STATE OF MICHIGAN



JOHN ENGLER, Governor DEPARTMENT OF ENVIRONMENTAL QUALITY

"Better Service for a Better Environment"
HOLLISTER BUILDING, PO BOX 30473, LANSING MI 48909-7973

INTERNET: www deq state milus RUSSELL J. HARDING, Director

July 28, 2000

Ms. Norma Bates, Chairperson Tuscola County Board of Commissioners 207 East Grant Street Caro, Michigan 48723

Dear Ms. Bates:

The Department of Environmental Quality (DEQ) received the locally approved update to the Tuscola County Solid Waste Management Plan (Plan) on February 24, 2000. Except for the items indicated below, the Plan is approvable. As outlined in the April 3, 2000 letter to Mr. Michael Hoagland, Tuscola County Controller, from Ms. Lynn Dumroese, DEQ, Waste Management Division (WMD), and as confirmed in your letter dated May 24, 2000, to Mr. Seth Phillips, DEQ, WMD, the DEQ makes the following modifications to the Plan:

On page III-31-2, criterion 6 prohibits the siting of a facility in a groundwater recharge area as defined by the United States Geologic Survey (USGS). The Plan is clarified to give objective certainty to this criterion by indicating that this definition will be based on the most recently available map from the USGS, which delineates groundwater recharge areas. This will establish a clearly defined, measurable standard to review consistency with this criterion. Criterion 6 is revised to read, "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."

On page III-31-5, the 4-6 point parameter for Natural Site Characteristics siting criteria states the facility will be assessed one of these point values if data indicates that the site will meet most of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451), requirements for natural soils. This parameter is clarified to give objective certainty by defining what the phrase "most Act 451 requirements for natural soils" include. As part of this clarification, the 7-10 point parameter is revised to read, "Data indicate that the site will meet all Act 451 requirements for use of natural soils." In addition, the 4-6 point parameter is revised to read, "Data indicate that the site will meet at least one, but not necessarily all Act 451 requirements for natural soils."

On page III-31-8, the Plan states the Tuscola County (County) Designated Solid Waste Planning Agency (DPA) shall have 90 days from the date of submission of a complete application package in which to issue its consistency determination. There is no specific timeframe established to determine when an application is determined to be complete. The lack of a mandatory time frame to assess the completion of the application package leaves the procedure without any assurance that a decision will be made in a timely fashion. Section 11538 (3) of Part 115, Solid Waste Management, of Act 451 requires that a siting mechanism not be subject to discretionary acts by the local planning entity and that the procedure will guarantee a decision. In order to resolve this issue, the following language is added to the end of the Submission of Proposed Site for Formal Review section:

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.

On page III-31-9, the Plan states large transfer facilities and solid waste processing plants are likely to require utility connections to provide water, sewer, and electric service. Therefore, the most appropriate areas for these facilities are an existing industrial area or in areas planned and/or zoned for industrial land uses. These factors should be considered when evaluating proposed sites in regard to the criteria that address future land use and local ordinances. This paragraph is hereby deleted because it does not give objective certainty as to how these factors will affect the site evaluation matrix, parameters, and assignment of point values. In addition, the last sentence of the Secondary Siting Criteria section is revised to read, "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."

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

By approving the Plan with modifications, the DEQ has determined that it complies with the provisions of Part 115 and the Part 115 administrative rules concerning the required content of solid waste management plans. Specifically, the DEQ has determined that the Plan identifies the enforceable mechanisms that authorize the state, a county, a municipality, or a person to take legal action to guarantee compliance with the Plan, as required by Part 115. The Plan is enforceable, however, only to the extent the County properly implements these enforceable mechanisms under applicable enabling legislation. The Plan itself does not serve as

such underlying enabling authority, and DEQ approval of the Plan neither restricts nor expands County authority to implement these enforceable mechanisms.

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

The DEQ applauds your efforts and commitment in addressing the solid waste management issues in Tuscola County. If you have any questions, please contact Mr. Seth Phillips, Chief, Solid Waste Management Unit, at 517-373-4750.

Sincerely,

Russell J. Harding

Director

517-373-7917

cc: Senator Joel D. Gougeon

Representative Mike Green

Mr. Arthur R. Nash Jr., Deputy Director, DEQ

Mr. Timothy R. Sowton, Legislative Liaison, DEQ

Mr. Jim Sygo, DEQ

Ms. Joan Peck, DEQ

Mr. Edwin Haapala, DEQ - Saginaw Bay

Mr. Seth Phillips, DEQ

Ms. Lynn Dumroese, DEQ

Tuscola County File

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 PA 451, 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./wmd/sections/swpshome.html

Tuscola County Solid Waste Management Plan Update

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

With the assistance of the
East Central Michigan Planning & Development Regional Commission
3144 Davenport Avenue, Suite 200
Saginaw MI 48602

1997 PLAN UPDATE COVER PAGE

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

DATE SUBMITTED TO THE DEQ: Locally approved plan submitted 2/23/00

			•
accepted to be included in the l	all the municipalities from outside the Conded in the Plan, or municipalities within Plan of another County according to Section 1 involved County boards of commission	the County ction 11536	that have been approved to Part 115 of the NREPA
Municipality	Original Planning Cour	<u>ıty</u>	New Planning County
Tuscola County Sol	ANNING AGENCY PREPARING THIS id Waste Management Planning Committed Waste Management Planning Committed Waste Management, County Controller	tee	
ADDRESS:	County Building Annex		- Angelium -
	207 East Grant		
	Caro MI 48723		
PHONE:	517-672-3700	FAX:	
E MATE.		(If Ap	(If Applicable) oplicable)
E-MAIL			

Tuscola County Solid Waste Management Plan

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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	Population	% Lar	nd Use	%	of E	conomic	Base*	
Municipality Name		Rural	Urban	Ag	For	Ind	Com	Other
Akron Twp	1,443			<u>75%</u> 0	<u>)</u>	<u>0</u>	2.3%	22.7%
Almer Twp	2,201			<u>29.7%</u> 0	<u>)</u>	0.2%	<u>15.7%</u>	<u>54.4%</u>
Arbela Twp	3,418			<u>25.7%</u> 0	<u>.4%</u>	0.3%	<u>1.8%</u>	<u>71.8%</u>
Columbia Twp	850			73.3%)	0.6%	2.1%	24.0%
Dayton Twp	1,678			32.1% (0.2%	0	1.0%	66.7%
Denmark Twp	2,018			40.6% ()	0.6%	6.4%	52.4%
Elkland Twp	1,238			17.3%	0.6%	4.6%	15.7%	61.8%
Ellington Twp	1,304			43.5%	1.3%	0	0.8%	54.4%(
Elmwood Twp	990			64.8%	0	0.7%	2.8%	31.7%
Fairgrove Twp	589			60.3%	0	0	3.7%	36.0%
Fremont Twp	1,054		·····	12.3%	0.8%	0.3%	7.4%	79.2%
Gilford Twp	884			80.0%	0	0	2.8%	17.2%
Indianfields Twp	3,209			4.6% (0.3%	4.7%	22.0%	68.4%
Juniata Twp	1,787			38.6% (0	0.2%	2.3%	589%
Kingston Twp	1,203			43.6%	1.3%	0	2.1%	53.0%
Koylton Twp	1,480			35.5% 1	1.0%	0.2%	1.4%	61.9%
Millington Twp	3,309			14.7%	0.2%	1.0%	6.8%	77.3%
Novesta Twp	1,570			44.2%	3.7%	0	1.3%	50.8%
Tuscola Twp	2,300			36.8%	0.1%	0.5%	6.9%	<u>55.7%</u>
Vassar Twp	3,993			6.7%	1.3%	1.3%	3.2%	<u>87.5%</u>
Watertown Twp	2,287			34.4%	0	0.5%	0.5%	64.6%
Wells Twp.	1,639			31.1% 3	3.1%	0.6%	0.6%	64.6%
Wisner Twp	853			62.3%	0	0	2.6%	35.1%

Township or	Population	%	Land Use		% of E	conomic	Base*	
Municipality Name		Rura	al Urban	Ag	For	Ind	Com	Other
			•		4			
Akron Village	430							
Caro Village	3,935							
Unionville Village	606							
Reese Village	1,610							
Cass City Village	2,213					* - ₁		
Gagetown Village	349							
Fairgrove Village	589							
Mayville Village	1,069					* 1		
Kingston Village	457							
Millington Village	1,084							
Vassar City	2,490	0.29	6 0	0.2%	0	8.2%	20.8%	70.6%
TUSCOLA COUNTY	See below	97%	3%	30.9%	0	<u>1.1%</u>	6.2%	<u>61.8%</u>
							1 1 14	
Total Population	58,087 (1997	<u>7)</u>						

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

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 oppoetunities 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 updated 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 11538 (1)(a), 11541 (4) and the State Solid Waste Policy adopted pursuant to this Section, and Administrative Rules 711(b)(i) and (ii). At a minimum, the goals must reflect two major purposes of Solid Waste Management Plans:

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

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

Goal 1. Develop 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 1a. Encourage new and innovative materials and energy recovery technologies

Objective 1b. 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.

INTRODUCTION

- Objective 2a. Arrange for adequate landfill space to meet the County's solid waste disposal needs.
- Goal 3: 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.
- Objective 3b. Encourage the expanded use of private/non-profit organizations for operating and coordinating formal efforts in recycling and resource recovery
- Goal 4 Develop an integrated solid waste management system that includes waste reduction, source separation, recycling, composting, and landfilling as its major components
- Objective 4a: Develop and implement education programs for waste reduction, source separation, recycling, and integrated solid waste management for County residents.

INTRODUCTION

Objective 4b. h. Encourage the expanded use of all feasible non-landfill alternatives for management.	or solid waste
Goal 5: Promote governmental, institutional, commercial, and industrial recycling capabili	ties
Objective 5a: Review local government and public institution procurement policies and ad appropriate entities as necessary to further encourage the use of recycled and recyclable management.	the state of the s
en e	
Goal 6: Encourage the creation and expansion of markets for recycled materials, and the u and recycled materials by government, business, industry, and the public	ise of recyclable
Objective 6a: Review local government and public institution procurement policies and ad appropriate entities as necessary to further encourage the use of recycled and recyclable management.	
Objective 6b: Encourage appropriate local, state, and federal legislation to provide incentireduction, source separation, and recycling.	ves for waste
Note: Additional goals and objectives are listed on attached pages	Andrew State of the Control of the C

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 plan update process began and is no longer available. Smaller quantities of waste were also disposed of in Bay (411 cubic yards) and Shiawassee (127 cubic yards) counties during the reporting period that ended September 30, 1997. Shiawassee is not identified for disposaal 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. Comercial solid waste makes up about 16% of the waste stream and is generated by commercial establishements 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 plan sludges, bulky items, tires, and agricultural waste.

Data collected by the County MRF show that approximately 1,000 tons of 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 two 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)

Tuscola County Current Annual Solid Waste Generation & Disposal

Disposal Racility	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
People's (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)**	127 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 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 0.67% per year.

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. Since the plan update 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 (Sheri	dan Twp.)			
Facility Name: Cove Landfill of Bad	Axe Inc.		· ·	
County: Huron Location: Town	n: <u>15 N</u> Range	: 12E_Section	n(s): 22	
Map identifying location included in	Attachment S	ection: 🔯	Yes No	
If facility is an Incinerator or a Trans Station wastes:	fer Station, lis	t the final di	sposal site and location f	or Incinerator ash or Transfer
☐ Public ☐ Private Owner: Cov	e Landfill of E	Bad Axe Inc		see Africa (1)
Operating Status (check) open closed licensed unlicensed construction permit open, but closure pending	Waste	reside comm indus constru conta	nercial trial action & demolition minated soils al wastes *	
* Explanation of special wastes, inclu	ding a specific	c list and/or	conditions	
Site Size: Total area of facility property: Total area sited for use: Total area permitted: Operating: Not excavated:		53.4 41.8 6.84 0	acres acres acres acres acres acres	
Current capacity: Estimated lifetime: Estimated days open per year: Estimated yearly disposal volume:		1,150,000 10 290 100,000	☐ tons or ☑yd years days ☐ tons or ☑yds³	
(if applicable) Annual energy production: Landfill gas recovery projects: Waste-to-energy incinerators:		<u>N/A</u> <u>N/A</u>	megawatts megawatts	

FACILITY DESCRIPTIONS Facility Type: Municipal Solid Waste (Type II) Landfill Facility Name: Tri-City Recycling and Disposal Facility County: Sanilac Location: Town: 12N Range: 15E Section(s): 32 Map identifying location included in Attachment Section: Yes No

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

Public Private Owner: Waste Management of Michigan Inc.

Operating S	tatus (check)	Wast	e Types Received (check all that apply)
\boxtimes	open	\boxtimes	residential
	closed	\boxtimes	commercial
\boxtimes	licensed	\boxtimes	industrial
	unlicensed	\boxtimes	construction & demolition
\boxtimes	construction permit	\boxtimes	contaminated soils
open, but	closure	\boxtimes	special wastes *
	pending		other

^{*} Explanation of special wastes, including a specific list and/or conditions: Paper pulp, shredded foam, food product waste.

C1.4	Size:
Ditto	DILLO.

Total area of facility property:	<u>195.4</u>	acres
Total area sited for use:	195.4	acres
Total area permitted:	125	acres
Operating:	31.6	acres
Not excavated:	93.4	acres
· · · · · · · · · · · · · · · · · · ·	70 500 000	<u></u>

(if applicable)

Annual energy production:
Landfill gas recovery projects:
Waste-to-energy incinerators:

N/A megawatts
N/A megawatts

FACILITY DESCRIPTIONS Facility Type: Type II Landfill (Taymouth Twp.) Facility Name: People's Landfill County: Saginaw Location: Town: 10N Range: 5E Section(s): 15 Map identifying location included in Attachment Section: X Yes \tag{Yes} \tag{No} If facility is an Incinerator or a Transfer Station, list the final disposal site and location for Incinerator ash or Transfer Station wastes: Public Private Owner: Waste Management Operating Status (check) Waste Types Received (check all that apply) residential open closed commercial licensed industrial unlicensed construction & demolition construction permit contaminated soils open, but closure special wastes * pending other: * Explanation of special wastes, including a specific list and/or conditions: Asbestos, soil, sludge, ash. Site Size: Total area of facility property: 163 acres Total area sited for use: acres Total area permitted: 29.1 acres Operating: acres Not excavated: 100 acres \square tons or \boxtimes yds³ Current capacity: 5,301,641 Estimated lifetime: 20 years 254 days Estimated days open per year: \boxtimes tons or \square vds³ Estimated yearly disposal volume: 1,000 (if applicable) Annual energy production: Landfill gas recovery projects: megawatts

megawatts

Waste-to-energy incinerators:

FACILITY DESCRIPTIONS

Facility Type: Type II Landfill		
Facility Name: Brent Run Landfill		
County: Genesee Location: Town: 9N Ra	nge: <u>5E</u> Section(s): <u>23</u>	
Map identifying location included in Attachm	nent Section: Yes X No	
If facility is an Incinerator or a Transfer Station Wastes:	on, list the final disposal site and location	on for Incinerator ash or Transfer
Public X Private Owner: Republic Service	ces	
Operating Status (check) X open closed X licensed unlicensed construction permit open, but closure pending	Commercial Industrial Construction & demolition	
* Explanation of special wastes, including a sp	pecific list and/or conditions.	
Site Size: Total area of facility property: Total area sited for use Total area permitted: Operating: Not excavated:	160 acres 90 acres 30 acres 15 acres 45 acres	
Current capacity: Estimated lifetime: Estimated days open per year: Estimated yearly disposal volume:	$ \begin{array}{c c} \underline{10.247,000} & \boxed{} & \text{tons or } X \text{ yds}^3 \\ \underline{} & \underline{18} & \text{years} \\ \underline{312} & \text{days} \\ \underline{} & \underline{} & \text{tons or } X \text{ yds}^3 \end{array} $	
(if applicable) Annual energy production: Landfill gas recovery projects: Waste-to-energy incinerators:	NA megawatts NA megawatts	

FACILITY DESCRIPTIONS

Facility Type: Type II Landfill		
Facility Name: Citizen's Disposal		
County: Genesee Location: Town:	6N Range: 6E Section(s): 23	
Map identifying location included in A		
If facility is an Incinerator or a Transfe	r Station, list the final disposal site and location	n for Incinerator ash or Transfer
Station wastes:		
Public X Private Owner: Allied W	Vaste Industries	
Operating Status (check) X open	Waste Types Received (check all that apply X residential	
closed	X commercial	
X licensed	X industrial	
unlicensed	X construction & demolition	
construction permit	X contaminated soils	
open, but closure pending	X special wastes * X other: asbestos	
All special waste requires review & app to non-hazardous waste.	proval prior to acceptance, including analytical	data & waste profile. Restricted
Site Size: Total area of facility property: Total area sited for use Total area permitted: Operating: Not excavated:	300 acres 300 acres 52 acres 52 acres 80 acres	
Current capacity: Estimated lifetime: Estimated days open per year: Estimated yearly disposal volume:	$ \begin{array}{c c} 5.300,000 & \boxed{} \text{ tons or } X \text{ yds}^3 \\ \underline{25} & \text{ years} \\ \underline{300} & \text{ days} \\ \boxed{} & \text{ tons or } X \text{ yds}^3 \end{array} $	en e
(if applicable) Annual energy production: Landfill gas recovery projects: Waste-to-energy incinerators:	2.4 megawatts NA megawatts	

FACILITY DESCRIPTIONS Facility Type: Type II Landfill Facility Name: Whitefeather Landfill Location: Town: 17 N Range: 4E Section(s): 2 County: Bay If facility is an Incinerator or a Transfer Station, list the final disposal site and location for Incinerator ash or Transfer Station wastes: Public Private Owner: Republic Services Waste Types Received (check all that apply) Operating Status (check) residential open closed commercial industrial licensed construction & demolition unlicensed contaminated soils construction permit special wastes * open, but closure other: pending * Explanation of special wastes, including a specific list and/or conditions:

<u>106</u>	acres
<u>56.5</u>	acres
<u>56.5</u>	acres
<u>24.5</u>	acres
<u>32</u>	acres
4,175,153	\square tons or \boxtimes yds ³
<u>18.8</u>	years
<u>260</u>	days
380,000	☐ tons or ⊠yds³
<u>NA</u>	megawatts
NA	megawatts
	56.5 56.5 24.5 32 4,175,153 18.8 260 380,000

Asbestos

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 BFI

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.

Tuscola County Solid Waste Collection & Transportation Information

Community	1 Service Provider		2 ce Type	2 Payment Method	4 Additional Services	Tra	5 usfer tion	6 Landfill
			Drop-off			Type		
Townships		Curbside_	Site			A	В	
Akron	Cove WMI	X		G I	RC		X	Cove Tri-City
Almer	Cove	X		S	RC		X	Cove
Arbela	City	X		S	RC			Brent Run
	Cove		X	G	RD		X	Cove
Columbia								
	Cove	X		S	-		1	Cove
Dayton						<u> </u>		Carinary Mallery
_	City	X		S	RC			Saginaw Valley
Denmark	XXX CT	X		I			 	Tri-City
Elkland	WMI BFI	X		1	·			Taymouth
Eikiano	Cove	X	<u> </u>	I		 	 	Cove
Ellington	BFI	A		1				Taymouth?
Dinigion	Cove	X		I				Cove
Elmwood			İ	1	·			
	City	X		S	RC		•	Saginaw Valley
Fairgrove						<u> </u>		~
	Cove	X		I		1		Cove Brent Run
Fremont	City	<u> </u>		<u> </u>	77		X	Saginaw Valley
	City		X	G	RD		X	Tri-City
Gilford	WMI	X		S	RC			Taymouth
Y 3! C! 1 3	BFI	X		3	RC			laymouth
Indianfields	BFI		X	S	RD		X	Taymouth
Juniata	Cove	x	A	I	100			Cove
Juliata	Cove	X	 	Î				Cove, Tri-City,
Kingston	BFI WMI	X		S				Taymouth
1221,501011	Cove	X		I				Cove
Koylton						<u> </u>		
	Cove, BFI	X		I	YW (DPW)			Cove, Brent
Millington	City			<u> </u>	RD	ļ	1	Run, Taymouth
	Cove	X		I			X	Cove Tri-City
Novesta	WMI	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	 		P.C	 		Saginaw Valley
m 1	City	X		S	RC		1	Saguiaw Valley
Tuscola		1		1	1	<u> </u>	<u> </u>	<u> </u>

Continued on next_page

Tuscola County Solid Waste Collection & Transportation Information, Continued

Community	Service Provider		2 :e Type	3 Payment Method	4 Additional Services	Tra	5 nsfer tion	6 Landfill
teominant,			Drop-off	2,42,40,2		Туре		
Townships		Curbside	Site			Α	В	
Vassar	Cove	X		G			X	Cove
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
Caro	Cove WMI	X		G	RC, YW		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		I				Tri-City
Kingston	WMI	X		I				Tri-City
Mayville	WMI, BFI Cove	X		S, I	RC YW (DPW)		X	Tri-City Cove
Millington	DPW Cove (Comm.)	X		S I	RD		X X	Brent Run Cove
Reese	Cove	X		I	RC			Cove
Unionville	Cove WMI	X		I		anni fi danna 2020	X	Cove Tri-City
City								
Vassar	Cove	X		S	RC		X	Cove

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:

Cove

Cove Sanitation

WMI

Waste Management Inc.

City

City Environmental Services

BFI

Browning Ferris Industries

DPW

Village Dept. 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 to indicate the method of payment for services:
 - I Individuals billed directly for service
 - G Services are paid for from the local government's General Fund
 - 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.

RC Curbside collection of separated recyclable materials from residences is provided.

RB Collection of specified recyclable materials from businesses is provided.

RD Separated recyclable materials may be dropped off at a designated site in the community.

YW Separate collection of yard waste is provided to residences.

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.

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.

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 Indicate the landfill where the solid waste generated in the community is taken for final disposal.

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.

DEMOGRAPHICS

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

See attached table showing population and solid waste generation projections.

Tuscola County Population Projections & Solid Waste Generation Estimates Continued

Year		998	I B A	003	2008		
Government Unit	Estimated Population	Annual Solid Waste Generation (cubic yards)	Estimated Population	Annual Solid Waste Generation (cubic yards)	Estimated Population	Annual Solid Waste Generation (cubic yards)	
Villages			100	(05	442	703	
Akron	433	687	438	695	443		
Caro	3966	6297	4012	6370	4058	6443	
Unionville	611	970	618	981	625	992	
Reese	1623	2577	1642	2607	1661	2637	
Cass City	2230	3541	2256	3582	2282	3623	
Gagetown	352	559	356	565	360	572	
Fairgrove	594	943	601	954	608	965	
Mayville	1078	1712	1091	1732	1104	1753	
Kingston	461	732	466	740	471	748	
Millington	1093	1735	1106	1756	1119	1777	
City				200			
Vassar	2510	3985	2539	4031	2568	4077	

Tuscola County
Population Projections & Solid Waste Generation Estimates

Year		998	2	003	2008		
Government Unit	Estimated Population	Annual Solid Waste Generation (cubic yards)	Estimated Population	Annual Solid Waste Generation (cubic yards)	Estimated Population	Annual Solid Waste Generation (cubic yards)	
Tuscola	50.007	02.5(1	50.07/	02 (20	50.654	04.716	
County	58,297	92,561	58,976	93,639	59,654	94,716	
Townships	1454	2200	Organization of the control of the c	2336	1488	2362	
Akron	1454 2219	2308	1471 2245	3564	2271	3606	
Almer	3443	3523 5467	3483	5530	3523	5594	
Arbela	857	1361	3483 867	1376	877	1392	
Columbia	1691	2685	1711	2717	1731	2748	
Dayton Denmark	2034	3229	2058	3268	2082	3306	
Elkland	1248	1982	1263	2005	1277	2028	
Ellington	1314	2086	1329	2110	1344	2134	
Elmwood	998	1584	1010	1604	1022	1623	
Fairgrove	1062	1686	1074	1705	1086	1724	
Fremont	2317	3679	2344	3722	2371	3764	
Gilford	891	1415	901	1430	911	1446	
Indianfields	3235	5136	3273	5197	3311	5257	
Juniata	1801	2860	1822	2893	1843	2926	
Kingston	1213	1926	1227	1948	1241	1970	
Koylton	1492	2369	1509	2396	1526	2423	
Millington	3335	5295	3374	5357	3413	5419	
Novesta	1582	2512	1600	2540	1618	2569	
Tuscola	2318	3680	2345	3 7 23	2372	3766	
Vassar	4025	6391	4072	6465	4119	6540	
Watertown	2305	3660	2332	3703	2359	3746	
Wells	1652	2623	1671	2653	1690	2683	
Wisner	860	1365	870	1381	880	1397	

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 10 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

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 forseeable future. Urban development in the county is concentrated in the incorporated communities of Caro, Vassar, Millington, Reese, and Cass 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.

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:

gional collection of recyclable materials	
ional marketing of recyclable materials	
gional purchasing of recycled products	
ential regional processing facilities for mixed waste and composting	g
gional 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?

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 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 10-year rankings might be assigned to an alternative. For example, access to land for solid waste facilities might be more critical for the 10-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.

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 COUNTY	EXPORTING COUNTY	FACILITY NAME ¹	QUANTITY/	AUTHORIZED QUANTITY/	AUTHORIZED CONDITIONS ²
<u>Tuscola</u>	None		DAILY	ANNUAL	

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.

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 COUNTY	EXPORTING COUNTY	FACILITY NAME ¹	AUTHORIZED QUANTITY/ DAILY	AUTHORIZED QUANTITY/ ANNUAL	AUTHORIZED CONDITIONS ²
Tuscola	Huron	-	THE STATE OF THE S	The state of the s	*
Tuscola	Sanilac	Alternational control	-		*
Tuscola	<u>Lapeer</u>				*
Tuscola	Saginaw				* -
Tuscola	Genesee				*
Tuscola	Bay		And the second	karan sa	*
Additional authoriz	ations and the above infor	mation for those authorizations are list	ed 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

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

Table 2-A

CURRENT EXPORT VOLUME AUTHORIZATION OF SOLID WASTE

EXPORTING COUNTY	IMPORTING COUNTY	FACILITY NAME ¹	AUTHORIZED QUANTITY/ DAILY	AUTHORIZED QUANTITY/ ANNUAL	AUTHORIZED CONDITIONS ²
Tuscola	Huron				
Tuscola	Sanilac			MANUFACTURE AND ADDRESS OF THE PARTY OF THE	
Tuscola	Genesee		4***		
Tuscola	Saginaw		160 TPD		*
Tuscola	Bay				
Tuscola	Macomb ations and the above inform	nation for those authorizations are liste	ed on an attached page	15,000 cyds.	

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.

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 COUNTY	IMPORTING COUNTY	FACILITY NAME ¹	AUTHORIZED QUANTITY/ DAILY	AUTHORIZED QUANTITY/ ANNUAL	AUTHORIZED CONDITIONS ²
Tuscola	Lapeer		-	**************************************	*
	And the state of t				
		· ·	No. of the last of	***************************************	

Additional authorization	ations and the above inform	nation for those authorizations are liste	d 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.

SOLID WASTE DISPOSAL AREAS

The following identifies the names of existing disposal areas which will be utilized to provide the required capacity and management needs for the solid waste generated within the County for the next five years and, if possible, the next ten years. Pages III-7-1 through III-7-5 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:

None

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)

Pine Tree Acres Landfill (Macomb County)

Type B Transfer Facility:

Several -- see tables on page II-10

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 owners/operators stating their facility capacity and willingness to accept the County's solid waste are in the AttachmentsSection.

Facility Type: Type II Landfill (Sheric	dan Twp.)	,	
Facility Name: Cove Landfill of Bad	Axe Inc.		· .
County: <u>Huron</u> Location: Towr	n: 15 N Range: 12E Sect	ion(s): 22	and the second of the second o
Map identifying location included in	Attachment Section:	Yes 🗌 No	
If facility is an Incinerator or a Transf Transfer Station wastes:	fer Station, list the final	disposal site and location for	Incinerator ash or
☐ Public ☐ Private Owner: Cove	e Landfill of Bad Axe In	C.	
Operating Status (check) open closed licensed unlicensed construction permit open, but closure pending Explanation of special wastes, inclu	resi con ind cons cons	•	
Site Size: Total area of facility property: Total area sited for use: Total area permitted: Operating: Not excavated: Current capacity:	53.4 41.8 6.84 0 1,150,00	acres acres acres acres acres acres acres	3
Estimated lifetime: Estimated days open per year: Estimated yearly disposal volume:	10 290 100,000	years days ☐ tons or ⊠yds³	A MANAGE
(if applicable) Annual energy production: Landfill gas recovery projects: Waste-to-energy incinerators:	<u>N/A</u> <u>N/A</u>	megawatts megawatts	

Facility Type: Type II Landfill Facility Name: Whitefeather Development County:Bay Location: Town:17N Range:4E			ari Ari
Map identifying location included in Attachm	nent Section: Y	es 🛛 No	er en e
If facility is an Incinerator or a Transfer Station Transfer Station wastes: Dublic Private Owner: Republic		sposal site and location for Incir	nerator ash or
Operating Status (check) War open	X reside X comm X indust X constr X contain	nercial trial ruction & demolition minated soils al wastes *	
* Explanation of special wastes, including a s Asbestos	specific list and/or o	conditions	
Site Size: Total area of facility property: Total area sited for use: Total area permitted: Operating: Not excavated:	106 56.5 56.5 24.5 32	acres acres acres acres acres	
Current capacity: Estimated lifetime: Estimated days open per year: Estimated yearly disposal volume:	4,175,153 18.8 260 380,000	☐ tons or ☐yds³ years days ☐ tons or ☐ yds³	
(if applicable) Annual energy production: Landfill gas recovery projects: Waste-to-energy incinerators:	<u>NA</u> <u>NA</u>	megawatts megawatts	

Estimated days open per year:

Annual energy production:

Landfill gas recovery projects:

(if applicable)

Estimated yearly disposal volume:

Waste-to-energy incinerators:

FACILITY DESCRIPTIONS Facility Type: Municipal Solid Waste (Type II) Landfill Facility Name: Tri-City Recycling and Disposal Facility Location: Town:12N Range: 15E Section(s): 32 County: Sanilac Map identifying location included in Attachment Section: X Yes X No If facility is an Incinerator or a Transfer Station, list the final disposal site and location for Incinerator ash or Transfer Station wastes: Public Private Owner: Waste Management of Michigan Inc. Waste Types Received (check all that apply) Operating Status (check) residential open commercial closed licensed industrial construction & demolition unlicensed contaminated soils construction permit open, but closure special wastes * pending other: * Explanation of special wastes, including a specific list and/or conditions: Paper pulp, shredded foam, food product waste. Site Size. Total area of facility property: 195.4 acres Total area sited for use: 195.4 acres 125 Total area permitted: acres Operating: acres Not excavated: 93.4 acres ☐tons or ☑yds 10,780,000 Current capacity: Estimated lifetime: 22 years

272

330,000

days

megawatts megawatts

 \square tons or \boxtimes yds³

Waste-to-energy incinerators:

FACILITY DESCRIPTIONS Facility Type: Type II Landfill (Taymouth Twp.) Facility Name: People's Landfill Location: Town: 10N Range: 5E Section(s): 15 County: Saginaw 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 Private Owner: Waste Management Waste Types Received (check all that apply) Operating Status (check) open residential commercial closed industrial licensed construction & demolition unlicensed contaminated soils construction permit open, but closure special wastes * other: pending * Explanation of special wastes, including a specific list and/or conditions: Asbestos, soil, sludge, ash. Site Size: 163 Total area of facility property: acres Total area sited for use: acres 29.1 acres Total area permitted: 2 acres Operating: 100 acres Not excavated: \square tons or \boxtimes yds³ Current capacity: 5,301,641 20 years Estimated lifetime: 254 days Estimated days open per year: \boxtimes tons or \square yds³ 1,000 Estimated yearly disposal volume: (if applicable) Annual energy production: 3.2 megawatts Landfill gas recovery projects:

N/A

megawatts

Facility Type: Type II Landfill				
Facility Name: Brent Run Landfill				
County: Genesee Location: Town:9	N Range: 5E S	Section(s): 23		
No. 13.420 in 1. 141 in 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	ta alamanut Caat	tion. Tyes X No		*
Map identifying location included in Att	iachment Sect	non. 🔝 res - A No		
If facility is an Incinerator or a Transfer Transfer Station wastes :	Station, list the	he final disposal site and location	for Inciner	ator ash or
Public X Private Owner: Republic	Services	entre de la companya		7.7
Operating Status (check) X open	Waste Type X X	es Received (check all that apply) residential commercial		
closed X licensed	X ,	industrial		
unlicensed construction permit	X X	construction & demolition contaminated soils		
open, but closure pending		special wastes *		
* Explanation of special wastes, including	ng a specific li	ist and/or conditions:		
Site Size:				
Total area of facility property:	<u>]</u>	160 acres		
Total area sited for use Total area permitted:	-	90 acres 30 acres		
Operating:	-	15 acres		
Not excavated:		45 acres		ra njatuvnje
Current capacity:	1	$\frac{10.247,000}{18}$ \Box tons or X yds ³	, per terbiling af Affilia Till Till Till Till Till Till Till Till	
Estimated lifetime: Estimated days open per year:	3	<u>18</u> years 312 days		
Estimated yearly disposal volume:		$\frac{720,000}{\text{cons or X yds}^3}$		
(if applicable)				
Annual energy production:	_	VI.		
Landfill gas recovery projects: Waste-to-energy incinerators:		NA megawatts NA megawatts		
waste-to-chergy intelligraturs.	Ŧ	<u> </u>		

Facility Type: Type II Landfill	And the second second
Facility Name: Citizen's Disposal	
County: Genesee Location: Town: 6N Range: 6	SE Section(s): 23
Map identifying location included in Attachment Se	ection: Yes X No
If facility is an Incinerator or a Transfer Station list	t the final disposal site and location for Incinerator ash or
Transfer Station wastes:	
Public X Private Owner: Allied Waste Industr	ies
X open X Closed X X licensed X Unlicensed X Construction permit X Open, but closure X pending X * Explanation of special wastes, including a specific	rpes Received (check all that apply) residential commercial industrial construction & demolition contaminated soils special wastes * other: asbestos clist and/or conditions: o acceptance, including analytical data & waste profile.
Site Size: Total area of facility property: Total area sited for use Total area permitted: Operating: Not excavated:	300 acres 300 acres 52 acres 52 acres 80 acres
Current capacity: Estimated lifetime: Estimated days open per year: Estimated yearly disposal volume: (if applicable)	5,300,000 tons or X yds ³ 25 years 300 days tons or X yds ³
(if applicable) Annual energy production: Landfill gas recovery projects: Waste-to-energy incinerators:	2.4 megawattsNA megawatts

Facility Type: Type II Landfill Facility Name: Pine Tree Acres Landfill		
County: Macomb Location: Town: 41	N_Range:14E_Section(s):23.24	and the second s
Map identifying location included in Atta	achment Section: Yes X No	
If facility is an Incinerator or a Transfer Station wastes:	Station, list the final disposal site and location	n for Incinerator ash or
Public X Private Owner: Waste Ma	anagement	
Operating Status (check) X open Closed X licensed unlicensed construction permit open, but closure pending * Explanation of special wastes, including Sludge, Auto Fluff	Waste Types Received (check all that apply X residential X commercial X industrial X construction & demolition X contaminated soils X special wastes *	
Site Size: Total area of facility property: Total area sited for use: Total area permitted: Operating: Not excavated: Current capacity: Estimated lifetime: Estimated days open per year: Estimated yearly disposal volume:	568 acres 460 acres 161.2 acres 86.1 acres 75.1 acres 7.200,000 □ tons or X yds³ 8 years 286 days 180,000 □ tons or X yds³	
With current expansion, future capacity was (if applicable) Annual energy production: Landfill gas recovery projects: Waste-to-energy incinerators:	will be 59,000,000 cyds. and a lifetime of 27 y 4 megawatts megawatts	years

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 update's intention to limit the efforts to only what is listed. Instead citizens, businesses, and industries are encouraged to explore the options available to their lifestyles, practices, and processes which will reduce the amount of materials requiring disposal.

Effort Description	Est. Dive	rsion Ton:	yr
	Current	<u>5th yr</u>	<u> 10th yr</u>
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)	0	3%	6%
•			
		 	

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

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 this Plan update's intention to limit the techniques to only what is listed. Persons within the County are encouraged to utilize the technique that provides the most efficient and practical volume reduction for their needs. Documentation explaining achievements of implemented programs or expected results of proposed programs is attached.

Technique Description	Est. Air Spa <u>Current</u>	ce Conserved <u>5th yr</u>	Yds ³ /Yr <u>10th yr</u>
Efforts mainly limited to techniques practiced by private solid			
waste industry & recycling program operators: compacting, baling,			
shredding, and so forth.			
	,		
5	9		
	. •		
		4	
	<u>.</u>		
	:		

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 material 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.

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

\boxtimes	Recycling programs within the County are feasible. Details of existing and planned pr	ograms
	are included on the following pages.	
	Recycling programs for the County have been evaluated and it has been determined th	at it is

Ø	Composting progon the following	_	County are feasible.	Details of	existing and planned	l programs are included
		grams for the Cou grams because of	•	ated and it l	nas been determined	that it is not feasible to
	Programs for soi included on the fo	-	potentially hazardo	ous materials	are feasible and deta	ails are
	•	•			waste stream has becograms because of t	en evaluated and it has he 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-1, III-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.

TABLE III-1

RECYCLING:

Program Name	Service Area ¹	Public or Private	Collection Point ³	Collection Frequency ⁴	Materials Collected ⁵	Program Mana Development	gement Respons Operation	sibilities ² Evaluation
Tuscola County Recycling	Tuscola County	<u>Publi</u>	MRF	<u>d</u>	ABCDE	<u>6</u>	<u>6</u>	<u>6</u>
						· 		
					. <u> </u>			
				-			-	
		· · · · · ·	: '	· 			der der lande der der der der der der der der der d	·
			***************************************				***********	

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 materials 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; L1, L2 etc. = as identified on page 29.

COMPOSTING:

Program Name	Service Area ¹	Public or Private	Collection Point ³	Collection Frequency ⁴	Materials Collected ⁵	Program Mana Development	gement Respon Operation	sibilities ² <u>Evaluation</u>
		***************************************		. ·	-			***************************************
Home composting & some			***************************************					Approximate the property
municipal yard waste collection only. No formal	in the production of the second of the secon	**************************************					Anthropina (martin)	######################################
programs at this time.						oracinos disculstratas	- Antoning conference and the	***************************************

		. Anythropistochen	***************************************		***************************************		, 	
				**************************************	•			
				· · · · · · · · · · · · · · · · · · ·	~~~~	April de Principal		destructions of the second
		***************************************		-				West Contraction of the Contract

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.

Identified by the materials collected by listing of the letter located by that material type. G = Grass Clippings; L = Leaves; F = Food; W = Wood; P = Paper; S = Municipal Sewage Sludge; A = Animal Waste/Bedding; M = Municipal Solid Waste; L1, L2 etc. = as identified on page 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 <u>Private</u>	Collection Point ³		Materials Collected ⁵	Program Mana Development	ngement Responsion Operation	sibilities ² Evaluation
						***************************************		Flagorian P.P.
Michigan Recycling	Tuscola County	<u>Priv</u>	ō	<u>d</u>	A	<u>5</u>	<u>5</u>	<u>5</u>
Riverview Auto	Tuscola County	<u>Priv</u>	ō	<u>d</u>	<u>B1</u>	<u>5</u>	<u>5</u>	<u>5</u>
Fairgrove Oil Co.	Tuscola County	<u>Priv</u>	ō	<u>d</u>	<u>n</u>	<u>5</u>	<u>5</u>	<u>5</u>
Farmers' Petroleum	Tuscola County	<u>Priv</u>	ō	<u>d</u>	<u>U</u>	<u>5</u>	<u>5</u>	<u>5</u>
TSC Store	Tuscola County	<u>Priv</u>	Q	<u>d</u>	<u>U</u>	<u>5</u>	<u>5</u>	<u>5</u>
						-		***************************************

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 27); 5 = Private Owner/Operator; 6 = Other (Identified on page 27).

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.

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; B1 = Lead Acid Batteries; 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.

PR	OP	0	SED	R	$\mathbf{E}C$	Y	CL	IN.	J	G
1 1/	·VI	v	עענט	\mathbf{I}	-	, 1	\sim	/1.	٧.	٠.,

Program Name (if known)	Service Area ¹	Public or Private	Point ³	Collection Materials Frequency Collected	Program Management Response Development Operation	onsibilities ² Evaluation
	ili da kalantan sebesah Managaran kabupatèn		·			ATTENDED TO THE
Continuation & enhancement				<u> </u>		-
of current program.		at the state of	1. T 1		<u></u>	<u> </u>
		<u> </u>	· .			-
				· · · · · · · · · · · · · · · · · · ·		

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 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 27); 5 = Private Owner/Operator; 6 = Other (Identified on page 27).

³ Identified by c = curbside; d = drop-off; o = onsite; and if other, explained.

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

⁵ Identified by the materials collected by listing of the letter located by that material type. A = Plastics; B = Newspaper; C = Corrugated Containers; D = Other Paper; E = Glass; F = Metals; P = Pallets; J = Construction/Demolition; K = Tires; L1, L2 etc. = as identified on page 28.

PROPOSED COMPOSTING:

Program Name,	Service Area ¹	Public or		Collection	Materials	Program Mana	gement Respon	sibilities ²
(if known)		Private	Point ³	Frequency ⁴	Collected ⁵	Development	Operation	Evaluation
				***********			++++	****
Promotion of home composting								
& municipal composting sites					, 			
as desired.				·				
us usarvu.	e de la companya de l							
							•••••	

		<u>-</u>					·	
								
					-			

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 27); 5 = Private Owner/Operator; 6 = Other (Identified on page 27).

³ Identified by c = curbside; d = drop-off; o = onsite; and if other, explained.

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

⁵ Identified by the materials collected by listing of the letter located by that material type. G = Grass Clippings; L = Leaves; F = Food; W = Wood; P = Paper; S = Municipal Sewage Sludge; A = Animal Waste/Bedding; M = Municipal Solid Waste; L1, L2 etc. = as identified on page 28.

PROPOSED SOURCE SEPARATION OF POTENTIALLY HAZARDOUS MATERIALS.

	Program Name,	Service Area ¹	Public or	Collection	Collection	Materials	Program Mana	gement Respons	sibilities ²
	(if known)		Private	Point ³	Frequency ⁴	Collected ⁵	Development	Operation	Evaluation
							*		
Nor	ne de la companya de				·				
		The stage of the state of the s							

	Additional programs and the above	information for those programs	are listed or	an attached	l 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.

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

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.

⁵Identified 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; B1 = Lead Acid Batteries; 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.

IDENTIFICATION OF RESOURCE RECOVERY MANAGEMENT ENTITIES:

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

Environmental Groups:

None with program management responsibilities.

Other:

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.

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	l Annual T	ons Diverted:	Collected Material:	Projected	Annual Tor	s Diverted:
	Current	5th Yr	10th Yr		Current	5th Yr	10th Yr
A. TOTAL PLASTICS:	<u>46.2</u>	<u>51</u>	<u>56</u>	G. GRASS AND LEAVES:	· <u></u>		
B. NEWSPAPER:	<u>348.6</u>	<u>384</u>	<u>422</u>	H. TOTAL WOOD WASTE:	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	and the state of t	
C. CORRUGATED CONTAINERS: D. TOTAL OTHER PAPER: E. TOTAL GLASS:	113.7 26.5 46.7	125 29 51	138 32 56	I. CONSTRUCTION AND DEMOLITION: J. FOOD AND FOOD PROCESSING: K. TIRES:	863 (#)	950	<u>1050</u>
F. OTHER MATERIALS:				L. TOTAL METALS:	<u>49.0</u>	<u>54</u>	<u>59</u>
F1				F3			
F2				F4			(

MARKET AVAILABILITY FOR COLLECTED MATERIALS:

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

Collected <u>Material:</u>	In-State <u>Markets</u>	Out-of-State Markets	Collected Material	In-State <u>Markets</u>	Out-of-State <u>Markets</u>
A. TOTAL PLASTICS:	<u>46.2</u>	· ·	G. GRASS AND LEAVES:		
B NEWSPAPER:	<u>348.6</u>		H. TOTAL WOOD WASTE:		
C. CORRUGATED CONTAINERS:	113.7	:	I CONSTRUCTION AND DEMOLITION:		
D. TOTAL OTHER PAPER:	<u>26.5</u>		J. FOOD AND FOOD PROCESSING	***************************************	
E. TOTAL GLASS: F. OTHER MATERIALS:	<u>46.7</u>		K. TIRES: L. TOTAL METALS:	863 (#)	
F1		***************************************	F3	<u>49.0</u>	,
F2		r aan de je ee ee je je ee	F4		

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	<u>Delivery Medium</u> ²	Targeted Audience ³	Program Provider ⁴	*
1	rnfot	<u>p b i s</u>	O = County Recycling Co	ordinator
<u>2</u>	rnfot	pbis	<u>O</u>	
<u>3</u>	rnfot	pbis	<u>o</u>	
4	r n f ot	pbis	<u>O</u>	
	ot = Internet web si	te.		
· 		-		

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

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

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); OO = Private Owner/Operator (Identify name); HD = Health Department (Identify name); DPA = Designated Planning Agency; CU = College/University (Identify name); LS = Local School (Identify name); ISD = Intermediate School District (Identify name); O = Other which is explained.

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

TIMETABLE FOR SELECTED SYSTEM IMPLEMENTATION

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

TABLE III-7

Management Components	Timeline		
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)

See attached siting process for Tuscola County.

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 or 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, hydogeological 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.

Primary Landfill Siting Criteria

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

4. Environmental Areas

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

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

6. Groundwater Recharge and Wellhead Protection
A facility shall not be located in an area of groundw
States Geological Survey or in a wellhead protection
Department of Environmental Quality

e United higan

7. Public Lands

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 areas may be located on state land only if both of the following conditions are met:

- a. Thorough investigation and evaluation of the proposed site by the facility developer indicates, to the satisfaction of the DEQ, that the site is suitable for such use.
- b. 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.

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 distances, as specified in Act 451, have 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 in conflict 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

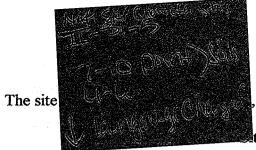
Site Evaluation Matrix

As previously mentioned, a site evaluation method has been developed to provide an objective means of evaluating any proposed 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 values.

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, their importance values, and the total points possible are shown as follows:

	Importance		Possible
<u>Criteria</u>	Value_		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		<u>30</u>
	. •	TOTAL	270



, and assignment of point values are shown below.

te Evaluation Matrix

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

<u>HIGH</u> <u>MEDIUM</u> <u>LOW</u> 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 the county and/or host municipality and the owner/operator qf 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 451. 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:

- 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.
 - The location of all existing structures on the subject property. iv
 - The location of all existing access roads. V.
 - The location and right-of-way widths of all abutting roads. vi.
 - Proposed boundaries of solid waste disposal areas vii.

d. The locations of all residential dwell

e. The locations of all public and p

f. The estimated capacity of the site

g. A non-refundable application fee Board of Commissioners prior to t reasonable relation to the County's ius of the site.

2,000 foot radius of the

ablished by the County The fee shall be in

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.

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 451 or local regulations. A negotiation committee should be established that consists of the following at a minimum

- a. 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 451. 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: la, 1b, 2, 3, 4, 5, 6, and 7.

Secondary Siting Criteria

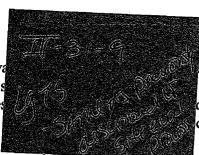
As previously described for potential landfills, the secondary criteria provide standards for evaluating proposed solid waste facility sites. The secondary siting criteria to be used for evaluating facilities other than landfills are as follows:

	Importance	Possible
<u>Criteria</u>	<u>Value</u>	<u>Points</u>
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, with the following exceptions:

a. Large transfer facilities and solid waste processing plants are likely to require utility

connections to provide wa areas for these facilities is industrial land uses. Thes regard to the criteria that



e. Therefore, the most appropriate in areas planned and/or zoned for d when evaluating proposed sites in cal ordinances

Total Site Scores and Interpretation

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

	<u>HIGH</u>	<u>MEDIUM</u>	LOW
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.

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

A. 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 BPW, 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. With the exception of the Village of Millington, 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.

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 451 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 III-37 of this plan, are also applicable. The Michigan Department of Environmental Quality is the enforcement body for compliance with Act 451 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 451. 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.

SELECTED SYSTEM

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 & promotional efforts by Solid Waste Management Advisory Board (SWMAB) & County Recycling Coordinator.

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

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

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

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

<u>Volume Reduction Techniques</u>: Private solid waste industry (collection & disposal operations), County MRF. Also residents, businesses, and industries through voluntary efforts.

SELECTED SYSTEM
Collection Processes: Private solid waste industry & 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 & municipalities. Type A could be sited by private sector in accordance with the plan's siting process.
Sanitary Landfills – Private solid waste industry
<u>Ultimate Disposal Area Uses:</u> Private solid waste industry with input from host municipalities.
<u>Local Responsibility for Plan Update Monitoring & 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

	Plan update's relationship to local ordinand option(s) marked below:	ces and regulations within the County is described
	local ordinances and regulations pert explicitly included in an approved So	f Part 115 prohibits enforcement of all County and aining to solid waste disposal areas unless slid Waste Management Plan. Local regulations f this Plan must be specified below and the manner ed.
	2. This Plan recognizes and incorporate based on existing zoning ordinances:	s as enforceable the following specific provisions
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:

\boxtimes	3 This Plan authorizes adoption and implementation of local regulatio following subjects by the indicated units of government without fur from or amendment to the Plan.	~ .	-
	Additional listings are on attached pages		, i

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.

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:

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

Tuscola County Solid Waste Management Plan Update

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:

Recyling 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 III-16. The County Recycling Program and MRF was 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 & insitutions that wish to recycle but lack on-site storage space for materials. A desire to increase participation by businesses, industries & insitutions 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 volumes 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 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 composting drop-off sites. The specific choices will depend on individual community needs.

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 were encountered in the selection of this equipment. COMPOSTING: 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 & 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 & composting for their residents.

Site Availability & 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 adquate arrangements for compositing areas, usually adjacent to existing private landfill sites. Municipalities that collect yard waste & brush generally utilize vacant publicly-owned sites for placement of material.

Proposed Programs: No new programs or siting needs have been identifed.

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 operations in the County.

Existing Frograms:				
Program Name:	pH Range	Heat Range	Other Parameter	Measurement Uni
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Proposed Programs				Property of the second
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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 III-3 through III-6 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 Village 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 & 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 & institutions.
Resource Recovery Programs	Operating: \$60,000 per year Future Capital: Unknown	Tuscola County Board of Commissioners, material sales, municipalities, private enterprise.
Volume Reduction Techniques	Unknown	Private enterprise
Collection Processes	Unknown	Private enterprise & customer fees.
Transportation	Unknown	Private enterprise
Disposal Areas	Unknown	Private enterprise & customer fees.
Future Disposal Area Uses	None	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 Commissioners, 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 anitcipated 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 stll 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 competive 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 10 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 10 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 is 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 & 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 & materials recovery programs: compactors, balers, shredders.

Alternative C: Same as Alternative A.

RESOURCE RECOVERY PROGRAMS:

Alternative A

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

Alternative C:

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

COLLECTION PROCESSES:

Alternative A: Collection mainly by private solid waste industry under municipal contracts & 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 & 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, economics, environmental, transportation, siting and energy resources of the County. In addition,

it was reviewed for technical feasibility, and whether it would have public support. Following is a brief summary of that evaluation along with an explanation why this system was not chosen to be implemented

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 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:

- 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 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.
- 3. 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.

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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:

- 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 public.
- 2. No mechanism to increase materials recovery levels.
- 3. No mechanism to increase awareness & 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 & other services.
- 3. Potential for regional waste processing & composting facilities.
- 4. Regional purchasing power for recycled products.

DISADVANTAGES:

- 1. Significant barriers to formation & 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.

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 PARTICIPATION

<u>PUBLIC INVOLVEMENT PROCESS</u>: 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 public involvement process is described on the preceding page. The Solid Waste Management Planning Committee met on the following dates:

November 13, 1997
December 11, 1997
January 8, 1998
February 12, 1998
March 12, 1998
April 9, 1998
May 14, 1998
June 11, 1998
July 9, 1998
August 13, 1998
September 10, 1998
October 8, 1998 (Public Hearing)
November 19, 1998
December 10, 1998

PLAN APPROVALS:

The updated 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 29, 1998.

The updated Solid Waste Management Plan was submitted to the municipalities within Tuscola County on February 5, 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 updated Solid Waste N	Management Plan was approved by the	e Michigan Department of
Environmental Quality on	, 2000.	

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:

- 1. Dave Lewis, Cove Sanitation
- 2. Mike Beagle, Waste Management (formerly City Environmental)
- 3 Gordon Wills, Waste Management
- 4. Mark Kozan, Riverview Auto

One representative from an industrial waste generator:

1 Kari Lohela, General Cable

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

- 1. Duane Maas, MUCC
- 2. Rick Everts, Pheasants Forever

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

1. Ed Kimbrue, County Health Department, (designee of County Board Chair)

One representative from township government:

1 Todd Fackler, Tuscola Township Supervisor

One representative from city government:

1. Donald Duggar, Manager of Caro (designee of Council President)

One representative from the regional solid waste planning agency:

1 Earl Beagle, East Central Michigan Planning & Dev. Regional Commission

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

- 1. Barbara Beecher
- 2. Rudy Tilley
- 3. Robert Cnare

Plan Approvals

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

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 update 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 Update; and
- WHEREAS, The Planning Committee has now completed a draft of the Solid Waste Management Plan Update, 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 Update for public
 review and comment in accordance with the procedures specified in Part
 115 of Act 451.

Motion to adopt the resolution by Becker, support by R. Lelley.

YES:

NO: C

ABSENT: 5

Resolution declared adopted at a regular meeting of the Tuscola County Solid Waste Management Planning Committee held on August 13, 1998

Vice Chairman (Acting Chair)

Secretary

Erbara a Beecher

Tuscola County Solid Waste Planning Committee Minutes

Don Duggar Chairman 517-673-2860 Ed Kimbrue Vice Chairman 517-673-8114 x 137 Sharon Mika Recycling Coordinator 517-672-1673

Minutes of December 10, 1998

Members present: Beecher, Duggar, Tilley, Cnare, Wills, Fackler, Maas, Lohela

Members absent: Everts, Lewis, E. Beagle, M. Beagle, Kimbrue, Kozan

Others Attending: S. Mika, Ken Hess and Mr. and Mrs. John Ryba from Cass City

Call to order: Motion by Cnare seconded by Rudy to accept the minutes of November 19, 1998. Motion carried.

Public Comment: John Ryba from Elkland Township appeared before the board They appreciate the recycling program and the addition of magazines. John picked up 100 tires in a four-mile area in his township. He is concerned about the amount of material being dumped in the area. John supports Sharon in having two tire collections. He is also concerned about HHW (Household Hazardous Waste) and no collection for this material. John picked up a bucket of roofing tar in one of the ditches and Cove Sanitation wanted to charge \$5.00 to dispose of it in their landfill. He would like to see more recycling. He has also brought this matter to the Elkland Township board. Bartnick would consider being a drop off for metals if people wanted to recycle them. Don Duggar suggested Mr. Ryba talk to the Elkland Twp board to recommend mandatory trash pick -up.

Old Business:

Review the proposed revisions of the draft plan: Doug Bell reviewed the plan and went over the answers to the concerns of DEQ. The committee then reviewed the appendices. The Solid Waste Management Advisory Board (SWMAB) can be appointed by the Board of Commissioners (BOC). This Board would carry out the solid waste plan update. Following approval of the Plan the BOC will appoint the SWMAB.

Mika has returned all correspondences from the counties that requested information on our plan.

Doug Bell stated letters have been sent to the landfills for permission to accept our material but has no reply.

This plan if approved tonight would go before the BOC on Dec. 22, 1998.



Motion by Rudy Tilley and seconded by Duane Maas to approve the draft plan with the changes mentioned tonight and send the plan to the Board of Commissioners for approval. Motion carried.

New Business:

Final Copies, how many and to whom?

Copies need to go to each unit of government along with a cover letter and resolution.

Seven commissioners and Mike Hoagland

14 committee members

All libraries

One to county clerk

One to Recycling Coordinator

One to each county in the plan

One to the County PlanningCommission

Extras to be sold at cost to any other person or entity

Next meeting date: to be called by the Chairperson.

Adjourn: 9:00 f.M.

Draft

POC 7-99

Tuscola County Board of Commissioners December 22, 1998 Minutes Annex Board Room

Chairman Kenneth Hess called the regular meeting of the Tuscola County Board of Commissioners to order at 6:00 p.m.

Prayer by Commissioner Scollon

Pledge by Commissioner McLane

Roll call: District #1 James Schafer Present

District #2 Edward Scollon Present District #3 Kenneth Hess Present District #4 Norma Bates Present District #5 Donald McLane Present District #6 Robert Russell Present District #7 Roy Petzold Present

98-M-558

Motion by Schafer, seconded by Russell, to adopt the agenda as amended. Motion carried.

98-M-559

Motion by Scollon, seconded by McLane, to approve the minutes of the 12/8/98 regular meeting. Motion carried.

98-M-560

Motion by Schafer, seconded by McLane, to approve the County Clerk to automatically pay for out-of-state certification costs that do not exceed \$25 and providing the check is made directly to the child support enforcement agency from the investigations line item and upon approval and signature of the Friend of the Court. Motion carried.

98-M-561

Motion by Schafer, seconded by Scollon, to approve the Friend of the Court's application for an extension of time through May 31, 1999 to liquidate the remaining funds of the access and visitation grant and the chairman is authorized to sign the necessary paperwork. Motion carried.

98-M-562

Motion by Schafer, seconded by Russell, to approve the 1999 Cooperative Reimbursement application for funding through September 1999 and the chairman is authorized to sign. Motion carried.

98-M-567

Motion by McLane, seconded by Russell, that per the recommendation of the County Solid Waste Planning Committee, the Tuscola County Solid Waste Management Plan Update (dated 12/10/98) be approved and authorized to be submitted to all local units of government for review and approval. Also authorize the chairman to sign. Motion carried.

98-M-568

Motion by Bates, seconded by Petzold, to approve the agreement between the Tuscola County Board of Commissioners and the 54th Circuit Court Judge regarding wage, fringe benefits, and personner poncy matters. Also, the chairman is authorized to sign said agreement. Motion carried.

98-M-569

Motion by Bates, seconded by Petzold, to approve the renewal revisions in the Information System Director's contract and the chairman is authorized to sign said revised contract. Motion carried.

98-M-570

Motion by Bates, seconded by Russell, to grant Curtis Chambers approximately three months of service credit in the Municipal Employees Retirement System because he was laid off in 1988 when he actually had more seniority than other Sheriff's deputies and should not have been laid off. Previously a grievance ruling regarding this matter decided that the county was required to award this credited service. Motion carried.

98-M-571

Motion by Bates, seconded by Russell, to amend previous board motion 98-M-553 to read "to amend the independent contractor agreement for Vanderbilt Park management to reflect an increase in payment to the contractor from \$5,650 in 1998 to \$55,820 in 1999" and the chairman be authorized to sign the amended agreement. Motion carried

98-M-572

Motion by Bates, seconded by Russell, that as presented in the 1999 county budget, effective January 1, 1999 the part-time secretary position at Mosquito Abatement be made full-time and said position be paid at the rate of \$10.16 per hour. Motion carried.

98-M-573

Motion by Bates, seconded by Petzold, to correct the 1999 wage step schedule to identify the following steps for the Victim Services Coordinator which have been in practice and were previously identified in grant documents.

Step I

\$25,000

W

DAVID M. MURPHY
MANAGER
CHARLES R. SPAULDING
CLERK/TREASURER
GARY CREWS
ATTORNEY

VILLAGE OF CARO

317 SOUTH STATE STREET CARO, MICHIGAN 48723 PHONE: 673-2226 FAX: 673-7310 PRESIDENT:
DONALD W. COLLING
TRUSTEES:
CAROL ELLSWORTH
RICHARD POULIOT
MICHAEL SINCHAK
TOM STRIFFLER
JOHN FIELDS
MICHAEL HENRY

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

WHEREAS, Tuscola County has prepared an updated 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 Village of Caro has reviewed the updated Solid Waste Plan and its recommendations;

NOW THEREFORE, BE IT RESOLVED that the Common Council of this municipality does hereby approve the updated Tuscola County Solid Waste Management Plan in accordance with Act 451, as amended.

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THIS RESOLUTION IS DECLARED ADOPTED THIS 26TH DAY OF APRIL, 1999.

Charles R. Spaulding

Village Clerk

I hereby certify that the foregoing is a true and correct copy of a resolution duly adopted by the Common Council of the Village of Caro at a Regular meeting held on Monday, April 26, 1999 at 7:30 o'clock P.M. in the Council Chambers of the Municipal Building, 317 S. State Street, Caro, Michigan, 48723.

Charles R. Spaulding Village Clerk

WHEREAS,	Tuscola County has prepared an updated 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 TOWN SHIP of FAIRGROUE (Township/Village/City) of (Name of Local Unit)
	has reviewed the updated Solid Waste Plan and its recommendations;
NOW, THER	EFORE, BE IT RESOLVED that the <u>BEARD</u> of this (Board/Council) municipality hereby <u>APPECES</u> (Approves/Disapproves)
	the updated Tuscola County Solid Waste Management Plan in accordance with Act 451, as amended
	clared adopted at a regular meeting of the BCARD (Board/Council) (Board/Council) (Cotal Unit) (Date) (Date)
Chief Elected	Official Clerk

WHEREAS,	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 VILLAGE of CASS CITY
	(Township/Village/City) (Name of Local Unit)
	has reviewed the updated Solid Waste Plan and its recommendations;
NOW, THER	EFORE, BE IT RESOLVED that the COUNCIL (Board/Council) of this
	municipality hereby APPROVES
	(Approves/Disapproves)
	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 COUNCIL (Board/Council)
of VILLAGE	OF CASS CITY held on Feb. 22 , 1999.
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WILLIAM,	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 pas prepared and submitted by the County Solid Waste Management Planning Committee; and	olan
WHEREAS,	The Township of WEILS (Township/Village/City) of WEILS (Name of Local Unit)	
21 H.C	has reviewed the updated Solid Waste Plan and its recommendations;	
NOW, THER	EFORE, BE IT RESOLVED that the <u>board</u> of this (Board/Council)	
	municipality hereby \(\Omega \rangle \capproves \) \(\Delta \text{Disapproves}\)	
	the updated Tuscola County Solid Waste Management Plan in accorda with Act 451, as amended.	nce
Resolution dec	clared adopted at a regular meeting of the HOARD	
of <u>WENG</u> (Name of L	(Board Council) Township held on April 8 1999. Local Unit) (Date)	
Melen	Without have a Vanning	
Chief Elected	Official Clerk	

WHEREAS,	Tuscola County has prepared an updated 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 TOWNSHIP of ALMER (Township/Village/City) (Name of Local Unit)
	has reviewed the updated Solid Waste Plan and its recommendations,
NOW, THERI	EFORE, BE IT RESOLVED that the BOARD of this (Board/Council)
	municipality hereby APPROVES (Approves/Disapproves)
	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 BOARD
of ALMER TOW	(Board/Council) NSHIB held on MARCH 9, 12, 1999.
(Name of Le	
Loy.	Rossell Word REAVEY
Chief Elected (Official Clerk

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Resolution for Action on the Updated Tuscola County Solid Waste Management Plan by Local Units of Government

WHEREAS,	Tuscola County has prepared an updated 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 Jourship of Kingston (Township/Village/City) (Name of Hocal Unit)
	has reviewed the updated Solid Waste Plan and its recommendations,
NOW, THERI	EFORE, BE IT RESOLVED that the Buil of this (Board/Council)
	municipality hereby <u>(Approves/Disapproves)</u> (Approves/Disapproves)
	the updated Tuscola County Solid Waste Management Plan in accordance with Act 451, as amended
Resolution decorded of Marie of L	clared adopted at a regular meeting of the Brail (Board/Council) Ston Mushy held on May //, 1999 ocal Unit) (Date)
Vm. Jesse	Zanla Sarry Wood

Chief Elected Official

WHEREAS,	Tuscola County has prepared an updated 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 Township of DENMARK (Township/Village/City) (Name of Local Unit)
	has reviewed the updated Solid Waste Plan and its recommendations;
NOW, THER	EFORE, BE IT RESOLVED that the BOARD of this (Board/Council)
	municipality hereby APPROVES (Approves/Disapproves)
	the updated Tuscola County Solid Waste Management Plan in accordance with Act 451, as amended
Resolution de	clared adopted at a regular meeting of the Township BOARD (Board/Council)
of <u>DEN</u> (Name of L	YARK held on 144 34 , 1999.
John W	Budinger Gardel & Gamme
Chief Elected	Official Clerk

WHEREAS,	Tuscola County has prepared an updated 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 Township of Fremont (Township/Village/City) (Name of Local Unit)
	has reviewed the updated Solid Waste Plan and its recommendations;
NOW, THER	EFORE, BE IT RESOLVED that the Board of this (Board/Council)
	municipality hereby <u>approves</u> (Approves/Disapproves)
	the updated Tuscola County Solid Waste Management Plan in accordance with Act 451, as amended
	clared adopted at a regular meeting of the Board (Board/Council)
of Fremo (Name of L	nt Twp., held on May 19, 1999. ocal Unit) (Date)
for p	alema Lite Talema
Chief Elected	Official Clerk

WHEREAS,	Tuscola County has prepared an updated 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 Township of Elmwood (Township/Village/City) (Name of Local Unit)
	has reviewed the updated Solid Waste Plan and its recommendations;
NOW, THER	EFORE, BE IT RESOLVED that the Board of this (Board/Council)
	municipality hereby <u>Opproves/Disapproves</u>) (Approves/Disapproves)
	the updated Tuscola County Solid Waste Management Plan in accordance with Act 451, as amended
	FI TO THE STATE OF
Resolution des	clared adopted at a regular meeting of the Council) (Board/Council) (Date) (Date)
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Clerk

Chief Elected Official

WHEREAS,	Tuscola County has prepared an updated Solid Waste Management Plan 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 planas prepared and submitted by the County Solid Waste Management Planning Committee, and
WHEREAS,	The Township of Tuscola (Township/Village/City) (Name of Local Unit)
	has reviewed the updated Solid Waste Plan and its recommendations;
NOW, THER	EFORE, BE IT RESOLVED that the Board of this (Board/Council)
	municipality herebyapproves (Approves/Disapproves)
	the updated Tuscola County Solid Waste Management Plan in accordance with Act 451, as amended
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Resolution dec	clared adopted at a regular meeting of the Board (Board/Council)
of Tusc	ola Township held on 3-2-, 1999.
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Chief Elected	Official Clerk

WHEREAS,	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 Olius Mif of Tref Oll (Township/Village Gity) (Name of Local Unit)
	has reviewed the updated Solid Waste Plan and its recommendations;
NOW, THER	EFORE, BE IT RESOLVED that the Goard/Council)
	municipality hereby
	the updated Tuscola County Solid Waste Management Plan in accordance with Act 451, as amended
Kesolution de	clared adopted at a regular meeting of the Will Constitution
of X	(Board Council) The held on 3 - 1999.
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Chief Elected Official

WHEREAS,	Tuscola County has prepared a accordance with Part 115 of the Protection Act, 1994 PA 451, a	in updated Solid Waste Management Plan in e Natural Resources and Environmental as amended; and
WHEREAS,	The Tuscola County Board of as prepared and submitted by the Planning Committee; and	Commissioners has now approved the plan he County Solid Waste Management
WHEREAS,	The City (Township/Village/City)	of Vassar (Name of Local Unit)
	has reviewed the updated Solid	Waste Plan and its recommendations;
NOW, THER	EFORE, BE IT RESOLVED tha	the Council of this (Board/Council)
	municipality hereby Approves. (Approves.	es Disapproves)
	the updated Tuscola County So with Act 451, as amended.	lid Waste Management Plan in accordance
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Resolution dec	clared adopted at a regular meeti	(Board/Council)
of Vassar		1999.
(Name of L	ocal Unit)	(Date)
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D. Joseph Hembl Chief Elected		Brian M. Kischnick Clerk
Mayor of Vassar		City Manager

WHEREAS,	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 Township of Columbia
	(Township/Village/City) (Name of Local Unit)
	has reviewed the updated Solid Waste Plan and its recommendations;
NOW, THERI	EFORE, BE IT RESOLVED that the Board of this (Board/Council)
	municipality hereby <u>approves</u> (Approves/Disapproves)
	the updated Tuscola County Solid Waste Management Plan in accordance with Act 451, as amended
	clared adopted at a regular meeting of the Board (Board/Council) a Township held on June 21, 1999 (Date)
	Spannogel Janue Vagel
Chief Elected	

WHEREAS,	Tuscola County has prepared an updated 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 Township of Millington (Township/Village/City) (Name of Local Unit)
	has reviewed the updated Solid Waste Plan and its recommendations;
NOW, THER	EFORE, BE IT RESOLVED that the Board of this (Board/Council)
	municipality hereby Approves (Approves/Disapproves)
	the updated Tuscola County Solid Waste Management Plan in accordance with Act 451, as amended
Resolution de	clared adopted at a regular meeting of the Twp Board (Board/Council)
of Milling (Name of L	ngton held on June 21, 1999.
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Chief Elected	Official Clerk

WHEREAS,	Tuscola County has prepared an updated 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 Township of Juniata (Township/Village/City) (Name of Local Unit)
	has reviewed the updated Solid Waste Plan and its recommendations,
NOW, THERE	EFORE, BE IT RESOLVED that the Township Board of this (Board/Council)
	municipality hereby Approves (Approves/Disapproves)
	the updated Tuscola County Solid Waste Management Plan in accordance with Act 451, as amended.
	clared adopted at a regular meeting of the Township Board (Board/Council)
of Junia (Name of L	ta Township held on June 14 , 1999. ocal Unit) (Date)
Neil Jackson Chief Elected	y

WHEREAS,	Tuscola County has prepared an updated Solid Waste Management Plan in accordance with Part 115 of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended; and
	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 Upron of Obton (Township/Village/City) (Name of Local Unit)
	has reviewed the updated Solid Waste Plan and its recommendations;
NOW, THERE	EFORE, BE IT RESOLVED that the Board of this (Board Council)
	municipality hereby <u>Opportunity</u> (Approves/Disapproves)
	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 Worship Borel (Board/Council)
of <u>U</u>	Phon held on Man 17, 1999.
(Name of L	ocal Unit) / (Date)
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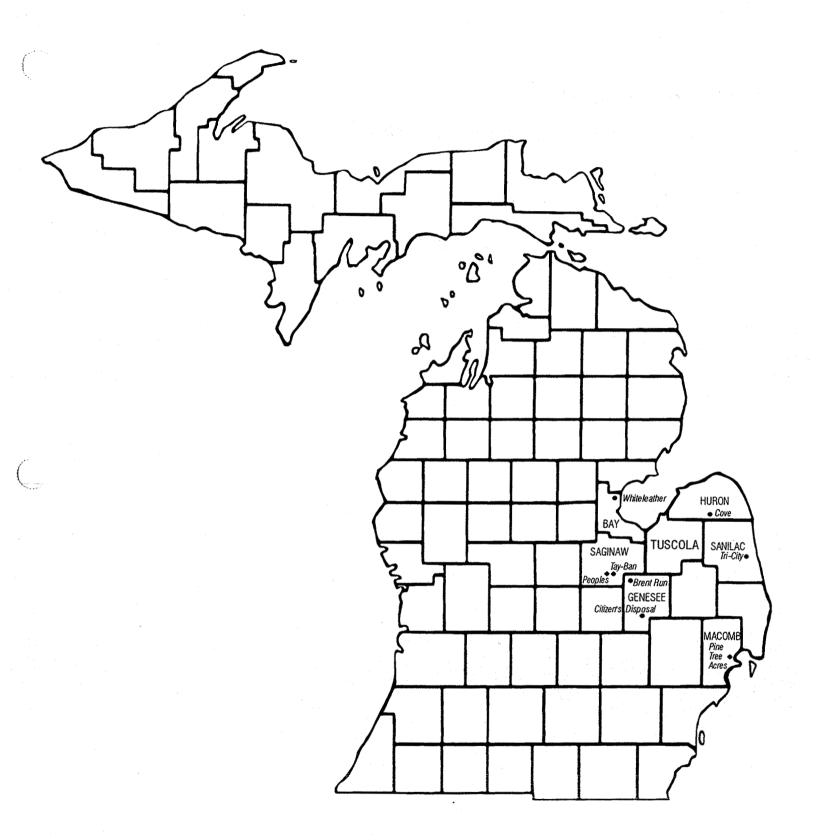
Clerk

Chief Elected Official

WHEREAS,	Tuscola County has prepared an updated Solid Waste Management Plan is 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 Township of Gilford (Name of Local Unit)
	has reviewed the updated Solid Waste Plan and its recommendations;
NOW, THER	EFORE, BE IT RESOLVED that the Board of this (Board/Council)
	municipality hereby Approves/Disapproves)
	the updated Tuscola County Solid Waste Management Plan in accordance with Act 451, as amended
Resolution decorate of (Name of L	clared adopted at a regular meeting of the Board (Board/Council) Sufferd Township held on June 10, 1999. ocal Unit) (Date)
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WHEREAS,	Tuscola County has prepared an updated Solid Waste Management Plan i 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 Village of Fairgrove (Name of Local Unit)
	has reviewed the updated Solid Waste Plan and its recommendations;
NOW, THER	EFORE, BE IT RESOLVED that the Council of this (Board/Council)
	municipality hereby approves (Approves/Disapproves)
	the updated Tuscola County Solid Waste Management Plan in accordance with Act 451, as amended
Resolution de	clared adopted at a regular meeting of the Council (Board/Council)
of Fair (Name of L	rgrove held on June 7, 1999. ocal Unit) (Date)
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Smn	Clamer Jum Marie Ball
Chief Elected	Official Clerk

WHEREAS,	Tuscola County has prepared an updated 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 VILLAGE of MILLINGTON (Township/Village/City) (Name of Local Unit)
	has reviewed the updated Solid Waste Plan and its recommendations;
NOW, THERI	EFORE, BE IT RESOLVED that the COUNCIL of this (Board/Council)
	municipality hereby APPROVES (Approves/Disapproves)
	(Approves/Disapproves)
	the updated Tuscola County Solid Waste Management Plan in accordance with Act 451, as amended
Resolution dec	lared adopted at a regular meeting of the COUNCIL (Board/Council)
of VILLAGE	OF MILLINGTON held on June 14, 1999.
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GAILAN RI	
Chief Elected Official Clerk	



Tuscola County Landfill Location Map LANDFILLS UTILIZED OUTSIDE OF TUSCOLA COUNTY

ATTACHMENTS

Inter-County Agreements

Copies of Inter-County agreements with other Counties (if any).

the solid waste programs in the contiguous counties and also wants to know what waste materials are being sent here. Please read through the approved flow control proposal.

I have also included the import/export section pages from the Solid Waste Plan in this packet. In order for the authorizations to be legal, both Plans must say the same thing. If you are interested in transferring waste between counties, we ask that you follow the steps listed in the attached document.

If you have any questions, please give me a call at (517) 797-6800.

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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.



2361 West Grand Blanc Road Grand Blanc, Michigan 48439 810.655.4207 810.655.4147 fax

November 29, 1999

Tuscola County Solid Waste Planning Committee 214 East State Street Clare, MI 48617

Attn: Douglas A. Bell, AICP0

Solid Waste Plan Consultant for Tuscola County

Re: Tuscola County Solid Waste Plan Update

Dear Mr. Bell:

This letter is in response to your correspondence of October 22, 1999, regarding the above-captioned matter. Citizens Disposal, Inc. supports open markets to facilitate efficient flow of solid waste streams. This facility is requesting inclusion into the Tuscola County Solid Waste Plan to allow solid waste disposal from Tuscola County to our facility.

Citizens Disposal, Inc. has approximately 17,000,000 cubic yards of airspace capacity at various stages of design construction and active operation. This facility has the operational capacity to accept all solid waste generated in Tuscola County annually for the next ten years.

Please contact me should you have any further questions regarding this matter.

Sincerely.

Robert S. Thornton

Manager



October 28, 1999

Douglas A. Bell **Community Planning Consultant** 214 East State Street Clare, Michigan 48617

Subject: Tuscola County Solid Waste

Plan Update

Dear Mr. Bell:

The following is in response to your request for documentation regarding disposal of Tuscola County solid waste at Brent Run Landfill.

Solid waste that is generated in Tuscola County can be accepted for disposal at Brent Run Landfill. Disposal capacity for Tuscola County will be available in accordance with the Genesee County Solid Waste Plan.

If you have questions regarding this response, please call me at 734-654-3615.

Sincerely,

Matt Neely General Manager

ATTACHMENTS

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



Saginaw County Metropolitan Planning Commission

400 Court Street

Saginaw, Michigan 48602 Phone: (517) 797-6800 • Fax: (517) 797-6809

Date: September 24, 1998

To: Solid Waste Management Planning Committees:

Bay County, Clinton County, Genesee County, Gratiot County, Midland County,

Shiawassee County, Tuscola County

From: Christina Pecoraro, Associate Planner

Re: Import/Export Agreements

The Saginaw County Solid Waste Management Planning Committee has identified your county as one that will be explicitly authorized to import and export waste in Saginaw County's 1998 Solid Waste Management Plan. There are three conditions that a contiguous county must meet in order to be authorized in Saginaw County's Plan. The three conditions are: 1) the waste volumes flowing between borders must not be higher than the identified maximum daily volumes (listed in attached document); 2) The contiguous counties must provide supporting information for import/export authorization (see attached document); and 3) Both counties (the sending and receiving) must explicitly authorize the import/export of waste in each other's plan. Please note that while reciprocal agreements are not required, they are still the preferred method.

The Supporting Information for Import/Export Authorizations is listed below and can also be found in the attached flow control proposal.

- 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 material for potential 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 this 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/export of waste in the subject county's plan.

This information is required because the Solid Waste Planning Committee wants to learn more about

EXPORT AUTHORIZATION

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

Table 2-A

CURRENT EXPORT VOLUME AUTHORIZATION OF SOLID WASTE

EXPORTING COUNTY	IMPORTING COUNTY	PACILITY NAME ¹	AUTHORIZED QUANTITY/ DAILY	AUTHORIZED QUANTITY/ ANNUAL	AUTHORIZED CONDITIONS ²
Saginaw	Bay	000 000 000 000 0000000000000000000000	343 TPD	A CONTRACTOR OF THE PARTY OF TH	40 * 40000
Saginaw	Genesee		1000 TPD		
Saginaw	Midland	Any day file time	622 TPD		
Saginaw	Shiawassee		130 TPD		
Saginaw	Clinton	- Andrews	84 TPD	en ell avan	*****
Saginaw	Gratiot		1000 TPD	-	*****
Saginaw	Tuscola	alth arts alth alth	160 TPD	descriptions of the second of	an Warran

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

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

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

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 COUNTY	EXPORTING COUNTY	FACILITY NAME ¹	AUTHORIZED QUANTITY/ DAILY	AUTHORIZED QUANTITY/ ANNUAL	AUTHORIZED CONDITIONS ²
Saginaw	Bay	400 400 400 400 400 400	343 TPD		*
Saginaw	<u>Clinton</u>		<u>84 TPD</u>		+
Saginaw	Genesee		1000 TPD	(m) (m) (m) (m)	**************************************
Saginaw	Gratiot		50 TPD	Color diller delle aggi.	
Saginaw	Midland		622 TPD		*=
Saginaw	Shiawassee		_130 TPD		
Saginaw	Tuscola	and the distance of the second	160 TPD	Other Admira	

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

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

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

Non-Contiguous Counties

Due to a number of recent waste industry mergers, competition has been somewhat limited in mid-Michigan. Based on this fact, the County will allow any Saginaw County citizen, business or municipality to request at any time that the County authorize a non-contiguous county in the Plan for the transfer of waste (with a reciprocal agreement or in conjunction with the authorized conditions set forth in this section). Saginaw County will also allow anyone from outside the County to submit a proposal for inclusion in the plan, if the proposal is sponsored by a Saginaw County resident, business or municipality, with sponsorship being clearly disclosed.

Each non-contiguous county proposal must contain, at a minimum, the Supporting Information for Import/Export Authorizations listed above, plus the following to even be considered:

- 1. Name, address and phone number of sponsor
- 2. Describe what goals from the Saginaw County Solid Waste Management Plan are not presently being met and how the proposed authorization or reciprocal agreement would help to achieve these goals.
- 3. Describe how the proposal increases competition for Saginaw County customers and/or improves the financial health of the company(ies) involved

These proposals shall be submitted to the Saginaw County Designated Planning Agency (Saginaw County Metropolitan Planning Commission). The DPA staff will ensure that each of the above listed items has been answered completely. If the proposal is complete, it will be sent to the Saginaw County Solid Waste Management Planning Committee, at their next quarterly meeting, for further review. If information is incomplete, the application will not be forwarded and the DPA will notify the applicant by letter of the applications shortcomings.

This Saginaw County Solid Waste Management Planning Committee will judge each proposal on the goals and objectives of this plan and criteria which may be adopted by the Planning Committee. These would include, but are not limited to:

- 1. Alternative systems in use in the proposed county for inclusion (i.e. Are recycling, composting, and resource recovery occurring in the proposed county to their maximum ability?)
- 2. Are local companies in poor financial health? Would including additional counties help them become financially stable again?
- 3. Are there multiple options for disposal of the materials that would be brought into Saginaw or is the other county relying exclusively on Saginaw County for disposal of its waste?
- 4. How does the proposal impact projections of available landfill capacity for Saginaw County waste?
- 5. Are all weather roads available for transport of waste between Saginaw County and the subject county?

Once the Solid Waste Committee has met to discuss the proposal initially, a public hearing will be held. The Solid Waste Committee, after the hearing and their own discussion, will make a recommendation to the Saginaw County Board of Commissioners on whether this Solid Waste Management Plan should be amended to include the subject county as an authorized importer/exporter. If the County Board approves the amendment, the local municipalities must

then vote on it and have at least 67% approval of the amendment. If there is enough local support, the DEQ must then approve it to officially become a part of the plan. Upon adoption of such a plan amendment, waste may be transferred between borders under the authorized conditions of the plan amendment (in the import/export section) or the Chairman of the Saginaw County Board of Commissioners would be authorized to sign a reciprocal agreement for up to the specified amount.

If the Solid Waste Planning Committee or the Board of Commissioners wants additional information before making their decision, they may assign the acting Designated Planning Agency to compile it.

Upon approval of this Saginaw County Management Plan Update by the MDEQ, all wastes being brought into Saginaw County for disposal from counties other than the above explicitly authorized sources, or those that the Board approves through a special request/plan amendment, will be considered in direct violation of the Plan and P.A. 451.



36600 29 Mile Road Lenox, MI 48048 (810) 749-9698 (810) 749-6440 Fax

December 21, 1998

Mr. Douglas A. Bell Community Planning Consultant 214 East State Street Clare, MI 48617

RE: Tuscola County Solid Waste Plan Update

The following is in response to your request for documentation regarding disposal of Tuscola County solid waste at Tri-City Landfill:

Solid waste that is generated in Tuscola County can be accepted for disposal at Tri-City Landfill. Disposal capacity for Tuscola County will be available in accordance with the Sanilac County Solid Waste Plan. It should be noted that Tri-City Landfill currently has a volume cap of 3,500 yards/day.

If you have questions regarding this response please call me at (810) 749-9698.

Sincerely,

James A. Schmieder Division Manager Tri-City Landfill

Maps

Maps showing locations of solid waste disposal facilities used by the County.

WHITEFEATHER DEVELOPMENT COMPANY

TO: Mr. Douglas A. Bell

FROM: Jeff Tucker

DATE: October 28, 1999

RE: Tuscola County Solid Waste Plan Update

The following is in response to your request for documentation regarding disposal of Tuscola County solid waste at Whitefeather Development Company.

Solid waste that is generated in Tuscola County can be accepted for disposal at Whiteather Development Company. Disposal capacity for Tuscola County will be available in accordance with the Bay County Solid Waste Plan.

Sincerely.

Jeff Tucker

Site Manager

Whitefeather Development Company

Phone (517) 658-2464 Fax (517) 658-2301

September 29, 1999

Mr. Douglas A. Bell Community Planning Consultant 214 East State Street Clare, MI 48617

RE: Tuscola County Solid Waste Plan Update

The following is in response to your request for documentation regarding disposal of Tuscola County solid waste at Cove Sanitation, Inc. Landfill:

Solid waste that is generated in Tuscola County can be accepted for disposal at Cove Landfill. Disposal capacity for Tuscola County will be available in accordance with the Tuscola County Solid Waste Plan.

If you have any questions regarding this response, please contact me at (517) 658-2464.

Respectfully Submitted,

Richard L. Everts

Manager, Cove Sanitation, Inc.

Cove Landfill



PINE TREE ACRES
A WASTE MANAGEMENT COMPANY

36600 29 Mile Road Lenox, MI 48048 (810) 749-9698 (810) 749-6440 Fax

Mr. Douglas Bell Community Planning Consultant 214 East State Street Clare, MI 48017

RE: Tuscola County Solid Waste Plan Update

The following is in response to your request for documentation regarding the disposal of Tuscola County solid waste at Pine Tree Acres Landfill in Macomb County.

Solid waste that is generated in Tuscola County can be accepted for disposal at Pine Tree Acres Landfill. Disposal capacity for Tuscola County will be available in accordance with the Macomb County Solid Waste Plan.

If you have any questions, please call me at (810) 749-9698.

Sincerely.

James A. Schmieder Division Manager

Pine Tree Acres RDF



PEOPLES LANDFILL

4143 East Rathbun Road Birch Rut, MI 48415 (517) 777-1145 (517) 777-1460 Fax

January 10, 2000

Mr. Douglas A. Bell Community Planning Consultant 214 East State Street Clare, Mi. 48617

RE: Tuscola County Solid Waste Plan Update

The following is in response to your request for documentation regarding the disposal of Tuscola County solid waste at Peoples Landfill in Saginaw County.

Solid waste that is generated in Tuscola county can be accepted for disposal at Peoples Landfill. Disposal capacity for Tuscola County will be available in Accordance with the Saginaw County Solid Waste Plan.

If you have any questions regarding this response, please call me at 517-777-1145.

Singerely,

Ron Langworthy 0

District Manager

Peoples Landfill Inc.

Listed Capacity

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

The operators of the landfills identifed 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
Cove, Huron County	1,150,000	10 years
Tri-City, Sanilac County	10,780,000	22 years
People's, Saginaw County	5,301,641	20 years
Whitefeather, Bay County	4,175,153	18 years
Pine Tree Acres, Macomb County	7,200,000	8 years
Brent Run, Genesee County	10,247,000	18 years
Citizen's Disposal, Genesee County	5,300,000	25 years
TOTAL	44,153,794	

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 beed 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 requite 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)

Cove, Huron County 1,150,000 Tri-City, Sanilac County 10,780,000

People's, Saginaw County 1,248,000 (10 years @ 124,800 cyds/yr)

Whitefeather, Bay County 4,175,15

Pine Tree Acres, Macomb County 150,000 (10 years @ 15,000 cyds/yr)

Genesee County sites (2) 15,547,000

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.

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, 2000 - 2004

Resolutions

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

None

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, SWMAB

Timeline: Ongoing

ACTION #3: Expand recycling program to collect additional materials as they become feasible.

Lead Responsibilites: 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

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

Resolution for Action on the Updated Tuscola County Solid Waste Management Plan by Local Units of Government

WHEREAS,	Tuscola County has prepared an updated 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 Tup. of Koy Hon (Township/Village/City) (Name of Local Unit)
	has reviewed the updated Solid Waste Plan and its recommendations;
NOW, THERE	EFORE, BE IT RESOLVED that the Board/Council) of this
	municipality hereby Approves/Disapproves)
	the updated Tuscola County Solid Waste Management Plan in accordance with Act 451, as amended
	lared adopted at a regular meeting of the Board/Council) (Board/Council) (box Twp- held on June 12, 1999. (Date)
Albert	Ruygha James & Bouch
Chief Elected (Official Clerk

Resolution for Action on the Updated Tuscola County Solid Waste Management Plan by Local Units of Government

WHEREAS, Tuscola County has prepared an updated 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 Industiolds of Juscola (O. (Township/Village/City) (Name of Local Unit)
	has reviewed the updated Solid Waste Plan and its recommendations,
NOW, THER	EFORE, BE IT RESOLVED that the <u>Twf)</u> , <u>Board</u> of this (Board/Council)
	municipality hereby (Approves/Disapproves)
	the updated Tuscola County Solid Waste Management Plan in accordance with Act 451, as amended.
Resolution de of	clared adopted at a regular meeting of the ward/Council) (Board/Council) (Color O held on 6-14, 1999 (Date)
SMA.	This sup. Jinomohisk Pastralar

Clerk

Chief Elected Official

Resolution for Action on the Updated Tuscola County Solid Waste Management Plan by Local Units of Government

WHEREAS,	Tuscola County has prepared an updated Solid Waste Management Plan in accordance with Part 115 of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended; and
WHEREAS,	as prepared and submitted by the County Solid Waste Management Planning Committee, and
WHEREAS,	The Township/Village/City) of Moves + A (Name of Local Unit)
	has reviewed the updated Solid Waste Plan and its recommendations;
NOW, THER	EFORE, BE IT RESOLVED that the <u>BOARD</u> of this (Board/Council)
	municipality hereby Approves/Disapproves) (Approves/Disapproves)
	the updated Tuscola County Solid Waste Management Plan in accordance with Act 451, as amended
ekty o se	and the state of the
of Novest	clared adopted at a regular meeting of the BOARD (Board/Council) 4 Twp held on 6-7-99, 1999. ocal Unit) (Date) Kayleen Newell
Chief Elected	Official Clerk

WATERTOWN TOWNSHIP

Resolution for Action on the Updated Tuscola County Solid Waste Management Plan by Local Units of Government

Tuscola County has prepared an updated Solid Waste Management Plan in WHEREAS. 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

The Journaline of Watertonion (Township Village City) (Name of Local Unit) WHEREAS.

has reviewed the updated Solid Waste Plan and its recommendations,

NOW, THEREFORE, BE IT RESOLVED that the Board/Council) of this

municipality hereby (Approves) (Approves)

the updated Tuscola County Solid Waste Management Plan in accordance with Act 451, as amended.

Resolution declared adopted at a regular meeting of the

(Board/Council)

of United Section (Date)

(Name of Local Unit)

(Date) (Name of Local Unit)

Chief Elected Official

Karen Green