfill



May 22, 1998

Mr. John Hanifan  
Livingston County Solid Waste Coordination  
304 East Grand River  
Howell, MI 48843

RE: Livingston County Solid Waste Management Plan Update  
Explicitly Authorized Solid Waste Exports

Dear Mr. Hanifan:

BFI Waste Systems of North America, Inc. is a waste disposal company operating three Type II Sanitary Landfills in Michigan. These disposal facilities are authorized to accept municipal refuse, non-hazardous industrial waste and non-hazardous contaminated soils. These facilities are C&C Landfill in Calhoun County (south central Michigan), Arbor Hills Landfill in Washtenaw County (southeast Michigan) and Vienna Junction Landfill in Monroe County (also southeast Michigan). Included with this letter are the facility descriptions for each of the three BFI sites. You will be required by the MDEQ to provide this information in your planning process.

BFI understands that your county has indicated to the Michigan Department of Environmental Quality (MDEQ) its intention to update your solid waste management plan as required by Part 115 of the Natural Resources and Environmental Protection Act. In order for a landfill located in one county to serve the disposal needs of another county, Part 115 requires that the solid waste management plans of both counties explicitly authorize such services. The MDEQ also recommends, as part of your solid waste management plan update, that the updated plan explicitly identify the quantity of waste which may be exported to another county for disposal. Current export/import authorizations for your county are listed in the MDEQ "Export/Import Authorizations in County Solid Waste Management Plan Updates - January 1996". A copy of this report can be obtained from the MDEQ.

BFI's intent in sending this letter is to ask that your Solid Waste Planning Committee review its current export authorizations. We would then ask that your committee consider providing for export authorization to the three counties identified above (Calhoun, Washtenaw and Monroe) in the event that your county should ever be in need of one of

Arbor Hills Landfill • 10690 W. Six Mile Rd. • Northville, Michigan 48167

Phone 248-349-7230 • Fax 248-349-7572

~~D-6~~  
www.bfi.com

County SW Planning  
May 22, 1998  
Page 2

these disposal facilities in the next five to ten years (as required by the solid waste planning process). BFI would also ask your committee to consider authorizing each of these three landfills to serve up to 100 percent of the daily and annual disposal needs of your county, again, in the event that this should ever be necessary.

BFI would be pleased to help your county to provide for its long term disposal needs. We looks to provide any assistance we may offer to you as you move through this solid waste planning update process. We would also be happy to attend any scheduled meetings at which you might request BFI to be present in order to discuss this request in more detail. I thank you for your attention to this request.

Sincerely,



Kathleen A. Klein  
BFI Public Sector Representative

Encl.

LAW OFFICES  
**JAFFE, RAITT, HEUER & WEISS**  
PROFESSIONAL CORPORATION

SUITE 2400  
ONE WOODWARD AVENUE  
DETROIT, MICHIGAN 48226

SOUTHFIELD

TELEPHONE (313) 961-8380  
TELEFACSIMILE (313) 961-8358

July 20, 1998

Mr. John Hanifan  
Solid Waste Coordination Department  
Livingston County  
304 East Grand River  
Howell, MI 48843

Dear Mr. Hanifan:

This letter is being sent to you on behalf of the Adrian Landfill, Inc. ("ALI"), which was formerly known as Laidlaw Waste Systems (Adrian), Inc. As you may know, Laidlaw underwent a corporate acquisition, which explains the name change of the corporation that owns the landfill. Because this was merely a name change, Adrian Landfill, Inc. is the same corporation as Laidlaw Waste Systems (Adrian), Inc.

ALI would like to assist the Livingston County Solid Waste Planning Committee with ensuring that the Livingston County Solid Waste Plan update reflects the current legal and practical status of the ALI landfill, located in Lenawee County, thereby assisting Livingston County in developing a Plan that will both meet the needs of the County and obtain all of the approvals necessary to be effective.

**A. History**

In March of 1996, Laidlaw and Lenawee County extended a pre-existing agreement, enhancing some of the benefits granted to both sides. The new agreement remains in effect until August 31, 2006, or until the Landfill's airspace is exhausted, whichever occurs first. The Agreement defines the airspace by reference to the property owned by the Landfill. In paragraph 13 of the Agreement, the County agreed to incorporate the relevant terms of the Agreement into all future amendments or updates of the Lenawee County Solid Waste Plan.

Without trying to modify or repeat all of the terms of the Agreement, of particular import are the following:

- The Landfill is authorized to accept up to an average of 6,600 tons of municipal solid waste per week over each six month period from Ohio, Indiana and Ontario, Canada or from Livingston County in addition to a number of other specified Michigan counties which make up the regional wasteshed.
- The Landfill is authorized to accept up to an average of 6,600 tons of "special waste" per week over each six month period from outside of Michigan or from any county in the State of Michigan. Special waste is defined in the agreement as solid waste which is not generally considered residential or commercial waste and which is generally homogenous in nature and generated in bulk, including, but not limited to: contaminated soil, construction and demolition debris, foundry sand, sludges, street sweepings, fly ash, bottom ash, slag, auto fluff and agricultural wastes.



Mr. John Hanifan  
July 20, 1998  
Page 2

**B. Current and Future Disposal Capacity**

ALI currently has an estimated 1,540,000 cubic yards of disposal capacity available to it, which, at current rates of receipt would mean an anticipated life of seven years. This includes receipts from outside Lenawee County. Recently, ALI applied for MDEQ approval of a construction permit for an expansion that would allow the acceptance of an additional 3,650,000 cubic yards of waste, which translates into an anticipated additional life of 16 years, for a total of 23 years. While ALI has not projected beyond that point, it does have substantial additional land reserves at the same location.

The current Lenawee County Solid Waste Plan identifies Livingston County as an approved source of waste for disposal in Lenawee County. See enclosure. Chapter Six of Volume 1 of the most recent Livingston County Solid Waste Management Plan clearly reflects the county's intent to export waste for disposal. The ALI facility is another option that is available to the County.

ALI is working with the Lenawee County Solid Waste Planning Committee and fully expects that its 1996 agreement will be incorporated into the Lenawee County Solid Waste Plan Update.

**C. Proposal**

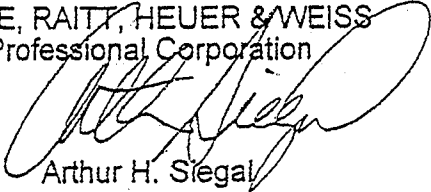
Therefore, ALI has and will have disposal capacity available to the residents and businesses of Livingston County and requests that its facility in Lenawee County, Michigan be incorporated into the Livingston County Solid Waste Plan Update. We believe that it is appropriate to, and ALI hereby requests that your Planning Committee include Lenawee County as an approved location for disposal of Livingston County waste of up to 343,200 tons per year, or up to 85,800 cubic yards per month.

We believe that this proposal is consistent with and satisfies the requirements of Michigan Environmental Code Part 115 sections 11533(1), 11538(1)(a), 11538(1)(i), and 11538(2) and Michigan Administrative Code Rules R 299.4711(e)(iii), all of which specify the content of every county's solid waste management plan.

I will be the primary contact and will be responsible for providing any information that the Livingston Solid Waste Planning Committee requires. I look forward to working with the Committee to ensure a smooth transition between the old and new Plans and to ensure that Livingston County has a safe, secure and environmentally sound waste management program for years to come. If you have any questions, please feel free to call me. My telephone number is (313) 961-8380. I hope the above assists the Committee with its project.

Sincerely,

JAFFE, RAITT, HEUER & WEISS  
Professional Corporation

  
Arthur H. Siegal

AHS/vlp/0568391.01

Enclosure

cc: Mr. William Cramb, ALI



## **Waste Management<sup>SM</sup>**

Grand Rapids Customer Service Center  
1668 Porter Street, S.W.  
Grand Rapids Michigan 49509-1796

Phone 616.538.3750

May 1, 1998

Mr. John Hanifan  
Livingston County Solid Waste Coordinator  
304 East Grand River  
Howell, MI 48843

Re: Waste Management Landfills in Michigan

Dear Solid Waste Planning Committee Members:

Waste Management of Michigan, Inc. owns and operates eight (8) licensed solid waste landfills located throughout the lower peninsula of Michigan. All of these landfills are allowed to receive waste from many counties and a few from all counties in the lower peninsula. Attached please find the following information:

1. MDEQ standard format information sheets for each of our landfills.
2. A map showing the location of our landfills.
3. A listing for each landfill showing which counties may import waste to the site.

The list of counties for each site is based upon existing county plans or our existing host agreements with counties which provide for the county to add these counties during the current plan updates. In most cases there is no requirement to have signed inter-county agreements. However, for those counties that do require inter-county agreements, we have indicated that on the sheet. We are encouraging all counties to have their plans as open as possible with regards to inter-county transfers and to not require signed agreements between the counties. In some cases, we are requesting our host counties to add additional counties, during the update process, which are not covered under a host agreement. These are also indicated on the attached sheets.

**As you update your plan, please add as many of our landfills, as you wish, to your plan and notify out host counties of your intentions and request that they also include you in their plans.**

May 1, 1998

Page 2

Mr. John Hanifan

Livingston County Solid Waste Coordinator

Livingston County

If you have any questions, need additional information, or wish to add your county as an exporting county to one of our landfills, please call me at (616) 538-1921 ext. 151.

Sincerely,

*WASTE MANAGEMENT OF MICHIGAN, INC.*



Jeff Poole

Manager, Business Development

File: Livingston County, 517/545-9609



GREATER MICHIGAN LANDFILL DIVISION  
A WASTE MANAGEMENT COMPANY

9536 East Lennon Road  
Lennon, MI 48449  
(810) 621-9080  
(810) 621-3156 Fax

March 5, 1999

John P. Hanifan, Solid Waste Coordinator  
Livingston County Solid Waste Coordination Department  
304 E. Grand River Ave  
Howell, Mi. 48843

Dear Mr. Hanifan,

This letter shall serve as Venice Park's formal request to be included as a primary disposal site in the Livingston County Solid Waste Plan. Waste is approved to leave Livingston County and be disposed of at Venice Park in the Shiawassee County Solid Waste Plan. Currently, Venice Park has 900,000 cu. yds. of available air space. Venice Park is in the process of finalizing a construction permit expansion that will be completed and approved in June of 1999. The expansion will yield an additional 15 million cu. yds. of capacity.

Venice Park can accept up to 100% of Livingston County's annual 750,000 cubic yards of waste. If you have questions regarding this communication, please feel free to call me at 810-621-9080.

Sincerely,

*Chris Basgall*  
Chris Basgall

cc: Mike VanDinther  
Terry Cooney



**WOODLAND MEADOWS**  
A WASTE MANAGEMENT COMPANY

5900 Hannan  
Wayne, MI 48184  
(734) 326-0993  
(734) 326-9245 Fax

March 5, 1999

John P. Hanifan  
Solid Waste Management Coordinator  
Livingston County Solid Waste Coordination Department  
304 E. Grand River Ave.  
Howell, MI 48843

Re: Request for Inclusion in Solid Waste Plan

Dear Mr. Hanifan:

We are hereby submitting a formal request for inclusion of Woodland Meadows RDF - Van Buren in the Livingston County Solid Waste Plan.

The total remaining capacity of the Woodland Meadows RDF - Van Buren landfill is approximately 25 million 'in place' cubic yards (approximately 75 million 'gate' cubic yards). Woodland Meadows is willing to accept any portion of the solid waste generated annually in Livingston County, up to and including the 750,000 cubic yards referenced in your letter.

If you have any questions or need additional information, please feel free to contact me at (734) 326-8230.

Sincerely,

Paul Mazanec, P.E.  
Division Engineer

cc: Ric Spencer, WM  
Jim Logsdon, WM



# Region 2 Planning Commission

Jackson County Tower Building - 16th Floor  
120 West Michigan Avenue  
Jackson, Michigan 49201

Fax: 517-788-4635

517-788-4426

Email: Region2@dmci.net

October 14, 1998

Mr. John Hanifan  
Livingston County Solid Waste Coordination  
304 E. Grand River Avenue  
Howell, MI 48843

Dear Mr. Hanifan:

This letter is written to request that Lenawee County be included in the Livingston County Solid Waste Management Plan update.

Lenawee County will allow intercounty flow of waste with the same counties that were listed in the 1991 Lenawee County Solid Waste Plan. Therefore, the draft Lenawee County indicates that Livingston County will continue to be eligible for intercounty exchange of waste with Lenawee County.

The draft Lenawee County plan update contains the following conditions regarding the import of solid waste into Lenawee County:

1. *The total solid waste received at any Lenawee County facility shall not cumulatively exceed 6,600 tons per week. Using a six day operating week, the cumulative total is therefore equivalent to a 1,100 ton per day cap yet provides some latitude for typically encountered daily operating tonnage fluctuations.*
2. *Solid waste disposal facilities in Lenawee County shall accept all waste generated within Lenawee County. In order to ensure capacity for Lenawee County waste, solid waste disposal facilities shall, on a weekly basis, reserve capacity for 1,800 tons per week of Lenawee County solid waste. If Lenawee County waste disposal does not equal or exceed 1,800 tons per week at a Lenawee County solid waste disposal facility, the facility may accept additional waste from other authorized sources not to exceed the maximum weekly cumulative cap of 6,600 tons per week. This cap of 6,600 tons per week shall be a condition of consistency to the operation of a solid waste disposal facility.*
3. *Intercounty transfer of solid waste agreements shall not be required.*
4. *Counties exporting waste to Lenawee County shall comply with Lenawee County's policy to encourage waste reduction, reuse and recycling*

The first draft of the solid waste plan will be reviewed at the October 22, 1998 meeting of the Lenawee County Solid Waste Management Planning Committee. It is anticipated that the Plan update will be released for public comment before the end of the year.

If you have any questions, please feel free to give me a call at (517) 768-6703.

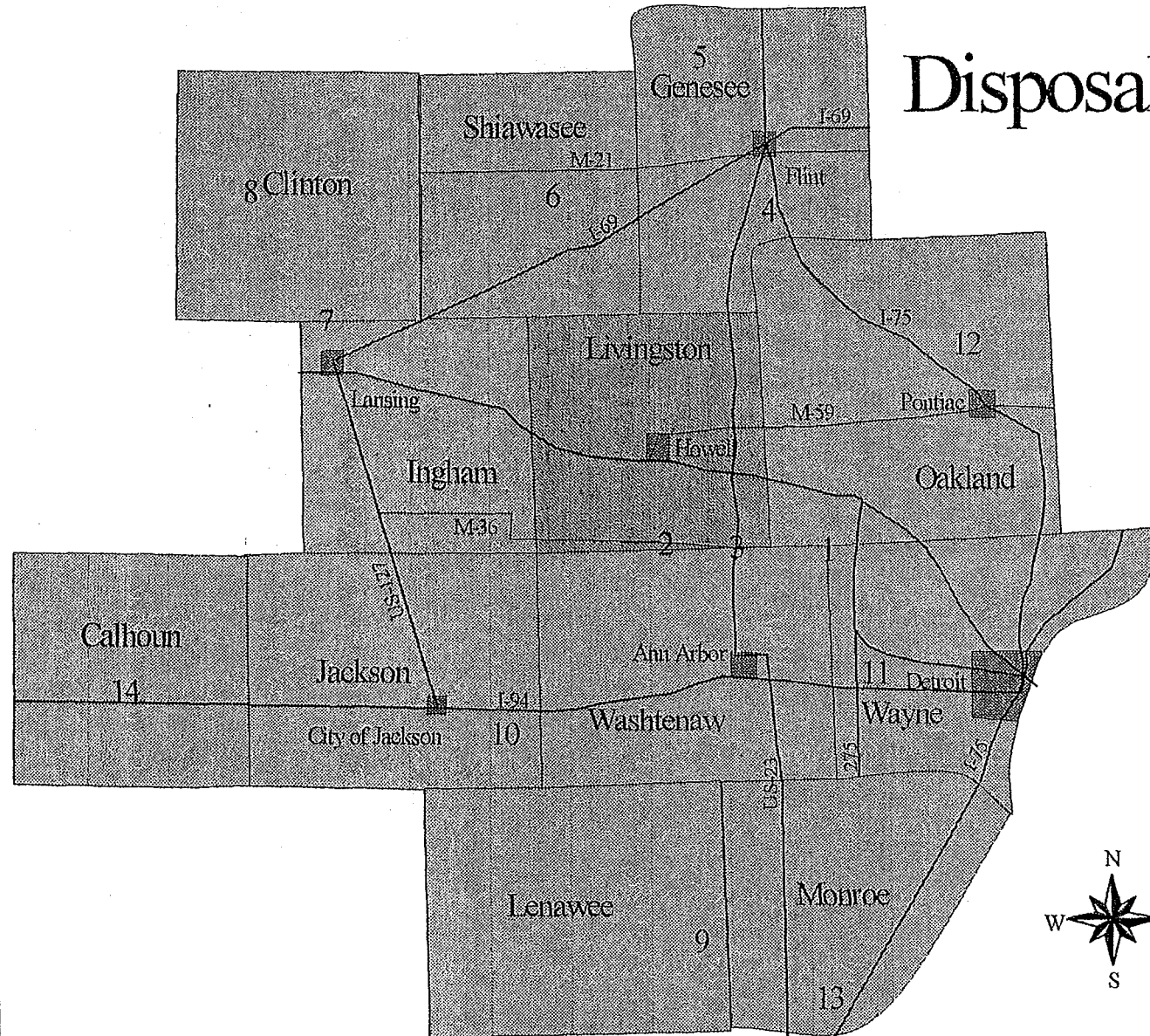
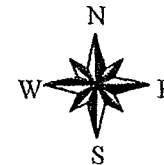
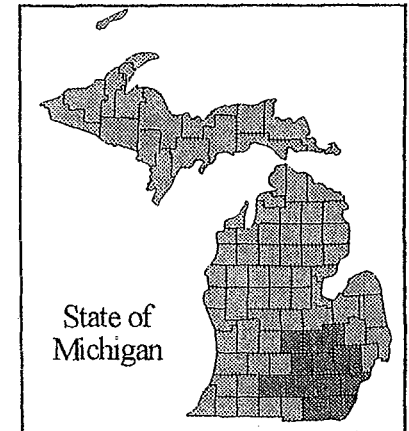
Sincerely,

A handwritten signature in black ink, appearing to read 'Timothy Anderson', with a stylized flourish at the end.

Timothy Anderson  
Senior Planner

# Disposal Facilities

- 1 Arbor Hills
- 2 Len's Rubbish
- 3 Mister Rubbish
- 4 Citizens Disposal
- 5 Brent Run
- 6 Venice Park
- 7 Granger-Wood Road
- 8 Granger-Watertown
- 9 Adrian
- 10 McGill Road
- 11 Woodland Meadows
- 12 Eagle Valley
- 13 Vienna Junction
- 14 C&C





APPENDIX E

CRITERIA FOR SITING  
TYPE II AND TYPE III SANITARY LANDFILLS



**SECTION E-1**  
**ADMINISTRATIVE COMPLETENESS**

Facilities must first follow the SITING REVIEW PROCESS in Section III. All landfill proposals are then subject to the following siting criteria: 

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- A. A narrative description detailing the following:
- a. Useful life and capacity of proposed facility, including any plans for composting and recovery of reusable and recyclable material.
  - b. Proposed Fill Area
  - c. Proposed borrow area
  - d. Proposed service area
  - e. Cells
  - f. On-site roads
  - g. Structures
  - h. Proposed leak detection systems
  - i. Post Closure use of facility

Does the proposal contain the information specified above?

YES \_\_\_\_\_ NO \_\_\_\_\_

- B. Proposed Design elements including liner systems

Does the proposal contain the information specified above?

YES \_\_\_\_\_ NO \_\_\_\_\_

- C. Proposed Leachate Collection, Disposal and Monitoring Systems

Does the proposal contain the information specified above?

YES \_\_\_\_\_ NO \_\_\_\_\_

- D. Proposed Methane Gas Collection and Treatment System

Does the proposal contain the information specified above?

YES \_\_\_\_\_ NO \_\_\_\_\_

- E. Expected Roadway Traffic

- a. Expected number of vehicles per day using the site

b. Expected size of vehicles using site

Does the proposal contain the information specified above?

YES \_\_\_\_\_ NO \_\_\_\_\_

F. Time frames for Development, Use and Closure

Does the proposal contain the information specified above?

YES \_\_\_\_\_ NO \_\_\_\_\_

G. Odor Control Program

Odor control program for use. The program must outline:

- a. Control Measures
- b. Monitoring process & response thresholds

Does the proposal contain the information specified above?

YES \_\_\_\_\_ NO \_\_\_\_\_

H. Fugitive Dust Control Program

Fugitive dust control program for use under daily operation. The program should outline:

- a. Control Measures
- b. Monitoring process & response thresholds

Does the proposal contain the information specified above?

YES \_\_\_\_\_ NO \_\_\_\_\_

I. Intercounty transfer of waste

- a. Indicate the geographic areas, by county, from which waste will be drawn and the intended disposal site/method in Livingston County. Intercounty transportation of waste must be in compliance with the provisions authorized by the Livingston County Solid Waste Management Plan

Does the proposal contain the information specified above?

YES \_\_\_\_\_ NO \_\_\_\_\_

J. Other

The developer may submit additional information highlighting significant or unique features of the proposal.


**ADMINISTRATIVE COMPLETENESS DETERMINATION**

The SWMC and the Livingston County Board of Commissioners shall review the proposal to determine if each of the items listed above have been addressed by the developer. If the developer has referenced or included specific information addressing each of the items above, the proposal shall be considered administratively complete. This process does not provide an opportunity for evaluation of the adequacy of the material submitted nor does this process allow for discretionary decision making on the part of the SWMC or the Livingston County Board of Commissioners.

Proposals determined Administratively Complete will then be reviewed using **SECTION E-2.**

**SECTION E-2  
LANDFILL SITING CRITERIA**

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1. If Livingston County has more than 66 months of disposal capacity available for all waste generated in the County as demonstrated by a currently approved capacity certification, the County may, at its discretion, refuse to allow this siting procedure to be used. 

Does the County have less than 66 months of disposal capacity?

YES \_\_\_\_\_ NO \_\_\_\_\_

2. All proposed new sites and expansions of existing sites must meet Act 451, Part 115 requirements for vertical isolation to groundwater. The developer shall submit a signed statement which states that the design of the facility will meet Act 451, Part 115 requirements for vertical isolation to groundwater.

Is a signed statement included? YES \_\_\_\_\_ NO \_\_\_\_\_

3. All proposed new sites and expansions of existing sites must control drainage of storm water from the disposal area of the site. Systems must be designed to control, at a minimum, run-off volume from a 25-year, 24-hour rainfall event. The developer shall submit a signed statement which states that the design of this facility will Control, at a minimum, run-off volume from a 25-year, 24-hour rainfall event.

Is a signed statement included? YES \_\_\_\_\_ NO \_\_\_\_\_

4. Active fill areas and leachate collection, storage and pre-treatment facilities (exclusive of hook-ups to sanitary sewer systems) must comply with the following isolation distances from public and private water supplies.

A. A minimum of 2,000 feet isolation distance measured from the solid waste boundary down gradient, in the direction of groundwater flow of the first potable aquifer, to any existing Type 1 or Type 2A wellhead as defined by PA 399 of 1976. Test wells existing at the time of the reviews are not subject to this isolation requirement.

B. All other isolation distances from the solid waste boundary to any public and private water supplies must be in compliance with the provisions of Act 451, part 115.

Does the proposal maintain the isolation distances listed above?

YES \_\_\_\_\_ NO \_\_\_\_\_

5. A facility shall not be located in an area of groundwater recharge as defined by the United States Geological Survey or in a wellhead protection area as defined by the Michigan Department of Environmental Quality. A wellhead protection area is defined as the surface and subsurface area surrounding a water well or well field supplying a public water system through which contaminants are reasonably likely to move toward and reach such water well or well field. In-effect, the wellhead protection area is the “capture area” within which pollutants can readily reach public drinking water supplies. The developer shall submit a signed statement stating the facility is not in a groundwater recharge area or a wellhead protection area.

6. The exterior boundaries of the disposal area footprint of a landfill may not be located

- Does the proposal maintain the isolation distances listed above?  
YES \_\_\_\_\_ NO \_\_\_\_\_

- Does the proposal maintain the isolation distances listed above?**

YES \_\_\_\_\_ NO \_\_\_\_\_

- E-5

Is specific documentation included? YES \_\_\_\_\_ NO \_\_\_\_\_

9. The landfill shall not be constructed within 10,000 feet of a licensed airport runway.

Is specific documentation included? YES \_\_\_\_\_ NO \_\_\_\_\_

10. A facility shall not be located in a 100 year flood plain as defined by Rule 323.311 of the administrative rules of Part 31, Water Resources Protection, of Act 451.

Is specific documentation included? YES \_\_\_\_\_ NO \_\_\_\_\_

11. The developer must include a signed statement agreeing to provide appropriate bonding to the road agency for the entire roadway from the entrance of the facility to a Class A road.

Is the signed statement included? YES \_\_\_\_\_ NO \_\_\_\_\_

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LETTER

12. The developer must provide a traffic safety study, including traffic flow patterns and possible disruptions for all access roads to the facility. Issues of concern or hazardous conditions identified as part of the study must be discussed by the developer in the proposal.

Has the developer included a traffic safety study? YES \_\_\_\_\_ NO \_\_\_\_\_

13. Access to the site by truck traffic shall not be directly through a residential subdivision in which the roads were constructed primarily for local traffic within the boundaries of the subdivision.

Does the proposal identify access to the site that avoids direct routing through residential subdivisions as specified above? YES \_\_\_\_\_ NO \_\_\_\_\_

14. The site must provide staging and parking areas for trucks, employees and visitors such that access roads remain free of waiting vehicles.

Does the sited design provide staging and parking areas such that access roads remain free of waiting vehicles? YES \_\_\_\_\_ NO \_\_\_\_\_


Documentation identifying the number of trucks entering the site in correlation with the procedures and areas defined to process the materials coming into the facility must be provided by the developer.

Specified documentation included? YES \_\_\_\_\_ NO \_\_\_\_\_


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APPROVAL  
LETTER

15. Landscaping, including shrubbery and trees, shall be provided and maintained to beautify the view of the landfill. The landscaping must be of sufficient maturity and density to serve as an effective sight barrier around the active fill area. Has the developer submitted landscaping plans as specified above?

YES \_\_\_\_\_ NO \_\_\_\_\_

16. A landfill may only be located on property zoned as agricultural, industrial, commercial, at the time the facility developer applies to the county for a determination of consistency under the Plan. Facilities may be located on unzoned property, but may not be located on property zoned residential. 

Is specific documentation included? YES \_\_\_\_\_ NO \_\_\_\_\_

17. A landfill may not be located on land enrolled under Part 361, Farmland and Open Space Preservation, of Act 451. 

Is specific documentation included? YES \_\_\_\_\_ NO \_\_\_\_\_

18. The proposed facility shall detect and control the entry of any radioactive materials for which the level of radiation is above the maximum considered unarmful as defined by the Nuclear Regulatory Commission and the State of Michigan. The Owner/Operator shall install a portable-type scintillation detector at the facility's entrances to detect radioactive waste. This detector shall be operated within guidelines set by the Nuclear Regulatory Commission

Does the developer's plan include radioactive monitoring as defined above?

YES \_\_\_\_\_ NO \_\_\_\_\_

19. The developer of a facility will provide a detailed plan on all current and future recycling, composting and household hazardous waste reduction activities in the host community and county. The developer must include a signed statement agreeing to this stipulation.

Is a signed statement included? YES \_\_\_\_\_ NO \_\_\_\_\_

20. The developer of a facility shall submit a detailed plan describing the proposed final end use of the site.

Is a plan for end use submitted? YES \_\_\_\_\_ NO \_\_\_\_\_

21. The developer must include written plans to control noise, dust, odors, litter and a written plan for emergency response. Does the proposal include written plans as stipulated above?

YES \_\_\_\_\_ NO \_\_\_\_\_



22. Hours of operation to receive, process, cover, etc are no longer than 7 AM to 7 PM, Monday through Friday and 8 AM to 3 PM on Saturday. No Sunday or Holiday activity shall occur. Hours of operation may be altered at the mutual agreement of the host community and a developer.

Hours of maintenance of leachate collection, storage or treatment facilities, or any activity not directly associated with the disposal of waste shall also conform to the above stated hours. Maintenance or operational requirements imposed by the DEQ are not subject to these limitations.

Excavation or construction of new cells, emergency or remedial activities which require operation beyond these hours are exempt from this requirement. The developer shall submit a signed statement agreeing to the above hours of operation.

Is a signed statement included? YES \_\_\_\_\_ NO \_\_\_\_\_

23. All internal roadways from the public road way to the edge of the active fill area must be paved or maintained to minimize dust and tracking of mud off the site. The developer must include a signed statement agreeing to this stipulation.

Is a signed statement included? YES \_\_\_\_\_ NO \_\_\_\_\_

24. Upon written demonstration by the Michigan Department of Health that a situation exists, which is caused in part or in total by the solid waste facility, that impacts on the health or lives of residences by reason of actual contamination of certain water supplies, the owner/operator agrees to immediately provide an alternative source of water meeting the Safe Drinking Water Standards to those affected and designated uses. The quantity shall be sufficient to satisfy all normal drinking and household uses. The developer must include a signed statement agreeing to this stipulation.

Is a signed statement included? YES \_\_\_\_\_ NO \_\_\_\_\_

25. The developer must provide a written statement agreeing to provide the County, the local facility operations committee and/or the host community copies of all quarterly monitoring reports required by the DEQ.

Is a signed statement included? YES \_\_\_\_\_ NO \_\_\_\_\_

26. The developer must provide a written statement agreeing to participate in the establishments of a local facility operations committee. The committee will act as a liaison between the facility operator(s), residents and officials in Livingston County. Members of this committee will have access to the facility, at reasonable times, so long as their presence does not impede the operation of the facility. Other responsibilities of this committee may be negotiated between the facility

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LETTER

operator(s) and the officials in Livingston County. Membership may include: an elected official or planning commission member from the host community, two community residents, two residents from adjacent/impacted communities and one from the County SWMC.

Is a signed statement included? YES \_\_\_\_\_ NO \_\_\_\_\_

27. All operators of solid waste facilities permitted and licensed under Act 451 (formerly Act 451) in Livingston County must provide a written statement agreeing to submit to the Solid Waste Management Committee and the clerk of the host community in which the facility is located on or before the 20<sup>th</sup> day of March, the 20<sup>th</sup> day of June, the 20<sup>th</sup> day of September and the 20<sup>th</sup> day of December, a quarterly report which covers the preceding three-month period ending on the 20<sup>th</sup> day of the preceding month which includes the following information:

- A. Name, location and permit number of the facility;
- B. Name, address and telephone number of the facility owner;
- C. Name, address and telephone number of the facility operator;
- D. Total quantity of waste received at the facility during the past three months in cubic gate yards;
- E. Total quantity of waste received at the facility during the past three months originating from out-county sources in cubic gate yards by county of origin;
- F. An estimate of remaining permitted capacity for continued waste disposal. The method for calculating this capacity must be included in the quarterly report.

Is a signed statement included? YES \_\_\_\_\_ NO \_\_\_\_\_

If a developer submitted the information required under the item, or the proposed design of the facility includes the standard identified in the criterion, the SWMC and the County Board of Commissioners shall accept the information as fully compliant with the criterion in question. This procedure does not allow any discretionary evaluation or discretionary decision making on the part of the SWMC or the County Board of Commissioners. A proposal receiving a "YES" response for each of the items listed above shall be determined to be consistent with the Livingston County Solid Waste Management Plan. Proposals that receive a "NO" response for any of the items listed are inconsistent with the Livingston County Solid Waste Management Plan.

Competing landfill proposals shall be evaluated in **SECTION E-3**. Only those competing receiving YES responses for the criteria above will be evaluated in Section E-3.

**SECTION E-3**  
**LANDFILL SITING SCORING MATRIX**

In addition to the primary criteria listed in the previous section, a Landfill Siting Matrix System is used to score competing proposals. Only those proposals that meet the requirements for Administrative Completeness and receive a "YES" answer to all of the questions in Section E-1 and E-2 shall be reviewed using the Landfill Siting Matrix.

In the event of competing proposals, the facility scoring the highest would be the facility selected as consistent with the Livingston County Solid Waste Management Plan.

**LANDFILL SITING MATRIX**

<b>Criteria</b>	<b>Maximum Possible Points</b>
I. Design Criteria	100
II. Hydrogeologic Conditions	200
III. Land Use Compatibility	100
IV. Host Community Concerns	100

I. SITE DESIGN

1) A double liner system consisting of the components specified in R 299.4422 of Type II landfill design standards; leakage control criteria., including

a. A monitorable unit which is located over a natural soil barrier and which is in compliance with the provisions of subrule (2) of this rule, so as to restrict the migration of leakage from the unit.

AND

b. Designed with a double liner system which is in compliance with the provisions of subrule (3) of the rule and which is capable of detecting and collecting leakage through the primary composite liner.

Does the proposal specify a double liner system consisting of all the components listed in 1)?

YES \_\_\_\_\_ NO \_\_\_\_\_

If YES, 95 POINTS are awarded.

2) A secondary low permeability soil layer:

Does the proposal specify a secondary 5 foot low permeability soil layer?

YES \_\_\_\_\_ NO \_\_\_\_\_

If YES, 5 POINTS are awarded.

POINT TALLY FOR SITE DESIGN STANDARDS

Double Composite Liner

\_\_\_\_\_ ( 95 POINTS)

Secondary Soil Layer

\_\_\_\_\_ ( 5 POINTS)

SITE DESIGN POINT TOTAL:

\_\_\_\_\_ (MAX. 100 TOTAL  
POINTS POSSIBLE)

## II. HYDROGEOLOGY

A wellhead considered under this section must exist at the time the proposal is submitted to the County for review. Test wells may not be included in this review.

Criteria for calculating theoretical capture zones are included below as Attachment E-1.

### PUBLIC WATER SUPPLIES

A. Isolation distance from the active fill areas or leachate collection, storage and treatment areas (exclusive of hook-ups to sanitary sewer systems) to the nearest Type I or Type IIA wellhead. Choose ONLY 1, 2 or 3 below, whichever is applicable.

MAXIMUM NUMBER OF POINTS FOR A:      100

1. Are a minimum of 4,000 feet horizontal distance from any major Type I or Type IIA wellhead with an average 20 year usage of 360,601 gallons/day or greater.

90 POINTS

2. Theoretical capture zone calculation for wellhead with an average annual 20 year usage greater than 360,601 gallons/day, resulting in an isolation distance greater than 4000 feet.

OR

The developer may choose to provide site specific hydrogeological data which indicates that the upper most aquifer is not in direct contact with the aquifer supplying the public well (s).

100 POINTS

3. Theoretical capture zone calculation for wellheads with an average annual 20 year usage under 360,601 gallons/day, resulting in an isolation distance greater than 2000 feet.

OR

The developer may choose to provide site specific hydrogeological data which indicates that the upper most aquifer is not in direct contact with the aquifer supplying the public well (s).

80 POINTS

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POINT AWARDS:

1. Does the proposal maintain a minimum of 4,000 feet horizontal isolation distance?

YES \_\_\_\_\_ NO \_\_\_\_\_

If yes, 90 POINTS awarded.

2. Has the developer used the theoretical capture zone calculation to demonstrate an isolation distance greater than 4000 feet?

YES \_\_\_\_\_ NO \_\_\_\_\_

OR

Has the developer submitted site specific data which indicates that the uppermost aquifer is not in direct contact with the aquifer supplying the public wells? (NOTE: adequacy of this information is not an issue. If the site specific data is submitted by the developer, the criterion is met and the points award is to be made. Adequacy of the information will be determined by the DEQ during a permit application review.)

YES \_\_\_\_\_ NO \_\_\_\_\_

If yes, 100 POINTS awarded.

3. Has the developer used the theoretical capture zone calculation to demonstrate an isolation distance greater than 2000 feet?

YES \_\_\_\_\_ NO \_\_\_\_\_

OR

Has the developer submitted site specific data which indicates that the uppermost aquifer is no in direct contact with the aquifer supplying the public wells? (NOTE: adequacy of this information is not an issue. If the site specific data is submitted by the developer, the criterion is met and the points award is to be made. Adequacy of the information will be determined by the DEQ during a permit application review.)

If yes, 80 POINTS awarded.

## INDIVIDUAL PRIVATE WELL PROTECTION - FIRST POTABLE AQUIFER

B. Horizontal isolation distances from the active fill areas or leachate collection, storage and treatment areas (exclusive of hook-ups to sanitary sewer systems) to the nearest residences (exclusive of residences owned by the developer or facility operator) :

- |   |            |
|---|------------|
| 1. Less than 50 homes within 2000' radius-  | 100 POINTS |
| 2. 51 - 75 homes within 2000' radius-       | 80 POINTS  |
| 3. 76 - 100 homes within 2000' radius-      | 60 POINTS  |
| 4. 101 - 125 homes within 2000' radius      | 50 POINTS  |
| 5. More 125 than homes within 2000' radius- | 40 POINTS  |

OR

The developer has provided site specific information that indicates the direction of groundwater flow and that between the active fill areas or leachate collection, storage and treatment areas and the number of homes down gradient from these activities is:

- |   |            |
|---|------------|
| 1. Less than 50 homes within 2000' radius-  | 100 POINTS |
| 2. 51 - 75 homes within 2000' radius-       | 80 POINTS  |
| 3. 76 - 100 homes within 2000' radius-      | 60 POINTS  |
| 4. 101 - 125 homes within 2000' radius-     | 50 POINTS  |
| 5. More 125 than homes within 2000' radius- | 40 POINTS  |

The developer has gathered information from aerial photographs, well logs and drive-by surveys, or the developer has included site specific data on direction of groundwater flow (NOTE: If the site specific data is submitted by the developer, the criterion is met and the point award is to be made. Adequacy of the information will be determined by the DEQ during a permit application review.)

Based on this information, it has been determined that the number of homes within 2000 feet of the areas specified above is: \_\_\_\_\_

Therefore, the number of POINTS awarded is: \_\_\_\_\_

C. The proposal includes identification of all usable domestic-use aquifers and direction of groundwater flow for aquifers within 100 feet of the ground surface or the first clay layer whichever is deeper.

Has the developer included the above information in the proposal?(NOTE: adequacy of this information is not an issue. If the site specific data is submitted by the developer, the criterion is met and the points award is to be made. Adequacy of the information will be determined by the DEQ during a permit application review.)

YES \_\_\_\_\_ NO \_\_\_\_\_

If YES, 10 BONUS POINTS awarded.

**POINT TALLY FOR HYDROGEOLOGY**

Public Water Supply Protection

\_\_\_\_\_ (100 POINTS)

Individual Well Protection

\_\_\_\_\_ (100 POINTS)

BONUS Identification of Aquifers

\_\_\_\_\_ ( 10 POINTS)

HYDROGEOLOGY POINT TOTAL:

\_\_\_\_\_ (MAX. 200 TOTAL  
POINTS POSSIBLE)



### III. LAND USE COMPATIBILITY

To the extent possible, landfills should be compatible with existing and anticipated land uses as described in local Master Plans. The SWMC, when considering land use compatibility of the proposed facility and site with existing and anticipated land uses, will include in its evaluation, the planned uses of the buffer area and how the entire landfill parcel will impact surrounding land uses, in addition to the planned active fill area. Determination of compatibility will be made based on the anticipated impacts arising from normal facility operations on the surrounding existing land uses, and anticipated land uses during the active life of the landfill with the following criteria:

#### Adjacent Land use:

Point Value	35	40	50	70
ADJACENT LAND USE ZONING	Residential	Commercial	Agricultural	Industrial

#### Site Development in a Brownfield: 5 BONUS POINTS

If a parcel has more than one adjacent land use, the predominant land use of the site will be used to evaluate the site.

#### Design Impacts:

Point Value	0	15	20	30
SCREENING	No Natural or planted screening or berming	8' berm with 4' of fencing on top of berm	Vegetative screening (details below)	Natural Screening, no additional planting necessary

Vegetative screening should be composed of a combination of shrubs, trees and berming. The landscaping should be of sufficient screening to serve as a site barrier. Evergreen trees should be at least 4 feet in height at time of planting. The applicant must agree to replace any trees or shrubs which die during the next growing season.

#### POINT TALLY FOR LAND USE COMPATIBILITY

Land Use Compatibility  
Screening

\_\_\_\_\_ (70 POINTS)  
\_\_\_\_\_ (30 POINTS)

POINT TOTAL:

\_\_\_\_\_ (MAX. 100 TOTAL POINTS POSSIBLE)

IV. HOST COMMUNITY CONCERNS  
(MAXIMUM OF 100 POINTS)

A. Host Community Agreement

The developer has entered into a host community agreement with the host community and/or Livingston County.

If YES, the number of points awarded is 50 POINTS

B. Capacity Guarantee

The developer has submitted a signed statement agreeing to reserve at least 20 years of disposal capacity for Livingston County's use.

If YES, the number of points awarded is 30 POINTS

The developer has submitted a signed statement agreeing to reserve at least 25 years of disposal capacity for Livingston County's use.

If YES, the number of points awarded is 40 POINTS

The developer has submitted a signed statement agreeing to reserve at least 30 years of disposal capacity for Livingston County's use.

If YES, the number of points awarded is 50 POINTS

C. Waste Import Restriction

The developer has submitted a signed statement agreeing to not accept out-of state waste

If YES, the number of BONUS POINTS awarded is 5 POINTS

The developer has submitted a signed statement agreeing to not accept out-of country waste

If YES, the number of BONUS POINTS awarded is 10 POINTS

D. Waste Reduction Program

The developer has submitted the following waste reduction programs to be offered to the host community and/or Livingston County:

NOTE: The developer receives the corresponding BONUS POINTS for each program offered.

- |  |                 |
|--|-----------------|
| a. Household Hazardous Waste Collection Program  | 10 BONUS POINTS |
| b. On-site recycling drop-off station  | 2 BONUS POINTS  |
| c. Multiple (not less than 4) recycling drop-off stations county-wide.   | 5 BONUS POINTS  |
| d. Free curbside recycling for host community residents  | 3 BONUS POINTS  |
| e. Free yard waste service (curbside collection) for host community residents including Christmas tree collection program. | 3 BONUS POINTS  |

POINT TALLY FOR HOST COMMUNITY CONCERNS

HOST COMMUNITY AGREEMENT	_____ (50 POINTS)
CAPACITY GUARANTEE	_____ (50 POINTS)
BONUS POINTS - Waste Import Restriction	_____ (MAX 15 POINTS)
BONUS POINTS - Waste Reduction Program	_____ (MAX 23 POINTS)
HOST COMMUNITY CONCERNS TOTAL:	_____ (MAX. 100 TOTAL POINTS POSSIBLE)

**LANDFILL SITING MATRIX  
SCORING TABULATION TABLE**

<b>Criteria</b>	<b>TOTAL POINTS FOR THIS SECTION</b>	<b>Maximum Possible Points</b>
I. Design Criteria		100
II. Hydrogeologic Conditions		200
III. Secondary Impacts		100
IV. Host Community Concerns		100

## ATTACHMENT E-1

### CALCULATION OF THE THEORETICAL WELL CAPTURE ZONE AND ESTIMATES AVERAGE ANNUAL 20 YEAR WELL USAGE FOR TYPE 1 AND TYPE 2A WELLS

#### COMPUTATION METHOD

Divide the predicted average annual 20 year usage anticipated by the utility by an average recharge rate of 200,000 gallons per day per square mile. Convert the square mile computation to a circle radius.

#### STEP 1

Q20           =     Average annual 20 year demand in gallons per day  
RR           =     Required Recharge rate 200,000 gpd/mile<sup>2</sup>  
AR           =     Required Recharge Area (Capture Zone)

$$Q20/RR = AR$$

#### STEP 2

R           =     Radius  
AR           =     Required Recharge Area (Capture Zone)

$$R = \frac{(AR)}{\pi}^{1/2}$$

Example:

20 year demand = 1,200,000 gpd

$$\begin{array}{lll} 1,200,00 \text{ gpd} & = & 6 \text{ mile}^2 \\ \text{or} & & \\ 200,00 \text{ gpd/mile}^2 & & \pi \quad 7,300 \text{ feet} \end{array} \quad \begin{array}{l} 6^{1/2} = 1.38 \text{ miles} \end{array}$$