

STATE OF MICHIGAN

DEPARTMENT OF ENVIRONMENTAL QUALITY

LANSING



C. HEIDI GRETHER
DIRECTOR

April 18, 2018

Mr. Thomas Bardwell, Chairman Tuscola County Board of Commissioners 125 West Lincoln Street, Suite 500 Caro, Michigan 48723

Dear Mr. Bardwell:

The locally approved amendment to the Tuscola County Solid Waste Management Plan (Plan Amendment) received by the Department of Environmental Quality (DEQ) on February 7, 2017, is hereby approved with modification. The Plan Amendment required modifications that were sent to the Tuscola County Designated Planning Agency contact, Ms. Vicky Sherry, on September 22, 2017. The approval of the modifications dated October 30, 2017, were received from you on behalf of the Tuscola County Board of Commissioners.

The enclosed version of the Tuscola County Solid Waste Management Plan, with amendments, shall replace the currently approved Plan in its entirety, with the addition of the modifications as specified below:

The <u>Facility Descriptions pages</u>, found on <u>II-4a through II-9b</u> include all applicable Facility Description pages and the Operating License or Construction Permit associated with each facility. However, it shall be noted that all Facility Description pages and their associated Operating License/Construction Permit approval pages are not in consecutive order, meaning a Facility Description page may not correspond with the correct approval page for the Solid Waste Disposal Area Operating License or Construction Permit on the subsequent page. This shall be noted to avoid error or confusion when seeking reference of facilities in the County.

Specifically, the following shall be noted:

- The facility description for Brent Run, <u>page II-5a</u>, corresponds with the Construction Permit approval page, <u>page II-7b</u>.
- The facility description for Tri-City Recycling and Disposal Facility, <u>page II-6a</u>, corresponds with the Construction Permit approval page, <u>page II-5b</u>.

• The facility description for People's Landfill Inc., <u>page II-7a</u>, corresponds with the Operating License approval page, <u>page II-6b</u>.

Further, it shall be noted that these facility descriptions found in the Plan Amendment are also replacing the facility descriptions found in the Selected System.

On Page III-4, under the Selected System, Solid Waste Disposal Areas section, it should be noted that the sentences "Pages _____ through ____ 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 for the planning period" do not specify the corresponding page numbers. It shall be clarified that this sentence references the Facility Description section found at the beginning of the Plan Amendment, pages II-4a through II-9b.

The Siting Process found on <u>page III-20 of the Plan amendment section, Number 6.a.</u>, titled "Groundwater Recharge and Wellhead Protection" shall be deleted, as this criterion has been deemed too restrictive to be included in the siting process.

The "Siting Criteria A Transfer Facilities" found on pages III-28 and III-29 is actually defining siting criteria for both Type A and Type B Transfer Facilities. Therefore, the section title shall be changed to "Siting Criteria for Type A and Type B Transfer Facilities." Any reference to an "A Transfer Facility" in this section shall be changed to "Type A or Type B Transfer Facility."

The Plan Amendment also makes the following changes:

- Updates various sections, such as Census Information, Solid Waste Generation Estimates, Facility Descriptions, Solid Waste Collection and Transportation, Service Providers, and other data contained throughout the Plan to reflect current information.
- Revises the Groundwater Recharge and Wellhead Protection requirement within the facility siting process to make it not so restrictive that a facility could not be sited.
- Revises the "Responsibilities for Conducting Review" to require the designated planning agency to review a disposal facility application package for administrative completeness.
- Removes language within the "Secondary Siting Criteria" section to delete the last paragraph referencing evaluation point values and process for evaluating facilities other than landfills.
- Adds siting criteria for Solid Waste Processing Facilities.
- Adds siting criteria for Type A Transfer Facilities.

The DEQ would like to thank Tuscola County for its efforts in addressing its solid waste management issues. If you have any questions, please contact Ms. Amy Lafferty, Environmental Quality Analyst, Sustainable Materials Management Unit, Solid Waste Section, Waste Management and Radiological Protection Division, at 517-242-8324; laffertya@michigan.gov; or DEQ, P.O. Box 30241, Lansing, Michigan 48909-7741.

Sincerely,

Jack Schinderle, Director Waste Management and

Radiological Protection Division

517-284-6551

Enclosure

cc: Senator Mike Green

Representative Edward Canfield

Ms. Vicky Sherry, Tuscola County Solid Waste Management Planning Committee

Ms. C. Heidi Grether, Director, DEQ

Ms. Susan Leeming, External Relations Deputy Director, DEQ

Mr. Michael McClellan, Environment Deputy Director, DEQ

Ms. Sarah Howes Legislative Affairs, DEQ

Mr. Steven R. Sliver, DEQ

Ms. Rhonda S. Oyer, DEQ

Mr. Phil Roycraft, DEQ

Mr. Jeff Spencer, DEQ

Ms. Amy Lafferty, DEQ\Tuscola County File

TUSCOLA COUNTY BOARD OF COMMISSIONERS

125 W. Lincoln Street Suite 500 Caro, MI 48723

Telephone: 989-672-3700

Fax: 989-672-4011

October 23, 2017

Ms. Amy Lafferty
Sustainable Materials Management Unit
Solid Waste Section
Waste management and
Radiological Protection Division
MDEQ
P.O. Box 30241
Lansing, MI 48909-7741

Dear Ms. Lafferty:

SUBJECT: Tuscola County Solid Waste Management Plan Amendment Modification

As a follow-up to your letter dated September 22, 2017 to Ms. Vicky Sherry of the Tuscola County Solid Waste Management Planning Committee, the Tuscola County Board of Commissioners respectfully request the DEQ to issue its approval of the Tuscola County Solid Waste Management Plan Amendment, and agrees with the DEQ administratively making all of the modifications to the amendment as discussed in the letter of September 22, 2017 and quoted below.

- "The Facility Descriptions pages, found on II-4a through II-9b include all applicable Facility Description pages and the Operating License or Construction Permit associated with each facility. However, it should be noted that all Facility Description pages and their associated Operating License/Construction Permit approval pages are not in consecutive order, meaning a Facility Description page may not correspond with the correct approval page for the Solid Waste Disposal Area Operating License or Construction Permit on the subsequent page. This should be noted to avoid error or confusion when seeking reference of facilities in the County. Specifically, the following should be noted:
 - oThe facility description for Brent Run found on page II-5a corresponds with the Construction Permit approval page found on page II-7b.
 - oThe facility description for Tri City Recycling and Disposal Facility found on Page II-6a corresponds with the Construction Permit approval page found on page II-5b.
 - oThe facility description for People's Landfill Inc. found on page II-7a corresponds with the Operating License approval page found on page II-6b.



Further, it should be noted that these facility descriptions found in the Plan Amendment are also replacing the facility descriptions found in the Selected System.

- On page III-4 under the Selected System, Solid Waste Disposal Areas section, it should be noted that the sentence "Pages__ through __ 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 for the planning period" do not specify the corresponding page numbers. It should be clarified that this sentence references the Facility Description section found at the beginning of the Plan Amendment; Pages II-4a through II-9b.
- The Siting Process found on page III-20 of the Plan amendment section, Number 3.a. title "Groundwater Recharge and Wellhead Protection" should be deleted, as this criterion has been deemed too restrictive to be included in the siting process.
- The "Siting Criteria A Transfer Facilities" found on pages III-28 and III-29 is actually defining siting criteria for both Type A and Type B Transfer Facilities. Therefore, the section title should be changed to "Siting Criteria for Type A and Type B Transfer Facilities." Any reference to an "A Transfer Facility" in this section should be changed to "Type A or Type B Transfer Facility.""

I believe this letter satisfies the documentation required for your final consideration of our proposed amendment. Should you require additional information, please do not hesitate to contact me at (989) 672-3700.

Sincerely

Thomas Bardwell, Chairman

Tuscola County Board of Commissioners

From: Vicky Sherry

To: Miller, Christina (DEQ)

Subject: Tuscola County SWMP Amendment

Date: Wednesday, July 29, 2015 1:20:40 PM

Attachments: Tuscola County Solid waste management plan amendment.pdf

Tuscola County SWMP Amendment.pdf

Hi Christine,

After a lot of hard work the Solid Waste Management Plan Committee has completed the amendment for the Tuscola County SWMP. I have attached the amended plan and the amendment document for your review. When you are able to, would you please let me know if the proposed amendment would be acceptable and ready to submit to the Tuscola County Board of Commissioners, so that the 90 public review and approval process can begin.

Thank you and have a great day, Vicky

--

Vicky Sherry Communications Director Tuscola County EDC 429 N. State Street, Suite 102 Caro, MI 48723 (989) 673 - 2849 (989) 550 - 6959 (cell) vsherry@tuscolaedc.org



STATE OF MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY LANSING



C. HEIDI GRETHER
DIRECTOR

September 22, 2017

Ms. Vicky Sherry Tuscola County Solid Waste Management Planning Committee 429 North State Street, Suite 102 Caro. Michigan 48723

Dear Ms. Sherry:

SUBJECT: Tuscola County (County) Solid Waste Management Plan (Plan)

Amendment

This letter is a follow-up to a conversation on July 24, 2017, with you, regarding clarifying the intent of the Tuscola County (County) Solid Waste Management Plan Amendment (Amendment). In order for the Department of Environmental Quality (DEQ) to recommend approval and to acknowledge the intent of the County, the following modifications to the Amendment need to be made:

The document received by the DEQ on July 29, 2015, consisting of the amendments proposed for the 90-Day Public Comment period ranging from August 20, 2015, to November 20, 2015, contained a full version of the currently approved Tuscola County Solid Waste Management Plan, with amendments to the Plan language inserted throughout the document. This document should replace the currently approved Plan in its entirety, with the addition of the modifications as specified below. This change should be made to alleviate a format discrepancy that exists between the currently approved Plan, the proposed amendments during the 90-Day Public Comment period, and the amendment submitted to the DEQ for final approval on February 7, 2017.

The document received by the DEQ on February 7, 2017, for review for final approval will amend the document received by the DEQ on July 29, 2015, for review during the 90-Day Public Comment period, with the addition of the modifications below:

• The Facility Descriptions pages, found on II-4a through II-9b include all applicable Facility Description pages and the Operating License or Construction Permit associated with each facility. However, it should be noted that all Facility Description pages and their associated Operating License/Construction Permit approval pages are not in consecutive order, meaning a Facility Description page may not correspond with the correct approval page for the Solid Waste Disposal Area Operating License or Construction Permit on the subsequent page. This should be noted to avoid error or confusion when seeking reference of facilities in the County.

Specifically, the following should be noted:

- The facility description for Brent Run found on page on Page II-5a corresponds with the Construction Permit approval page found on page II-7b.
- The facility description for Tri City Recycling and Disposal Facility found on Page II-6a corresponds with the Construction Permit approval page found on page II-5b.
- The facility description for People's Landfill Inc. found on page II-7a corresponds with the Operating License approval page found on page II 6b.

Further, it should be noted that these facility descriptions found in the Plan Amendment are also replacing the facility descriptions found in the Selected System.

- On Page III-4 under the Selected System, Solid Waste Disposal Areas section, it should be noted that the sentence "Pages _____ through _____ 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 for the planning period" do not specify the corresponding page numbers. It should be clarified that this sentence references the Facility Description section found at the beginning of the Plan Amendment; Pages II-4a through II-9b.
- The Siting Process found on page III-20 of the Plan amendment section, Number 3.a. titled "Groundwater Recharge and Wellhead Protection" should be deleted, as this criterion has been deemed too restrictive to be included in the siting process.
- The "Siting Criteria A Transfer Facilities" found on pages III-28 and III-29 is actually defining siting criteria for both Type A and Type B Transfer Facilities. Therefore, the section title should be changed to "Siting Criteria for Type A and Type B Transfer Facilities." Any reference to an "A Transfer Facility" in this section should be changed to "Type A or Type B Transfer Facility."

If the County agrees with the DEQ administratively making these modifications to the Amendment as part of the DEQ's approval of the Amendment, please have a party who is authorized to act on behalf of the County provide a letter to the DEQ indicating the County's agreement with these changes and requesting that the DEQ issue its approval with these modifications. An example of such a letter is enclosed.

The DEQ believes that the Amendment does not achieve the intent of the County without the modifications outlined above. If the County decides not to agree to have the DEQ make the changes as part of the approval process, the Waste Management and

Radiological Protection Division will recommend that the DEQ not approve the Amendment as written.

If you have any questions concerning this matter, please contact me at the telephone number below; via e-mail at laffertya@michigan.gov; or DEQ, P.O. Box 30241, Lansing, Michigan 48909-7741.

Sincerely,

Amy Lafferty
Sustainable Materials Management Unit
Solid Waste Section
Waste Management and
Radiological Protection Division
517-242-8324

Enclosure

cc: Ms. Rhonda Oyer, DEQ Mr. Jeff Spencer, DEQ Ms. Christina Miller, DEQ Tuscola County File

TUSCOLA COUNTY SOLID WASTE MANAGEMENT PLAN AMENDMENT

Amendment Page Number	Current SWMP Page Number	Description of Change			
I-1a	I-1	Updated 'Overall View of Tuscola County' to reflect 2010 Census Information			
II-1a	II-1	Updated 'Data Base – Solid Waste Generation Estimates' to reflect 2013/2014 DEQ "Report of Solid Waste Landfilled in Michigan" information			
II-1a	II-1	Updated "Data Collected by the Tuscola County MRF' to reflect 2010 to 2013 information			
II-1a	II-1	Updated 'Total Quantity of Solid Waste Generated' to reflect 2014 information			
II-2a	II-2	Updated 'Tuscola County Current Annual Solid Waste Generation & Disposal' to reflect 2014 information			
II-3a	II-3	Updated 'Tuscola County Population Trends' to reflect 1990 to 2010 Population Percentage Change and the Average Change Per Year			
II-3z	II-3	Updated 'Tuscola County Population and Solid Waste Generation Projections' to reflect 2010 to 2020 projections			
II-4a to II-9a	II-4 to II-9	Updated 'Facility Descriptions' to reflect current information			
II-4b to II-9b	II-4b to II- 9b	Attached Facility Operating License to each Facility in 'Facility Description'			
II-10a	II-10	Updated 'Solid Waste Collection Services and Transportation Infrastructure' to reflect current information			
II-11a, II-12a	II-11, II-12	Updated 'Tuscola County Solid Waste Collection &Transportation Information' to reflect current information			
II-13a	II-13	Updated '1. Service Provider' to reflect current information			
III-4a	III-4	Updated 'Type II Landfill' to reflect current information			
III-20a	III-20	Revised language '6. Groundwater Recharge and Wellhead Protection' per MDEQ 2000 SWMP update approval requirement			
III-22a	III-22	Revised language 'Site Evaluation Matrix' per MDEQ 2000 SWMP update approval requirement			
III-26a	III-26	Revised language 'Responsibilities for Conducting Review' per MDEQ 2000 SWMP update approval requirement			
III-27a	III-27	Revised language 'Secondary Siting Criteria' per MDEQ 2000 SWMP update approval requirement			
III-28a	III-28	Added 'Siting Criteria for Solid Waste Material Recovery Facilities (MRF) '			
III-29a	III-29	Added 'Siting Criteria Transfer Facilities'			
III-29a	III-29	Removed language "B. Collection and Transportation of Solid Waste" to reflect current conditions. Removed "With the exception of the Village of Millington"			

Tuscola County Solid Waste Management Plan

PLAN FORMAT

FOR PREPARING

COUNTY SOLID WASTE MANAGEMENT PLANS

AS REQUIRED BY SECTION 11539a OF PART 115, SOLID WASTE MANAGEMENT, OF THE NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION ACT 1994 PA451, AS AMENDED



John Engler, Governor Russell J. Harding, Director

Michigan Department of Environmental Quality
Waste Management Division

This document is available to download from our Internet site at:

http://www.deq.state.mi.us/wrnd/sections/swpshome.html

Tuscola County Solid Waste Management Plan Amendment

Locally Approved Plan February 2000

Submitted to the

Michigan Department of Environmental Quality for

Approval

Prepared by the

Tuscola County Solid Waste Management Planning Committee
DRAFT - Amended 2015

2015 PLAN AMENDMENT 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 SUBMITTEL	O TO THE DEQ:
If this Plan includes n	nore than a single County, list all counties participating in this Plan.
DESIGNATED PLAN	NING AGENCY PREPARING THIS PLAN UPDATE:
Tuscola County Soli	d Waste Management Planning Committee
	N. Vielzy D. Charry, Tuccola County Economic Dayslanment Corneration
CONTACT PERSON	N: Vicky D. Sherry, Tuscola County Economic Development Corporation
ADDRESS:	429 North State Street, Suite 102
	Caro MI 48723
DIIONE	(000) (72 2040 FAV
PHONE:	(989) 673 – 2849 FAX: (If Applicable)
E-MAIL:	vsherry@tuscolaedc.org (If Applicable)
CENTRAL REPOSI	TORY LOCATION(S): Tuscola County Building Annex, 125 Lincoln
Street, Caro MI 4872	23

TUSCOLA COUNTY SOLID WASTE MANAGEMENT PLAN

^{*} Blue indicates items that have been amended * Red indicates added amended language

TABLE OF CONTENTS

SECT	ION	PAGE
	Executive Summary	I-1 I-1A
I.	Introduction	I-3
	GOALS AND OBJECTIVES	I-3
II.	DATA BASE	
	SOLID WASTE DISPOSAL AREAS	II-2 II-2A
	SOLID WASTE FACILITY DESCRIPTIONS	
	COLLECTION AND TRANSPORTATION INFRASTRUCTURE	
	EVALUATION OF DEFICIENCIES AND PROBLEMS	II-14
	DEMOGRAPHICS	II-14
	LAND DEVELOPMENT	
	SOLID WASTE MANAGEMENT ALTERNATIVES	II-16
III.	SELECTED SOLID WASTE MANAGEMENT SYSTEM	III-1
	IMPORT/EXPORT AUTHORIZATIONS	
	SOLID WASTE DISPOSAL AREAS	III-4 III-4A
	COLLECTION AND TRANSPORTATION INFRASTRUCTURE	
	RESOURCE CONSERVATION EFFORTS	
	WASTE REDUCTION, RECYCLING, & COMPOSTING PROGRAMS	III-10
	EDUCATIONAL AND INFORMATIONAL PROGRAMS	III-17
	TIMETABLE FOR SELECTED SYSTEM IMPLEMENTATION	III-18
	SITING PROCEDURE	III-18
	MANAGEMENT COMPONENTS	III-29 III-29A
	LOCAL ORDINANCES	III-32
IV.	CAPACITY CERTIFICATION	IV-1
	APPENDIX A: ADDITIONAL INFORMATION REGARDING THE SELECTION	ED SYSTEM
	EVALUATION OF RECYCLING	
	DETAILED FEATURES OF RECYCLING & COMPOSTING PROGRAMS	A-2
	COORDINATION EFFORTS	A-4
	COSTS & FUNDING	A-5
	EVALUATION SUMMARY	
	ADVANTAGES & DISADVANTAGES	A-8
	APPENDIX B: NON-SELECTED SYSTEMS	В-1
	APPENDIX C: PUBLIC PARTICIPATION AND APPROVAL	
	Appendix D. Attachments	D-1

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.

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

Township or		% Lar	nd Use		% of Economic	c Base	
Municipality Name	Population	Rural	Urban	Agriculture	Commercial	Industry	Other
Akron Twp	1,653			37.4%	2.8%	0.0%	59.3%
Almer Twp	3,101			29.3%	4.0%	0.0%	66.7%
Arbela Twp	3,070			19.3%	1.5%	0.5%	78.7%
Columbia Twp	1,284			46.1%	4.5%	0.8%	48%
Dayton Twp	1,848			11.8%	0.5%	0.0%	87.7%
Denmark Twp	3,074			24.7%	5.7%	1.9%	67.7%
Elkland Twp	3,528			15.6%	9.1%	0.9%	73.7%
Ellington Twp	1,332			26.7%	0.8%	0.0%	72.5%
Elmwood Twp	1,207			38.1%	3.5%	1.0%	57%
Fairgrove Twp	1,429			35.4%	3.5%	0.0%	60.5%
Fremont Twp	3,312			8.4%	5.3%	0.5%	85.5%
Gilford Twp	741			61.2%	0.5%	0.2%	38.1%
Indianfields Twp	1,819			3.7%	7.7%	0.9%	87.7%
Juniata Twp	1,567			21.5%	1.4%	0.0%	77.1%
Kingston Twp	1,629			25.0%	2.6%	0.0%	72%
Koylton Twp	1,530			20.3%	1.6%	0.0%	78.1%
Millington Twp	4,354			8.3%	5.5%	0.8%	85.4%
Novesta Twp	1,491			28.2%	2.2%	0.0%	69.5%
Tuscola Twp	2,082			27.8%	3.5%	1.4%	67.3%
Vassar Twp	4,093			3.4%	1.8%	0.8%	94%
Watertown Twp	2,202			13.1%	0.7%	1.4%	84.7%
Wells Twp	1,773			20.3%	0.7%	0.3%	78.7%
Wisner Twp	690			35.9%	2.6%	0.0%	61.5%
Caro City	4,229			0.0%	16.7%	0.9%	81.8%
Vassar City	2,697			0.2%	11.9%	1.8%	85.7%
Akron Village	402						
Cass City Village	2,428						
Fairgrove Village	563						
Gagetown Village	388						
Kingston Village	440						
Mayville Village	950						
Millington Village	1,072						
Reese Village	1,454						
Unionville Village	508						
otal Population 55, 729		95%	5%	19.5%	4.4%	0.6%	75.5%

^{*}A~= Agriculture; For =Fore-, Ind =Industry; Corn = Commercial, 0th = All Other Economic Bases Additional listings, if 'necessary, are listed on an attached page (Source: 2010 Federal Census)

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.

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

Township or		% Lar	nd Use		% of Economic	c Base	
Municipality Name	Population	Rural	Urban	Agriculture	Commercial	Industry	Other
Akron Twp.	1,653			37.4%	2.8%	0.0%	59.3%
Almer Twp	3,101			29.3%	4.0%	0.0%	66.7%
Arbela Twp	3,070			19.3%	1.5%	0.5%	78.7%
Columbia Twp	1,284			46.1%	4.5%	0.8%	48%
Dayton Twp	1,848			11.8%	0.5%	0.0%	87.7%
Denmark Twp	3,074			24.7%	5.7%	1.9%	67.7%
Elkland Twp	3,528			15.6%	9.1%	0.9%	73.7%
Ellington Twp	1,332			26.7%	0.8%	0.0%	72.5%
Elmwood Twp	1,207			38.1%	3.5%	1.0%	57%
Fairgrove Twp	1,429			35.4%	3.5%	0.0%	60.5%
Fremont Twp	3,312			8.4%	5.3%	0.5%	85.5%
Gilford Twp	741			61.2%	0.5%	0.2%	38.1%
Indianfields Twp	1,819			3.7%	7.7%	0.9%	87.7%
Juniata Twp	1,567			21.5%	1.4%	0.0%	77.1%
Kingston Twp	1,629			25.0%	2.6%	0.0%	72%
Koylton Twp	1,530			20.3%	1.6%	0.0%	78.1%
Millington Twp	4,354			8.3%	5.5%	0.8%	85.4%
Novesta Twp	1,491			28.2%	2.2%	0.0%	69.5%
Tuscola Twp	2,082			27.8%	3.5%	1.4%	67.3%
Vassar Twp	4,093			3.4%	1.8%	0.8%	94%
Watertown Twp	2,202			13.1%	0.7%	1.4%	84.7%
Wells Twp	1,773			20.3%	0.7%	0.3%	78.7%
Wisner Twp	690			35.9%	2.6%	0.0%	61.5%
Caro	4,229			0.0%	16.7%	0.9%	81.8%
Vassar	2,697			0.2%	11.9%	1.8%	85.7%
Akron Village	402						
Cass City Village	2,428						
Fairgrove Village	563						
Gagetown Village	388						
Kingston Village	440						
Mayville Village	950						
Millington Village	1,072						
Reese Village	1,454						
Unionville Village	508						
otal Population 55, 729		95%	5%	19.5%	4.4%	0.6%	75.5%

*A~= Agriculture; For =Fore-, Ind =Industry; Corn = Commercial, 0th = All Other Economic Bases Additional listings, if 'necessary, are listed on an attached page (Source: 2010 Federal Census)

EXECUTIVE SUMMARY

CONCLUSIONS

Tuscola County's current solid waste management system is functioning well, and it provides an effective means for managing the solid waste that is generated in the county Solid waste collection and transportation services are mainly provided by the private sector and are available to all residents, businesses, and industries in the county Solid waste that is generated in Tuscola County is transported to licensed landfills in Huron, Sanilac, Lapeer, Genesee, Saginaw, and Bay Counties These landfills have sufficient capacity to provide for Tuscola County's solid waste disposal needs for the next 10 years and beyond. There are presently no disposal facilities in Tuscola County, and none are currently planned

Tuscola County has a well-established Materials Recovery Facility and Recycling Program that provides recycling opportunities to all residents and diverts recyclable materials from landfills The overall goal of this program is to reduce the county's solid waste stream by 25%

Composting of yard wastes and other organic materials also takes place in the county, mainly through home composting efforts by residents, and some collection of yard waste by the private solid waste haulers and municipalities No formal municipal composting programs are currently in place

It is the conclusion of this planning process that the greatest opportunities and challenges for improved solid waste management in Tuscola County are available through expanded and enhanced materials recovery efforts Consequently, Tuscola County's amended Solid Waste Management Plan focuses on actions that will increase the levels of recycling and composting that occur in the county over the next several years

SELECTED ALTERNATIVES

The Selected System calls for the continuation of the present system of transporting solid waste that is generated in Tuscola County to licensed landfills in adjacent counties for disposal under the selected plan, the current free market system for the collection and transportation of solid waste will remain in effect. However, measures will be taken to encourage the municipalities within the county to contract for solid waste collection services on a community-wide basis.

The major focus of the selected alternative is on enhanced recovery of materials from the solid waste stream through recycling and composting efforts Tuscola County Recycling will continue to operate a county materials recovery facility (MRF) Recycling components of this plan include:

- a) Continuation of efforts by Tuscola County Recycling: collection of office paper, glass, plastic, newsprint, steel cans, and aluminum
- b) Additional collection of new materials: magazines
- c) Efforts to target recycling at businesses, industries, and multi-family housing
- d) Promote the establishment of a re-use center excess, leftover, and scrap materials
- e) Establish a "pay as you throw" (PAYT) program on a trial basis
- f) Encourage waste reduction efforts by businesses and industries in the county
- g) Continued scrap tire collection program (with financial assistance through Mosquito Control)

Enhanced composting of yard wastes is also a major element of the selected system. Efforts will include:

- a. Continued promotion of home composting through information/education.
- b. Encourage the establishment of municipal composting operations in the larger communities.

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 1 1538.(l)(a), 11541(4) and the State Solid Waste Policy adopted pursuant to this Section, and Administrative Rules 71 l(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

<u>Goal 1:</u> Develop an efficient, environmentally sound, and cost-effective solid waste management system that is capable of meeting the County's diverse needs for the next 10 years.

Objective la: Encourage new and innovative materials and energy recovery technologies.

Objective I b. Assign within the County the responsibilities for carrying out the various actions required for implementing the adopted Solid Waste Management Plan

Goal 2: Encourage inter-county cooperation in the development of a solid waste management system

Objective 2a. Arrange for adequate landfill space to meet the County's solid waste disposal needs

<u>Goal 3:</u> Ensure continued participation by the private solid waste industry in all solid waste management activities

Objective 3a: Arrange for adequate landfill space to meet the County's solid waste disposal needs

<u>Objective 3b.</u> Encourage the expanded use of private non-profit organizations for operating and coordinating formal efforts in recycling and resource recovery

<u>Goal 4:</u> Develop an integrated solid waste management system that includes waste reduction, source separation, recycling, composting, and landfilling as its major components

<u>Objective 4a</u>. Develop and implement education programs for waste reduction, source separation, recycling, and integrated solid waste management for County residents

Objective 4b: h. Encourage the expanded use of all feasible non-landfill alternatives for solid waste management.

<u>Goal 5:</u> Promote governmental, institutional, commercial, and industrial recycling capabilities <u>Objective 5a:</u> Review local government and public institution procurement policies and advise the appropriate entities as necessary to further encourage the use of recycled and recyclable materials. <u>Goal 6:</u> Encourage the creation and expansion of markets for recycled materials, and the use of recyclable and recycled materials by government, business, industry, and the public

<u>Objective 6a:</u> Review local government and public institution procurement policies and advise the appropriate entities as necessary to further encourage the use of recycled and recyclable materials <u>Objective 6b</u>: Encourage appropriate local, state, and federal legislation to provide incentives for waste reduction, source separation, and recycling.

____Note: Additional goals and objectives are listed on attached pages

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

Solid waste generation estimates for Tuscola County were obtained from the most recent DEQ "Report of Solid Waste Landfilled in Michigan" for the period of October 1, 1996 through September 30, 1997 and from the records kept by the County Materials Recovery Facility The report on volumes Landfilled showed that 98,798 cubic yards of solid waste generated in Tuscola County was disposed of at nine different Type II landfills. No Type III solid waste disposal was reported The facilities used for primary disposal are located in Huron, Genesee, Sanilac, Saginaw, and Lapeer Counties However, the Lapeer County site has closed since the ph update process began and is no longer available Smaller quantities of waste were also disposed of in Bay (41 1 cubic yards) and Shiawassee (127 cubic yards) counties during the reporting period that ended September 30, 1997. Shiawassee is not identified for disposal of Tuscola County solid waste in the previous County Solid Waste Plan or in this plan update

Solid waste is predominantly generated in the County by residential, commercial, and industrial sources The sources of waste generation have been estimated based on the previous County Solid Waste Plan Update and current employment levels in the County Residential waste is estimated to make up about 60% of the waste stream Commercial solid waste makes up about 16% of the waste stream and is generated by commercial establishments such as retail and wholesale trade, financial institutions, offices, restaurants, and schools. Industrial waste comprise about 12% of the total County waste stream Industrial solid waste originates mainly from manufacturing, processing assembly, and distribution facilities The remainder of the waste stream is comprised of other waste that does not fit into one of the preceding categories "Other" waste includes construction and demolition waste, wastewater treatment plant sludges, bulky items, tires, and agricultural waste.

Data collected by the County MRF show that approximately 1,000 tons material were collected and marketed during 1996 and 1997. As a rough estimate, this quantity represents approximately 3,000 cubic yards of material that would have otherwise been placed in landfills.

The current solid waste collection and disposal system appears to be working well, and no major problems are anticipated. There are no special wastes generated in the county that create any unique problems for collection, transportation, or disposal. Landfill capacity in the region is adequate and provides Tuscola County with more than ten years of capacity. Participation in the County Recycling Program has grown substantially over the past ten years, and participation is expected to continue to improve.

TOTAL QUANTITY OF SOLID WASTE GENERATED: 101,798 ☐ Tons or ☑ Cubic Yards in One Year (identify unit of time) TOTAL QUANTITY OF SOLID WASTE NEEDING DISPOSAL:

98,798 Tons or Cubic Yards in One Year (identify unit of time)

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

Solid waste generation estimates for Tuscola County were obtained from the most recent DEQ "Report of Solid Waste Landfilled in Michigan" for the period of October 1, 2013 through September 30, 2014 and from the records kept by the County Materials Recovery Facility The report on volumes Landfilled showed that 109,237 cubic yards of solid waste generated in Tuscola County was disposed of at seven different Type II landfills. No Type III solid waste disposal was reported. The facilities used for primary disposal are located in Bay, Huron, Genesee, Sanilac, and Saginaw Counties.

Solid waste is predominantly generated in the County by residential, commercial, and industrial sources. The sources of waste generation have been estimated based on the previous County Solid Waste Plan Update and current employment levels in the County. Residential waste is estimated to make up about 60% of the waste stream Commercial solid waste makes up about 16% of the waste stream and is generated by commercial establishments such as retail and wholesale trade, financial institutions, offices, restaurants, and schools. Industrial waste comprise about 12% of the total County waste stream Industrial solid waste originates mainly from manufacturing, processing assembly, and distribution facilities The remainder of the waste stream is comprised of other waste that does not fit into one of the preceding categories "Other" waste includes construction and demolition waste, wastewater treatment plant sludges, bulky items, tires, and agricultural waste.

Data collected by the County MRF show that approximately 2,543 tons of material were collected and marketed during 2010 to 2013. As a rough estimate, this quantity represents approximately 1,816.4 cubic yards of material that would have otherwise been placed in landfills.

The current solid waste collection and disposal system appears to be working well, and no major problems are anticipated. There are no special wastes generated in the county that create any unique problems for collection, transportation, or disposal. Landfill capacity in the region is adequate and provides Tuscola County with more than ten years of capacity. Participation in the County Recycling Program has grown substantially over the past ten years, and participation is expected to continue to improve.

TOTAL QUANTITY OF SOLID WASTE GENERATED:

109,237 Tons or X Cubic Yards in One Year (identify unit of time)
TOTAL QUANTITY OF SOLID WASTE NEEDING DISPOSAL:
108,827.5 Tons OT X Cubic Yards in One Year (identify unit of time)

Tuscola County

Current Annual Solid Waste Generation & Disposal

Disposal Facility	Type II Solid Waste	Type III Solid Waste
Cove Landfill (Huron)	43,470 cubic yards	0
Brent Run (Genesee)	28,105 cubic yards	0
Tri-City RDF (Sanilac)	10,269 cubic yards	0
Peoples (Saginaw)	6,510 cubic yards	0
Saginaw Valley (Saginaw)*	6,055 cubic yards	0
Taymouth (Saginaw)*	3,122 cubic yards	0
Pioneer Rock LF (Lapeer)*	729 cubic yards	0
Whitefeather (Bay)	411 cubic yards	0
Venice Park (Shiawassee)**	729 cubic yards	0
Total	98,798 cubic yards	0

Source: "Report of Solid Waste Landfilled in Michigan October 1, 1996 – September 30, 1997" Michigan Department of Environmental Quality, Waste Management Division, February 27, 1998.

^{*} Facilities marked with an asterisk (*) have closed since the plan update process began. Refer to Section III of the plan update for information on the facilities that Tuscola County will use to meet its solid waste disposal needs for the planning period.

^{**} The Venice Park landfill was not identified for use by Tuscola County in the previous County Solid Waste Plan, and it is not included in this plan update.

Tuscola County Current Annual Solid Waste Generation & Disposal

Disposal Facility	Type II Solid Waste	Type III Solid Waste
Huron Landfill Corp (Huron)	39,244 cubic yards	0
Brent Run (Genesee)	10,298 cubic yards	0
Peoples Landfill Inc. (Saginaw)	12,223 cubic yards	0
Citizens Disposal Inc. (Genesee)	22,314 cubic yards	0
Tri-City Recycling and Disposal Facility (Sanilac)	22, 673 cubic yards	0
Whitefeather Landfill (Bay)	2,485 cubic yards	0
Total	109,237 cubic yards	0

Disposal Facility	MCW	IW	C&D
Brent Run Landfill			
(Genesee County)	3,680	2,647	3,971
Citizens Disposal INC (Genesee County)	22,191	62	61
Huron Landfill Corp. DBA Huron			
Landfill (Huron County)	39,244	0	0
Peoples Landfill INC (Saginaw County)	8,947	2,910	266
Tri-City Recycling and Disposal Facility (Sanilac County)	10,070	11,688	915
Whitefeather Landfill (Bay County)	10	2,475	0
Total Waste Disposed	109,237		

^{*} MCW means municipal and commercial waste

Source: "Report of Solid Waste Landfilled in Michigan October 1, 2013 – September 30, 2014"

Michigan Department of Environmental Quality Office of Waste Management and

Radiological Protection Solid Waste Section February 9, 2015

^{*} IW means industrial waste

^{*}C&D means construction and demolition waste

Tuscola County Population Trends

1990 Census	1996 Estimate	1997 Estimate	% Change 1990 - 1997	Average Change Per Year
55,498	57,733	58,087	4.7%	0.67%

Source: Bureau of the Census, U.S. Department of Commerce, Federal-State Cooperative Program for Population Estimates, Released on March 17, 1998.

Tuscola County Population and Solid Waste Generation Projections

	1998	2003	2008
County Population	58,476	58,868	59,262
Annual Solid			
Waste Generation	99,460 cubic yards	102,792 cubic yards	106,235 cubic yards

Note: Population and solid waste generation assumed to increase at 0.02% per year

DATA BASE

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 listing of the solid waste disposal areas that Tuscola County will utilize to meet its disposal needs for the planning period. All of these facilities are located in surrounding counties. Detailed descriptions of these disposal areas are included on the following pages.

Type II Landfills (County Location)

Cove Landfill (Huron County)

Brent Run Landfill (Genesee County)

Citizen's Disposal Landfill (Genesee County)

Tri-City Recycling & Disposal Facility (Sanilac County)

People's Garbage Disposal Landfill (Saginaw County)

Whitefeather Landfill (Bay County)

Note: The previous draft of this plan update included the Saginaw Valley, Taymouth, and Pioneer Rock Landfills and Richfield Services. Since the plan update process and amendment process has been in progress, these facilities have all closed and no longer provide disposal capacity for Tuscola County.

Tuscola County Population Trends

1990 Census	2000 Census	2010 Census	% Change 2000 – 2010	Average Change Per Year
55,498	58,266	55,729	.42%	0.02%

Source: United States Bureau of the Census 1990, 2000, & 2010.

Tuscola County Population and Solid Waste Generation Projections

	2010	2015	2020
County Population	55,729	56,843	57,957
Annual Solid Waste Generation	97,958	116,710	137,624

Note: Population and solid waste generation assumed to increase at 0.02% per year

DATA BASE

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 listing of the solid waste disposal areas that Tuscola County will utilize to meet its disposal needs for the planning period. All of these facilities are located in surrounding counties. Detailed descriptions of these disposal areas are included on the following pages.

Type II Landfills (County Location)

Brent Run Landfill (Genesee County)

Citizens Disposal Inc. (Genesee County)

Huron Landfill Corporation (Huron County)

Peoples Landfill Inc. (Saginaw County)

Tri-City Recycling and Disposal Facility (Sanilac County)

Whitefeather Landfill (Bay County)

Note: The previous draft of this plan update included the Saginaw Valley, Taymouth, and Pioneer Rock Landfills and Richfield Services. Since the plan update process and amendment process has been in progress, these facilities have all closed and no longer provide disposal capacity for Tuscola County

FACILITY DESCRIPTIONS

Facility Type: Type II Landfill (Sheridan Twp.) Facility Name: Cove Landfill of Bad Axe, Inc. County: Huron Location: Township: 15 N Range: 12E Section(s): 22 Map identifying location included in Attachment Section: X_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 __X_ Private Owner: Cove Landfill of Bad Axe, Inc. Operating Status (check) Waste Types Received (check all that apply) residential X open __ closed commercial X licensed industrial ___ unlicensed construction & demolition X construction permit contaminated soils ___ open, but closure pending special wastes* other *Explanation of special wastes, including a specific list and/or conditions Site Size: Total area of facility property: 53.4 acres Total area sited for use: 41.8 acres Total area permitted: acres Operating: 6.84 acres Not excavated: acres Current capacity: 1,150,000 ____ Tons or _X_ yds ³ Estimated lifetime: 10 years 290 Estimated days open per year: days Estimated yearly disposal volume: 200,000 ____ tons or X yds³ (if applicable) Annual energy production Landfill gas recovery projects: megawatts Waste-to-energy incinerators: megawatts

FACILITY DESCRIPTIONS

rating license)
Section(s): <u>22</u>
n: <u>X_</u> Yes No
e final disposal site and location for Incinerator ash
Waste Types Received (check all that apply) X residential X commercial X industrial X construction & demolition X contaminated soils special wastes* other and/or conditions
53.4 acres 41.8 acres acres 28.2 acres acres 2,994,000 Tons or _X _ yds ³ 10 years 290 days 200,000 tons or _X _ yds ³
<u>200,000</u> tons of <u>11</u> yas
megawatts



Michigan Department of Environmental Quality Office of Waste Management and Radiological Protection

SOLID WASTE DISPOSAL AREA OPERATING LICENSE

This license is issued under the provisions of Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, MCL 324.11501 et seq., and authorizes the operation of this solid waste disposal area (Facility) in the state of Michigan. This license does not obviate the need to obtain other authorizations as may be required by state law.

FACILITY NAME: Huron Landfill Corp. dba Huron Landfill

LICENSEE/OPERATOR: Huron Landfill Corp. FACILITY OWNER: Bad Axe Property Corp. PROPERTY OWNER: Bad Axe Property Corp. FACILITY TYPE(S): Municipal Solid Waste Landfill

FACILITY ID NUMBER: 439983

COUNTY: Huron

LICENSE NUMBER: 9389 ISSUE DATE: June 3, 2014 EXPIRATION DATE: June 3, 2019

FACILITY DESCRIPTION: The Huron Landfill, a municipal solid waste landfill, consists of 55.02 acres located in the 1/2 of the NW 1/4 of Section 22, T15N, R12E, Sheridan Township, Huron County, Michigan, as identified in

Attachment A and fully described in this license.

AREA AUTHORIZED FOR DISPOSAL OF SOLID WASTE: The area identified in Item 2 of this license.

RESPONSIBLE PARTY: Mr. John Walker, Landfill Manager

Huron Landfill Corp. 4151 South McMillan Road Bad Axe, Michigan 48413

989-550-6078

RENEWAL OPERATING LICENSE: This License Number 9389 supersedes and replaces Solid Waste Disposal Area Operating License Number 9344 issued to Huron Landfill on January 22, 2013.

This license is subject to revocation by the Director of the Michigan Department of Environmental Quality, if the Director finds that this Facility is not being constructed or operated in accordance with the approved plans, the conditions of a permit or license, Part 115, or the rules promulgated under Part 115. Failure to comply with the terms and provisions of this license may result in legal action leading to civil and/or criminal penalties pursuant to Part 115. This license shall be available through the licensee during its term and remains the property of the Director.

THIS LICENSE IS NOT TRANSFERABLE.

Steven R. Sliver, Chief, Solid Waste Section

Office of Waste Management and Radiological Protection

EQP 5203a (Rev. 10/2012)

FACILITY DESCRIPTIONS Facility Type: Municipal Solid Waste Landfill Facility Name: Tri-City Recycling and Disposal Facility County: Sanilac Location: Township: 12 N Range: 15E Section(s): 32 Map identifying location included in Attachment Section: X_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 __X_ Private Owner: Emterra Operating Status (check) Waste Types Received (check all that apply) residential X open __ closed commercial X licensed industrial ___ unlicensed construction & demolition X construction permit contaminated soils ___ open, but closure pending special wastes* other *Explanation of special wastes, including a specific list and/or conditions Site Size: Total area of facility property: 195.4 acres Total area sited for use: 195.4 acres Total area permitted: _125__ acres Operating: 31.6 acres Not excavated: 93.4 acres Current capacity: 10,780,000 ____ Tons or _X_ yds ³ Estimated lifetime: 22 years 272 Estimated days open per year: days Estimated yearly disposal volume: 330,000 ___ tons or X yds³ (if applicable) Annual energy production

megawatts

megawatts

Landfill gas recovery projects:

Waste-to-energy incinerators:

FACILITY DESCRIPTIONS

Facility Type: Municipal Solid Waste Landfill Facility Name: Brent Run (see attached operating license) County: Genesee Location: Township: 17N Range: 4E Section(s):2 Map identifying location included in Attachment Section: X 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 __X__ Private Owner: Operating Status (check) Waste Types Received (check all that apply) X open residential ___ closed commercial X licensed industrial ___ unlicensed construction & demolition X construction permit contaminated soils ___ open, but closure pending special wastes* other *Explanation of special wastes, including a specific list and/or conditions Site Size: Total area of facility property: 243.17 acres Total area sited for use: acres Total area permitted: 157.17 acres _38___acres Operating: Not excavated: 120.17 acres $_$ Tons or $_X$ $_$ yds 3 Current capacity: 16,000,000 Estimated lifetime: _16__ years Estimated days open per year: 280 days $_{1,000,000}$ ____ tons or $_{\rm X}$ yds³ Estimated yearly disposal volume: (if applicable) Annual energy production Landfill gas recovery projects: 5.4__ megawatts Waste-to-energy incinerators: megawatts



Michigan Department of Environmental Quality Resource Management Division

SOLID WASTE DISPOSAL AREA CONSTRUCTION PERMIT

This construction permit is issued in decrine analysisms of Part.1 (E. Solid Wegle Management, of the frequent increasings and Environmental Environment, 1998 Property as a merced, MCT solid state, 10 permit the construction of a solid wasterdisposal state and only in the state of Metagen. The permit does not conside the necessary of overland other structuration as may be required by stage but

FACILITY NAME: In-City Recycling and Disposal Facility

PERMITTEE/FACILITY CVANEUS Management of Michigan, Inc.

PROPERTY OWNER: Waste Management of Michigan, Inc.

TYPE OF FACILITY: Winn Bipal Solli) Waste I snofth

FARS TV IT: 4 7640

GOUNTY Samuel

DERMIT NUMBER: 4529

ISBUE DATE: May 46, 2012

FXPRATION DATE: One year from date of issuance upless development of the Feating togens within the year.

FARKLITY BEGURIPTION: The INICity Recycling and Diagnosal Facility, a Musicipal Solid (Vaste Lacatill), consists of 196.46 agrees to accept in the NW Y, and the SW X of Society 32. T12N, R15E, Brugonampton, fownship, Sanifari County, Mikitigan. The Facility

is identified in Atlact mont A and is fully described in this hermit.

RESPONSIBLE PARTY: Mr. John Gall, District Manager

Wasie Management of Woodkjan, Inc.

426 North Rulh Road

Carsonville, Mickigan 48419.

(510) 621-9080

This sent it is surject to reviewed in by the honder of the Wichigan Department of Charlother (Interior in the surround) of the provided of a permit of the surround it is a surround in a constant with the surround items of the constitution of a permit of the surround in the surround in

THIS PERMIT IS NOT TRANSFERABLE UNLESS PRIOR AUTHORIZATION HAS BEEN DETAINED. FROM THE DIRECTOR

Dar. Wyant

Director

Vicingen Department of Environmental Citality

EDF-\$201 (REV/1092IAT)

FACILITY DESCRIPTIONS Facility Type: Type II Landfill (Taymouth Twp.) Facility Name: People's Landfill County: Saginaw Location: Township: 10 N Range: 5E Section(s): 15 Map identifying location included in Attachment Section: X_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 __X_ Private Owner: Emterra Operating Status (check) Waste Types Received (check all that apply) residential X open __ closed commercial X licensed industrial ___ unlicensed construction & demolition X construction permit contaminated soils ___ open, but closure pending special wastes* other *Explanation of special wastes, including a specific list and/or conditions Site Size: Total area of facility property: 163 acres Total area sited for use: acres Total area permitted: 29.1_ acres Operating: 2 acres Not excavated: 100 acres 5,301,641 ____ Tons or _X_ yds ³ Current capacity: Estimated lifetime: 20 years Estimated days open per year: 254 days Estimated yearly disposal volume: 1,000 ___ tons or X yds³ (if applicable) Annual energy production Landfill gas recovery projects: megawatts

megawatts

Waste-to-energy incinerators:

FACILITY DESCRIPTIONS

Facility Type: Municipal Solid Waste Landfill	
Facility Name: Tri City Recycling and Disposal Facility	(see attached operating license)
County: Sanilac Location: Township: 12N Range:	15E Section(s): 32
Map identifying location included in Attachment Section	:: <u>X_</u> Yes No
If facility is an Incinerator or a Transfer Station, list the f or Transfer Station wastes:	inal disposal site and location for Incinerator ash
Public X Private Owner:	
Operating Status (check) X open closed X licensed unlicensed X construction permit open, but closure pending *Explanation of special wastes, including a specific list a	Waste Types Received (check all that apply) X residential X commercial X industrial X construction & demolition X contaminated soils special wastes* other and/or conditions
Site Size: Total area of facility property:	_195.40acres
Total area sited for use: Total area permitted: Operating: Not excavated:	195.4 acres 122 acres 42 acres 80 acres
Current capacity: Estimated lifetime: Estimated days open per year: Estimated yearly disposal volume:	17,000,000 Tons orX_yds ³ 12 years 272_ days 178,000 tons or _X_yds ³
(if applicable) Annual energy production Landfill gas recovery projects: Waste-to-energy incinerators:	megawatts megawatts

Michigan Department of Natural Resources and Environment Waste and Hazardous Materials Division

SOLID WASTE DISPOSAL AREA OPERATING LICENSE

This license is issued under the provisions of Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, MCL 324.11501 et seq., and authorizes the operation of this solid waste disposal area (Facility) in the state of Michigan. This license does not obviate the need to obtain other authorizations as may be required by state law.

FACILITY NAME: People's Landfill, Inc.
LICENSEE/OPERATOR: People's Landfill, Inc.
FACILITY OWNER: People's Landfill, Inc.
PROPERTY OWNER: People's Landfill, Inc.
FACILITY TYPE(S): Municipal Solid Waste Landfill

FACILITY ID NUMBER: 437908

COUNTY: Saginaw
LICENSE NUMBER: 9267
ISSUE DATE: April 30, 2010
EXPIRATION DATE: April 30, 2015

FACILITY DESCRIPTION: The People's Landfill, Inc., a municipal solid waste landfill, consists of 163.5 acres located in the

NW 1/2 of Section 15, T10N, R5E, Taymouth Township, Saginaw County, Michigan, as identified in

Attachment A and fully described in this license.

AREA AUTHORIZED FOR DISPOSAL OF SOLID WASTE: Trench 1A, Trench 2A, Trench 3, a portion of Cell 4, Cell 7, Cell 8, Cell 9, Cell 10, and a portion of the old "Act 87" area totaling 62.0 acres.

RESPONSIBLE PARTY: Mr. Fred Sawyers, District Manager

People's Landfill, Inc. 4143 East Rathbun Road Birch Run, Michigan 48415

989-777-1145

RENEWAL OPERATING LICENSE: This License Number 9267 supersedes and replaces Solid Waste Disposal Area Operating License Number 9100 issued to People's Landfill, Inc. on June 17, 2005.

This license is subject to revocation by the Director of the Michigan Department of Natural Resources and Environment, if the Director finds that this Facility is not being constructed or operated in accordance with the approved plans, the conditions of a permit or license, Part 115, or the rules promulgated under Part 115. Failure to comply with the terms and provisions of this license may result in legal action leading to civil and/or criminal penalties pursuant to Part 115. This license shall be available through the licensee during its term and remains the property of the Director.

THIS LICENSE IS NOT TRANSFERABLE.

Steven R. Sliver, Chief, Storage Tank and Solid Waste Section

ewin

Waste and Hazardous Materials Division

EQP 5203e (Rev. 02/2010)

FACILITY DESCRIPTIONS Facility Type: Type II Landfill Facility Name: Brent Run Landfill County: Genesee Location: Township: 9N Range: 5E Section(s): 23 Map identifying location included in Attachment Section: X_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 __X_ Private Owner: Emterra Operating Status (check) Waste Types Received (check all that apply) residential X open ___ closed commercial X licensed industrial ___ unlicensed construction & demolition X construction permit contaminated soils ___ open, but closure pending special wastes* other *Explanation of special wastes, including a specific list and/or conditions Site Size: Total area of facility property: 160 acres Total area sited for use: 90 acres 30 Total area permitted: acres Operating: 15 acres Not excavated: acres 10,247,000 ____ Tons or _X_ yds ³ Current capacity: Estimated lifetime: 18 years Estimated days open per year: 312 days Estimated yearly disposal volume: 720,000 ____ tons or X yds³ (if applicable) Annual energy production Landfill gas recovery projects: N/A megawatts Waste-to-energy incinerators: megawatts N/A

FACILITY DESCRIPTIONS

Facility Type: Municipal Solid Waste Landfill Amendment Facility Name: Peoples Landfill Inc. (see attached operating license) County: Saginaw Location: Township: 10N Range: 5E Section(s): 15 Map identifying location included in Attachment Section: X 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 __X__ Private Owner: Operating Status (check) Waste Types Received (check all that apply) X open residential ___ closed commercial X licensed industrial ___ unlicensed construction & demolition X construction permit contaminated soils ___ open, but closure pending special wastes* other *Explanation of special wastes, including a specific list and/or conditions Site Size: Total area of facility property: 163.5 acres Total area sited for use: 62 acres Total area permitted: acres Operating: acres Not excavated: acres ____ Tons or ____yds ³ Current capacity: Estimated lifetime: years Estimated days open per year: days Estimated yearly disposal volume: $\underline{\hspace{1cm}}$ tons or $\underline{\hspace{1cm}}$ yds³ (if applicable) Annual energy production Landfill gas recovery projects: megawatts Waste-to-energy incinerators: megawatts

Return to

Letter



Michigan Department of Environmental Quality Office of Waste Management and Radiological Protection

SOLID WASTE DISPOSAL AREA CONSTRUCTION PERMIT

This construction permit is issued under the provisions of Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, MCL 324.11501 gt seg., to permit the construction of a solid waste disposal area (Facility) in the state of Michigan. This permit does not obviate the necessity of obtaining other authorization as may be required by state law.

FACILITY NAME: Brent Run Landfill, Inc.

PERMITTEE/FACILITY OWNER: Brent Run Landfill, Inc.

PROPERTY OWNER: Brent Run Landfill, Inc.

TYPE OF FACILITY: Municipal Solid Waste Landfill

FACILITY ID: 406671 COUNTY: Genesee

PERMIT NUMBER: 4138

ISSUE DATE: December 20, 2013

EXPIRATION DATE: One year from date of issuance unless development of the Facility begins within the

year.

FACILITY DESCRIPTION: The Brent Run Landfill, Inc., a Municipal Solid Waste Landfill, consists of

243.17 acres located in the North 1/2 of Section 23, T9N, R5E, Montrose Township, Genesee County, Michigan. The Facility is identified in

Attachment A and is fully described in this permit.

RESPONSIBLE PARTY: Mr. Dominic Remmes, P.E.

Brent Run Landfill, Inc. 8247 Vienna Road Montrose, Michigan 48457

309-787-2303

This permit is subject to revocation by the Director of the Michigan Department of Environmental Quality (Director) if the Director finds that the disposal area is not being constructed or operated in accordance with the approved plans, the conditions of a permit or license, Part 115, or the rules promulgated under Part 115. This permit shall be available through the applicant during its term and remains the property of the Director. Failure to comply with the terms and provisions of this permit may result in legal action leading to civil and/or criminal penalties as stipulated in Part 115.

THIS PERMIT IS NOT TRANSFERABLE UNLESS PRIOR AUTHORIZATION HAS BEEN OBTAINED

FROM THE DIRECTOR.

Dan Wyant Director

Michigan Department of Environmental Quality

EQP 5201 (REV 11/2012)

DATA BASE

FACILITY DESCRIPTIONS Facility Type: Type II Landfill Facility Name: Citizen's Disposal County: Genesee Location: Township: 6N Range: 6E Section(s): 23 Map identifying location included in Attachment Section: X_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 __X_ Private Owner: Emterra Operating Status (check) Waste Types Received (check all that apply) residential X open ___ closed commercial X licensed industrial ___ unlicensed construction & demolition X construction permit contaminated soils ___ open, but closure pending special wastes* other: asbestos *Explanation of special wastes, including a specific list and/or conditions 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 _X_ yds ³ Estimated lifetime: 25 years <u>300</u> Estimated days open per year: days Estimated yearly disposal volume: $\underline{\hspace{1cm}}$ tons or $\underline{\hspace{1cm}} X$ yds³ (if applicable) Annual energy production Landfill gas recovery projects: megawatts

megawatts

Waste-to-energy incinerators:

Facility Type: Municipal Solid Waste Landfill Facility Name: Citizens Disposal, Inc. (See attached Operating License) County: Genesee Location: Township: Mundy Range: Section(s): 23 Map identifying location included in Attachment Section: X 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 __X__ Private Owner: Operating Status (check) Waste Types Received (check all that apply) X open residential ___ closed commercial X licensed industrial ___ unlicensed construction & demolition X construction permit contaminated soils ___ open, but closure pending special wastes* other *Explanation of special wastes, including a specific list and/or conditions Site Size: Total area of facility property: 313.7 acres Total area sited for use: 236.5 acres Total area permitted: 109 acres Operating: 77.9 acres Not excavated: 31.1 acres 17,400,000___ Tons or _X_yds ³ Current capacity: Estimated lifetime: _21__ years Estimated days open per year: _286_ days X tons or yds^3 Estimated yearly disposal volume: 350,000 (if applicable) Annual energy production Landfill gas recovery projects: _60,000__ megawatts Waste-to-energy incinerators: megawatts

Michigan Department of Natural Resources and Environment Environmental Resource Management Division

SOLID WASTE DISPOSAL AREA OPERATING LICENSE

This license is issued under the provisions of Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, MCL 324.11501 et seg., and authorizes the operation of this solid waste disposal area (Facility) in the state of Michigan. This license does not obviate the need to obtain other authorizations as may be required by state law.

FACILITY NAME: Citizens Disposal Landfill LICENSEE/OPERATOR: Citizens Disposal, Inc. FACILITY OWNER: Citizens Disposal, Inc. PROPERTY OWNER: Citizens Disposal, Inc. FACILITY TYPE(S): Municipal Solid Waste Landfill

FACILITY ID NUMBER: 470517

COUNTY: Genesee LICENSE NUMBER: 9291

ISSUE DATE: November 10, 2010

EXPIRATION DATE: November 10, 2015

FACILITY DESCRIPTION: The Citizens Disposal, Inc., Landfill, a municipal solid waste landfill, consists of 236.51 acres

located in the SW 1/4 of Section 23, Mundy Township, Genesee County, Michigan, as identified in

Attachment A and fully described in this license.

AREA AUTHORIZED FOR DISPOSAL OF SOLID WASTE: As described in Section 2 and identified in Attachment A of this

license.

RESPONSIBLE PARTY: Mr. Robert Thornton

Citizens Disposal, Inc.

2361 West Grand Blanc Road Grand Blanc, Michigan 48439

810-655-4207

RENEWAL OPERATING LICENSE: This License Number 9291 supersedes and replaces Solid Waste Disposal Area Operating License Number 9145 issued to Citizens Disposal, Inc., on October 19, 2006.

This license is subject to revocation by the Director of the Michigan Department of Natural Resources and Environment, if the Director finds that this Facility is not being constructed or operated in accordance with the approved plans, the conditions of a permit or license, Part 115, or the rules promulgated under Part 115. Failure to comply with the terms and provisions of this license may result in legal action leading to civil and/or criminal penalties pursuant to Part 115. This license shall be available through the licensee during its term and remains the property of the Director.

THIS LICENSE IS NOT TRANSFERABLE.

Steven R. Sliver, Chief, Solid Waste and Land Application Section

Environmental Resource Management Division

EQP 5203e (Rev. 07/2010)

DATA BASE

FACILITY DESCRIPTIONS Facility Type: Type II Landfill Facility Name: Whitefeather Landfill County: Bay Location: Township: 17 N Range: 4E Section(s): 2 Map identifying location included in Attachment Section: X 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 __X_ Private Owner: Emterra Operating Status (check) Waste Types Received (check all that apply) residential X open ___ closed commercial X licensed industrial ___ unlicensed construction & demolition X construction permit contaminated soils ___ open, but closure pending special wastes* other *Explanation of special wastes, including a specific list and/or conditions Site Size: Total area of facility property: 106 acres Total area sited for use: 56.5 acres Total area permitted: 56.5_ acres Operating: 24.5 acres Not excavated: Current capacity: 4,175,153 Tons or X yds ³ Estimated lifetime: <u>18.8</u> years Estimated days open per year: <u>260</u> days Estimated yearly disposal volume: 380,000 ____ tons or X yds³ (if applicable) Annual energy production Landfill gas recovery projects: N/A megawatts Waste-to-energy incinerators: megawatts N/A

Facility Type: Municipal Solid Waste Landfill Facility Name: Whitefeather Landfill (see attached operating license) County: <u>Bay</u> Location: Township: <u>17N</u> Range: <u>4E</u> Section(s): <u>2</u> Map identifying location included in Attachment Section: X 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 __X__ Private Owner: Operating Status (check) Waste Types Received (check all that apply) X open residential ___ closed commercial X licensed industrial ___ unlicensed construction & demolition X construction permit contaminated soils ___ open, but closure pending special wastes* other *Explanation of special wastes, including a specific list and/or conditions Site Size: Total area of facility property: 111.4 acres Total area sited for use: acres Total area permitted: acres Operating: acres Not excavated: acres ____ Tons or ___yds ³ Current capacity: Estimated lifetime: _ years Estimated days open per year: days $\underline{\hspace{1cm}}$ tons or $\underline{\hspace{1cm}} X$ yds³ Estimated yearly disposal volume: (if applicable) Annual energy production Landfill gas recovery projects: megawatts Waste-to-energy incinerators: megawatts

Michigan Department of Natural Resources and Environment Waste and Hazardous Materials Division

SOLID WASTE DISPOSAL AREA OPERATING LICENSE

This license is issued under the provisions of Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, MCL 324.11501 et seq., and authorizes the operation of this solid waste disposal area (Facility) in the state of Michigan. This license does not obviate the need to obtain other authorizations as may be required by state law.

FACILITY NAME: Whitefeather Landfill

LICENSEE/OPERATOR: Republic Services of Michigan IV, LLC FACILITY OWNER: Republic Services of Michigan IV, LLC PROPERTY OWNER: Republic Services of Michigan IV, LLC

FACILITY TYPE(\$): Municipal Solid Waste Landfill

FACILITY ID NUMBER: 449252

COUNTY: Bay

LICENSE NUMBER: 9274 ISSUE DATE: June 30, 2010

EXPIRATION DATE: June 30, 2015

FACILITY DESCRIPTION: The Whitefeather Landfill, a municipal solid waste landfill, consists of 111.04 acres located in the

N 1/2 of the SE 1/4 and the SE 1/4 of the SE 1/4, Section 2, T17N, R4E, Pinconning Township, Bay County, Michigan, as identified in Attachment A and fully described in this license.

AREA AUTHORIZED FOR DISPOSAL OF SOLID WASTE: Trenches or Cells 2, 3, 4, 5, and portions of 6.

RESPONSIBLE PARTY: Mr. Jeff Tucker, General Manager

Republic Services of Michigan IV, LLC 2401 East Whitefeather Road Pinconning, MI 48650 989-879-2700

RENEWAL OPERATING LICENSE: This License Number 9274 supersedes and replaces Solid Waste Disposal Area Operating License Number 9081 issued to Republic Services of Michigan IV, LLC on March 14, 2005.

This license is subject to revocation by the Director of the Michigan Department of Natural Resources and Environment, if the Director finds that this Facility is not being constructed or operated in accordance with the approved plans, the conditions of a permit or license, Part 115, or the rules promulgated under Part 115. Failure to comply with the terms and provisions of this license may result in legal action leading to civil and/or criminal penalties pursuant to Part 115. This license shall be available through the licensee during its term and remains the property of the Director.

THIS LICENSE IS NOT TRANSFERABLE.

Steven R. Sliver, Chief, Storage Tank and Solid Waste Section

Waste and Hazardous Materials Division

EQP 5203e (Rev. 02/2010)

DATABASE

SOLID WASTE COLLECTION SERVICES AND TRANSPORTATION INFRASTRUCTURE

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

The collection and transportation of solid waste that is generated at residences, businesses, and industries in Tuscola County is accomplished almost exclusively by the private solid waste industries. Two exceptions are the Village of Millington Department of Public Works, which provides waste collection services in the Village, and the Village of Reese DPW, which provides collection of residential yard waste.

Private solid waste collection firms that operate in Tuscola County include Cove Sanitation, City Environmental, Waste Management, and BFl.

In the County's ten villages and one city, residential solid waste collection services are mostly provided under municipal contracts with private haulers. Commercial collection services for businesses and industries are generally handles under individual arrangements.

In the rural townships, a "free market" system that includes all possible combinations of arrangements for solid waste collection services exists.. This includes township contracts for residential curbside service, arrangements for drop-off (transfer station) sites to serve residents, and individual arrangements for service through subscriptions with private haulers..

Current information on solid waste collection services in Tuscola County is summarized in the following table. A key to the information in the table is also attached.

DATABASE CONT...

SOLID WASTE COLLECTION SERVICES AND TRANSPORTATION INFRASTRUCTURE

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

The collection and transportation of solid waste that is generated at residences, businesses, and industries in Tuscola County is accomplished almost exclusively by the private solid waste industries. Two exceptions are the Village of Millington Department of Public Works, which provides waste collection services in the Village, and the Village of Reese DPW, which provides collection of residential yard waste.

Private solid waste collection firms that operate in Tuscola County include Diva Disposal, Emterra Environmental, Republic Services, Richfield Management, and Waste Management Services

In the County's nine villages and two cities, residential solid waste collection services are mostly provided under municipal contracts with private haulers. Commercial collection services for businesses and industries are generally handles under individual arrangements.

In the rural townships, a "free market" system that includes all possible combinations of arrangements for solid waste collection services exists. This includes township contracts for residential curbside service, arrangements for drop-off (transfer station) sites to serve residents, and individual arrangements for service through subscriptions with private haulers.

Current information on solid waste collection services in Tuscola County is summarized in the following table. A key to the information in the table is also attached.

Tuscola County Solid Waste Collection & Transportation Information

-	1			3	4	5	5	
	Service	2		Payment	Additional	Tran	sfer	6
Community	Provider	Service	е Туре	Method	Services	Stat	ion	Landfill
			Drop- off			Туре	Туре	
Townships		Curbside	Site			Α	В	
4.1	Cove	N/		G	RC		X	Cove
Akron	WMI	X		S	D.C.		X	Tri-City
Almer	Cove				RC		A	Cove
Arbela	City	X		S	RC			Brent Run
Columbia	Cove		X	G	RD		X	Cove
Dayton	Cove	X		S				Cove
Denmark	City	X		S	RC			Saginaw Valley
	WMI	X		I				Tri-City
Elkland	BFI	X		T				Taymouth Cove
Ellington	Cove BFI	A		I				Taymouth
Elmwood	Cove	X		I				Cove
Fairgrove	City	X		S	RC			Saginaw Valley
Fremont	Cove City	X		I				Cove Brent Run
Gilford	City WMI	X	X	G I	RD		X	Saginaw Valley Tri-City
Indianfields	BFI	X		S	RC			Taymouth
Juniata	BFI Cove	X	X	S I	RD		X	Taymouth Cove
Kingston	Cove BFI WMI	X X		I S				Cove Tri-City Taymouth
Koylton	Cove	X		I				Cove
Millington	Cove BFI City	X		I	YW (DPW) RD			Cove, Brent Run Taymouth
Novesta	Cove WMI	X		I			X	Cove Tri-City
Tuscola	City	X		S	RC			Saginaw Valley

Tuscola County Solid Waste Collection & Transportation Information

Community	1 Service Provider	2 Service		3 Payment Method	4 Additional Services	Tran Stat	sfer	6 Landfill
Townships		Curbside	Drop- off Site			Type A	Type B	
	Emterra			G	RC		X	Huron
Akron	Diva	X		I S	RC		X	Huron
Almer								
Arbela	Waste	X		S	RC			Tri City
Columbia	Diva		X	G	RD		X	Huron
Dayton	Waste	X		S				Tri City
Denmark	Waste	X		S	RC			Tri City
Elkland	Diva	X		Ι	RC			Huron
Ellington	Emterra	X		S	RC			Huron
Elmwood	Open Contract	X	X	I	RC			N/A
Fairgrove	Diva	X		S	RC			Huron
Fremont	Open	X		I	RC			N/A
Gilford	Republic	X	X	G I	RD		X	Whitefeather
Indianfields	Diva	X		S	RC			Huron
Juniata	Emterra	X	X	S I	RD RC		X	Huron
Kingston	Diva	X		S	RC			Huron
Koylton	Open	X		Ι				N/A
Millington	Republic	X		I	YW RC (DPW) RD			Whitefeather
Novesta	Diva	X		Ι			X	Huron
Tuscola	Republic	X		S	RC			Whitefeather

Tuscola County Solid Waste Collection & Transportation Information

	1			3	4		5	
	Service	2		Payment	Additional	Trar	nsfer	6
Community	Provider	Service	Type	Method	Services	Sta	tion	Landfill
Townships		Curbside	Drop- off Site			Туре	Type B	
Townships	Cove	X	Site	G			X	Cove
Vassar	Cove	Λ		O .			Λ	
Watertown	WMI, Cove BFI, City	X		I	YW			Tri-City, Cove, Taym, Brent
Wells	Cove	X		I				Cove
Wisner	City Cove		X	G				Saginaw Valley Cove
Villages								
Akron	Cove WMI	X		G I	RC		X	Cove Tri-City
Cass City	Cove WMI	X		G, I	RC, YW		X	Cove Tri-City
Gagetown	Cove WMI	X		G,I	RC, YW		X	Cove Tri-City
Fairgrove	WMI	X		G, I	RC, YW		X	Cove Tri-City
Kingston	WMI	X		I				Tri-City
8	WMI, BFI	X		S, I	RC YW			Tri-City
Mayville	Cove				(DPW)		X	Cove
M'II'	DPW Cove	X		S	RD		37	Brent Run
Millington	(Comm.) Cove	X		I	RC		X	Cove Cove
Reese					I KC			
Unionville	Cove WMI	X		I			X	Cove Tri-City
City								
Vassar	Cove	X		S	RC		X	Cove
Caro								

Solid Waste Collection & Transportation Services Key to Information in the Table

The following numbers refer to the numbered blocks on the form:

- 1. **Service Provider:** This entry identifies the firms or other organizations that provide solid waste collection services in the community:
 - a. Cove Cove Sanitation
 - b. **WMI** Waste Management Inc.
 - c. **City** City Environmental Services
 - d. **BFI** Browning Ferris Industries
 - e. **DPW** Village Department of Public Works (i.e., Mayville, Millington)
- 2. **Service Type:** These columns are marked to indicate whether solid waste is picked up from residences (curbside service) or must be transported to a drop-off site (transfer station or similar arrangement).
- 3. **Payment Method:** The following codes indicate the method of payment for services:
 - a. **I** individuals billed directly for service
 - b. **G** services are paid for from the local government's General Fund
 - c. S a special fee is levied for trash collection, such as a special assessment
- 4. Additional Services: The following codes indicate any additional services that are available
 - a. **RC** curbside collection of separated recyclable materials from residences is provided
 - b. **RB** collection of specified recyclable materials from businesses is provided
 - **c. RD** separated recyclable materials may be dropped off at a designated site in the community
 - **d.** YW separate collection of yard waste is provided to residences
 - **e. CS** a site where residents may drop off yard waste for composting is provided in the community
- 5. **Transfer Station:** The columns are marked if a transfer station is located in the community
 - **a. Type A** transfer stations are generally enclosed facilities where solid waste is mechanically unloaded from commercial collection vehicles. The waste is often compacted for transport to a landfill in large loads.
 - **b. Type B** transfer stations generally consist of roll-off units or 'dumpster' containers where residents may directly deposit their garbage. The containers are picked up or emptied by collection vehicles for transport to a landfill.
- 6. **Landfill:** This entry indicates the landfill where solid waste generated in the community is taken for final disposal.

Solid Waste Collection & Transportation Information Continued

	1			3	4	5		_
Comana un itu	Service Provider	Comics		Payment	Additional	Tran		6 Landfill
Community Townships	Provider	Service Curbside	Drop- off Site	Method	Services	Stat Type A	Type B	Landilli
- Common po	Republic	X	0.110	S	RC		X	Whitefeather
Vassar	·							
Watertown	Open	X	X	S	YW RC			N/A
Wells	Republic	X		S	RC			Whitefeather
Wisner	Emterra	X		S	RC			Huron
Villages								
Akron	Republic	X		S	RC		X	Whitefeather
Cass City	Emterra	X		G, I	RC, YW		X	Huron
Gagetown	Diva	X		S	RC			Huron
Fairgrove	Diva	X		G, I	RC, YW		X	Huron
Kingston	Diva	X		Ι	RC			Huron
Mayville	Republic	X		S, I	RC YW (DPW)		X	Whitefeather
Millington	Emterra	X		S I	RD RC		X	Huron
Reese	Republic	X		Ι	RC		X	Whitefeather
Unionville	Emterra	X		I	RC		X	Huron
City								
Vassar	Republic	X		S	RC		X	Whitefeather
Caro	Emterra				RC YW			Huron

II-12a

Solid Waste Collection & Transportation Information

DATABASE CONT...

Solid Waste Collection & Transportation Services Key to Information in the Table

The following numbers refer to the numbered blocks on the form:

- 7. **Service Provider:** This entry identifies the firms or other organizations that provide solid waste collection services in the community:
 - a. Diva Diva Disposal
 - b. Emterra Emterra Environmental
 - c. Republic Republic Services
 - d. Waste Waste Management Services
- 8. **Service Type:** These columns are marked to indicate whether solid waste is picked up from residences (curbside service) or must be transported to a drop-off site (transfer station or similar arrangement).
- 9. **Payment Method:** The following codes indicate the method of payment for services:
 - a. **I** individuals billed directly for service
 - b. **G** services are paid for from the local government's General Fund
 - c. S a special fee is levied for trash collection, such as a special assessment
- 10. Additional Services: The following codes indicate any additional services that are available
 - a. RC curbside collection of separated recyclable materials from residences is provided
 - b. **RB** collection of specified recyclable materials from businesses is provided
 - **c. RD** separated recyclable materials may be dropped off at a designated site in the community
 - **d.** YW separate collection of yard waste is provided to residences
 - **e. CS** a site where residents may drop off yard waste for composting is provided in the community
- 11. **Transfer Station:** The columns are marked if a transfer station is located in the community
 - **a. Type A** transfer stations are generally enclosed facilities where solid waste is mechanically unloaded from commercial collection vehicles. The waste is often compacted for transport to a landfill in large loads.
 - **b. Type B** transfer stations generally consist of roll-off units or 'dumpster' containers where residents may directly deposit their garbage. The containers are picked up or emptied by collection vehicles for transport to a landfill.
- 12. **Landfill:** This entry indicates the landfill where solid waste generated in the community is taken for final disposal.

DATABASE CONT...

EVALUATION OF DEFICIENCIES AND PROBLEMS

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

- 1. Although existing landfill capacity in the region appears to be adequate, continued reliance on landfills outside Tuscola County creates some uncertainty regarding the availability of sufficient disposal capacity.
- 2. The current system does not provide a direct economic incentive for waste reduction and recycling efforts. The County should investigate incentives, such as "pay-as-you-throw" (PAYT) programs.
- 3. There is a need to expand recycling opportunities for additional sectors within the County's population and economic base:
 - Commercial/business sector
 - Industries
 - Multi-family housing (apartments)
- 4. There is a need to expand recycling efforts to include additional materials:
 - "Universal waste" such as mercury bulbs & switches, rechargeable batteries
 - Other types of plastics, such as PVC..
- 5. In some parts of the county, a lack of municipal contracting for solid waste collection results in inadequate or unreliable collection services.. The County should encourage the townships to contract for services and adopt appropriate ordinances to ensure the adequate collection of solid waste from residents
- 6. There is no countywide system in place to monitor solid waste collection services in the local government units (especially the townships). There should be system for notification if a service is changed or discontinued
- 7. Established composting programs in the county are very limited, except for collection of residential yard waste in some communities, and home composting by residents.

DEOMOGRAPHICS

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, then it was calculated by using 365 days per year, or another number of days as indicated.

Tuscola County Population Projections & Solid Waste Generation Estimates

Year	19	98	20	03	2008		
Government Unit	Population	Annual Solid Waste Generation (cubic yards)	Estimated Population	Annual Solid Waste Generation (cubic yards)	Estimated Population	Annual Solid Waste Generation (cubic yards)	
Tuscola	•		•		•		
County	58,297	92,561	58,976	93,639	59,654	94,716	
Townships							
Akron	1,454	2,308	1,471	2,336	1,488	2,362	
Almer	2,219	3,523	2,245	3,564	2,271	3,606	
Arbela	3,443	5,467	3,483	5,530	3,523	5,594	
Columbia	857	1,361	867	1,376	877	1,392	
Dayton	1,691	2,685	1,711	2,717	1,731	2,748	
Denmark	2,034	3,229	2058	3,268	2,082	3,306	
Elkland	1,248	1,982	1263	2,005	1,277	2,028	
Ellington	1,314	2,086	1329	2,110	1,344	2,134	
Elmwood	998	1,584	1010	1,604	1,022	1,623	
Fairgrove	1,062	1,686	1074	1,705	1,086	1,724	
Fremont	2,317	3,679	2344	3,722	2,371	3,764	
Gilford	891	1,415	901	1,430	911	1,446	
Indianfields	3,235	5,136	3273	5,197	3,311	5,257	
Juniata	1,801	2,860	1822	2,893	1,843	2,926	
Kingston	1,213	1,926	1227	1,948	1,241	1,970	
Koylton	1,492	2,369	1509	2,396	1,526	2,423	
Millington	3,335	5,295	3374	5,357	3,413	5,419	
Novesta	1,582	2,512	1600	2,540	1,618	2,569	
Tuscola	2,318	3,680	2345	3,723	2,372	3,766	
Vassar	4,025	6,391	4072	6,465	4,119	6,540	
Watertown	2,305	3,660	2332	3,703	2,359	3,746	
Wells	1,652	2,623	1671	2,653	1,690	2,683	
Wisner	860	1,365	870	1,381	880	1,397	
Villages							
Akron	433	687	438	695	443	703	
Unionville	611	970	618	981	625	992	
Reese	1,623	2,577	1642	2,607	1,661	2,637	
Cass City	2,230	3,541	2256	3,582	2,282	3,623	
Gagetown	352	559	356	565	360	572	
Fairgrove	594	943	601	954	608	965	
Mayville	1,078	1,712	1091	1,732	1,104	1,753	
Kinston	461	732	466	740	471	748	
Millington	1,093	1,735	1106	1,756	1,119	1,777	
City							
Vassar	2,510	3,985	2539	4,031	2,568	4,077	
Caro	3,966	6,297	4012	6,370	4,058	6,443	

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.

General Land Cover

General land cover data for Tuscola County are shown below, as derived from the Michigan Resource Information System (MIRIS). Tuscola County is a rural and predominantly agricultural area. Agricultural and open land makes up almost 75% of the county's land area. Most of the agricultural land base consists of cropland and occupies over 300,000 acres. Urban land uses, including residential, commercial, and industrial development, occupy less than 3% of the county. Forested land covers about 18% of the county, consisting mainly of both upland and lowland hardwood species. Finally, open water (such as lakes and streams) and various types of wetlands cover slightly less than 4% of the county.

Development Patterns

Agricultural land uses are expected to dominate the character of Tuscola County for the foreseeable future. Urban development in the county is concentrated in the incorporated communities of Caro, Vassar, Millington, Reese, and Cass City and their adjacent townships. Together, these communities make up over 47% of the total county population. These areas also represent the centers for manufacturing, retail trade, and services within the county. Consequently, these communities are also the county's centers of solid waste generation. The three areas are expected to remain the centers of both population and solid waste generation for the five-year and ten-year planning periods.

SOLID WASTE MANAGEMENT ALTERNATIVES (attach additional pages as necessary)

The following briefly describes all solid waste management systems considered by the 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 the Selected Alternatives are located in the following section. Details regarding each non-selected alternative are located in Appendix B.

The following alternative systems were discussed and evaluated by the County Solid Waste Management Planning Committee (SWMPC):

Alternative A: Status Quo

This represents the "do nothing" alternative and is always an option. This alternative assumes that the existing solid waste management system will remain in place without any drastic changes.. Solid waste generated in Tuscola County would continue to be exported to licensed landfills in surrounding counties. It is assumed that the existing landfills have adequate capacity for Tuscola County's disposal needs for the next 1 0 years. Landfilling would remain the primary means for solid waste disposal.

Under this alternative, the current free market system for solid waste collection and transportation would remain in effect.

The current levels of materials recovery and recycling by the County's Recycling Center would continue. However, this plan option does not call for any major expansion of the current level of recycling. Composting would be encouraged by residents ("backyard composting") and by local governments that may wish to provide such services. The County would furnish educational support, but it would not engage in actual composting operations

Alternative B: Enhanced Materials Recovery

This alternative also calls for continuation of the present system of exporting solid waste to landfills in adjacent counties.

However, a major focus of this alternative would be on expanded materials recovery efforts. Some components of this focus might include:

- Expanded curbside collection of recyclables in parts of the County
- Collection of additional materials (beyond what is collected now)
- Experimentation with economic incentives for recycling in target communities (such as "pay as you throw" or metered bag systems)
- Model local government procurement policies to promote the purchase and use of recycled products

The implementation of this alternative will require a greater role for the County's Recycling Program and Center. Specific recommendations for program enhancements would need to be developed. Expanded composting efforts would also be a part of this plan option. This could occur through municipal composting operations, composting services furnished by the private sector, or some combination of approaches.

This plan would also provide for the continuation of the current collection and transportation arrangements. However, better county-level monitoring of local collection practices could also be implemented

Alternative C: Regional Solid Waste Management System

This alternative calls for the creation of a regional solid waste management system in cooperation with surrounding counties. For initial discussion purposes, this is assumed to include Tuscola, Huron, Sanilac, and Lapeer Counties. From an institutional standpoint, this option calls for the creation of a formal solid waste management authority or similar entity.

Under this option, the use of the existing, privately owned landfills within this group of counties would continue. Due to current disposal capacity, this alternative does not call for the development of a new regional landfill. However, this could remain an option should the need arise (much like in the current plan). Also, the creation of an authority would give the counties greater ability to control the solid waste stream and to direct it to certain facilities, if necessary.

The regional management approach would also present certain other opportunities for improved solid waste management:

- Regional collection of recyclable materials
- Regional marketing of recyclable materials
- Regional purchasing of recycled products
- Potential regional processing facilities for mixed waste and composting
- Regional franchises for solid waste collection and other services

Evaluation of Alternative Solid Waste Management Plans

The alternatives were evaluated according to the following factors, as specified in Act 451:

Technical feasibility – can the alternative be implemented using available technology, or will the needed technology become available in the near future?

Economic feasibility – how much will it cost to implement the alternative? Is the cost greater than the financial capabilities of public and private entities? How will facility development, operation, and maintenance costs be provided?

Access to Land and Transportation Routes – does the alternative require the acquisition of land? Would facilities be efficiently located? Will the existing transportation system be adequate, or will road improvements be required?

II 17

Energy Consumption/Production. Is the alternative energy-efficient for transportation and operation requirements? Would energy be produced in conjunction with any processing or disposal operations? Would any revenue be generated by energy production?

Environmental Impacts. What environmental impacts would result from implementation of the alternative? Would implementation create long-term impacts associated with operation and maintenance of solid waste facilities?

Public Health Effects. Would the alternative create, continue, or mitigate public health hazards associated with improper handling or disposal of solid waste?

Public Acceptability. Is the alternative likely to be accepted by county residents? Will it be politically acceptable to local governments? Will the alternative comply with all applicable laws, especially Act 451?

Evaluation Method

The three alternatives were evaluated through the use of a numerical ranking system. For each of the evaluation factors described above, a numerical score was assigned to each alternative using the following scoring system

- 3 High positive impact superior benefits
- 2 Moderate positive impact
- 1 Slight positive impact
- 0 Very little or no impact
- 1 Slight negative impact
- 2 Moderate negative impact
- 3 Major negative impact

Once a score was assigned for each factor, the results were added to obtain a total score for each alternative. The alternative with the highest total score should be the committee's preferred option.

Separate plan evaluations were conducted for the 5-year and 10-year periods. In some cases, the evaluations will probably be the same. In other cases, however, different 5-year and I0-year rankings might be assigned to an alternative. For example, access to land for solid waste facilities might be more critical for the I0-year period as the County becomes more populated and developed. Also, some solid waste facilities might not create major environmental impacts over the next 5 years, but their operation over time might generate long-term (i.e., 10 years and beyond) impacts.

Based on this evaluation process, the SWMPC's selected management system is Alternative B, Enhanced Materials Recovery. Further details on the evaluation process and the non-selected alternatives are provided in Appendix B.

SELECTED 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 B. Following is an overall description of the Selected System:

The Selected System calls for the continuation of the present system of transporting solid waste that is generated in Tuscola County to licensed landfills in adjacent counties for disposal. Under the selected plan, the current free market system for the collection and transportation of solid waste will remain in effect. However, measures will be taken to encourage the municipalities within the county to contract for solid waste collection services on a community-wide basis.

The major focus of the selected alternative is on enhanced recovery of materials from the solid waste stream through recycling and composting efforts. Tuscola County Recycling will continue to operate a county materials recovery facility (MRF). Recycling components of this plan include:

- a. Continuation of efforts by Tuscola County Recycling: collection of office paper, glass, plastic, newsprint, steel cans, and aluminum.
- b. Additional collection of new materials: magazines
- c. Efforts to target recycling at businesses, industries, and multi-family housing.
- d. Promote the establishment of a re-use center: excess, leftover, and scrap materials.
- e. Establish a "pay as you throw" (PAYT) program on a trial basis.
- f. Encourage waste reduction efforts by businesses and industries in the county.
- g. Continued scrap tire collection program (with financial assistance through Mosquito Control). Enhanced composting of yard wastes is also a major element of the selected system. Efforts will include:
 - a. Continued promotion of home composting through information education
 - b. Encourage the establishment of municipal composting operations in the larger communities

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

IMPORTING	EXPORTING	FACILITY	AUTHORIZED	AUTHORIZED	AUTHORIZED
COUNTY	COUNTY	$NAME^1$	QUANTITY/	QUANTITY/	
CONDITIONS ²					

DAILY ANNUAL

<u>Tuscola</u> <u>None</u>

III 1

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

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

SELECTED SYSTEM

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

IMPORTING AUTHORIZED	EXPORTING	FACILITY	AUTHORIZED	AUTHORIZED		
COUNTY	COUNTY	NAME ¹	QUANTITY/	QUANTITY/		
CONDITIONS ²			DAILY	ANNUAL		
<u>Tuscola</u>	<u>Huron</u>					*
<u>Tuscola</u>	Sanilac					*
<u>Tuscola</u>	<u>Lapeer</u>					*
<u>Tuscola</u>	<u>Saginaw</u>					*
<u>Tuscola</u>	Genesee				*	
<u>Tuscola</u>	<u>Bay</u>					*

 $[\]square$ Additional authorizations and the above information for those authorizations are listed on an attached page.

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

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

EXPORT AUTHORIZATION

Table 2-A

CURRENT EXPORT VOLUME AUTHORIZATION OF SOLID WASTE

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 2-A.

EXPORTING	IMPORTING	FACILITY	AUTHORIZED	AUTHORIZED	AUTHORIZED
COUNTY	COUNTY	NAME ¹	QUANTITY/	QUANTITY/	CONDITIONS ²
			DAILY	ANNUAL	
<u>Tuscola</u>	<u>Huron</u>				*
<u>Tuscola</u>	Sanilac				*
<u>Tuscola</u>	<u>Lapeer</u>				*
<u>Tuscola</u>	<u>Saginaw</u>		<u>160TPD</u>		*
<u>Tuscola</u>	<u>Genesee</u>				*
<u>Tuscola</u>	<u>Bay</u>				*
<u>Tuscola</u>	<u>Macomb</u>			15,000 cyds	*

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

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

EXPORTING	IMPORTING	FACILITY	AUTHORIZED	AUTHORIZED	AUTHORIZED
COUNTY	COUNTY	$NAME^1$	QUANTITY/	QUANTITY/	CONDITIONS ²
			DAILY	ANNUAL	
Tuscola	Lapeer				*
					_

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

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

 $^{^2}$ Authorization indicated by P = Primary Disposal; C = Contingency Disposal; * = Other conditions exist and detailed explanation is included in the Attachment Section.

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

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

SELECTED SYSTEM

SOLID WASTE DISPOSAL AREAS

The following identifies the names of existing disposal area 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 _____ through ____ 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 for 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: Type A Transfer Facility:

Cove Landfill (Huron County)

None

Brent Run Landfill (Genesee County)

Citizen's Disposal Landfill (Genesee County)

Tri-City Recycling & Disposal Facility (Sanilac County)

People's Garbage Disposal Landfill (Saginaw County)

Whitefeather Landfill (Bay County)

Pine Tree Acres Landfill (Macomb County)

Type B Transfer Facility

Several – see tables on page ?

Type III Landfill: Processing Plant:

None None

Incinerator: Waste Piles:

None None Waste-to-Energy Incinerator: Other:

None

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

III-4

SELECTED SYSTEM

SOLID WASTE DISPOSAL AREAS

The following identifies the names of existing disposal area which capacity and management needs for the solid waste generated with and if possible, the next ten years. Pages through concentrated disposal facilities which are located within the County and the disposal facilities which are located within the County and the disposal facilities which are located within the County and the disposal facilities which are located within the County and the disposal facilities are into this Plan, and become available for disposal. If this Plan upofacilities in other counties outside the County, those facilities may authorized in the receiving County's Plan. Facilities outside of Navailable for such use.	ontain descriptions of the solid waste isposal facilities located outside of the riod. Additional facilities within the hey are sited by this Plan, or amended date is amended to identify additional by only be used if such import is				
Type II Landfill:	Type A Transfer Facility:				
Huron County Landfill (Huron County)	None				
Brent Run Landfill (Genesee County)					
Citizen's Disposal Landfill (Genesee County)					
Tri-City Recycling & Disposal Facility (Sanilac County)					
People's Garbage Disposal Landfill (Saginaw County)					
Whitefeather Landfill (Bay County)					
	Type B Transfer Facility				
Type III Landfill:	Processing Plant:				
None	None				
<u>Incinerator:</u>	Waste Piles:				
None None					
Waste-to-Energy Incinerator:	Other:				
None					

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

SELECTED SYSTEM CONT...

Facility Type: Type II I	Landfill		
Facility Name: Huron C	County Landfill, Inc.		
County: Huron	Location: Township:	Range:	Section(s):
Map identifying location	n included in Attachmer	nt Section: X	_Yes No
If facility is an Incineral or Transfer Station was		, list the final dis	sposal site and location for Incinerator ash
PublicXPriv	vate Owner:		
Operating Status (check X open closed X licensed unlicensed X construction perm open, but closure *Explanation of special Site Size: Total area of facility pro Total area permitted: Operating: Not excavated:	nit pending wastes, including a spe operty:	X X X X X	other
Current capacity: Estimated lifetime: Estimated days open pe Estimated yearly dispos	•	=	years days tons or X yds 3 years years years years years
(if applicable) Annual energy producti Landfill gas recovery Waste-to-energy incir	projects:	=	megawatts megawatts

Facility Type: Type II I	Landfill		
Facility Name:			
County:	Location: Township:	Range:	Section(s):
Map identifying location	n included in Attachmer	nt Section: <u>X</u>	Yes No
If facility is an Incinera or Transfer Station was		, list the final di	isposal site and location for Incinerator ash
PublicXPriv	vate Owner:		
Operating Status (check X open closed X licensed unlicensed X construction perm open, but closure step state size: Total area of facility pro Total area sited for use: Total area permitted: Operating: Not excavated:	nit pending wastes, including a spe operty:	X X X X X	other
Current capacity: Estimated lifetime: Estimated days open pe Estimated yearly dispos		<u>-</u>	Tons or <u>X</u> yds ³ years days tons or <u>X</u> yds ³
(if applicable) Annual energy producti Landfill gas recovery Waste-to-energy incir	projects:		megawatts megawatts

Facility Type: Type II I	Landfill			
Facility Name:				
County:	Location: Township:	Range:	S	ection(s):
Map identifying locatio	n included in Attachmer	nt Section:	<u>X</u> Y	es No
If facility is an Incinera or Transfer Station was		, list the fina	l dispo	sal site and location for Incinerator ash
PublicXPriv	vate Owner:			
Operating Status (check X open closed X licensed unlicensed X construction pern open, but closure *Explanation of special Site Size: Total area of facility pro Total area sited for use: Total area permitted: Operating: Not excavated:	nit pending wastes, including a spe operty:	X X X X X	re con con aa	pes Received (check all that apply) esidential commercial industrial construction & demolition contaminated soils pecial wastes* ther ditions cres cres cres cres cres cres cres cr
Current capacity: Estimated lifetime: Estimated days open pe Estimated yearly dispos			y d	
(if applicable) Annual energy producti Landfill gas recovery Waste-to-energy incir	projects:			negawatts negawatts

Facility Type: Type II I	Landfill				
Facility Name:					
County:	Location: Township:	Range:		Section	(s):
Map identifying location	n included in Attachmen	t Section:	_X_	_Yes	No
If facility is an Incineral or Transfer Station was		, list the fir	nal dis	posal site	e and location for Incinerator ash
PublicXPriv	vate Owner:				
Operating Status (check X open closed X licensed unlicensed X construction perm open, but closure part Site Size: Total area of facility pro Total area sited for use: Total area permitted: Operating: Not excavated:	nit pending wastes, including a spec operty:	- - - - -	X X X X X	resident comme industri construct contame special other	rcial al ction & demolition inated soils wastes*
Current capacity: Estimated lifetime: Estimated days open pe Estimated yearly dispos	•	- - -		years dayston	Tons or X yds ³ as or X yds ³
(if applicable) Annual energy producti Landfill gas recovery Waste-to-energy incir	projects:	- -		megawa megawa	

SELECTED SYSTEM

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.

The existing collection and transportation system, as previously described, will remain in place. The various solid waste collection and transportation firms doing business in the county may change due to municipal contracts, mergers, and other factors.

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 updates 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.				
	Current	5th yr	10th yr		
Waste reduction education efforts aimed at businesses & Industries					
Waste reduction education efforts aimed at general public					
Investigate the feasibility of establishing a reuse center					
Projected waste reduction through combined efforts (all the above)					

Additional	efforts a	ınd the a	ibove in	tormation	tor t	hose e	efforts	are I	listed	on an	attach	ned	pag	e.

SELECTED SYSTEM

WASTE REDUCTION, RECYCLING, & COMPOSTING PROGRAMS:

Volume Reduction Techniques

The following describes the techniques utilized and proposed to be used throughout the County which reduces the volume of solid waste requiring disposal. The annual amount of landfill air space not used as a result of each of these techniques is estimated. Since volume reduction is practiced voluntarily and because technologies change and equipment may need replacing, it is not the Plan updates 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 Sp	ace Conser	ved Yds ³ /Yr
	Current	5th yr	10th yr
Efforts mainly limited to techniques practiced by private solid			
waste industry & recycling program operators: compacting,			
baling, shredding, and so forth			

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

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.

The Tuscola County Recycling Program provides recycling opportunities to all county residents through the operation of 10 drop-off sites located strategically throughout the county and a centrally located Materials Recovery Facility (MRF). Private solid waste haulers that furnish collection of recyclables also deliver materials to the MRF. Materials accepted are newspapers, office paper, corrugated, aluminum, steel cans, #1 and #2 plastic, clear, green and brown glass, and polystyrene.. Approximately 631 tons of materials were recycled in 1997. The program's goal is to achieve recycling of 25% of the county's solid waste stream. The County Recycling Program will be continued and enhanced where possible under the update Solid Waste Plan.

III 10

Composting in the county is largely practiced voluntarily by residents at their homes. Yard waste collection is provided by some private haulers and municipalities. Under the updated plan, home composting by residents will continue to be encouraged through education efforts.. Also, municipalities will be encouraged to establish composting programs where they are best suited to the needs of residents.. These may include municipality-sponsored programs, services furnished by the private sector, or some combination.

Current programs for separation of potentially hazardous materials are mainly limited to used motor oil collection at several locations. Also, some local scrap dealers accept automotive batteries, appliances, and white goods.

<u>X</u> 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.

<u>X</u> 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:

 \underline{X} Programs for source separation of potentially hazardous materials are feasible and details are included on the following pages.

__ Separation of potentially hazardous materials from the County's waste stream has been evaluated and it has been determined that it is not feasible to conduct any separation 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, Tables III-I, ID-2, & III-3 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. Tables III-4, III-5, & III-6 then 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.

As previously indicated, Tuscola County has an established and successful recycling program in place. This program will be continued and enhanced as needs and opportunities dictate.. Composting is currently practiced as home composting by residents and through collection of yard wastes by private haulers and some municipalities. These practices will continue and will be encouraged through educations efforts under the updated plan. Also, municipalities will be encouraged to establish local composting sites according to needs and interest levels.

RECYCLING:

Program Name	Service Area ¹	Public or <u>Private</u>	Collection Point ³	Collection Frequency ⁴		Program Mana Development	C	1
Tuscola County	Tuscola County	<u>Public</u>	MRF	<u>d</u>	<u>ABCDE</u>	<u>6</u>	<u>6</u>	<u>6</u>
Additional prog	rams and the above info	ormation for	those progra	ms are listed o	n an attache	d page		

TABLE III – 2 COMPOSTING:

Program Name	Service Area ¹	Public or Private	Collection Point ³			Program Mana Development		
Tuscola County	Tuscola County							
Home composting & some								
Municipal yard waste	e collection							
Only. No formal programs at this time.								
Additional programs and the above information for those programs are listed on an attached page								

¹ Identified by where the program will be offered. If 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 ~tnsa me and respective county.

¹ Identified by where the program will be offered. If 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.

² Identified by 1= Designated Planning Agency; 2 = County Board of Commissioners: 3 = Department of Public Works; 4 = Environmental Group (Identified on page 28); 5 = Private Owner/Operator; 6 = Other (Identified on page 28).

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 mate 1 ials collected by listing of the letter located by that material type. A= Plastics; B = Newspaper; C = Corrugated Containers; D = Other Paper; E = Glass; F = Metals; P = Pallets; J = Construction/Demolition; K = Tires; LI, L2 etc. = as identified on page 29,

² Identified by 1 = Designated Planning Agency; 2 = County Board of Commissioners; 3 = Department of Public Works; 4 = Environmental Group (Identified onpage 27); 5 = Private OwnerQerator; 6 = Other (Identified on page 27).

³ Identified by $c = curbs \sim de; d = drop-off; o = onsite;$ and if other, explained.

⁴ Identified by d = daily; tv = 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 WastefBedding; M = Mumcipal Solid Waste; Ll, L2 etc. = as identified on page 29

SOURCE SEPARATION OF POTENTIALLY HAZARDOUS MATERIALS:

Since improper disposal of nonregulated hazardous materials has the potential to create risks to the environment and human health, the following programs have been implemented to remove these materials from the County's solid waste stream.

Program Name	Service Area ¹	Public or Private	Collection Point ³	Collection Frequency ⁴		Program Mana Development		
Tuscola County	Tuscola County							
Michigan Recycling	Tuscola County	Priv	0	d	A	5	5	5
Riverside Auto	Tuscola County	Priv	0	d	Bl	5	5	5
Fairgrove Oil Co.	Tuscola County	Priv	0	d	U	5	5	5
Farmers ¹ Petroleum	Tuscola County	Priv	0	d	U	5	5	5
TSC Store	Tuscola County	Priv	0	d	U	5	5	5
Additional progr	ams and the above info	ormation for	r those progra	ms are listed of	n an attache	d page		

¹ Identified by where the program will be offered. If 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 ~tnsa me and respective county.

² Identified by 1 = Designated Planning Agency; 2 = County Board of Commissioners; 3 = Department of Public Works; 4 = Environmental Group (Identified onpage 27); 5 = Private Owner Qerator; 6 = Other (Identified on page 27).

³ Identified by $c = \text{curbs} \sim \text{de}; d = \text{drop-off}; o = \text{onsite};$ and if other, explained.

⁴ Identified by d = daily; tv = 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. AR = Aerosol Cans; A = Automotive Products except Used Oil, Oil Filters & Antifreeze; AN = Antifreeze; B 1 = Lead Acid Battenes; B2 = Household Batteries; C = Cleaners and Polishers; H = Hobby and Art Supplies; OF = Used Oil Filters; P = Paints and Solvents; PS = Pesticides and Herbicides; PH = Personal and Health Care Products; U = Used Oil; OT = Other Materials and identified.

PROPOSED RECYCLING:

Program Name	Service Area ¹	Public or	Collection	Collection	Materials	Program Mana	gement Res	ponsibilities ²
		<u>Private</u>	Point ³	Frequency ⁴	Collected ⁵	Development	Operation	Evaluation
Tuscola County	Tuscola County							
Continuation & enha	ncement of							
Program								
Additional progr	ams and the above info	ormation for	those progra	ms are listed o	n an attache	d page		

TABLE III - 5

PROPOSED COMPOSTING:

Program Name	Service Area ¹	Public or Private	Collection Point ³	Collection Frequency ⁴		Program Mana Development			
Promotion of home composting									
& municipal compos	sting sites								
As desired.									
Additional programs and the above information for those programs are listed on an attached page									
As desired.	Ü	ormation for	those progra	ams are listed o	on an attache	d page			

¹ Identified by where the program will be offered. If 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.

III-14

¹ Identified by where the program will be offered. If 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.

² Identified by 1= Designated Planning Agency; 2 = County Board of Commissioners: 3 = Department of Public Works; 4 = Environmental Group (Identified on page 28); 5 = Private Owner/Operator; 6 = Other (Identified on page 28).

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 mate 1 ials collected by listing of the letter located by that material type. A= Plastics; B =Newspaper; C =Corrugated Containers; D =Other Paper; E = Glass; F = Metals; P = Pallets; J = Construction/Demolition; K = Tires; LI, L2 etc. = as identified on page 29,

² Identified by 1= Designated Planning Agency; 2 = County Board of Commissioners: 3 = Department of Public Works; 4 = Environmental Group (Identified on page 28); 5 = Private Owner/Operator; 6 = Other (Identified on page 28).

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; Fa = Fall

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; Ll, L2 etc. = as identified on page 29

PROPOSED SOURCE SEPARATION OF POTENTIALLY HAZARDOUS MATERIALS:

Program Name Service Area ¹	Public or <u>Private</u>	Collection Point ³	Collection Frequency ⁴		Program Mana Development		
Promotion of home composting						 	
& municipal composting sites						 	
As desired.						 	
Additional programs and the abo	ve information for	r those progra	ams are listed o	n an attache	ed page		

5 Identified by the materials collected by listing of the letter located by that material type. AR = Aerosol Cans; A = Automotive Products except Used Oil, Oil Filters & Antifreeze; AN = Antifreeze; B 1 = Lead Acid Battenes; B2 = Household Batteries; C = Cleaners and Polishers; H = Hobby and Art Supplies; OF = Used Oil Filters; P = Paints and Solvents; PS = Pesticides and Herbicides; PH = Personal and Health Care Products; U = Used Oil; OT = Other Materials and identified.

INDENTIFICATION 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:

None with program management responsibilities

Other:

¹ Identified by where the program will be offered. If 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.

² Identified by 1= Designated Planning Agency; 2 = County Board of Commissioners: 3 = Department of Public Works; 4 = Environmental Group (Identified on page 28); 5 = Private Owner/Operator; 6 = Other (Identified on page 28).

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.

Tuscola County has the management responsibility for its countywide recycling program, as described elsewhere in this document. Day-to-day operations are managed by the County Recycling Coordinator.

SELECTED SYSTEM

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.

Collected Material:	Projected Annual Tons Diverted			Collected Material	Projected Annual Tons Diverted:				
	Current	5 th Yr.	10 th Yr.		Current	5 th Yr.	10 th Yr.		
A. TOTAL PLASTICS:				G. GRASS & LEAVES					
B. NEWSPAPER:				H. TOTAL WOOD WAS	ГЕ:				
C. CORRUGATED				I. CONSTRUCTION ANI)				
CONTAINERS:				DEMOLITION:					
D. TOTAL OTHER				J. FOOD AND FOOD					
PAPER:				PROCESSING:					
E. TOTAL GLASS:				K. TIRES					
F. OTHER MATERIALS				L. TOTAL METALS:					
F1				F.3					
F.2				F.4					

MARKET AVAILABLILITY 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.

Collected Material:	<u>Instate</u>	Out-of-State	Collected Material	<u>Instate</u>	Our-of-
	Markets	<u>Markets</u>		<u>Markets</u>	Markets
A. TOTAL PLASTICS:			G. GRASS & LEAVES		
B. NEWSPAPER:			H. TOTAL WOOD WASTE	E:	
C. CORRUGATED			I. CONSTRUCTION AND		
CONTAINERS:			DEMOLITION:		
D. TOTAL OTHER			J. FOOD AND FOOD		
PAPER:			PROCESSING:		
E. TOTAL GLASS:			K. TIRES		
F. OTHER MATERIALS			L. TOTAL METALS:		
F1			F.3		
F.2			F.4		

SELECTED SYSTEM

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.

Program Topic ¹	Delivery Medium ²	Targeted Audience ³	Program Provider ⁴
1	<u>r n f o t</u>	<u>pbis</u>	O = County Recycling Coordinator
2	<u>r n f o t</u>	<u>pbis</u>	<u>O</u>
<u>3</u>	<u>r n f o t</u>	<u>pbis</u>	<u>O</u>
<u>4</u>	<u>r n f o t</u>	<u>p b i s</u>	<u>O</u>
	ot = Internet web site		

- 1 Identified by 1 = recycling; 2 = composting; 3 = household hazardous waste; 4 = resource conservation; 5 = volume reduction: 6 = other which is explained
- 2 Identified by $\mathbf{w} = \text{workshop}$; $\mathbf{r} = \text{radio}$; $\mathbf{t} = \text{television}$; $\mathbf{n} = \text{newspaper}$; $\mathbf{o} = \text{organizational newsletters}$; $\mathbf{f} = \text{flyers}$; $\mathbf{e} = \text{exhibits}$ and locations listed; and $\mathbf{ot} = \text{other which is explained}$
- 3 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
- 4 Identified by EX = MSU Extension; EG = Environmental Group (Identify name); 00 = 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); θ = 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 <u>Timeline gives</u> 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
1. Establish Solid Waste Management Advisory Board	1999
2. Expand recycling program to collect additional materials as feasible	Ongoing
3. Conduct trial 'pay as you throw' program in a selected community	1999 – 2000
4. Promote home and municipal composting	Ongoing
5. Promote commercial & industrial recycling capabilities	Ongoing
6. Promote resource conservation & waste reduction efforts	Ongoing
7. Develop model procurement guidelines to encourage purchase of recycled products by county & local governments, and major institutions.	2000 – 2001
8. Investigate feasibility of establishing a county re-use center	2002 – 2003
9. Continue operation of County MRF & Recycling Program	Ongoing
10. Review implementation progress & make adjustments as necessary	Annual: 2000 – 2004

SITING REVIEW PROCEDURES

AUTHORIZED DISPOSAL AREA TYPES

The following solid waste disposal area types may not be sited by this Plan. Any proposal to construct a facility listed herein shall be deemed inconsistent with this Plan.

None are prohibited.

SITING CRITERIA AND PROCESS

The following process describes the criteria and procedures to be used to site solid waste disposal facilities and determine consistency with this Plan. (Attach additional pages if necessary)

None are prohibited

SITING CRITERIA AND PROCESS

The following process describes the criteria and procedures to be used to site solid waste disposal facilities and determine consistency with this Plan. (Attach additional pages if necessary)

See attached siting process for Tuscola County.

TUSCOLA SWMP UPDATE: SITING PROCESS

SITING CRITERIA FOR NEW SOLID WASTE DISPOSAL FACILITIES IN TUSCOLA COUNTY

This section presents Tuscola County's siting criteria for solid waste disposal facilities and explains the process for evaluating proposed sites for consistency with the Solid Waste Management Plan. The criteria are designed to ensure that County solid waste management goals and objectives are achieved. In developing these criteria, several major factors have been considered.

- 1. The County prefers that the private sector continue to provide solid waste disposal services to all residents in a manner that satisfies adopted regulatory standards. In this regard, the criteria are intended to be used by the private sector as a guide to identifying potentially suitable sites for needed disposal facilities. However, the County does intend to retain the option of developing a landfill should conditions dictate the need for such an action.
- 2. The criteria are intended to provide a reasonable, objective basis of evaluating potential sites so that needed facilities can be developed in a manner that will minimize negative environmental impacts and community disruptions.
- 3. The criteria are intended to avoid arbitrary of discriminatory actions that would prevent the establishment of needed facilities. Instead, the siting process is designed to ensure that valid local concerns and special local resources are adequately considered.
- 4. The criteria do not eliminate the need for site-specific investigations, hydrogeological studies, and engineering plans that must be approved by the Michigan Department of Environmental Quality (DEQ).

Some of Tuscola County's siting criteria are specified in Part 115 of Act 451. Other criteria relate to local concerns and special resources of Tuscola County. The criteria are divided into two categories primary criteria and secondary criteria. *Primary criteria* represent minimum requirements and cannot be compromised. *Secondary criteria* require a technical review process before a recommendation on a particular site can be made. The review process is explained later, following descriptions of the *intent* and *nature* of the criteria used.

1. Minimum Isolation Distances

- a. The active work area for new sanitary landfills or expansions to existing sanitary landfills shall not be located closer than 100 feet to adjacent road rights-of-way, adjacent property lines, lakes, and perennial streams.
- b. The active work area for new sanitary landfills or expansions to existing sanitary landfills shall not be located closer than 800 feet to domiciles existing at the time of submission of the application.
- c. A sanitary landfill shall not be located within 10,000 feet of a licensed airport runway.

2. Floodplains and Wetlands

- a. A facility shall not be located in a 100 year floodplain as defined by Rule 323.311 of the administrative rules of Part 31, Water Resources Protection, of Act 451
- b. A facility shall not be located in a wetland regulated by Part 303, Wetlands Protection, of Act 451, unless a permit is issued.

3. Lands Enrolled for Farmland or Open Space Preservation

a. A facility shall not be located on lands enrolled in Part 361, Farmland and Open Space Preservation, of Act 451.

Tuscola SWMP Update - Siting Process cont...

4. Environmental Areas

a. a facility shall not be located in an environmental area as defined in Part 323, Shorelands Protection and Management, of Act 451, or in areas of unique habitat as defined by the Department of Natural Resources, Natural Features Inventory.

5. Historic and Archaeological Areas

a. The site shall not be located in a designated historic or archaeological area as defined by the State Historic Preservation Officer (SHPO).

Return to Amendment Letter

6. **Groundwater Recharge and Wellhead Protection**

a. The site 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 approved by the Michigan Department of Environmental Quality

7. Public Lands

- a. A facility shall not be located or permitted to expand on land owned by the United States of America or the State of Michigan. Disposal area may be located on state land only if both of the following conditions are met:
 - i. Thorough investigation and evaluation of the proposed site by the facility developer indicates, to the satisfaction of the MDEQ, that the site is suitable for such use.
 - ii. The state determines that the land may be released by disposal area purposes and the facility developer acquires the property in fee title from the state in accordance with state requirements for such acquisition.

8. Maximum Number of Operating Sanitary Landfills

- a. Only one Type II landfill facility will be allowed to operate in Tuscola County at any given time unless the County has less than 10 years of disposal capacity available under the Plan. Additional disposal facilities may be sited until such time that the aggregate capacity for Tuscola County of all available primary disposal facilities is 10 years or more. At the time a new site is proposed, remaining capacity shall be determined by the quantity of solid waste that is accepted under normal conditions from the service area identified in the Solid Waste Management Plan
- b. The condition described in 8a shall not apply if a landfill with remaining capacity permanently ceases operation for any reason

Secondary Siting Criteria

As previously mentioned, the secondary criteria provide additional standards for evaluating potential landfill sites. The secondary criteria are designed to be used in a site evaluation matrix as a means of objectively evaluating a proposed site. The siting matrix is used to measure how well a potential site meets each of the established criteria. This method involves assigning point values to a proposed site for each of the criteria. The result of this process is a total score for the site. The matrix and scoring system are explained in greater detail later in this section. First, the secondary siting criteria are described in general below.

1. Natural Site Characteristics

Act 451 and its Rules provide for the use of natural soils in conjunction with synthetic liners for the construction of sanitary landfills if the site meets certain requirements regarding soil type, permeability, and isolation from groundwater. Sites with natural soils that may be used to meet the Act 451 requirements will have lower construction and operating costs. Therefore, the use of natural soil sites is encouraged. In the evaluation system, sites with the potential to be developed using natural soils will be assigned higher point values than sites that lack this potential.

Tuscola SWMP Update – Siting Process cont....

9. Environmental Areas

a. a facility shall not be located in an environmental area as defined in Part 323, Shorelands Protection and Management, of Act 451, or in areas of unique habitat as defined by the Department of Natural Resources, Natural Features Inventory.

10. Historic and Archaeological Areas

a. The site shall not be located in a designated historic or archaeological area as defined by the State Historic Preservation Officer (SHPO).

11. Groundwater Recharge and Wellhead Protection

a. The proposed facility shall not be located in an area of groundwater recharge as defined by the most current available map from the United States Geological Survey or in a wellhead protection area, as defined by the Michigan Department of Environmental Quality.

12. Public Lands

- a. A facility shall not be located or permitted to expand on land owned by the United States of America or the State of Michigan. Disposal area may be located on state land only if both of the following conditions are met:
 - i. Thorough investigation and evaluation of the proposed site by the facility developer indicates, to the satisfaction of the MDEQ, that the site is suitable for such use.
 - ii. The state determines that the land may be released by disposal area purposes and the facility developer acquires the property in fee title from the state in accordance with state requirements for such acquisition.

13. Maximum Number of Operating Sanitary Landfills

- a. Only one Type II landfill facility will be allowed to operate in Tuscola County at any given time unless the County has less than 10 years of disposal capacity available under the Plan. Additional disposal facilities may be sited until such time that the aggregate capacity for Tuscola County of all available primary disposal facilities is 10 years or more. At the time a new site is proposed, remaining capacity shall be determined by the quantity of solid waste that is accepted under normal conditions from the service area identified in the Solid Waste Management Plan
- b. The condition described in 8a shall not apply if a landfill with remaining capacity permanently ceases operation for any reason

Secondary Siting Criteria

As previously mentioned, the secondary criteria provide additional standards for evaluating potential landfill sites. The secondary criteria are designed to be used in a site evaluation matrix as a means of objectively evaluating a proposed site. The siting matrix is used to measure how well a potential site meets each of the established criteria. This method involves assigning point values to a proposed site for each of the criteria. The result of this process is a total score for the site. The matrix and scoring system are explained in greater detail later in this section. First, the secondary siting criteria are described in general below.

2. Natural Site Characteristics

Act 451 and its Rules provide for the use of natural soils in conjunction with synthetic liners for the construction of sanitary landfills if the site meets certain requirements regarding soil type, permeability, and isolation from groundwater. Sites with natural soils that may be used to meet the Act 451 requirements will have lower construction and operating costs. Therefore, the use of natural soil sites is encouraged. In the evaluation system, sites with the potential to be developed using natural soils will be assigned higher point values than sites that lack this potential.

III-20a

2. Accessibility

A potential site will ideally have direct access to an all-weather road of sufficient capacity and suitable condition to accommodate heavy truck traffic generated at the site. Sites lacking direct access will be assigned lower point values based on the particular conditions and the amount of road upgrading expected to be necessary.

3. Isolation from Residential Development

Potential landfill sites should be in areas which allow the establishment of substantial buffer zones between the proposed landfill and adjacent properties and residential dwellings. Minimum isolation distance, as specified in Act 451, has been established in the primary siting criteria. The secondary criteria go further in encouraging the maximum degree of isolation possible. Point values will be assigned based on the number of dwelling units within a one mile radius of the proposed site.

4. Proposed Disposal Capacity

An ideal site will provide sufficient capacity to meet the disposal needs of the county for the next 10 years, according to the projected disposal capacity requirements described in the County Solid Waste Management Plan. If importation of solid waste from additional counties is authorized in the plan, the required disposal area will increase accordingly.

5. Isolation of Water Supplies

Ideally, available data will indicate that a proposed site will provide excellent isolation from public and private water supplies.

6. Future Land Use

Local land use plans play an important role in the orderly development of a community. Whenever possible, a proposed landfill site should conform to the future land uses of the area identified in county and/or local plans. Landfills are intensive land uses which require fairly large acreages. Therefore, the county finds that the most appropriate areas for proposed landfills are in areas planned for agricultural or industrial land uses.

7. Local Ordinances

An applicant for a permit to construct a solid waste facility must comply with all local ordinances and rules, provided they are not inconflict or inconsistent with Act 451 or the County Solid Waste Management Plan. Where local ordinances or rules are found to be in conflict or inconsistent with Act 451 or this Plan, they shall not be considered enforceable. Solid waste facilities may only be sited on property that is zoned agricultural, commercial, industrial, or other designation that specifically permits such facilities at the time the facility developer applies for a determination of consistency under the Plan. Facilities may be located on property that is not zoned (i.e., no zoning regulations are in place), but they may not be located on property that is zoned residential.

Site Evaluation Matrix

As previously mentioned, a site evaluation method has been developed to provide an objective means of evaluating any propos d landfill site. The evaluation matrix uses the secondary siting criteria. Each of the secondary criteria has been assigned an importance value ranging from one to five, with five being the most important.

This is based on the concept that the criteria are not equally important, and that the criteria that have the greatest potential impacts on the community should receive the highest importance value.

For each criterion, a proposed site is assigned a point value according to the parameters described in the matrix. These parameters are intended to measure how well a site meets each of the criteria. Possible point values range from one to ten, with ten being the highest rating. The point value is then multiplied by the importance value for the criterion under consideration to obtain a score for the site. After evaluating the site for each of the criteria, a total score is obtained for the sit

The criteria, there importance values and the total points possible are shown as follows:

	Importance	Possible
<u>Criteria</u>	<u>Value</u>	Points Points
Natural Site Characteristics	5	50
Accessibility	3	30
Isolation from Residences	5	50
Capacity	4	40
Isolation of Water Supplies	5	50
Future Land Use	2	20
Local Ordinances	3	30

The site and assignment of point values are shown below:

Site Evaluation Matrix

Siting Criteria (Importance Values)	7 10 Points 1. 1	Parameters 4 — 6 Points	0 = 3 points
Natural Site Characteristics (5)	Data indicate that the site will meetAct451 requirements for use of natural soils.	Data indicate that site will meet most Act 451 requirements for natural soils.	Data unavailable or data indicate that site will not meet Act 451 requirements for natural soils.
Accessibility (3)	Site has direct access to an all-weather road that can accommodate traffic generated by the site.	Site is close to an allweather road $(1 - 3 \text{ miles to road})$.	Site does not have direct access (over 3 miles to road)
Residential Isolation (5)	Less than 10dwelling units within a one mile radius of the site.	Less than 50 dwelling units within a one mile radius of the site.	More than 50 dwelling units within a one mile radius of the site.
Site Capacity (4)	Site will provide more than 10 years of disposal	Site will provide from 66 months to 10 years of	Site will provide less than 66 months of disposal
Water Supply Isolation (5)	Data indicate site is over 5,000 feet from public & private water supplies	Data indicate that site is from 2,000 to 5,000 feet from public & private water supplies.	Insufficient data or data indicates major concerns with adequate isolation (less than 2,000.
Future Land Use (2)	Entire site is planned for agricultural or industrial uses.	Half or more of the site is planned for agricultural or industrial uses.	Less than half of the site is planned for agricultural or industrial uses.
Local Zoning (3)	Entire site is zoned for agricultural or industrial uses.	Half or more of the site is zoned for agricultural or industrial uses.	Less than half of the site is zoned for agricultural or industrial uses.

For each criterion, a proposed site is assigned a point value according to the parameters described in the matrix. These parameters are intended to measure how well a site meets each of the criteria. Possible point values range from one to ten, with ten being the highest rating. The point value is then multiplied by the importance value for the criterion under consideration to obtain a score for the site. After evaluating the site for each of the criteria, a total score is obtained for the site.

The criteria, there importance values and the total points possible are shown as follows:

	Importance	Possible
<u>Criteria</u>	<u>Value</u>	Points
Natural Site Characteristics	5	50
Accessibility	3	30
Isolation from Residences	5	50
Capacity	4	40
Isolation of Water Supplies	5	50
Future Land Use	2	20
Local Ordinances	3	30

The site and assignment of point values are shown below:

Site Evaluation Matrix

Siting Criteria (Importance Values)	7 — 10 Points : 17	Parameters 4 — 6 Points	0 <u>3 points</u>
Natural Site Characteristics (5)	Data indicate that the site will meet all Act451 requirements for use of natural soils.	Data indicate that site will meet at least one, but not necessarily all Act 451 requirements for natural soils.	Data unavailable or data indicate that site will not meet Act 451 requirements for natural soils.
Accessibility (3)	Site has direct access to an all-weather road that can accommodate traffic generated by the site.	Site is close to an allweather road (1 – 3 miles to road).	Site does not have direct access (over 3 miles to road).
Residential Isolation (5)	Less than 10dwelling units within a one mile radius of the site.	Less than 50 dwelling units within a one mile radius of the site.	More than 50 dwelling units within a one mile radius of the site.
Site Capacity (4)	Site will provide more than 10 years of disposal	Site will provide from 66 months to 10 years of	Site will provide less than 66 months of disposal
Water Supply Isolation (5)	Data indicate site is over 5,000 feet from public & private water supplies.	Data indicate that site is from 2,000 to 5,000 feet from public & private water supplies.	Insufficient data or data indicates major concerns with adequate isolation (less than 2,000.
Future Land Use (2)	Entire site is planned for agricultural or industrial uses.	Half or more of the site is planned for agricultural or industrial uses.	Less than half of the site is planned for agricultural or industrial uses.
Local Zoning (3)	Entire site is zoned for agricultural or industrial uses.	Half or more of the site is zoned for agricultural or industrial uses.	Less than half of the site is zoned for agricultural or industrial uses.

Total Site Scores and Interpretation

Based on the matrix evaluation, the total scores for proposed sites should fall into three broad categories. These are shown below:

	HIGH	MEDIUM	LOW
TOTAL SCORE	189 - 270	108 - 162	0 - 81

For a site to be considered consistent with the County Solid Waste Management Plan, the site must receive a total score of at least 108 points. Also, a minimum of 60 of the total points must be received in combination from the evaluation for Natural Site Characteristics, Residential Isolation, and Water Supply Isolation.

Negotiations

Although neither Act 451 nor this siting review process requires negotiations to take place between a disposal facility owner/operator and the community, the act does not prohibit negotiations from taking place. The plan encourages the establishment of discussions between negotiations from taking place. The plan encourages the establishment of discussions between the county and/or host municipality and the owner/operator of a proposed disposal facility. The objective of such discussions will be the development of a mutual agreement with a private owner/operator to address areas of local concern that are not specifically addressed in Act 451 or local regulations.

As a starting point, the county, the host municipality, and the private owner/operator of a proposed disposal facility should jointly prepare a negotiation plan. The negotiation plan is to serve as an agenda for further discussion, outlining the points of negotiation to be considered. Recommended points of negotiation may include, but are not limited to, the following:

- 1. Facility design, including greenbelts, landscaping, screening, and fencing
- 2. Hours of operation
- 3. On-site access roads
- 4. Control of noise, litter; dust, odors, and vectors.
- 5. Operating records and reports
- 6. Security
- 7. Monitoring of wastes accepted and prohibited
- 8. Host community fees
- 9. Participation in recycling activities.

The owner/operators of solid waste disposal facilities should recognize the importance of negotiating with the county and/or municipality to ensure that local concerns are adequately addressed and that reasonable efforts are made to mitigate potential negative impacts

The Site Review Process

This section describes the review process for evaluating proposed disposal facility sites, identifies the bodies responsible for conducting the review, and specifies the information which must be submitted by the applicant:

1. Pre-Application Conference (Optional)

The applicant for a proposed disposal facility may request a pre-application conference with a representative of the designated solid waste planning agency to informally discuss the County Solid Waste Management Plan, the site review process, and other relevant matters. Such a conference is recommended, but not required.

2. MDEQ Advisory Analysis

Prior to submitting a proposed site to the county for review, the applicant shall request that an advisory analysis for the site be prepared by the Michigan Department of Environmental Quality, as specified in Act 45 1. The format of the request and required information will be specified by the district staff the DEQ Waste Management Division DEQ may not prepare an advisory analysis for all proposed sites.

3. Submission of Proposed Site for Formal Review

Following the preparation of the advisory analysis, any applicant wishing to proceed with the development of a disposal facility shall submit a written request for the county to conduct a formal review of the site to determine its consistency with the county Solid Waste Management Plan. The request shall be accompanied by an application package containing the following items.

- a. The DEQ advisory analysis, if available
- b. The names, addresses, and phone numbers of the applicant and any authorized representative
- c. A map of the site with the following information
 - i. A scale of not less than one inch equals 100 feet
 - ii. Date, north point, and scale
- iii. The dimensions of all lot and property lines for the subject property and all adjacent parcels
- iv. The location of all existing structures on the subject property
- v. The location of all existing access roads
- vi. The location and right-of-way widths of all abutting roads
- vii. Proposed boundaries of solid waste disposal areas
- d. The locations of all residential dwellings ... radius of the site
- e. The locations of all public and private ... 2,000 foot radius of the site
- f. The estimated capacity of the site ...
- g. A non-refundable application fee ... by the County Board of Commissioners prior to ... The fee shall be in reasonable relation to the County's ...

4. Responsibilities for Conducting Review

The body responsible for reviewing any proposed disposal site for plan consistency shall be the Tuscola County Designated Solid Waste Planning Agency (DPA) To assist the DPA in its review, a technical review committee (TRC) shall be established consisting of the following persons or agency representatives.

- a. The County Road Commission Engineer
- b. The County and/or municipal Zoning Administrator
- c. The County Soil Erosion and Sedimentation Control Agency
- d. The Regional Solid Waste Planning Agency
- e. The local health department
- f. The County Drain Commission

The TRC shall conduct an evaluation of the proposed site using the site evaluation matrix and methods described elsewhere in this section. The site will be evaluated to determine its ability to satisfy the criteria. A site that satisfies a particular criterion to the maximum extent will receive the maximum point value of 10 for that criterion. This process will continue until a proposed site has been evaluated for all listed criteria. The individual point values assigned for each criterion shall then be multiplied by that criterion's importance value to obtain a final value for each criterion. The final values for all criteria will then be added to obtain a total value for the site. A determination of consistency for the site shall then be made according to the process described in "Total Site Scores and Interpretation." In conducting its evaluation, the TRC may request assistance from other agencies as necessary. Such agencies may include, but not be limited to, the Michigan Departments of Natural Resources and Environmental Quality, and the Natural Resources Conservation Service.

Upon completion of its review, the TRC shall submit its report and recommendations to the

DPA for concurrence.. The DPA may reject the TRC recommendation <u>only</u> if (1) the DPA finds that the TRC made an error in its evaluation that would change the outcome, or (2) the DPA finds that TRC blatantly disregarded the criteria in its evaluation Upon acceptance of the TRC recommendation, the DPA shall notify the applicant of its findings in writing If the DPA finds that a proposed site is not consistent with the Plan, it shall also notify the applicant in writing, of the reason(s) for its findings.

The DPA shall have 90 days from the date of submission of a complete application package in which to issue its consistency determination Failure to act within the required time frame will result in an automatic determination of plan consistency. The consistency determination is then forwarded to the DEQ for review, where the DEQ Director makes the final determination of consistency.

If an applicant does not agree with the consistency decision of the DPA, the applicant may request that DEQ determine the consistency of the proposal as part of the DEQ review of a construction permit application.

4. Responsibilities for Conducting Review

The body responsible for reviewing any proposed disposal site for plan consistency shall be the Tuscola County Designated Solid Waste Planning Agency (DPA) To assist the DPA in its review, a technical review committee (TRC) shall be established consisting of the following persons or agency representatives.

- a. The County Road Commission Engineer
- b. The County and/or municipal Zoning Administrator
- c. The County Soil Erosion and Sedimentation Control Agency
- d. The Regional Solid Waste Planning Agency
- e. The local health department
- f. The County Drain Commission

The TRC shall conduct an evaluation of the proposed site using the site evaluation matrix and methods described elsewhere in this section. The site will be evaluated to determine its ability to satisfy the criteria. A site that satisfies a particular criterion to the maximum extent will receive the maximum point value of 10 for that criterion. This process will continue until a proposed site has been evaluated for all listed criteria. The individual point values assigned for each criterion shall then be multiplied by that criterion's importance value to obtain a final value for each criterion. The final values for all criteria will then be added to obtain a total value for the site. A determination of consistency for the site shall then be made according to the process described in "Total Site Scores and Interpretation." In conducting its evaluation, the TRC may request assistance from other agencies as necessary. Such agencies may include, but not be limited to, the Michigan Departments of Natural Resources and Environmental Quality, and the Natural Resources Conservation Service.

Upon completion of its review, the TRC shall submit its report and recommendations to the

DPA for concurrence.. The DPA may reject the TRC recommendation <u>only</u> if (1) the DPA finds that the TRC made an error in its evaluation that would change the outcome, or (2) the DPA finds that TRC blatantly disregarded the criteria in its evaluation Upon acceptance of the TRC recommendation, the DPA shall notify the applicant of its findings in writing If the DPA finds that a proposed site is not consistent with the Plan, it shall also notify the applicant in writing, of the reason(s) for its findings.

The DPA shall have 90 days from the date of submission of a complete application package in which to issue its consistency determination Failure to act within the required time frame will result in an automatic determination of plan consistency. The consistency determination is then forwarded to the DEQ for review, where the DEQ Director makes the final determination of consistency.

Upon receipt of an application package for a disposal facility, the DPA will review the application package for administrative completeness in accordance with the items listed in this section. The DPA will determine if the application package is administratively complete within 30 calendar days. If the application package is found to be incomplete, the DPA shall notify the developer in writing within the 30-day time frame. If the DPA fails to make a determination of completeness within the 30-day period, the application package shall be considered administratively complete. (2000, DEQ Revision)

If an applicant does not agree with the consistency decision of the DPA, the applicant may request that DEQ determine the consistency of the proposal as part of the DEQ review of a construction permit application.

5. The Formal Construction Application

The applicant may prepare and submit a construction application according to Act 451 and its rules to DEQ at any time At this point, it is recommended (but not required) that formal negotiations be initiated with the applicant to develop a mutual agreement which will address aspects of facility construction and operation that are not specifically addressed by Act 45 1 or local regulations A negotiation committee should be established that consists of the following at a minimum.

- q. The facility owner/operator
- b. Representative of county government
- c. Representative of the host municipality

The negotiation committee shall report on its progress as requested by the DPA During the negotiation process, the DPA may utilize appropriate public participation mechanisms to assist in the identification of local concerns Such mechanisms may include public information meetings, the formation of citizen advisory committees, and other appropriate methods Negotiations however, do not impact the consistency determination.

Siting Criteria for Other Solid Waste Facilities

This section describes the county's siting criteria and review process for major solid waste facilities, other than sanitary landfills, that require licensing under Act 45 1. Such major facilities include Type A transfer facilities, solid waste processing plants, and waste-to-energy facilities and other incinerators.

Primary Siting Criteria

The solid waste facilities that are subject to the review process must meet the following primary siting criteria, as described on pages 1-2 for landfills: 1a, 1b, 2, 3,4,5,6, and 7.

Secondary Siting Criteria

As previously described for potential landfills, the secondary criteria provide standards for evaluating proposed solid waste facility sites. The secondary siting criteria to be used for evaluating facilities other than landfills are as follows:

	Importance	Possible
Criteria	Value	Points
Accessibility	3	30
Isolation from Residences	5	50
Isolation of Water Supplies	5	50
Future Land Use	2	20
Local Ordinances	3	30
	Total	: 180

The site evaluation matrix, parameters, and assignment of point values for these criteria are the same as previously described for the landfill site evaluation process. (DEQ revision – deletes paragraph).

Total Site Scores and Interpretation

Based on the matrix evaluation, the total scores should fall into three broad categories. These are:

	<u>HIGH</u>	MEDIUM	<u>LOW</u>
TOTAL SCORE	126-180	72-108	0-54

For a site to be considered consistent with the County Solid Waste Management Plan, the site must receive a total score of at least 90 points.

Negotiations

As previously discussed for landfills, negotiations may take place between the developer of a proposed disposal facility and the community. This process is encouraged, at the discretion of the developer, but it is not a requirement of the facility siting process. The points of negotiation to be considered should be clearly delineated in a negotiation plan that is jointly prepared and agreed to by the owner/operator, the county, and the host municipality. Appropriate points of negotiation include those previously listed for landfills, especially regarding facility design, hours of operation, control of noise, odors, and dust, and site security.

The Site Review Process

The site review process, information required of the applicant, and the responsibilities for conducting the review are the same as previously described for landfills.

The Formal Construction Application

Following a determination of consistency, formal negotiations may, if so desired, take place between the facility developer and the community, as previously discussed for landfills. The determination of consistency, however, is not impacted by the negotiation process.

After the determination of consistency and after negotiations, the applicant is then encouraged to submit a formal construction application to the DEQ.

Siting Criteria for Solid Waste Material Recovery Facilities (MRF)

The MRF building(s) shall not be located within 300 feet of adjacent property lines, road rights-of way, lakes, and perennial streams. All facilities shall be screened with a suitable barrier at least eight feet high and with 75 percent screening to reduce the visibility of the operation.

The MRF building(s) shall not be located closer than 1,000 feet to domiciles existing at the time of permit application, unless the affected property owner and local municipality has provided a written waiver consenting to activities closer than 1,000 feet. The waiver shall be knowingly made and separate from a lease or deed unless the lease or deed contains an explicit waiver from the current owner.

The MRF shall not be located within 300 feet of a wetland regulated by Public Act 98 or within a 100-year flood plain as defined by Rule 323.311 of the administrative rules of Part 31, Water Resources Protection, of Act 451.

The MRF shall not be located within 300 feet of any public park or recreation area.

A facility shall be located on a paved, all weather "class a" road. If a facility is not on such a road, the developer shall submit a signed statement which states the developer will provide upgrading to a "class a" of the road serving the facility before the facility becomes operational.

A MRF shall be located in an area that has been zoned for industrial use.

Return to
Amendment
Letter

Siting Criteria Transfer Facilities

The transfer facility building(s) shall not be located within 300 feet of adjacent property lines, or domiciles unless the affected property owner and local municipality had provided a written waiver consenting to activities closer than 300 feet. The waiver shall be knowingly made and separate from a lease or deed unless the lease or deed contains an explicit waiver from the current owner.

All facilities shall be screened with a suitable barrier at least 8 feet high and 75 percent screening to reduce the visibility of the operation.

III-28 & III-28a

The transfer facility building(s) shall not be located closer than 300 feet of road right-of-ways unless the affected property owner had provided a written waiver consenting to activities closer than 300 feet.

The transfer facility activities shall not be located within 300 feet of a wetland, lake, perennial stream, or within the 100-year flood plain as described by Rule 323.11 of the administrative rules of Part 31, Water Resources Protection of Act 451 and Michigan Public Act 98.

A transfer facility's activities shall not be located within 300 feet of any existing public park or recreation area.

A facility shall be located on a paved, all weather "class a" road. If a facility is not on such a road, the developer shall submit a signed statement which states the developer will provide upgrading to a "class a" of the road serving the facility before the facility becomes operational.

SELECTED SYSTEM

SOLID WASTE MANAGEMENT COMPONENTS¹

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.

SEE ATTACHED PAGES

¹ components or subcomponents may be added to this table.

Existing Management Capabilities

C. Ongoing Planning, Coordination, and Plan Implementation

Countywide solid waste management planning and coordination is an ongoing process. Act 451 requires that the Solid Waste Plan is updated every five years and that plan implementation be ensured through the assignment of management responsibilities.

The Tuscola County Board of Public Works (BPW) has been assigned the responsibility of overseeing the plan update. The BOW, as the designated solid waste management planning agency, has coordinated the plan update process with the Solid Waste Management Planning Committee.

Coordination and cooperation among the municipalities in Tuscola County, and between the public and private sectors are major elements of successful plan implementation. The Solid Waste Management Planning Committee has outlined a way to achieve this coordination. However, the duties of this committee are officially completed once the updated plan receives final approval. No other existing organization is available to serve this function.

B. Collection and Transportation of Solid Waste

The private solid waste management industry currently provides solid waste collection and transportation services to all parts of Tuscola County, either through municipal contracts or individual subscriptions with homes and businesses. No public agency in the county presently operates a solid waste collection and transportation system. The private sector can continue to provide these services economically and efficiently as long as disposal facilities are available within a reasonable distance.

III-29 & III-29a

C. Construction, Operation, and Maintenance of Solid Waste Facilities

With the exception of Type B transfer facilities, the construction and operation of solid waste facilities in compliance with Act 45 1 is a costly undertaking that cannot typically be accomplished by a single rural municipality. Rural municipalities, such as townships, have the financial capabilities to develop Type B transfer facilities However, the operation and maintenance of these facilities is most typically performed by private solid waste haulers.

There is currently no county agency with the administrative and technical capabilities to operate a solid waste disposal facility. The County Board of Public Works has the legal authority to own and operate a solid waste facility in accordance with this plan and applicable laws.

However, the County Board of Public Works is not currently authorized to take on this responsibility.

The private sector has the capabilities to construct and operate a solid waste disposal facility However, there are presently no formal plans or agreements to develop or operate new disposal facilities in Tuscola County.

Tuscola County has the administrative and technical capabilities to operate a County *Recycling* Program and Materials Recovery Facility (MRF) The County will continue to provide this facility and program under the updated plan.

D. Financial Capabilities

The municipalities and residents of Tuscola County have the capability to finance the collection and transportation of solid waste by entering into contracts with private haulers Tuscola County is the only public agency with the capability to construct and operate a solid waste disposal facility, such as a sanitary landfill The construction of a disposal facility is a costly undertaking that cannot typically be financed by an individual rural municipality Tuscola County also has the financial capabilities to continue to operate a County MRF and Recycling Program.

E. Regulation and Enforcement

Regulations for construction and operation of solid waste facilities are defined by state legislation, particularly Act 451 Local ordinances, as authorized on page 111-37 of this plan, are also applicable The Michigan Department of Environmental Quality is the enforcement body for compliance with Act 45 1 within the County For specific enforcement of the various provisions of the County Solid Waste Management Plan, the Tuscola County Board of Commissioners is empowered to identify violations of this plan and to bring suit against violators as required.

Recommended Management System

The updated plan recommends the establishment of a single advisory body at the county level to oversee plan implementation, in coordination with the County Board of Public Works This body would address various tasks and make recommendations within the areas specified in the plan The advisory body will represent the same groups as specified for planning committees in Act 45 1 However, to distinguish the role of the advisory board from that of the planning committee, the body will be called the Tuscola County Solid Waste Management Advisory Board (SWMAB) The Advisory Board may require staff assistance to carry out its duties, and the county may assign staff for this purpose Alternatively, the county may contract with the regional solid waste planning agency or other qualified personnel to assist the SWMAB as needed.

Other entities with management responsibilities for carrying out the plan's various provisions are identified on the following pages.

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 – All citizens, businesses, and industries. Educational and promotional efforts by Solid Waste Management Advisory Board (SWMAB) and County Recycling Coordinator

Product Reuse – All citizens, business, and industries. Educational and promotional efforts by Solid Waste Management Advisory Board (SWMAB) and County Recycling Coordinator

Reduced Material Volume – All citizens, businesses, and industries. Educational and promotional efforts by Solid Waste Management Advisory Board (SWMAB) and County Recycling Coordinator.

Increased Product Lifetime – All citizens, businesses, and industries. Educational and promotional efforts by Solid Waste Management Advisory Board (SWMAB) and County Recycling Coordinator.

Decreased Consumption - All citizens, businesses, and industries. Educational and promotional efforts by Solid Waste Management Advisory Board (SWMAB) and County Recycling Coordinator.

Resource Recovery Programs:

Composting – Residents, municipalities, private solid waste industry

Recycling – County MRF/Recycling Coordinator, SWMAB, municipalities, residents, businesses, industries, private solid waste industry

Energy Production – Not included in plan

SELECTED SYSTEM

Volume Reduction Techniques:

Private solid waste industry (collection and disposal operations), County MRF. Also resident, businesses, and industries through voluntary efforts.

Collection Processes:

Private solid waste industry and municipalities

Transportation:

Private solid waste industry; Millington Village DPW

Disposal Areas:

Processing Plants - None included in plan

Incineration - Not included in plan

Transfer Stations – Type B private solid waste industry and municipalities. Type A could be sited by private sector in accordance with the plan's siting process.

Sanitary Landfills - Private solid waste industry

Ultimate Disposal Area Uses:

Private solid waste industry with input from host municipalities

<u>Local Responsibility for Plan Update Monitoring and Enforcement:</u> SWMAB (plan implementation monitoring); County Board of Commissioners (plan enforcement); Michigan DEQ (Act 451 enforcement).

Educational and Informational Programs:

SWMAB and County Recycling Coordinator

Documentation of acceptance of responsibilities is contained in Appendix D.

LOCAL ORDINANCES AND REGULATIONS AFFECTING SOLID WASTE DISPOSAL

This Plan updates relationship	to local ordinances	and regulations	within the	County i	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 b 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: 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.
 - ☐ Additional listings are on attached pages.

The County and all municipalities may adopt regulations governing the following subjects:

- 1. The following solid waste facility design elements: greenbelts, landscaping, screening, and fencing.
- 2. Hours of solid waste facility operation
- 3. Control of noise, litter, dust, odors, and pest species at solid waste facilities
- 4. Operating records and reports at solid waste facilities
- 5. Site security at solid waste facilities
- 6. Monitoring of wastes accepted and prohibited at solid waste facilities
- 7. Waste disposal surcharges, over and above host fees established by Act 451, at any solid waste disposal facilities that may be constructed in the future.

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.

 \underline{X} 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:

Calculation of Tuscola County's disposal capacity and related information is included in Appendix D

APPENDIX

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.

RECYCLING:

Recycling in Tuscola County is accomplished through the operation of the County Recycling Program and Materials Recovery Facility (MRF). An overview of this program has been presented in the "Overview of Resource Recovery Programs" section in the main body of the plan text on page ID-16. The County Recycling Program and MRF were established in 1996 with the assistance of a State of Michigan Solid Waste Alternatives Program (SWAP) grant. Annual progress reports for the program are submitted to the Michigan Department of Environmental Quality and are on file with the Solid Waste Programs Section of DEQ.

The overall goal of the County Recycling Program is to provide recycling opportunities to all Tuscola County residents and to reduce the solid waste stream by 30%, Materials accepted by the program are newspaper; office paper; corrugated paper; aluminum; steel cans; # 1& # 2 plastics; clear, green, & brown glass; and polystyrene. The program also began to accept magazines in 1998. Recycling trailers serve eight communities with monthly drop-off service. A private solid waste hauler drops materials from collection routes on a daily basis. The Recycling Program also serves about 40 commercial, industrial, and institutional entities. Several of these are provided pick-up service once or twice a month with a recycling trailer. The MRF building is used as the main facility for residential drop-off service, materials processing and storage, and program administration. Labor to sort and bale materials is furnished by a prison crew from Camp Tuscola in Caro. All materials are currently marketed within Michigan. The program recycled about 462 tons of material in 1996 and 631 tons in 1997. The Tuscola County Recycling Program is operating successfully. From 1996 to 1997, material volume increased by 32% and revenue grew by 45%.

Program issues & concerns include the following:

- 1. There are businesses & institutions that wish to recycle but lack on-site storage space for materials. A desire to increase participation by businesses, industries & institutions has been identified in the updated plan.
- 2. The area around the MRF building needs paving. Currently, mud creates problems for vehicles & when loading materials. The mud also discourages drop-offs by residents. Mud & stones can be picked up by the loader and contaminate materials being loaded for market.
- 3. The size of the MRF building limits the types & quantities of materials that can be collected & stored. Simply stated, as material volume increase, the MRF may outgrow its present building.

COMPOSTING:

Due to its rural nature, composting in Tuscola County largely occurs as home composting on private property. Also, curbside collection of yard waste is provided by private haulers in some municipalities. These services are available to all communities that wish to subscribe for them through contracts with the solid waste industry. Finally, some municipal Departments of Public Works provide brush chipping and yard waste collection to residents. No formal I public or private composting sites are operated in the County. Under the updated plan, all communities are encouraged to ensure that their residents have adequate access to convenient composting opportunities, through either home composting, private yard waste collection, municipal yard waste collection, or cornposting drop-off sites. The specific choices will depend on individual community needs.

A 1

DETAILED FEATURES OF RECYCLING AND COMPOSTING PROGRAMS:

List below the types and volumes of material available for recycling or composting

A detailed waste stream assessment has never been conducted for Tuscola County. The volumes of various materials have been estimated based on the solid waste components identified in the previous (1989) County Solid Waste Plan and current solid waste generation estimates. The following estimates are based on total annual solid waste generation of about 34, 000 tons.

Material	% of Waste Stream	Annual Quantity (Tons)
Paper (all types)	15%	5,100
Plastics	9%	3,060
Glass	5%	1,700
Ferrous metals	7%	2,380
Aluminum	0.8%	272
Yard waste	4%	1.360

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:

RECYCLING: The existing County Recycling Program primarily utilizes a baler, bobcat loader, and recycling trailer. No major problems ere encountered in the selection of this equipment.

COMPSOTING: Current equipment selection is addresses by the private solid waste industry in providing yard waste collection services in various communities. Municipalities that provide some form of yard waste collection generally utilize normal public works equipment such as portable chippers for brush and vacuum units for fall leaf collection. No specific problems with equipment selection have been reported and no major new equipment needs have been identified.

Proposed Programs:

RECYCLING – No new programs or major equipment needs have been identified. The updated plan recommends the continuation of the current program and enhancement as opportunities arise.

COMPOSTING – No new programs or major equipment needs have been identified. Equipment selection will be the responsibility of individual private solid waste firms or municipalities that choose to provide some form of yard waste collection and composting for their residents.

Site Availability and Selection

Existing programs:

RECYCLING – The County MRF will continue to operate at its current location. Site improvement needs previously described include site paving to enhance accessibility and convenience for drop-off traffic, and to facilitate materials loading. Also, the program may eventually outgrow its present building as material volumes increase. These issues are under study by the County.

COMPOSTING – No specific site needs have been identified. Private solid waste firms that collect yard waste have made adequate arrangements for composting areas, usually adjacent to existing private landfill sites. Municipalities that collect yard waste and brush generally utilize vacant publicly-owned sites for placement of material

Proposed	Programs
----------	-----------------

No new programs or siting needs have been identified.

Composting Operating Parameters:

The following identifies some of the operating parameters which are to be used or are planned to be used to monitor the composting programs.

These parameters are not monitored at any existing composting operation in the County.

Existing Programs:				
Program:	Ph Range	Heat Range	Other Parameter	Measurement Unit
Proposed Programs:	:			
Program:	Ph Range	Heat Range	Other Parameter	Measurement Unit
None Proposed				

COORDINATION EFFORTS:

Solid Waste Management Plans need to be developed and implemented with due regard for both local conditions and the state and federal regulatory framework for protecting public health and the quality of the air, water, and land The following states the ways in which coordination will be achieved to minimize potential conflicts with other programs and, if possible, to enhance those programs

It may be necessary to enter into various types of agreements between public and private sectors to be able to implement the various components of this solid waste management system. The known existing arrangements are described below which are considered necessary to successfully implement this system within the County. In addition, proposed arrangements are recommended which address any discrepancies that the existing arrangements may have created or overlooked. Since arrangements may exist between two or more private parties that are not public knowledge, this section may not be comprehensive of all the arrangements within the County.. Additionally, it may be necessary to cancel or enter into new or revised arrangements as conditions change during the planning period. The entities responsible for developing, approving, and enforcing these arrangements are also noted.

- 1. The municipalities within Tuscola County may enter into agreements (i.e., contracts) with other entities, both public and private, for solid waste management services, including the collection and transportation of solid waste, recyclable materials, and yard waste.
- 2. The Tuscola County Board of Commissioners may negotiate arrangements with the counties identified in the 'Import/Export Authorization' tables on pages ____ through ____ for acceptance of solid waste generated in Tuscola County. These arrangements may include written inter-county agreements, if required by the importing counties.
- 3. The Tuscola County MRF is situated on property owned by the City of Caro and leased to the County under a 10-year agreement. Under this agreement, Caro also provides snow removal and assistance when needed for staffing and large equipment.
- 4. The County enters into contracts with all communities that host a recycling trailer. The contracts require that the trailers are staffed and open at least four hours per month.
- 5. Tuscola County is a member of the Multi-County Solid Waste Task Force (MCTF) that includes Sanilac, Lapeer, and Huron Counties. The MCTF serves as a regional clearinghouse for solid waste management and resource recovery program information in the four-county area. The MCTF also meets regularly to discuss solid waste management issues of mutual concern.
- 6. This updated plan calls for the creation of a Solid Waste Management Advisory Board (SWMAB) to oversee and generally coordinate the implementation of the plan As such, the SWMAB will work in cooperation with County government, local government units, the private solid waste industry, businesses, industries, institutions, and the general public to facilitate the various actions required to carry out the updated Solid Waste Management Plan.

COSTS AND 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.

System Component ¹	Estimated Costs	Potential Funding Sources	
Resource Conservation Efforts	None	Private enterprise – voluntary efforts by businesses, industries, and institutions	
Resource Recovery Programs	Operating: \$60,000 per year Future Capital: Unknown	Tuscola County Board of Commissioners, material sales, municipalities, private enterprise	
Volume Reduction <u>Techniques</u>	<u>Unknown</u>	Private enterprise	
Collection Processes	Unknown	Private enterprise and customer fees	
Transportation	<u>Unknown</u>	Private enterprise	
Disposal Area	<u>Unknown</u>	Private enterprise & customer fees	
Future Disposal Area Uses	<u>None</u>	Private enterprise & host counties	
Management Arrangements	None or minor cost	Tuscola County Board of Commissioners	
Educational & Informational Programs	None or minor cost – included in cost of Resource Recovery Programs	Tuscola County Board of Commissioner, private enterprise, municipalities	

¹ These components and their subcomponents may vary with each system.

EVALUATION SUMMARY 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, and composting are proven technologies that are currently in place and have been accepted by the public.. To a large degree, the selected plan is a continuation of the current management system. The main difference is that the updated plan calls for continued expansion and improvement of materials recovery efforts for recycling and composting.

The following discussion describes the anticipated positive and negative impacts on public health, economics, environmental conditions, siting considerations, existing disposal areas, and energy consumption and production

PUBLIC HEALTH

The selected plan relies mainly on sanitary landfills located in other counties for final disposal of solid waste.. Landfills that are properly sited, constructed, and operated will have minimal effects on groundwater and the environment.

Recycling and composting may reduce public health impacts by removing materials from the waste stream that would otherwise go to a disposal facility.

The proper collection and transportation of solid waste reduces the potential for negative health impacts.

ECONOMICS

Landfilling is still the most economical method of solid waste disposal However, landfilling could be costly if a landfill is improperly designed or operated, resulting in surface or groundwater pollution. The selected plan relies on landfills located in surrounding counties that are in full compliance with Act 451 and other applicable laws. Properly designed and operated landfills will minimize the risk of pollution. However, landfilling will also result in the disposal of materials that could be recycled or reused at a lower cost than the manufacture of new materials.

The Tuscola County Recycling Program & MRF currently operates at a minimal cost to taxpayers. A recent analysis by the County Recycling Coordinator showed that, once revenues and avoided landfilling costs were subtracted, the Recycling Program's total cost to County taxpayers only about \$9,400 or less than \$0.20 per capita.. In the near future, any additional program costs are expected to be minimal. However, increased participation and material volumes may eventually require physical expansion of the Materials Recovery Facility (MRF). The capital costs of such an expansion are not presently known.

It is this plan's intent that the County may explore and implement all feasible options in the future for financing resource recovery programs. This includes the authority to impose waste disposal surcharges, as recently (October 1998) determined by the Michigan Court of Appeals.

The recycling component of the selected system also has positive economic impacts by generating revenues from the sale of materials. However, these revenues are typically subject to wide market fluctuations, and they are not expected to entirely offset the costs of operation.

Solid waste collection through an open market system provides competitive pricing and economies of scale. Transfer stations can provide cost savings by making collection routes more efficient and reducing the transportation costs incurred by collection vehicles.

ENVIRONMENTAL CONDITIONS

The selected system will have minimal environmental impacts because it does not call for the siting of any major new solid waste facilities.

Recycling and composting facilities help to reduce reliance on landfills and, consequently, they also help to reduce the environmental consequences of landfills. However, recycling and composting facilities can also cause nuisance conditions if they are not properly designed and maintained. Also, composting facilities can have odor problems if they are not properly operated.

SITING CONSIDERATIONS

The selected system will have minimal impacts on siting because no new facilities are proposed. Landfills are extremely difficult to site because of public opposition and the need to identify an environmentally sound location that will meet all Act 451 requirements. Tuscola County has access to sufficient capacity for the next I 0 years and does not need to site a new landfill

The selected plan identifies the continued operation of the County MRF in its present location. There are presently no commercial or large-scale composting operations in the County. New materials recovery facilities could face local opposition if the proposed locations lacked adequate screening and isolation distances.

EXISTING DISPOSAL AREAS

The selected plan relies on existing landfills in surrounding counties to provide disposal capacity for the next I0 years. No new landfills will be required.. Also, solid waste that is generated in Tuscola County is currently going to the landfills identified in this plan for disposal. Therefore, the continued acceptance of Tuscola County solid waste will not have an impact on the operations of the current landfills.

ENERGY CONSUMPTION AND PRODUCTION

The selected plan relies on landfills located in other counties for the disposal of Tuscola County's solid waste. The transportation of solid waste to out-of-county landfills will result in higher energy consumption than if a disposal facility was located within Tuscola County. However, this transportation system is currently in place and does not represent an unexpected or increased cost over the present management system.

The transportation of recyclable materials and yard waste also consumes energy. However, materials recovery can also save energy by reusing certain items, or substituting recycled materials for newly manufactured components.

Sanitary landfills represent a loss of energy resources due to the burial of materials that could be otherwise recovered and utilized. However, methane gas can be recovered from landfills which are then used as an energy source.

ADVANTAGES AND DISADVANTAGES OF THE SELECTED SYSTEM:

Each solid waste management system has pros and cons relating to its implementation within the County. Following is an outline of the major advantages and disadvantages for this Selected System.

ADVANTAGES:

- 1. Selected plan is a logical extension of the current system which has been accepted by the public
- 2. Basic management system components are already in place
- 3. Low capital costs minimal facility development requirements
- 4. Increased levels of materials recovery through recycling and composting
- 5. Increased diversion of materials from landfills, which increases the lifetime of the present disposal facilities
- 6. Increased public awareness and involvement in solid waste management

DISADVANTAGES:

- 1. Continued reliance on landfills in other counties as primary means of disposal
- 2. Increased participation and material volumes may ultimately require physical expansion of the MRF (additional capital costs).
- 3. May require greater coordination at the County level
- 4. Additional promotion and education efforts required

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.

ALTERNATIVE A: RETAIN THE CURRENT SYSTEM (STATUS QUO)

This alternative assumed that the current management system would remain in place with no major changes. It is nearly identical to the selected alternative, except that there would be no efforts directed toward expansion of materials recovery programs.

ALTERNATIVE C: REGIONAL SOLID WASTE MANAGEMENT SYSTEM

This alternative called for the creation of a regional solid waste management system in cooperation with Huron, Sanilac, and Lapeer Counties. This option would involve the creation of a formal solid waste management authority or similar entity.

SYSTEM COMPONENTS:

The following briefly describes the various components of the non-selected system

RESOURCE CONSERVATION EFFORTS:

Alternative A: Voluntary measures by consumers, businesses, and industries

Alternative C: Same as Alternative A

VOLUME REDUCTION TECHNIQUES:

Alternative A: Use of volume reduction equipment by private solid waste industry and materials recovery programs: compactors, baler, shredders

Alternative C: Same as Alternative A

RESOURCE RECOVERY PROGRAMS:

Alternative A:

- Continuation of County MRF and Recycling Program
- Yard waste collection by private industry and municipalities
- Home composting by residents

Alternative C:

- Potential development of regional MRF and composting facility
- Regional marketing of recyclable materials and compost

COLLECTION PROCESS:

Alternative A: Collection mainly by private solid waste industry under municipal contracts and individual subscriptions

Alternative C: Collection by private solid waste industry under contract with regional Solid Waste Authority or similar entity.

TRANSPORTATION:

Alternative A: Transportation mainly by private solid waste industry

Alternative C: Transportation by the private solid waste industry under contract with regional authority or similar entity

DISPOSAL AREAS:

Alternative A: Landfills located in other counties owned and operated by the private solid waste industry

Alternative C: Same as Alternative A

INSTITUTIONAL ARRANGEMENTS:

Alternative A:

- Arrangements for solid waste collection & transportation under municipal contracts and individual subscriptions with residents & businesses
- Continuation of contracts between MRF & communities hosting a drop-off recycling trailer

Alternative C:

- Establishment of formal multi-county solid waste management authority or similar entity
- Agreements between authority & counties for solid waste services
- Agreements between municipalities and counties and 101 directly with authority for solid waste
- Agreements between authority and private solid waste industry for collection, transportation, and other solid waste services

EDUCATIONAL AND INFORMATIONAL PROGRAMS:

Alternative A:

Continuation of current programs through County Recycling Coordinator

Alternative C

- Programs carried out by multi-county authority
- Expansion of current programs by Multi-County Task Force

A-9

CAPITAL, OPERATIONAL, AND MAINTENANCE COSTS:

Alternative A:

- \$58,000 annually for MRF/Recycling Program
- No major capital costs

Alternative C:

- High initial start-up costs for establishment of authority, administration & staffing
- Potential high capital costs for regional materials recovery & cornposting facilities

EVALUATION SUMMARY OF NON-SELECTED SYSTEM:

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 1 implemented

ALTERNATIVE A

The evaluation of this alternative is essentially the same as that previously described for the selected system, with the following exceptions:

- Alternative A would have a lower capital cost than the selected system because no new facilities would be
 required, and the MRF would not be expected to expand its operations However, revenues from material
 sales would be lower than for the selected plan
- Alternative A would require an even greater reliance on landfills because materials recovery activities would not expand much above current levels
- Energy consumption would be greater than for the selected alternative because larger volumes of solid waste would need to be transported to out-of-county landfills for disposal Also, a lower volume of material would be reused or recovered, representing a greater loss of resources

In general, this alternative was not chosen because the selected management system offers greater public and environmental benefits at a minimal cost over the present system

ALTERNATIVE C

Again, the evaluation of this alternative was similar to the selected system in many respects. However; there were also some significant differences. The following discussion describes the positive and negative impacts on public health, economics, environmental conditions, siting considerations, existing disposal areas, and energy consumption and production, as they differ from the selected system

- This alternative would be expected to have somewhat greater public health benefits than the selected system by. Where reducing reliance on landfills through a higher level of materials recovery Proper collection of solid waste would be better served by contracting for collection services on a regional basis.
- This option would generate greater revenues from recycled materials by collecting a larger quantity of materials. Also, it may be possible to achieve cost savings on solid waste services by obtaining competitive bids on a regional basis. However, higher costs would be associated with the initial formation of an authority, and with the development of regional resource recovery facilities Feasibility studies would need to be conducted for such facilities, and their proposed capital and operating costs are not presently known
- Like the selected system, no new disposal areas would need to be sited under this alternative. The existing landfills that presently serve the counties participating in the authority would continue to be used. However, as previously noted, large-scale regional materials recovery and waste processing facilities are considered to be part of the alternative. Such facilities would face public opposition and would be difficult to site.

• Energy would also be consumed under this alternative to collect and transport solid waste, recyclable materials, and yard waste. However, there would presumably be greater energy savings through a greater level of materials recovery. Depending on the locations of materials recovery and processing facilities, there may be greater fuel consumption to transport materials than under the selected system.

CONCLUSIONS

Alternative C was not selected for the following major reasons:

- A major problem associated with the alternative is the complexity of creating a regional solid waste authority In particular, there does not presently appear to be any strong support for this concept Local governments are likely to perceive the creation of a solid waste authority as a loss of home rule authority. Also, the formation of an authority would likely be perceived as creating another level of government ("bureaucracy") and would meet with public opposition The private solid waste industry would probably also oppose the formation of an authority as excessively restrictive or unfairly competitive Without strong support by elected officials, the public, and private industry, a proposed solid waste authority would be doomed
- The current Multi-County Task Force (MCTF) possesses some of the same attributes as a proposed regional system, but operates on a more informal basis. It appears that many of the objectives of Alternative C could be accomplished through the MCTF under the selected system, without the difficulties of establishing a formal authority
- There are simply too many technical, economic, and political uncertainties to make a regional system feasible at this time However, the concept does hold potential, and it should be reevaluated in the future as the solid waste management systems in the region continue to evolve

ADVANTAGES AND DISADVANTAGES OF THE NON-SELECTED SYSTEM:

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 this non-selected system.

Advantages

- Public acceptance of the current system
- Minimal new costs, if any
- No new sites or facilities
- No major institutional or administrative changes
- Includes resource recovery opportunities

Disadvantages

- No efforts to improve management system or services to public
- No mechanism to increase materials recovery levels
- No mechanism to increase awareness and involvement by citizens, government, and others
- Continued reliance on landfills in other counties for primary disposal

ALTERNATIVE C

Advantages

- Collection and marketing of recyclable materials on a larger (multi-county) scale
- Economies of scale through regional contracts for solid waste collection and other services
- Potential for regional waste processing and composting facilities
- Regional purchasing power for recycled products

Disadvantages

- Significant barriers to formation and acceptance of solid waste authority
- Potentially high capital costs for new regional facilities
- Opposition to siting any solid waste facilities
- Duplication of current Multi-County Task Force role

A-11

APPENDIX B: NON-SELECTED SYSTEM

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 for each non-selected alternative system.

ALTERNATIVE A: RETAIN THE CURRENT SYSTEM (STATUS QUO)

This alternative assumed that the current management system would remain in place with no major changes. It is nearly identical to the selected alternative, except that there would be no efforts directed toward expansion of materials recovery programs

ALTERNATIVE C: REGIONAL SOLID WASTE MANAGEMENT SYSTEM

This alternative called for the creation of a regional solid waste management system in cooperation with Huron, Sanilac, and Lapeer Counties. This option would involve the creation of a formal solid waste management authority or similar entity.

SYSTEM COMPONENTS:

The following briefly describes the various components of the non-selected system.

RESOURCE CONSERVATION EFFORTS:

Alternative A: Voluntary measures by consumers, businesses, and industries

Alternative C: Same as Alternative A.

VOLUME REDUCTION TECHNIQUES:

Alternative A: Use of volume reduction equipment by private solid waste industry and materials recovery programs – compactors, balers, shredders

Alternative C: Same as Alternative A.

RESOURCE RECOVERY PROGRAMS:

Alternative A

- 1. Continuation of County MFR & Recycling Program
- 2. Yard waste collection by private industry and municipalities
- 3. Home composting by residents

Alternative C

- 1. Potential development of regional MRF and composting facility
- 2. Regional marketing of recyclable materials and compost.

COLLECTION PROCESSES:

Alternative A: Collection mainly by private solid waste industry under municipal contracts and individual subscriptions

Alternative C: Collection by private solid waste industry under contract with regional Solid Waste Authority or similar entity.

TRANSPORTATION:

Alternative A: Transportation mainly by private solid waste industry

Alternative C: Transportation by the private solid waste industry under contract with regional authority or similar entity

DISPOSAL AREAS:

Alternative A: Landfills located in other counties owned and operated by the private solid waste industry Alternative C: Same as Alternative A.

INSTITUTIONAL ARRANGEMENTS:

Alternative A

- 1. Arrangements for solid waste collection & transportation under municipal contracts and individual subscriptions with residents & businesses.
- 2. Continuation of contracts between MRF & communities hosting a drop-off recycling trailer.

Alternative C:

- 1. Establishment of formal multi-county solid waste management authority or similar entity.
- 2. Agreements between authority & counties for solid waste services.
- 3. Agreements between municipalities and counties and/or directly with authority for solid waste services.
- 4. Agreements between authority and private solid waste industry for collection, transportation, and other solid waste services.

EDUCATIONAL AND INFORMATIONAL PROGRAMS:

Alternative A Continuation of current programs through County Recycling Coordinator. Alternative C

- 1. Programs carried out by multi-county authority.
- 2. Expansion of current programs by Multi-County Task Force.

CAPITAL. OPERATIONAL. AND MAINTENANCE COSTS:

Alternative A

- 1. \$58,000 annually for: MRF/Recycling Program.
- 2. No major capital costs.

Alternative C

- 1. High initial start-up costs for establishment of authority; administration & staffing.
- 2. Potential high capital costs for regional materials recovery & composting facilities.

EVALUATION SUMMARY OF NON-SELECTED SYSTEM:

The non-selected system was evaluated to determine its potential of impacting human health, economic, 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.

ALTERNATIVE A:

The evaluation of this alternative is essentially the same as that previously described for the selected system, with the following exceptions:

- 1. Alternative A would have a lower capital cost than the selected system because no new facilities would be required, and the MRF would not be expected to expand its operations. However, revenues from material sales would be lower than for the selected plan.
- 2. Alternative A would require an even greater reliance on landfills because materials recovery activities would not expand much above current levels.
- 3. Energy consumption would be greater than for the selected alternative because larger volumes of solid waste would need to be transported to out-of-county landfills for disposal. Also, a lower volume of material would be reused or recovered, representing a greater loss of resources

In general, this alternative was not chosen because the selected management system offers greater public and environmental benefits at a minimal cost over the present system.

ALTERNATIVE C

Again, the evaluation of this alternative was similar to the selected system in many respects.

However, there were also some significant differences. The following discussion describes the positive and negative impacts on public health, economics, environmental conditions, siting considerations, existing disposal areas, and energy consumption and production, as they differ from the selected system:

- 1. This alternative would be expected to have somewhat greater public health benefits than the selected system by further reducing reliance on landfills through a higher level of materials recovery. Proper collection of solid waste would be better served by contracting for collection services on a regional basis.
- 2. This option would generate greater revenues from recycled materials by collecting a larger quantity of materials. Also, it may be possible to achieve cost savings on solid waste services by obtaining competitive bids on a regional basis. However, higher costs would be associated with the initial formation of an authority, and with the development of regional resource recovery facilities. Feasibility studies would need to be conducted for such facilities, and their proposed capital and operating costs are not presently known.
- 3. Like the selected system, no new disposal areas would need to be sited under this alternative. The existing landfills that presently serve the counties participating in the authority would continue to be used. However, as previously noted, large-scale regional materials recovery and waste processing facilities are considered to be part of this alternative. Such facilities would face public opposition and would be difficult to site.

4. Energy would also be consumed under this alternative to collect and transport solid waste, recyclable materials, and yard waste. However, there would presumably be greater energy savings through a greater level of materials recovery. Depending on the location of materials recovery and processing facilities, there may be greater fuel consumption to transport materials than under the selected system.

Conclusions:

Alternative C was not selected for the following major reasons:

- 1. A major problem associated with the alternative is the complexity of creating a regional solid waste authority. In particular, there does not presently appear to be any strong support for this concept. Local governments are likely to perceive the creation of a solid waste authority as a loss of home rule authority. Also, the formation of an authority would likely be perceived as creating another level of government bureaucracy and would meet with public opposition. The private solid waste industry would probably also oppose the formation of an authority as excessively restrictive or unfairly competitive. Without strong support by elected officials, the public, and private industry, a proposed solid waste authority would be doomed.
- 2. The current Multi-County Task Force (MCTF) possesses some of the same attributes as a proposed regional system, but operates on a more informal basis. It appears than many of the objectives of Alternative C could be accomplished through the MCTF under the selected system, without the difficulties of establishing a formal authority.
- 3. There are simply to many technical, economic, and political uncertainties to make a regional system feasible at this time. However, the concept does hold potential, and it should be re-evaluated in the future as the solid waste management systems in the region continue to evolve.

ANDVANTAGES AND DISAVANTAGES OF THE NON-SELECTED SYSTEM:

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 this non-selected system.

ADVANTAGES:

- 1. Public acceptance of the current system
- 2. Minimal new costs, if any
- 3. No new sites or facilities
- 4. No major institutional or administrative changes
- 5. Includes resource recovery opportunities

DISADVANTAGES:

- 1. No efforts to improve management system or services to the public
- 2. No mechanism to increase materials recovery levels
- 3. No mechanism to increase awareness and involvement by citizens, government, and others
- 4. Continued reliance on landfills in other counties for primary disposal

ALTERNATIVE C

ADVANTAGES

- 1. Collection and marketing of recyclable materials on a larger multi-county scale
- 2. Economies of scale through regional contracts for solid waste collection and other services
- 3. Potential for regional waste processing and composting facilities
- 4. Regional purchasing power for recycled products

DISADVANTAGES

- 1. Significant barriers to formation and acceptance of solid waste authority
- 2. Potentially high capital costs for new regional facilities
- 3. Opposition to siting any solid waste facilities
- 4. Duplication of current Multi-County Task Force role

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.

Several mechanisms were used to encourage involvement by local governments and the public in the Solid Waste Management Plan update process. These are summarized below:

- 1. A representative of the Planning Committee attended the December 1997 meeting of the County Townships Association to inform the local units that the plan update process was getting underway
- 2. Time for public comment was reserved on the agenda for each meeting of the Planning Committee
- 3. The Planning Committee's meeting calendar (second Thursday of each month) was published and distributed to all municipalities in the County
- 4. A general notice was published as required that announced the general availability of the draft plan when it was released for public review for a three-month period
- 5. The draft plan was distributed to all municipalities in the County and adjacent counties for review
- 6. A general notice announcing the public hearing on the draft plan was published at least 30 days prior to the hearing
- 7. A public hearing was held on the draft plan to provide all interested persons an opportunity to voice questions or concerns regarding the updated plan
- 8. An additional notice was published about 30 days before the close of the public comment period to advise all interested persons of the continued availability of the draft plan and the opportunity to submit comments
- 9. Following approval of the updated plan by the Planning Committee, a representative attended the December 1998 meeting of the County Townships Association to inform the membership of the completion of the plan updated and the upcoming municipal approval process

Public Involvement Process

A description of the process used, including dates of public meetings, copies of public notices, documentation of approval from solid waste planning committee, County Board of Commissioners, and municipalities.

The Solid Waste Management Planning Committee met on the following dates:

Listed each monthly meeting from November 1997 to December 1998. October 8, 1998 was the Public Hearing.

Plan Approvals:

The updated County Solid Waste Management Plan was approved by the County Solid Waste Management Plan was approved by the County Solid Waste Management Planning Committee on December 10, 1998.

The updated Solid Waste Management Plan was approved by the Tuscola County Board of Commissioners on December 8, 1998

The updated Solid Waste Management Plan was submitted to the municipalities within Tuscola County on July 9, 1999

The updated Solid Waste Management Plan was approved by 67% of the municipalities in the County on July 9, 1999.

The locally approved Solid Waste Management Plan was submitted to the Michigan Department of Environmental Quality on February 23, 2000.

The amended Solid Waste Management Plan was approved by the Michigan Department of Environmental Quality on , 2015

PLANNING COMMITTEE APPOINTMENT PROCEDURE:

The County Board of Public Works and the County Recycling Coordinator submitted a list of candidates for the Planning Committee to the County Board of Commissioners. Some of the candidates included individuals who had served on the Planning Committee during the preparation of the previous County Solid Waste Management Plan under Act 641. The County Board reviewed the list of candidates and appointed the 14-member Planning Committee on October 28, 1997.

PLANNING COMMITTEE

Committee member names and the company, group, or governmental entity represented from throughout the County are listed below.

Four representatives of the solid waste management industry:

John Walker – Emterra

Peter Miletich- Emterra

Melanie Radabaugh – Diva Disposal

Ryan Radabaugh – Diva Disposal

One representative from an industrial waste generator:

Keith Baur – POET Biorefinery

Two representatives from environmental interest groups from organizations that are active within the County:

Gene Suuppi – Cass River Greenway

Mike Miller – Tuscola County Recycling

One representative from County government. All government representatives shall be elected officials or a designee of an elected official:

Christine Trisch – County Commissioner

One representative from township government:

Ken Panek – Arbela Township Supervisor

One representative from city government:

Joe Green – Caro City Council Member

One representative from the regional solid waste planning agency

Sue Fortune – Eastern Michigan Council of Governments

Three representatives from the general public who reside within the County:

William Bushaw Steve Erickson Vicky Sherry

C-2

Tuesday July 14, 2015 Solid Waste Management Planning Committee Meeting Minutes

Meeting Called to order by Chairmen Bushaw at 5:00 pm in the Rolka Building Conference Room, 429 N. State Street, Caro MI 48723

Attendance: Bill Bushaw, Steve Erickson, Vicky Sherry, John Walker, Peter Miletich, Keith Baur, Mike Miller, Ken Panek, Christine Trisch, Gene Suuppi, and guest Brian Burke, MDEQ

Approval of the Agenda – motion by Member Trisch, support by Member Baur to approve the Agenda, motion carried

Approval of Minutes – Secretary Sherry informed the Committee the minutes of the previous meeting needed to be updated and would be presented at the next meeting.

Review Siting Criteria for Solid Waste Material Recovery Facilities (MRF) – Secretary Sherry informed the Committee of the purpose of this Siting Criteria, Guest Brian Burke further informed the Committee of the importance of having this siting criteria in the Solid Waste Management Plan. Motion by Member Panek, support by Member Trisch to approve the presented Siting Criteria for Solid Waste Material Recovery Facilities, motion carried.

Review Siting Criteria Transfer Facilities – Secretary Sherry presented the Committee with the suggested Siting Criteria for Transfer Facilities. Motion by Member Trisch, support by Member Miller motion carried.

Review Removing Language "B. Collection and Transportation of Solid Waste... With the exception of the Village of Millington." Secretary Sherry informed the Committee that this wording was outdated and Millington no longer collected or transported solid waste. Motion by Member Trisch, support by Member Baur, motion carried.

Review of Solid Waste Management Amendment – the Solid Waste Management Amendment was presented to the Committee. Discussion took place concerning the recycling portion of the Solid Waste Management Plan. It was decided, that since the recycling portion of the plan is governed and the responsibility of Tuscola County, it would not be amended and turned over to the Tuscola County Recycling Committee. Motion by Member Trisch, support by Member Baur to approve the Solid Waste Management Amendment as presented, motion carried.

Amendment Resolution – The Solid Waste Management Planning Committee Resolution Authorizing Release of the Draft Solid Waste Management Plan for Public Review and Comment was presented to the Committee. Motion by Member Panek, with support by Member Trisch to adopt the resolution as presented, 10 Yes Votes, 0 No Votes, 4 Members Absent, motion carried.

Next Meeting Date – Motion by Member Trisch, support by Member Baur that the next meeting will be scheduled after receiving the MDEQ's opinion on the amendment, motion carried.

Meeting Adjourned – Motion by Member Trisch, support by Member Baur to adjourn, motion carried. Meeting adjourned at 5:30 p.m.

Tuscola County Solid Waste Management Planning Committee Resolution Authorizing Release of the Draft Solid Waste Management Plan For Public Review and Comment

- WHEREAS, Tuscola County has filed a Notice of Intent with the Michigan Department of Environmental Quality indicating its intent to amend the County Solid Waste Management Plan in accordance with Part 115 of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended; and
- WHEREAS, The County has duly appointed a Solid Waste Management Planning Committee to oversee the preparation of the Solid Waste Management Plan Amendment, and
- WHEREAS, The Planning Committee has now completed a draft of the Solid Waste Management Plan Amendment, and
- WHEREAS, The Planning Committee now desires to release the draft Plan for a three-month public review and comment period as required by Act 451;
- NOW, THEREFORE, BE IT RESOLVED, That the Tuscola County Solid Waste Management Planning Committee hereby authorizes the release of the draft Tuscola County Solid Waste Management Plan Amendment for public review and comment in accordance with the procedures specified in Part 115 of Act 451.

Motion to adopt the resolution by Ken Panek_____; supported by Christine Trisch

Ycs: 10 No: 0 Absent: 4

Resolution declared adopted at a regular meeting of the Tuscola County Solid Waste Management Planning Committee held on Tuesday, July 14, 2015.

William A Bushaw - Chairperson

Vicky D. Sherry - Secretary

PLAN APPROVALS

Copies of plan approval actions by the Planning Committee, Tuscola County Board of Commissioners, and the municipalities within the County are attached following this page.

- **❖** Next pages
 - planning committee meeting minutes with motion and approval to approve the draft plan and send to Board of Commissioners
 - > Tuscola Board of Commissioners meeting minutes with Planning Commission recommendation of approval and release to local unites of government
 - > City of Caro
 - Resolution of acceptance –

RESOLUTION FOR ACTION ON THE AMENDED TUSCOLA COUNTY SOLID WASTE MANAGEMENT PLAN BY LOCAL UNITS OF GOVERNMENT

WHEREAS, Tuscola County has prepared an amended Solid Waste Management Plan in accordance with Part 115 of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, and

WHEREAS, the Tuscola County Board	of Commissioners has now approved the plan as prepared
and submitted by the County Solid Waste Mana	
WHEREAS, therecommendations;	has reviewed the updated Solid Waste Plan and its
NOW THEREFORE, BE IT RESOLVED that the Common Council of this municipality does hereby approve the amended Tuscola County Solid Waste Management Plan in accordance with Act 451, as amended.	
AYES:	
NAYS:	
ABSENT:	
THIS RESOLUTION IS DECLARED ADOPTI	ED THIS DAY OF 20
	Clerk
	correct copy of a resolution duly adopted by the Common ular meeting held on at at at
(Clerk name and title listed here)	

APPENDIX D: ATTACHMENTS

Insert Tuscola County Landfill Location Map

Landfills utilized outside of Tuscola County

Next Pages are the Inter County Agreements

Copies of Inter-County agreements with other Counties

Import/Export Authorization Conditions

Contiguous Counties:

This plan continues to authorize the seven contiguous counties for import and export of wastes across county borders. Reciprocal agreements are not required for the seven contiguous counties, but are preferred. If the authorized contiguous county meets all authorized conditions, waste may be transferred between counties without a reciprocal agreement.

The three conditions are:

- 1. The waste volumes flowing between borders must not be higher than the identified maximum daily volumes (listed in tables)
- 2. The contiguous counties must provide the Supporting Information for Import/Export Authorizations (found below) to the DPA.
- 3. Both Counties (the sending and the receiving) must explicitly authorize the import/export of waste in each other's approved Solid Waste Management plans. (Part 115 of Act 451).

If one or more of these authorized conditions in the Plan are not met, a contiguous county is not authorized to import/export waste to and from Saginaw County until such time that all of the authorized conditions are met.

Upon receipt of the Supporting Information for Import/Export Authorizations by the Designated Planning Agency (Saginaw County Metropolitan Planning Commission), waste may begin flowing across the borders of the seven contiguous counties as long as all of the authorized conditions are met. A reciprocal agreement, for any amount up to the identified volume, as listed in the import/export tables, may be signed by the Chairman of the Saginaw County Board of Commissioners without further approval from the Board of Commissioners. These agreements would expire no later than December 31, 2004.

SUPPORTING INFORMATION FOR IMPORT/EXPORT AUTHORIZATIONS – CONTIGUOUS COUNTIES

- 1. Name, address and phone number of applicant/contact person
- 2. Identify Counties and/or businesses involved
- 3. Identify proposed quantities, points of origin, and types of potential material for transfer between counties
- 4. Describe Solid Waste alternatives (recycling, composting, resource recovery, and reduction programs and technologies) in place in any communities or service areas within the subject county
- 5. If agreements/authorizations are intended to be for less than the lifetime of this Solid Waste Plan, specify the time frame contemplated for the agreement
- 6. Include facility descriptions for solid waste processing facilities in the subject county (refer to DEQ standard format).
- 7. List which counties are explicitly authorized for import and export of waste in the subject county's plan.

Letters from Robert S. Thornton of Citizens Disposal of Grand Blanc and Matt Neely of Republic Services

Special Conditions

Special conditions affecting import or export of solid waste

Conditions stipulated by Saginaw County are attached.

Macomb County has stipulated that the capacity available to Tuscola County is contingent upon the availability of sufficient capacity to Macomb County for the 5 year and 10 year planning periods.

Tuscola County's future import authorizations, should a disposal facility be sited in the County, stipulate that sufficient capacity shall be reserved for Tuscola County to provide capacity for 10 years.

Document from Saginaw County Metropolitan Planning Commission – identified Tuscola County and others as counties that are authorized to import/export waste in Saginaw County. Includes EXPORT AUTHORIZATION statement and Table 2 – A CURRENT EXPORT VOLUME AUTHORIZATION OF SOLID WASTE. This form and statement should be included in the updated plan. Also included are letters of endorsement statements from area waste management companies.

Listed Capacity

Documentation from landfills that the County has access to their listed capacity.

The operators of the landfills identified in the 'Selected System' portion of this plan have contacted to obtain documentation that Tuscola County will have access to their listed capacity for the planning period. Letters from the individual landfills will be attached as they are received.

CAPACITY CALCULATIONS

The following summarizes the listed capacity for the various disposal facilities that Tuscola County will use to meet its disposal capacity requirements. Facilities in Genesee County have additional capacity, but information on their available capacity has not yet been provided

Facility

Current Capacity (cubic yards)

Life Expectancy

List companies followed by county

TOTAL:

Over the next 10 years (2000 - 2009), Tuscola County is projected to generate a total volume of 1,031,998 cubic yards of solid waste. This figure is based on current disposal volumes and projected county growth. The figure has not been adjusted for additional diversion that may occur due to expected increases in materials recovery volumes. For final disposal volumes, a compaction of 2: 1 has been assumed although a greater volume compaction ratio may be achieved. On this basis, Tuscola County will require 516,000 cubic yards of landfill capacity for the next 10 years. This represents about 1.2% of the currently available capacity shown above.

Based on conditions stipulated by the respective counties, Tuscola County will have access to 124,000 annual cubic yards of capacity in Saginaw County and 15,000 annual cubic yards of capacity in Macomb County. The aggregate capacity available to Tuscola County has been adjusted accordingly, as follows:

Facility

Current Capacity (cubic yards)

List each and their county

TOTAL AVAILABLE TO TUSCOLA COUNTY

33,050,153

The 516,000 cubic yards of landfill space that Tuscola County is projected to require for the next 10 years represents only about 1.6% of the available capacity shown above. On this basis, it is apparent that Tuscola County will have access to sufficient disposal capacity far beyond 10 years. However, the facilities with the longest life expectancies are Citizens Disposal (25 years) and Tri-City RDF (22 years). With *this* in mind, a more conservative estimate is that 20 to 25 years of disposal capacity will be available to the County.

Letters from the various landfill operators that document that Tuscola County will have access to their listed capacity are attached following this page.

Resolutions

The following are resolutions from County Board of Commissioners approving municipality's request to be included in an adjacent County's Plan.

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.

ACTION #1: Establish the Solid Waste Management Advisory Board (SWMAB) as the body responsible for overseeing and coordinating plan implementation, under the general direction of the County Department of Public Works.

Lead Responsibilities: County Board of Commissioners, County Board of Public Works Timeline: 2000; within 3 months after DEQ approval of plan update.

ACTION #2.: Continue operation of County MRF and Recycling Program

Lead Responsibilities: County Board of Commissioners, Recycling Coordinator, and SWMAB Timeline: Ongoing

ACTION #3: Expand recycling program to collect additional materials as they become feasible. Lead Responsibilities: Recycling Coordinator, SWMAB

Timeline Ongoing

ACTION #4: Promote resource conservation & waste reduction efforts by residents, businesses, industries, and institutions.

Lead Responsibilities: Recycling Coordinator, SWMAB Timeline Ongoing

ACTION #5: Promote expanded recycling efforts by businesses, industries, and institutions, Lead Responsibilities: Recycling Coordinator, SWMAB

Timeline: Ongoing

D 3

ATIACHMENTS

ACTION #6 Promote home and municipal composting Lead Responsibilities Recycling Coordinator, SWMAB Timeline: Ongoing

ACTION #7 Conduct a trial "pay as you throw" program in a selected community.

Lead Responsibilities Recycling Coordinator, SWMAB, private solid waste industry, participating municipality.

Timeline: 2000 - 2001

ACTION #8 Develop model procurement guidelines to encourage purchase & use of recycled materials by county government, local governments, and major institutions.

Lead responsibilities: Recycling Coordinator, SWMAB, municipalities, institutions Timeline. 2001 - 2002

ACTION #9 Investigate the feasibility of establishing a county re-use center.

Lead Responsibilities Recycling Coordinator, SWMAB, private enterprise, civic organizations Timeline. 2001 - 2003

ACTION #10 Investigate options, including waste disposal surcharges, for long-term funding, of resource recovery programs and other solid waste management activities.

Lead Responsibilities Recycling Coordinator, SWMAB Timeline Ongoing

ACTION #11 Continue to coordinate solid waste management activities with surrounding counties through the Multi-County Task Force.

Lead Responsibilities: Recycling Coordinator, SWMAB Timeline: Ongoing

ACTION #12: Review implementation progress and make adjustments as necessary.

Lead Responsibilities: SWMAB, County Board of Public Works, County Board of Commissioners

Timeline: Annual review, 200 0–2004

Resolution for Action on the Amended Tuscola County Solid Waste Management Plan by Local Unites of Government

WHEREAS,	Tuscola County has prepared an amended Solid Waste Management Plan in accordance with Part 115 of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended; and	
WHEREAS,	The Tuscola County Board of Commissioners has now approved the plan as prepared and submitted by the County Solid Waste Management Planning Committee, and	
WHEREAS,	The of (Name of Local Unit)	
	Has reviewed the updated Solid Waste Plan and its recommendations;	
NOW, THERI	EFORE, BE IT RESOLVED that the of this of this	
	Municipality hereby(Approves/ Disproves)	
	The updated Tuscola County Solid Waste Management Plan in accordance with Act 451, as amended.	
Resolution dec	clared adopted at a regular meeting of the	
Of(Name of	(Board/Council) held on, 20 (Local Unit) (Date)	
Chief Elected	Official Clerk	

Amendment language received February 7, 2017 removed er modifications described in Tuscola County Solid Waste Management Planning amendment a roval letter found on Page 1

Tuesday July 14, 2015 Solid Waste Management Planning Committee Meeting Minutes

Meeting Called to order by Chairmen Bushaw at 5:00 pm in the Rolka Building Conference Room, 429 N. State Street, Caro MI 48723

Attendance: Bill Bushaw, Steve Erickson, Vicky Sherry, John Walker, Peter Miletich, Keith Baur, Mike Miller, Ken Panek, Christine Trisch, Gene Suuppi, and guest Brian Burke, MDEQ

Approval of the Agenda – motion by Member Trisch, support by Member Baur to approve the Agenda, motion carried

Approval of Minutes – Secretary Sherry informed the Committee the minutes of the previous meeting needed to be updated and would be presented at the next meeting.

Review Siting Criteria for Solid Waste Material Recovery Facilities (MRF) – Secretary Sherry informed the Committee of the purpose of this Siting Criteria, Guest Brian Burke further informed the Committee of the importance of having this siting criteria in the Solid Waste Management Plan. Motion by Member Panek, support by Member Trisch to approve the presented Siting Criteria for Solid Waste Material Recovery Facilities, motion carried.

Review Siting Criteria Transfer Facilities – Secretary Sherry presented the Committee with the suggested Siting Criteria for Transfer Facilities. Motion by Member Trisch, support by Member Miller motion carried.

Review Removing Language "B. Collection and Transportation of Solid Waste... With the exception of the Village of Millington." Secretary Sherry informed the Committee that this wording was outdated and Millington no longer collected or transported solid waste. Motion by Member Trisch, support by Member Baur, motion carried.

Review of Solid Waste Management Amendment – the Solid Waste Management Amendment was presented to the Committee. Discussion took place concerning the recycling portion of the Solid Waste Management Plan. It was decided, that since the recycling portion of the plan is governed and the responsibility of Tuscola County, it would not be amended and turned over to the Tuscola County Recycling Committee. Motion by Member Trisch, support by Member Baur to approve the Solid Waste Management Amendment as presented, motion carried.

Amendment Resolution – The Solid Waste Management Planning Committee Resolution Authorizing Release of the Draft Solid Waste Management Plan for Public Review and Comment was presented to the Committee. Motion by Member Panek, with support by Member Trisch to adopt the resolution as presented, 10 Yes Votes, 0 No Votes, 4 Members Absent, motion carried.

Next Meeting Date – Motion by Member Trisch, support by Member Baur that the next meeting will be scheduled after receiving the MDEQ's opinion on the amendment, motion carried.

Meeting Adjourned – Motion by Member Trisch, support by Member Baur to adjourn, motion carried. Meeting adjourned at 5:30 p.m.

Tuscola County Solid Waste Management Planning Committee Resolution Authorizing Release of the Draft Solid Waste Management Plan For Public Review and Comment

WHEREAS, Tuscola County has filed a Notice of Intent with the Michigan Department of Environmental Quality indicating its intent to amend the County Solid Waste Management Plan in accordance with Part 115 of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended; and

WHEREAS, The County has duly appointed a Solid Waste Management Planning Committee to oversee the preparation of the Solid Waste Management Plan Amendment, and

WHEREAS, The Planning Committee has now completed a draft of the Solid Waste Management Plan Amendment, and

WHEREAS, The Planning Committee now desires to release the draft Plan for a three-month public review and comment period as required by Act 451;

NOW, THEREFORE, BE IT RESOLVED, That the Tuscola County Solid Waste Management Planning Committee hereby authorizes the release of the draft Tuscola County Solid Waste Management Plan Amendment for public review and comment in accordance with the procedures specified in Part 115 of Act 451.

Motion to adopt the resolution by Ken Panek ; supported by Christine Trisch

Yes: 10

No: 0

Absent: 4

Resolution declared adopted at a regular meeting of the Tuscola County Solid Waste Management Planning Committee held on Tuesday, July 14, 2015.

William A Bushaw - Chairperson

Vicky D. Sherry - Secretar

Solid Waste Management Planning Committee

Meeting Minutes for December 10, 2015

Meeting Called to order by Chairman Bushaw at 5:00 p.m.

Attendance: Bill Bushaw, Steve Erickson, Vicky Sherry, Keith Baur, Mike Miller, Christine Trisch, Joe Greene, Gene Suuppi, and guest Brian Burke

Approval of Agenda: motion by Committee Member Green, support by Committee Member Trisch to approve the agenda as presented, motion carried

Approval of Minutes: motion by Committee Member Trisch, support by Committee Member Green to approve the minutes from the previous meeting, motion carried

Review of Public Comments for Amendment:

- a) Reviewed a comment from Dayton Township, to add their current solid waste provider to the amendment, motion by Committee Member Greene, support by Committee Member Erickson to add the current information to the amendment, motion carried
- b) Reviewed a comments from Brian Burke of the MDEQ,
 - a. to site all B Transfer Stations in the County. Upon investigation by Committee Member Sherry, it was discovered the only B Transfer Station in Tuscola County was sold on November 2, 2015 and is no longer used as a transfer station.
 - b. To change the language 'Siting Criteria Transfer Facilities to Siting Criteria for Type A Transfer Facilities Committee Agreed by Consensus to change the language as suggested by Mr. Burke
- c) Reviewed comments from Christina Miller of the MDEQ,
 - a. The committee agreed by consensus the comments about the B Transfer Station in Tuscola County was no longer relevant
 - Comment regarding the groundwater recharge and wellhead protection motion by Committee
 Member Trisch, support by Committee Member Miller, to leave the amendment language as
 written, motion carried
 - c. Comment suggestion of changing the language of the amendment from Siting Criteria for Solid Waste Material Recovery Facilities to Solid Waste Processing Facilities, motion by Committee Member Trisch, support by Committee Member Greene to change the amendment to the language listed above, motion carried

Amendment Resolution: motion made by Committee Member Greene, support by Committee Member Trisch to approve the Tuscola County Solid Waste Management Planning Committee Resolution to be presented to the Tuscola County Board of Commissioners, which approves the Solid Waste Management Plan Amendment and respectfully forwards the amendment to the Tuscola County Board of Commissioners for their approval, motion carried

Adjournment: Motion by Committee Member Green, support by Committee Member Suuppi to adjourn the meeting, motion carried. Meeting adjourned at 5:25 p.m.

Tuscola County Solid Waste Management Planning Committee Resolution

Motion made by Committee Member Green Supported by Committee Member Trisch to approve the following resolution motion _____X__Carried ______Not Carried.

WHEREAS, the Tuscola County Solid Waste Management Planning Committee are charged with providing for the health and safety of the residents of Tuscola County, and

WHEREAS, the Tuscola County Solid Waste Management Planning Committee, as part of that responsibility understand that providing for the safe collection and removal of solid waste is part of that obligation, and

WHEREAS, the Tuscola County Board of Commissioners has appointed the Tuscola County Solid Waste Management Committee to provide guidance and assistance in the development of the amended Tuscola County Solid Waste Management Plan for the County, and

WHEREAS, THE Solid Waste Management Planning Committee has reviewed, discussed, and devised an amendment to the Solid Waste Management Plan and as required by the Michigan Department of Environmental Quality submitted the request to all of the local legislative bodies within Tuscola County for consideration and a 90 day public comment period, and

WHEREAS, the Tuscola County Solid Waste Management Planning Committee met to discuss the comments and suggestions given during the 90 day public review and comment period, and

WHEREAS, this complies with the Michigan Department of Environmental Quality's requirements, and

NOW THEREFORE LET IT BE RESOLVED, that the Tuscola County Solid Waste Management Planning Committee hereby accepts and approves the Tuscola County Solid Waste Management Plan Amendment and respectfully forwards the amendment to the Tuscola County Board of Commissioners for their approval, and

NOW THEREFORE BE IT FURTHER RESOLVED, that following the Board of Commissioners review, the amendment will be forwarded to all Tuscola County Townships, Villages, and Cities for a required 67% approval and then forwarded to the Michigan Department of Environmental Quality for their review and concurrence.

Ayes: 8

Nayes: 0
Absent: 6

William A Bushaw - Chairman

I certify that the foregoing constitutes a true and complete copy of a resolution adopted by the Tuscola County Solid Waste Management Planning Committee at a special meeting held on December 10, 2015.

Vicky D. Sherry - Secretary

Dated: December 10, 2015

Resolution of Tuscola County Board of Commissioners Approval

Resolution
Tuscola County Board of Commissioners
125 Lincoln Street
Caro, MI 48723

WHEREAS, the Tuscola County Solid Waste Management Planning Committee are charged with providing for the health and safety of the residents of Tuscola County, and

WHEREAS, the Tuscola County Solid Waste Management Planning Committee, as part of that responsibility understand that providing for the safe collection and removal of solid waste is part of that obligation, and

WHEREAS, the Tuscola County Board of Commissioners has appointed the Tuscola County Solid Waste Management Committee to provide guidance and assistance in the development of the amended Tuscola County Solid Waste Management Plan for the County, and

WHEREAS, THE Solid Waste Management Planning Committee has reviewed, discussed, and devised an amendment to the Solid Waste Management Plan and as required by the Michigan Department of Environmental Quality submitted the request to all of the local legislative bodies within Tuscola County for consideration and a 90 day public comment period, and

WHEREAS, the Tuscola County Solid Waste Management Planning Committee met to discuss the comments and suggestions given during the 90 day public review and comment period, and

WHEREAS, this complies with the Michigan Department of Environmental Quality's requirements, and

NOW THEREFORE LET'IT BE RESOLVED, that the Tuscola County Board of Commissioners hereby accepts and approves the Tuscola County Solid Waste Management Plan Amendment as recommended by the Tuscola County Solid Waste Management Planning Committee, and

NOW THEREFORE BE IT FURTHER RESOLVED, that upon approval by 67% of Tuscola County Townships, Villages, and Cities the amendment will be forwarded to the Michigan Department of Environmental Quality for their review and concurrence.

Ayes: allen, Bardwell, Kirkpatrico, Burlin

Thomas Bardwell – Chairman

I certify that the Toregoing constitutes a true and complete copy of a resolution adopted by the Tuscola County Board of Commissioners at a regular meeting held on Lecensery 17, 2015

Jodi Fetting - Clerk

Absent: 🔰

Resolution of Municipal Approval

Township of Akron Resolution of Approval Tuscola County Solid Waste Management Plan Amendment

WHEREAS, the Tuscola County Board of Commissioners and its representatives on the Tuscola County Solid Waste Management Planning Committee are responsible for the preparation of a solid waste management plan for Tuscola County, and all amendments to the said plan, and

WHEREAS, this plan must conform to State of Michigan, Part 115 of 1994 Public Act as amended and monitored by the Michigan Department of Environmental Quality, and

WHEREAS, in addition to State of Michigan requirements, the Solid Waste Management Planning Committee has prepared a Plan Amendment that best represents the needs of the residents of Tuscola County and includes environmental responsibility and economic feasibility, and

WHEREAS, the Tuscola County Board of Commissioners has presented the Plan Amendment to us for review and vote, and

NOW THEREFORE LET IT BE RESOLVED, that the Township of Akron, does hereby approve the above referenced Tuscola County Solid Waste Management Plan Amendment as presented.

Absent:

enn allen

Don Schmuck, Supervisor

I certify that the foregoing constitutes a true and complete copy of a resolution adopted by the Akron Township Board at a regular meeting held on October 20, 2016.

Ann Allen, Clerk

Ayes: Nayes:

Village of Akron Resolution of Approval Tuscola County Solid Waste Management Plan Amendment

WHEREAS, the Tuscola County Board of Commissioners and its representatives on the Tuscola County Solid Waste Management Planning Committee are responsible for the preparation of a solid waste management plan for Tuscola County, and all amendments to the said plan, and

WHEREAS, this plan must conform to State of Michigan, Part 115 of 1994 Public Act as amended and monitored by the Michigan Department of Environmental Quality, and

WHEREAS, in addition to State of Michigan requirements, the Solid Waste Management Planning Committee has prepared a Plan Amendment that best represents the needs of the residents of Tuscola County and includes environmental responsibility and economic feasibility, and

WHEREAS, the Tuscola County Board of Commissioners has presented the Plan Amendment to us for review and vote, and

NOW THEREFORE LET IT BE RESOLVED, that the Village of Akron does hereby approve the above referenced Tuscola County Solid Waste Management Plan Amendment as presented.

Ayes: Nusz, Carland, C. Dworzecki, Hollister, Brabo, Schneider, Ruppal

Nayes:None

Absent:None

Juanita Hollister, President

I certify that the foregoing constitutes a true and complete copy of a resolution adopted by the Village of Akron Village Council at a regular meeting held on **February 16, 2016**.

Shari Hadaway, Clerk

City of Caro Resolution of Approval Tuscola County Solid Waste Management Plan Amendment

WHEREAS, the Tuscola County Board of Commissioners and its representatives on the Tuscola County Solid Waste Management Planning Committee are responsible for the preparation of a solid waste management plan for Tuscola County, and all amendments to the said plan, and

WHEREAS, this plan must conform to State of Michigan, Part 115 of 1994 Public Act as amended and monitored by the Michigan Department of Environmental Quality, and

WHEREAS, in addition to State of Michigan requirements, the Solid Waste Management Planning Committee has prepared a Plan Amendment that best represents the needs of the residents of Tuscola County and includes environmental responsibility and economic feasibility, and

WHEREAS, the Tuscola County Board of Commissioners has presented the Plan Amendment to us for review and vote, and

NOW THEREFORE LET IT BE RESOLVED, that the City of Caro does hereby approve the above referenced Tuscola County Solid Waste Management Plan Amendment as presented.

Yes: Richard Pouliot, Michael Henry, Charlotte Kish, Brian Rickwalt

No: None

Absent: Joseph Greene, Gordon Taggett, Rick Lipan

Richard E Pouliot, Mayor

I certify that the foregoing constitutes a true and complete copy of a resolution adopted by the City of Caro City Council at a regular meeting held on 5-16-16.

Karen Snider, Clerk/Treasurer

Township of Elmwood Resolution of Approval Tuscola County Solid Waste Management Plan Amendment

WHEREAS, the Tuscola County Board of Commissioners and its representatives on the Tuscola County Solid Waste Management Planning Committee are responsible for the preparation of a solid waste management plan for Tuscola County, and all amendments to the said plan, and

WHEREAS, this plan must conform to State of Michigan, Part 115 of 1994 Public Act as amended and monitored by the Michigan Department of Environmental Quality, and

WHEREAS, in addition to State of Michigan requirements, the Solid Waste Management Planning Committee has prepared a Plan Amendment that best represents the needs of the residents of Tuscola County and includes environmental responsibility and economic feasibility, and

WHEREAS, the Tuscola County Board of Commissioners has presented the Plan Amendment to us for review and vote, and

NOW THEREFORE LET IT BE RESOLVED, that the Township of Elmwood does hereby approve the above referenced Tuscola County Solid Waste Management Plan Amendment as presented.

Ayes: 5

Absent:

Chris Graff, Supervisor

I certify that the foregoing constitutes a true and complete copy of a resolution adopted by the Township of Elmwood Board of Trustees at a regular meeting held on 1/-16-20/6

roughton

Connie McNaughton, Clerk

Village of Cass City Resolution of Approval Tuscola County Solid Waste Management Plan Amendment

WHEREAS, the Tuscola County Board of Commissioners and its representatives on the Tuscola County Solid Waste Management Planning Committee are responsible for the preparation of a solid waste management plan for Tuscola County, and all amendments to the said plan, and

WHEREAS, this plan must conform to State of Michigan, Part 115 of 1994 Public Act as amended and monitored by the Michigan Department of Environmental Quality, and

WHEREAS, in addition to State of Michigan requirements, the Solid Waste Management Planning Committee has prepared a Plan Amendment that best represents the needs of the residents of Tuscola County and includes environmental responsibility and economic feasibility, and

WHEREAS, the Tuscola County Board of Commissioners has presented the Plan Amendment to us for review and vote, and

NOW THEREFORE LET IT BE RESOLVED, that the Village of Cass City does hereby approve the above referenced Tuscola County Solid Waste Management Plan Amendment as presented.

Ayes: BIEFER, ERICKSON, KARWOWSKI, KIRN, ZAWILINSKI, PALMATEER

Nayes: NONE

3

(m) Jahm

Absent: BARRIOS

Carl Palmateer, President

I certify that the foregoing constitutes a true and complete copy of a resolution adopted by the Village of Cass City Village Council at a regular meeting held on 8-29-2016.

Nanette Walsh, Clerk/Treasurer

DENMARK TOWNSHIP RESOLUTION NO. 2016-04



At a regular meeting of the Township Board of Trustees of the Township of Denmark, County of Tuscola, State of Michigan, held at the Denmark Township Hall on the 29th day of February, 2016 beginning at 6:00 o'clock pm, there were:

PRESENT:

Supervisor C Heinlein, Clerk N Heinlein, Treasurer Weber, Trustee Schwab, Trustee Krumnauer

ABSENT:

None

The following preamble and resolution were moved for adoption by Schwab, and the motion was supported by

Krumnauer.

RESOLUTION OF APPROVAL TUSCOLA COUNTY SOLID WASTE MANAGEMENT PLAN AMENDMENT

WHEREAS, the Tuscola County Board of Commissioners and its representatives on the Tuscola County Solid Waste Management Planning Committee are responsible for the preparation of a solid waste management plan for Tuscola County, and all amendments to the said plan, and

WHEREAS, this plan must conform to State of Michigan, Part 115 of 1994 Public Act as amended and monitored by the Michigan Department of Environmental Quality, and

WHEREAS, in addition to State of Michigan requirements, the Solid Waste Management Planning Committee has prepared a Plan Amendment that best represents the needs of the residents of Tuscola County and includes environmental responsibility and economic feasibility, and

WHEREAS, the Tuscola County Board of Commissioners has presented the Plan Amendment to the Denmark Township Board of Trustees.

NOW THEREFORE LET IT BE RESOLVED, that the Township of Denmark does hereby approve the above referenced Tuscola County Solid Waste Management Plan Amendment as presented.

A roll call vote on the foregoing resolution was taken and was as follows:

AYE:

C Heinlein, N Heinlein, Weber, Schwab, Krumnauer

NAY:

None

ABSTAIN:

None

The Supervisor declared the motion carried and the resolution duly adopted at 6:15 pm.

All resolutions and parts of resolutions insofar as they may be in conflict herewith are hereby rescinded.

CLERK'S CERTIFICATE

The undersigned, being the duly qualified and acting Clerk of the Township of Denmark, Tuscola County, Michigan, hereby certifies that (1) the foregoing is a true and complete copy of a resolution duly adopted by the Township Board at a regular meeting held on 29th day of February 2016, at which meeting a quorum was present and remained throughout, (2) the original thereof is on file in the records of the Township, (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.

Dated: February 29, 2016

Nancy Heinlein,

Denmark Township Clerk

YEINLEONG

Township of Elkland Resolution of Approval Tuscola County Solid Waste Management Plan Amendment

WHEREAS, the Tuscola County Board of Commissioners and its representatives on the Tuscola County Solid Waste Management Planning Committee are responsible for the preparation of a solid waste management plan for Tuscola County, and all amendments to the said plan, and

WHEREAS, this plan must conform to State of Michigan, Part 115 of 1994 Public Act as amended and monitored by the Michigan Department of Environmental Quality, and

WHEREAS, in addition to State of Michigan requirements, the Solid Waste Management Planning Committee has prepared a Plan Amendment that best represents the needs of the residents of Tuscola County and includes environmental responsibility and economic feasibility, and

WHEREAS, the Tuscola County Board of Commissioners has presented the Plan Amendment to us for review and vote, and

NOW THEREFORE LET IT BE RESOLVED, that the Township of Elkland does hereby approve the above referenced Tuscola County Solid Waste Management Plan Amendment as presented.

Ayes: 5

Nayes:0

Absent: 0

Dan Erla, Supervisor

Dan Ferre

Ed LaBelle, Clerk

Village of Fairgrove Resolution of Approval Tuscola County Solid Waste Management Plan Amendment

WHEREAS, the Tuscola County Board of Commissioners and its representatives on the Tuscola County Solid Waste Management Planning Committee are responsible for the preparation of a solid waste management plan for Tuscola County, and all amendments to the said plan, and

WHEREAS, this plan must conform to State of Michigan, Part 115 of 1994 Public Act as amended and monitored by the Michigan Department of Environmental Quality, and

WHEREAS, in addition to State of Michigan requirements, the Solid Waste Management Planning Committee has prepared a Plan Amendment that best represents the needs of the residents of Tuscola County and includes environmental responsibility and economic feasibility, and

WHEREAS, the Tuscola County Board of Commissioners has presented the Plan Amendment to us for review and vote, and

NOW THEREFORE LET IT BE RESOLVED, that the Village of Fairgrove does hereby approve the above referenced Tuscola County Solid Waste Management Plan Amendment as presented.

Ayes: 4
Nayes: \emptyset Absent: \emptyset

Thomas Wassa, President

I certify that the foregoing constitutes a true and complete copy of a resolution adopted by the Village of Fairgrove Village Council at a regular meeting held on 4016.

Heidi Stark, Clerk

Township of Fremont Resolution of Approval Tuscola County Solid Waste Management Plan Amendment

WHEREAS, the Tuscola County Board of Commissioners and its representatives on the Tuscola County Solid Waste Management Planning Committee are responsible for the preparation of a solid waste management plan for Tuscola County, and all amendments to the said plan, and

WHEREAS, this plan must conform to State of Michigan, Part 115 of 1994 Public Act as amended and monitored by the Michigan Department of Environmental Quality, and

WHEREAS, in addition to State of Michigan requirements, the Solid Waste Management Planning Committee has prepared a Plan Amendment that best represents the needs of the residents of Tuscola County and includes environmental responsibility and economic feasibility, and

WHEREAS, the Tuscola County Board of Commissioners has presented the Plan Amendment to us for review and vote, and

NOW THEREFORE LET IT BE RESOLVED, that the Township of Fremont does hereby approve the above referenced Tuscola County Solid Waste Management Plan Amendment as presented.

Ayes: Ida Barrons, John Welke, Henry Wymore, Amy Holbrook, Charles Sherwin

Nayes: None

Absent: None

Henry Wymore, Supervisor

I certify that the foregoing constitutes a true and complete copy of a resolution adopted by the Township of Fremont Board of Trustees at a regular meeting held on February 11, 2016.

Amy L. Holbrook, Clerk

RESOLUTION NO. 16-001 Village of Kingston

RESOLUTION OF MUNICIPAL APPROVAL OF THE PROPOSED AMENDMENT OF THE TUSCOLA COUNTY SOLID WASTE MANAGEMENT PLAN At the Regular meeting of the KINGSTON VILLAGE COUNCIL called to order by Robin LaFond, President On October 10, 2016 at 7:00 p.m. the following Resolution was offered: Moved by: Randal Seconded by: Skinner WHEREAS, the Tuscola County Board of Commissioners and its representatives on the Tuscola County Solid Waste Management Planning Committee are responsible for the preparation of a solid waste management plan for Tuscola County, and all amendments to the said plan, and WHEREAS, this plan must conform to State of Michigan, Part 115 of 1994 Public Act as amended and monitored by the Michigan Department of Environmental Quality, and WHEREAS, in addition to State of Michigan requirements, the Solid Waste Management Planning Committee has prepared a Plan Amendment that best represents the needs of the residents of Tuscola County and includes environmental responsibility and economic feasibility, and WHEREAS, the Tuscola County Board of Commissioners has presented the Plan Amendment to us for review and vote, and NOW THEREFORE, BE IT RESOLVED, that the Kingston Village Council does hereby approve the above referenced Tuscola County Solid Waste management Plan Amendment as presented. Ayes: 5 Nays: Ø Absent: 🗭 The Village President, Robin LaFond, declared Resolution No. 16-001 adopted. Robin LaFond, Carrie Gilley, Kingston Village President Kingston Village Clerk CERTIFICATE l. Carrie Gilley, the duly appointed and acting Clerk of the Village of Kingston hereby certify that the foregoing resolution was adopted by the Village of Kingston Council of said Village at the regular meeting of said Council held on October 10, 2016, at which a quorum was present, by roll call vote of said members as hereinbefore set forth; that said resolution was ordered to take immediate effect.

arrie dill Carrie Gilley, Clerk

Township of Koylton Resolution of Approval Tuscola County Solid Waste Management Plan Amendment

WHEREAS, the Tuscola County Board of Commissioners and its representatives on the Tuscola County Solid Waste Management Planning Committee are responsible for the preparation of a solid waste management plan for Tuscola County, and all amendments to the said plan, and

WHEREAS, this plan must conform to State of Michigan, Part 115 of 1994 Public Act as amended and monitored by the Michigan Department of Environmental Quality, and

WHEREAS, in addition to State of Michigan requirements, the Solid Waste Management Planning Committee has prepared a Plan Amendment that best represents the needs of the residents of Tuscola County and includes environmental responsibility and economic feasibility, and

WHEREAS, the Tuscola County Board of Commissioners has presented the Plan Amendment to us for review and vote, and

NOW THEREFORE LET IT BE RESOLVED, that the Township of Koylton does hereby approve the above referenced Tuscola County Solid Waste Management Plan Amendment as presented.

Ayes: 5

Nayes: O

Absent:

Douglas R Kramer, Supervisor

I certify that the foregoing constitutes a true and complete copy of a resolution adopted by the Township of Koylton Board of Trustees at a regular meeting held on +26 11,2016

James R Borek, Clerk

Village of Mayville Resolution of Approval Tuscola County Solid Waste Management Plan Amendment

WHEREAS, the Tuscola County Board of Commissioners and its representatives on the Tuscola County Solid Waste Management Planning Committee are responsible for the preparation of a solid waste management plan for Tuscola County, and all amendments to the said plan, and

WHEREAS, this plan must conform to State of Michigan, Part 115 of 1994 Public Act as amended and monitored by the Michigan Department of Environmental Quality, and

WHEREAS, in addition to State of Michigan requirements, the Solid Waste Management Planning Committee has prepared a Plan Amendment that best represents the needs of the residents of Tuscola County and includes environmental responsibility and economic feasibility, and

WHEREAS, the Tuscola County Board of Commissioners has presented the Plan Amendment to us for review and vote, and

NOW THEREFORE LET IT BE RESOLVED, that the Village of Mayville does hereby approve the above referenced Tuscola County Solid Waste Management Plan Amendment as presented.

Ayes: Atkinson, Charette, Hiiter, Marlow and Fryers

Nayes: None

Absent: Barkowska and Windham

Clare Fryers, President

I certify that the foregoing constitutes a true and complete copy of a resolution adopted by the Village of Mayville Village Council at a regular meeting held on February 16, 2016.

Lisa Haubenstricker, Clerk

2016-05

Village of Millington Resolution of Approval Fuscota County Sulid Waste Management Plan Amendment

AVTHORPAS, the Tuescola County United of Commissioners and the representatives in the Lorentia. County Selful Wayle Management Planning Committee are responsible for the propagation of a social waste prompeniers risuldus busenta l'en myz oud all ament memoris rine solid plan, and

WHIRE AS This pleasan will comform to State of Mic figure, Part 15 of 1991 Public Arrins. inneroded and the othered by the Idictaigua Dynamices of Legiteamental Out it; and

AHURREAS, hi addition is 5ta e al Mohigan regule news, 172 Solid Warts Management illimorting Committee that presumed a Plan Amendment that hest represents the mean of the residents of Tuscola Commy and methods environmental responsibility and assuming feasibility. mod

WITEREAS, the Location and Florad of Communications has proposed the Plan Amendment to us for wview and your and

ROW THERETORE LEG IT SHIRREDLYED, dark to Village of Millington does hereby printer Englose returnment Piscola Friugy Stuff Wash Management Plan Phendinch 35 incesanced.

Ayes: Bussett, Cobb. Packler, Marchinid, Krimery, spurngy our

Waves: frome

the lan Reinert, Desamen

Bunsaline

Footifie that the foregoid, incustings: 2 time and complete page of a resolution adopted by time Fillage of Millington Village Guiziell at a regular resetting heal on Lehmary 8, 2016.

Luylone Long, Olerk

Village of Reese Council Resolution No. 15-16-06 Approval of Tuscola County Solid Waste Management Plan Amendment

WHEREAS, the Tuscola County Board of Commissioners and its representatives on the Tuscola County Solid Waste Management Planning Committee are responsible for the preparation of a solid waste management plan for Tuscola County, and all amendments to the said plan, and

WHEREAS, this plan must conform to State of Michigan, Part 115 of 1994 Public Act as amended and monitored by the Michigan Department of Environmental Quality, and

WHEREAS, in addition to State of Michigan requirements, the Solid Waste Management Planning Committee has prepared a Plan Amendment that best represents the needs of the residents of Tuscola County and includes environmental responsibility and economic feasibility, and

WHEREAS, the Tuscola County Board of Commissioners has presented the Plan Amendment to us for review and vote, and

NOW THEREFORE LET IT BE RESOLVED, that at a regularly scheduled meeting of the Reese Village Council, a quorum being present, a motion was made by <u>ELBERS</u> and second by <u>KEAST</u> to approve the above referenced Tuscola County Solid Waste Management Plan Amendment as presented.

Vote:

Ayes:

7

Nayes:

0

Absent:

0

I certify that the foregoing constitutes a true and complete copy of a resolution adopted by the Reese Village Council at a regular meeting held on February 8, 2016.

Chris Ranney, Village Clerk

Jorry Ellison, Village President

Township of Tuscola Resolution of Approval Tuscola County Solid Waste Management Plan Amendment

#HEREAS: the Fuscilla County H and of Concenigazoners and its representatives on the Turnols. Uponly sollet whele Managorism Planning Committee are purpose ble for the propertition of a outlid worste management plan for Tuscola County, and all amendment in the solid purpose.

WHEREAS, this plan must conform at State of Brickages, Peril 11 of 1994 Public Act = inecaded and investigated by the Michigan Department of Environmental Quality, and

WithREAS in addition to State of Michigan exponents, the Solid Warte Management Philonogy Committee has presented a Plan Amendment that beat represents the needs of the observe of Triumle Change and incomes investmental perpossibility and economic feasibility, and

WHIREAS, the Custoff Library Roard of Commissioners has passented the Plan Amendment to us for review and vote, and

MOW THEREPORE LET THE BLR COUNTY AND the Lac Developing of Traced Library as accorded to a better referenced Traced Trace

MICH

May & d

Nissani G

Log II Fackler , Supervisor

Feet of y that the diregaling experiences is use and remalest copy of a graduation adopted by the flowing for the condition of the flowing of the condition of

Michaely Huss, Clint

Sesolution of Municipal Approval
Siths Proposed Amendment of the
Tusks a County Soid Waste Management Flain

WHERFAS the Tuesmia County Board of Commission ere and its representatives on the Tuesola County field Waste Management Flamling County tee are responsible for the preparation of a world waste management than for Tuesda County, and all amundments to the sais plan, and

WHEREAS, this plan micescafform to bate of Michigan, Hwill (15 of 1994 Rubile Action owner ded or 2 monitored by the Michigan Despriment of the commontal Out by, and

WHEREAS, in addition to state of Michigan renul rements, the Soile Waste Management Planning Committee has propored a Plan American II that best represents the needs of the residents of Taxosia County and Addullas and chimental responsibility and exposure less to they, and

WHEREAS, the Tussala County Board of Commissioners has presented the Plan Amendment is us for review and vote, and

ACW THEREFORE LTT IT BE RESOLVED that the Fairgrove Township librard of Trustees rices mereby analogy the applied referenced Trustees County Solid Waste Management Plan Amendment on the condition that no solid waste disposal facility solid waste material recovery facility, and/or solid waste frames fluidity (built be developed in Builtgurve Township without the knowledge and approval of the Fairgrove Township Planning Commission and/or the Fairgrove Township Deard of Trustees.

syes Day Michaely, H. Y. Warns, Emmisheld, News

Naves: Alva C

keith Ander

Faing lave Trickaling Supervisor

contilly that the foregoing constitutos above and complete complete real af a resolution adopted by the unignoval foreign about 17 to see all a regular meeting held on August 14, 2019.

Kanen (Innnich In-

Fairgrove Township | Isua

Downship of Artesta Resolution of Approval Tustola County Solid Waste Management Plan Amendment

WHEREAS, the Lussida Equally Board of Commissions, yand its representatives on the Lucotal County Soud Waste Management Planning Committee are expansible for the preparation of a mild waste management plan for Tusan a County, and all amendments to the solid plan, and

WHEREAS: the grad most conform to State of Middigan (fall 115 of 1994 Public Act as imended and memored by the Midligan Department of Lawrence and Quality, and

WHEREAS; in addition to State of Nachagar, requirements, the Sould Waste Management Planning Stormmake has prepared a Plan Amend here that destrepresents the next, of the residents of The cold County and includes environmental responsibility and economic femiliality, and

WREREAS: (as 1 year): County Board of Communications show steep steeped the Plant Ammunical to an for review and rate, and

MOWITH ERESORE LET IT BE RESOLVED, that the Torreship of Arbera éces bireby approve the above referenced it scot a County-Solid Waste Management at an Amendment as presented.

A) (2)

News 7

Mbsent

Ken Hanek, Supervisor

I satisfy that the integrant is assumed a time and not update copy of a resolution related by the Lewistop of Action Brand of Louisies ϕ are gular meeting to all on $\phi \to -2\%$.

Mary Willen C'hris

RESOLUTION OF APPROVAL - TUSCOLA COUNTY SOLID WASTE MANAGEMENT PLAN AMENDMENT

VILLAGE OF UNIONVILLE 6454 MERRY ST. UNIONVILLE, MI 48767

Resolution of Approval Tuscola County Solid Waste Management Plan Amendment

WHEREAS, the Tuscola County Board of Commissioners and its representatives on the Tuscola County Solid Waste Management Planning Committee are responsible for the preparation of a solid waste management plan for Tuscola County, and all amendments to the said plan, and

WHEREAS, this plan must conform to State of Michigan, Part 115 of 1994 Public Act as amended and monitored by the Michigan Department of Environmental Quality, and

WHEREAS, in addition to State of Michigan requirements, the Solid Waste Management Planning Committee has prepared a Plan Amendment that best represents the needs of the residents of Tuscola County and includes environmental responsibility and economic feasibility, and

WHEREAS, the Tuscola County Board of Commissioners has presented the Plan Amendment to us for review and vote, and

NOW THEREFORE LET IT BE RESOLVED, that the Village of Unionville does hereby approve the above referenced Tuscola County Solid Waste Management Plan Amendment as presented.

4 (Anker, Katnik, Saxon, Vantove) 3 (Rusch, Young, Prime)

John Katnik, President

I certify that the foregoing constitutes a true and complete copy of a resolution adopted by the Village of Unionville Village Council at a regular meeting held on February 15, 2016.

Jessica A. VanHove, Clerk

Township of Watertown

County of Tuscola

RESOLUTION of Approval of Tuscola County Solid Waste Management Plan Amendment

Whereas, the Tuscola Board of Commissioners and its representatives on the Tuscola County Solid Waste Management Planning Committee are responsible for the preparation of a solid waste management plan for Tuscola County, and all amendments to the said plan; and

Whereas ,this plan must conform to the State of Michigan, Part 115 of 1994 Public Act as amended and monitored by the Michigan Department of Environmental Quality; and

Whereas, in addition to State of Michigan requirements, the Solid Waste Management Planning Committee has a prepared a Plan Amendment that best represents the needs of the residents of Tuscola County and includes environmental responsibility and economic responsibility and economic feasibility;

Whereas, the Tuscola County Board of Commissioners has presented the Plan Amendment to us for revieq and vote; and

Now, therefore, let it be resolved that the Township of Watertown, in the County of Tuscola, in the State of Michigan does hereby approve the above referenced Tuscola County Solid Waste Management Plan Amendment as presented.

Motion made by Frenzel. Worvie seconded motion. In a roll call vote, Watertown Board of Trustees voted as follows:

Frank Worvie, Trustee:

aye

Patricia Frenzel, Treasurer:

aye

Samuel Fackler, Trustee:

aye

Barbara Tanks, Clerk:

aye

Danny Quertermous, Supervisor:

absent

Motion Carried.

I certify that the foregoing constitutes a true and complete copy of a resolution adopted by the Township of Watertown Board of Trustees at a regular meeting held on Wednesday, October 12, 2016.

Barbara Tanks, Watertown Township Clerk

Berbara Junks

10/12/16

Supervisor
Melvin Witkovsky
Clerk
Karen Varney
Treasurer
Pat Gettel

Township of Wells
Tuscola County
2190 Frankford Road
Caro, MI 48723
989-673-4481

Trustees
James Kratz
Richard Witkovsky
Zoning
Administrator
Carmen Stevens

WELLS TOWNSHIP

Resolution of Municipal Approval of the Proposed Amendment of the Tuscola County Solid Waste Management Plan Resolution 16-4

WHEREAS, the Tuscola County Board of Commissioners and its representatives on the Tuscola County Solid Waste Management Planning Committee are responsible for the preparation of a solid waste management plan for Tuscola County, and all amendments to the said plan, and

WHEREAS, this plan must conform to State of Michigan, Part 115 of 1994 Public Act as amended and monitored by the Michigan Department of Environmental Quality, and

WHEREAS, in addition to State of Michigan requirements, the Solid Waste Management Planning Committee has prepared a Plan Amendment that best represents the needs of the residents of Tuscola County and includes environmental responsibility and economic feasibility, and

WHEREAS, the Tuscola County Board of Commissioners has presented the Plan Amendment to us for review and vote, and

NOW THEREFORE LET IT BE RESOLVED, that the Wells Township Board does hereby approve the above referenced Tuscola County Solid Waste Management Plan Amendment as presented.

Ayes: Melvin Witkovsky, Karen Varney, Pat Gettel, Jim Kratz and Dick Witkovsky Nays: 0 Absent:0

I certify that the foregoing constitutes a true and complete copy of a resolution adopted by the Wells Township Board at a regular meeting held on October 13, 2016

Karen Värney, Clerk

2016-3

Toyoship of Noveses Resolution of Approval Fuscala County Sulid Waste Management Plint Ameaniment

WITERBA9, III.) Tracola County Hourden' Commissioners and its insurscentarities on the Tracola County Solut Weste Management Planning Deposition as preparable for the population of a color waste management planning Tracola County, and o'll amorthur use to be said also said.

WHURDAS, the plan may comform to Survey of Michigan. Fact 115 of 1994 Public Acres naturally and maintened by the Michigan Dioparages, of Susurengestal Quanty, and

WIHIGHAS, in addition to Some of Michigan segrity means, the Social Waste Management Planning Committee has proposed in Plan suncationard disc best regressions are needs of the residents of Toscala Fronty and includes surguental responsibility and committee transfer up, and

WHEREAS, the Trainola County Hoard of Commissioners has presented the Plan Amenture in the Interested and vote, and

NOW THE ACTORNITY IT BE RESOLVED that the Invision of Now a considerate a prove the above rates and Tuesda Equals Shill Was a Subjection of Part of Superior Plan Amendment of province in the Amendment of the Am

Assemb Daniel Little

3/10a Zindodus, Suparvisus

Learning that the largeoning constraints is true and complete copy of a resolution adopted by the This institute of Noveau Toxical of Trustices of a regular investing liquid on -3/1/2016.

Manual Posers, Clerk

75-16 Township of Millington Resolution of Approval Tuscola County Solid Waste Management Plan Amendment

WHEREAS, the Tuscola County Board of Commissioners and its representatives on the Tuscola County Solid Waste Management Planning Committee are responsible for the preparation of a solid waste management plan for Tuscola County, and all amendments to the said plan, and

WHEREAS, this plan must conform to State of Michigan, Part 115 of 1994 Public Act as amended and monitored by the Michigan Department of Environmental Quality, and

WHEREAS, in addition to State of Michigan requirements, the Solid Waste Management Planning Committee has prepared a Plan Amendment that best represents the needs of the residents of Tuscola County and includes environmental responsibility and economic feasibility, and

WHEREAS, the Tuscola County Board of Commissioners has presented the Plan Amendment to us for review and vote, and

NOW THEREFORE LET IT BE RESOLVED, that the Township of Millington does hereby approve the above referenced Tuscola County Solid Waste Management Plan Amendment as presented.

Ayes: HERNER, HOARD JONES, KEINATH, WORTH

Nayes: None

Absent: None

Terry Jones, Supervisor

I certify that the foregoing constitutes a true and complete copy of a resolution adopted by the Township of Millington Board of Trustees at a regular meeting held on 9-19-2016.

Sheila Hebner, Clerk

City of Vassar Resolution 2016-06 Approval of

Tuscola County Solid Waste Management Plan Amendment

WHEREAS, the Tuscola County Board of Commissioners and its representatives on the Tuscola County Solid Waste Management Planning Committee are responsible for the preparation of a solid waste management plan for Tuscola County, and all amendments to the said plan, and

WHEREAS, this plan must conform to State of Michigan, Part 115 of 1994 Public Act as amended and monitored by the Michigan Department of Environmental Quality, and

WHEREAS, in addition to State of Michigan requirements, the Solid Waste Management Planning Committee has prepared a Plan Amendment that best represents the needs of the residents of Tuscola County and includes environmental responsibility and economic feasibility, and

WHEREAS, the Tuscola County Board of Commissioners has presented the Plan Amendment to us for review and vote, and

NOW THEREFORE LET IT BE RESOLVED, that the City of Vassar does hereby approve the above referenced Tuscola County Solid Waste Management Plan Amendment as presented.

Ayes: Bacon, Surgert, Gamet, Damm, Atkins

Nayes: None. Absent: None

Roger Bacon, Mayor

I certify that the foregoing constitutes a true and complete copy of a resolution adopted by the

City of Vassar City Council at a regular meeting held on 3-7-2014

Merri Lemcke, Clerk/Treasurer

From: <u>Vicky Sherry</u>

To: Miller, Christina (DEQ)

Subject:Re: Tuscola County SWMP AmendmentDate:Monday, March 20, 2017 2:43:51 PM

Attachments: <u>SWMP Amendment PN.pdf</u>

Hi Christina,

Attached is a copy of what we had in our files for the public notice.

Thanks, Vicky

On Mon, Mar 20, 2017 at 9:21 AM, Miller, Christina (DEQ) < MILLERC1@michigan.gov wrote:

Can you please forward me the request for the Public Comment period to the Advertiser which indicated the earlier posting?

Christina Miller

Solid Waste Planning, Reporting and Surcharge Coordinator

Office of Waste Management and Radiological Protection

Department of Environmental Quality

Constitution Hall

4 South

525 West Allegan

P.O. Box 30241

Lansing, MI 48933

<u>(517) 614-7426</u>

(517) 373-4051 fax

From: Vicky Sherry [mailto: vsherry@tuscolaedc.org]

Sent: Monday, March 20, 2017 8:45 AM

To: Miller, Christina (DEQ) **Subject:** Re: Tuscola County SWMP Amendment Hi Christina. Upon further research into the public notice I discovered that a public notice was posted at the Tuscola County Board of Commissioners office, and included copies of the proposed amendment and at the Tuscola County Economic Development Corporation office beginning on August 13, 2015. The reason for the late posting in the Advertiser was because of a clerical error from the newspaper. We requested an earlier posting for a week prior, but they instead posted it later than what was requested. The wording of the posting at Tuscola County Board of Commissioners office and the Tuscola County Economic Development Corporation was the same as the wording in the Advertiser. Thank you, Vicky On Thu, Mar 16, 2017 at 11:38 AM, Miller, Christina (DEQ) < MILLERC1@michigan.gov > wrote: I tried to call your cell and work number. The cell number listed below is no longer in service; the gentleman at your work number wasn't able to connect us. Can you please call me when you get a chance? Thanks, **Christina Miller** Solid Waste Planning, Reporting and Surcharge Coordinator Office of Waste Management and Radiological Protection Department of Environmental Quality

Constitution Hall

4 South

525 West Allegan

P.O. Box 30241

Lansing, MI 48933

(517) 614-7426

(517) 373-4051 fax

From: Vicky Sherry [mailto:vsherry@tuscolaedc.org]

Sent: Thursday, March 16, 2017 11:25 AM

To: Miller, Christina (DEQ)

Subject: Re: Tuscola County SWMP Amendment

To the best of my recollection, this was the only notice sent.

On Thu, Mar 16, 2017 at 11:10 AM, Miller, Christina (DEQ) < MILLERC1@michigan.gov wrote:

Was the first advertisement (page 1) released prior to the 19th? It looks like the Public Hearing was the 14th of September; which is only 26 days' notice and not 30 days' notice as required by the statute.

Christina Miller

Solid Waste Planning, Reporting and Surcharge Coordinator

Office of Waste Management and Radiological Protection

Department of Environmental Quality

Constitution Hall

4 South

P.O. Box 30241
Lansing, MI 48933
<u>(517) 614-7426</u>
<u>(517) 373-4051</u> fax
From: Vicky Sherry [mailto: <u>vsherry@tuscolaedc.org</u>] Sent: Thursday, March 16, 2017 11:05 AM
To: Miller, Christina (DEQ)
Subject: Re: Tuscola County SWMP Amendment
It should be on the top of the second page of the paper. If it isn't clear please let me know and I will resend.
Thanks,
Vicky
On Thu, Mar 16, 2017 at 11:02 AM, Miller, Christina (DEQ) < MILLERC1@michigan.gov wrote:
ThanksI don't see a date of the publication. Can you please resend it with that information?
Thanks!
Christina Miller
Solid Waste Planning, Reporting and Surcharge Coordinator
Office of Waste Management and Radiological Protection

525 West Allegan

Department of Environmental Quality
Constitution Hall
4 South
525 West Allegan
P.O. Box 30241
Lansing, MI 48933
<u>(517) 614-7426</u>
<u>(517) 373-4051</u> fax
From: Vicky Sherry [mailto:vsherry@tuscolaedc.org] Sent: Thursday, March 16, 2017 10:29 AM To: Miller, Christina (DEQ) Subject: Re: Tuscola County SWMP Amendment
Good Morning Christina,
Attached please find a copy of the public notice from the Aug. 19th 2015 Tuscola County Advertiser issue.
Thank you,
Vicky
On Thu, Mar 16, 2017 at 8:54 AM, Vicky Sherry < <u>vsherry@tuscolaedc.org</u> > wrote: Good Morning Christina,
I have attached a list of the Tuscola County Municipals for you, I show 34 municipals for our County. I will have a copy of the newspaper public notice for you later today. I thought it was included in the amendment packet and therefore wasn't saved when my computer

crashed. I have ordered a replacement copy from the Tuscola County Advertiser.
Thank you,
Vicky
On Thu, Mar 16, 2017 at 8:49 AM, Miller, Christina (DEQ) < MILLERC1@michigan.gov > wrote:
Here's a link to another set of "municipalities" which does include the City of Caro: https://www.accessmygov.com/MunicipalDirectory?uid=2245 . This list has 36 municipalities.
We are in the process of trying to determine which list to use; once you send me your list we will hopefully be able to determine.
Christina Miller
Solid Waste Planning, Reporting and Surcharge Coordinator
Office of Waste Management and Radiological Protection
Department of Environmental Quality
Constitution Hall
4 South
525 West Allegan
P.O. Box 30241
Lansing, MI 48933
<u>(517) 614-7426</u>
<u>(517) 373-4051</u> fax

From: Miller, Christina (DEQ)
Sent: Tuesday, March 14, 2017 1:49 PM
To: 'Vicky Sherry'

Subject: RE: Tuscola County SWMP Amendment

Importance: High

Vicky,

I am not able to find the copy of the Newspaper Notice for the 90-day public comment and Public Hearing notice in the package that you emailed. **Can you please forward me this information so that I can add it to your amendment package?**

Also, could you send me a **list of all of the municipalities in Tuscola County**? You received a resolution from the "City of Caro", however, I don't see a City of Caro in the census listing of municipalities (see attached) only a "Caro Village". And there are 2 "Kingston villages" listed.....I'm not certain why they are split and whether or not to count them separately. But adding all of these together I show 36 municipalities. I'm in the process of seeing if I can get a list of municipalities from the MML by county and maybe this will help. I'll let you know if I need anything else.

Please let me know if you have any questions.

Thanks,

Christina Miller

Solid Waste Planning, Reporting and Surcharge Coordinator

Office of Waste Management and Radiological Protection

Department of Environmental Quality

Constitution Hall

4 South

525 West Allegan
P.O. Box 30241
Lansing, MI 48933
<u>(517) 614-7426</u>
<u>(517) 373-4051</u> fax
From: Vicky Sherry [mailto:vsherry@tuscolaedc.org] Sent: Tuesday, February 07, 2017 5:36 PM
To: Miller, Christina (DEQ) Subject: Tuscola County SWMP Amendment
Hi Christina,
Tuscola County is happy to present the solid waste management plan amendment to you for your approval.
your approvar.
Thank you very much for all of the help and assistance that you gave us, it is very deeply
appreciated.
If you have any questions or need more information, please feel free to contact me.
Doot Wichon
Best Wishes,
Vicky
Violar Chowy
Vicky Sherry Communications Director
Tuscola County EDC
141 South Almer Street

original_msg

MIME-Version: 1.0 Received: b 10.107.17.160 with HTTP; Thu, 6 Aug 2015 08:39:56 -0700 (PDT) Date: Thu, 6 Aug 2015 11:39:56 -0400 Delivered-To: vsherry@tuscolaedc.org Message-ID: <CALwb9vkgxSJ+CRYJwZU62ž52LdAOPD7_uFCoOTtu3a9ne-vAuQ@mail.gmail.com> Subject: SWMP Public Hearing From: Vicky Sherry <vsherry@tuscolaedc.org> To: Glen Roth <groth@tuscolaedc.org>, Steve Erickson <serickson@tuscolaedc.org> Content-Type: multipart/mixed; boundary=001a113ec3a6b4371e051d332598 --001a113ec3a6b4371e051d332598 Content-Type: multipart/alternative; boundary=001a113ec3a6b43719051d332596 --001a113ec3a6b43719051d332596 Content-Type: text/plain; charset=UTF-8 Hi Steve and Glen, I have attached the public hearing notice for the SWMP, please review and then please submit so that it is in the Wednesday August 12th paper. Thanks, Vicky Vicky Sherry Communications Director Tuscola County EDC 429 N. State Street, Suite 102 Caro, MI 48723 (989) 673 - 2849 (989) 550 - 6959 (cell) vsherry@tuscolaedc.org --001a113ec3a6b43719051d332596 Content-Type: text/html; charset=UTF-8 Content-Transfer-Encoding: quoted-printable <div dir=3D"ltr"><div><div><div>Hi Steve and Glen,
</div>I have atta= ched the public hearing notice for the SWMP, please review and then please = submit so that it is in the Wednesday August 12th's span style=3D"color:rgb(61,133,198)">429 N. State Street, Suite 102

le=3D"color:rgb(61,133,198)">caro, MI 48723

br>
span style=3D"color:rgb(32,18,77)">= 3D"color:rgb(32,18,77)">= (989) 550 - 6959 (cell)

span></div>vsherry@tuscolaedc.org t=3D"_blank">vsherry@tuscolaedc.org
<div></div> </div></div></div></div>

⁻⁻⁰⁰¹a113ec3a6b43719051d332596----001a113ec3a6b4371e051d332598 Content-Type:

Public Notices



NOTICE TO BIDDERS

Sealed bids will be received Thursday, August 27, 2015 at the office of the Board of Tuscola County Road Commissioners at 1733 S. Mertz (County Road Commissioners at 1733 S. Mertz (County Road Commissioners) at 1733 S. Mertz (County Road County R the time(s) specified:

8:30 A.M.

Phillips Road over Deerlick Drain Precast Concrete **Box Culvert**

Bids to be submitted on Road Commission forms in a plainly marked sealed envelope. Specifications are available at the Road Commission office or online at www.tuscolaroad.org. Please contact the Caro Office at 989-673-2128 with questions.

The Board reserves the right to accept or reject any or all proposals and to re-advertise or to accept the proposal, that in their opinion, is in the best interest of Tuscola County.

BOARD OF COUNTY ROAD COMMISSIONERS "An Equal Opportunity Employer"

John Laurie, Chairman Gary Parsell, Vice-Chairman Michael Zwerk, Member Julie Matuszak, Member Pat Sheridan, Member

NOTICE OF VACANCY

ELKTON-PIGEON-BAY PORT LAKER SCHOOL DISTRICT 6136 Pigeon Road Pigeon, MI 48755 989.453.4600

August 14, 2015

You are invited to apply for the position of high school special education teacher at Laker Schools.

POSITION:

Part-time Special Education Teacher (3/7)

QUALIFICATIONS:

1. Meet teacher qualifications of the State of Michigan
2. Meet highly qualified standards

WORK YEAR:

per Master Agreement

SALARY & BENEFITS: per Master Agreement

APPLICATION PROCEDURES:

Applicant should provide the following:

· Letter of application or email stating interest in the position to Bob Smith, Superintendent.

· If there are internal applicants, the position will be awarded per guidelines of the Master Agreement.

APPLY TO:

Bob Smith, Superintendent bsmith@lakerschools.org Elkton-Pigeon-Bay Port School District 6136 Pigeon Road Pigeon, MI 48755

DEADLINE:

August 21, 2015

ATTENTION! PUBLIC COMMENT PERIOD AND **PUBLIC HEARING**

The Tuscola County Solid Waste Management Plan Amendment that is authorized under Act 451 Part 114 of the Michigan Environmental Protection Act, 1994 will be released for public review and comment. The release of the draft amendment is the first task in the approval of the amended plan.

A 90-day public comment period for the DRAFT Solid Waste Management Plan Amendment will be held from Wednesday, August 19, 2015 through Thursday, November 19, 2015. The draft plan amendment can be reviewed at local units of government and the Tuscola County Board of Commissioners Chambers, 125 Lincoln Street, Caro, MI 48723. Comments may be made in person or by mail, telephone, or email. A public hearing for the plan is scheduled for:

Monday, September 14, 2015 at 8:30 a.m. **Board of Commissioners Chambers** 125 Lincoln Street • Caro, MI 48723

The hearing complies with the intent of the Michigan Environmental Protection Act, 1994. After the comment period, the Solid Waste Management Planning Committee will make any necessary changes based on comments received, either in writing or at the public hearing. All written comments should be submitted in writing to:

Tuscola County Economic Development Corporation ATTN: Vicky Sherry 429 N. State Street, Suite 102 Caro, MI 48723 Phone: (989) 673-2849 Email: vsherry@tuscolaedc.org

Public Land Auction

The following County Treasurers will be offering tax-reverted real estate at public Auction on August 26th, 2015: Bay & Tuscola.

The Auction will be held at the Double Tree Hotel-Bay City, One Wenonah Park Place, Bay City, MI 48708. Registration will begin at 11:30 am, Auction will begin at 12:00pm.

Online bidding will be available via www.tax-sale.info. For more information or for a list of the properties being sold, visit our website at www.tax-sale.infor or call 1-800-259-7470. Sale listings are also available at your local County Treasurer's Office.



LEGAL NOTICE

Asplundh Tree Expert Co.,

A contractor for Thumb Electric will be commencing with this year's Herbicide program.



For All Your Printing NEEDS!!!

You think it, we can print it.

Email: hpresscaro@yahoo.com Fax (989) 673-5662 344 N. State St., Caro, MI 48723



Motices backyard, washer/dryer hookup, \$600/month plus utilities. \$600 securideposit. No pets/No smoking. Rental application to be completed, 223 W. Congress St., Caro. 989-843-6766

2 Bedroom Apart-Vassar. ment in \$525/month. Pet cats are welcome: no dogs. \$475 security. Call 989-871-9569

3 BEDROOM TRAILER

Country setting 1.5 miles N of Clifford Quiet neighboorhood Water & garbage included. 500/month + 500deposit

Call 810-728-6382

Come live in Mayville!! (2) 1 BR units are available NOW! Air conditioner for Taking applications for our 1 and 2 BR updated apartments that start at \$504 per mo. Free heat! Inrequirements come apply. 1st and last mos rent required to move in. Call 989-843-0988 for information.

(Kent is not based on income) Central A/C, dishwasher, W/D hookups and walk-in kitchen pantry in every lovely apartment home.

Corner of M-81 & Romain Rd. Call Diana today at

989-673-0515





evening appointments available! Check out our new website mi-apartments.com & on facebook!

VILLAGE PLACE FAMILY APTS. 661 Hixon Place in Vassar has 2 bedroom units available. Rent based on income with limited rent subsidy. warm weather comfort. Minimum rent \$549. Barrier free unit in building. Laundry and play areas for resident use. Applications at manager apt#18 or call 1-800-225-7982. Managed by Stratford Group Ltd 442 W. Baldwin, Alpena, MI 49707. Equal ouseing Opportunity. This in-

Public Notices



Visit tuscolatoday.com for the latest in news around the thumb

NOTICE TO BIDDERS

Sealed bids will be received Thursday, August 27, 2015 at the office of the Board of Tuscola County Road Commissioners at 1733 S. Mertz Rd., Caro, Michigan for the following item(s) at the time(s) specified:

8:30 A.M.

Phillips Road over Deerlick Drain Precast Concrete Box Culvert

Bids to be submitted on Road Commission forms in a plainly marked sealed envelope. Specifications are available at the Road Commission office online or at www.tuscolaroad.org. Please contact the Caro Office at 989-673-2128 with questions.

The Board reserves the right to accept or reject any or all proposals and to re-advertise or to accept the proposal, that in their opinion, is in the best interest of Tuscola County.

BOARD OF COUNTY ROAD COMMISSIONERS "An Equal Opportunity Employer"

John Laurie, Chairman Gary Parsell, Vice-Chairman Michael Zwerk, Member Julie Matuszak, Member Pat Sheridan, Member

NOTICE OF VACANCY

ELKTON-PIGEON-BAY PORT LAKER SCHOOL DISTRICT 6136 Pigeon Road Pigeon, MI 48755 989,453,4600

August 14, 2015

You are invited to apply for the position of high school special education teacher at Laker Schools.

POSITION:

Part-time Special Education Teacher (3/7)

QUALIFICATIONS:

1. Meet teacher qualifications of the State of Michigan 2. Meet highly qualified standards

WORK YEAR:

per Master Agreement

SALARY & BENEFITS: per Master Agreement

APPLICATION PROCEDURES:

Applicant should provide the following:

· Letter of application or email stating interest in the position to Bob Smith, Superintendent.

· If there are internal applicants, the position will be awarded per guidelines of the Master Agreement.

APPLY TO:

Bob Smith, Superintendent bsmith@lakerschools.org Elkton-Pigeon-Bay Port School District 6136 Pigeon Road Pigeon, MI 48755

DEADLINE:

August 21, 2015

ATTENTION! **PUBLIC COMMENT PERIOD AI** PUBLIC HEARING

The Tuscola County Solid Waste Management Amendment that is authorized under Act 451 Part of the Michigan Environmental Protection Act, will be released for public review and comment. release of the draft amendment is the first task in approval of the amended plan.

A 90-day public comment period for the DRAFT Waste Management Plan Amendment will be from Wednesday, August 19, 2015 through Thurs November 19, 2015. The draft plan amendment be reviewed at local units of government and Tuscola County Board of Commissioners Cham 125 Lincoln Street, Caro, MI 48723, Comments be made in person or by mail, telephone, or em public hearing for the plan is scheduled for:

Monday, September 14, 2015 at 8:30 a **Board of Commissioners Chambers** 125 Lincoln Street • Caro, MI 48723

The hearing complies with the intent of the Mich Environmental Protection Act, 1994. After comment period, the Solid Waste Manage Planning Committee will make any neces changes based on comments received, eith writing or at the public hearing. All written comm should be submitted in writing to:

Tuscola County Economic Development Corpor ATTN: Vicky Sherry

