STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
LANSING

JOHN ENGLER
GOVERNOR

RUSSELL J. HARDING
DIRECTOR

July 25, 2002

Mr. Robert Cudney, Chairperson
Iosco County Board of Commissioners
P.O. Box 778
Tawas City, Michigan 48764

Dear Mr. Cudney:

The Department of Environmental Quality (DEQ) received the locally approved update to the Iosco County Solid Waste Management Plan (Plan) on April 15, 2002. Except for the items indicated below, the Plan is approvable. As outlined in the June 11, 2002 letter to you from Ms. Lynn Dumroese, DEQ, Waste Management Division (WMD), and as confirmed in your June 19, 2002 letter, the DEQ makes the following modifications to the Plan:

On page II-3, the Plan should list all of the disposal areas within Iosco County (County) or to be utilized by the County to meet its disposal needs for the planning period. The DEQ was notified that the Travis Sanitation Transfer Station (Transfer Station) in Oscoda Township is an existing Type B transfer station in the County and is currently operating. The Transfer Station had been inadvertently omitted from the list of disposal areas on page II-3. Section 11538(1) of Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, states the Plan must include an inventory and description of all solid waste disposal areas. Therefore, the Transfer Station shall be added to the list of facilities on page II-3 of the Plan. Additionally, page III-7 of the Plan identifies the existing disposal areas that will be utilized to provide the required capacity and management needs for the County during this planning period. The Transfer Station is currently operating and the County intends to utilize it during the planning period; therefore, the Transfer Station is also added under the heading Type B Transfer Facility on page III-7 of the Plan.

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

By approving the Plan with modifications, the DEQ has determined that it complies with the provisions of Part 115 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 Iosco County. If you have any questions, please contact Ms. Rhonda Oyer Zimmerman, Chief, Solid Waste Management Unit, WMD, at 517-373-4750.

Sincerely,

Russell J. Harding
Director
517-373-7917

cc: Senator Walter H. North
Representative Dale Sheltrown
Mr. Arthur R. Nash Jr., Deputy Director, DEQ
Mr. Thomas M. Hickson, Legislative Liaison, DEQ
Mr. Jim Sygo, DEQ
Ms. Joan Peck, DEQ
Mr. Edwin Haapala, DEQ – Saginaw Bay
Ms. Rhonda Oyer Zimmerman, DEQ
Ms. Lynn Dumroese, DEQ
Iosco County File

WASTE MANAGEMENT DIVISION
APR 15 2002

Iosco County
Solid Waste Management Plan Update

Revised Draft
June 2001

Approved by the
Iosco County Solid Waste Management Planning Committee

Approved by the
Iosco County Board of Commissioners

Approved by
Iosco County's Municipalities

Submitted to the
Michigan Department of Environmental Quality
For Final Approval

Prepared by the
Iosco 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

Iosco County Solid Waste Management Plan Update

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

EQP 5210 (8-97)

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:

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

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

Municipality	Original Planning County	New Planning County

DESIGNATED PLANNING AGENCY PREPARING THIS PLAN UPDATE:
East Central Michigan Planning & Development Regional Commission (ECMPDR)

CONTACT PERSON: Sue Fortune, Executive Director

ADDRESS: 3144 Davenport Avenue, Suite 200
Saginaw MI 48602

PHONE: 517-797-0800 FAX: 517-797-0896 (If Applicable)

E-MAIL: (If Applicable)

CENTRAL REPOSITORY LOCATION(S): (1) ECMPDR, 3144 Davenport Ave, Suite 200, Saginaw, Michigan, 48602 (2) Iosco County Board of Commissioners, Iosco County Building, Tawas City, Michigan 48763.

Iosco County Solid Waste Management Plan Update

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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 Municipality Name	Population	% Land Use		% of Economic Base*				
		Rural	Urban	Ag	For	Ind	Com	Other
Alabaster Twp	503	93%	7%	0.4%	1.2%	16.0%	2.1%	80.3%
Au Sable Twp	2,230	88%	12%	0.3%	1.1%	9.3%	14.4%	74.9%
Baldwin Twp	1,726	80%	20%	0.3%	1.5%	8.8%	10.6%	78.8%
Burleigh Twp	775	97%	3%	26.4%	2.8%	<0.1%	4.8%	66.0%
Grant Twp	1,560	93%	7%	3.1%	2.3%	4.1%	2.0%	88.5%
Oscoda Twp	7,248	70%	30%	0.3%	3.0%	10.1%	13.0%	73.6%
Plainfield Twp	4,292	92%	8%	4.9%	2.3%	0.4%	4.4%	78.5%
Reno Twp	656	98%	2%	30.2%	7.1%	3.5%	3.9%	55.3%
Sherman Twp	493	95%	5%	17.6%	7.1%	17.1%	2.0%	56.2%
Tawas Twp	1,684	94%	6%	12.4%	2.3%	0.2%	6.1%	79.0%
Wilber Twp	740	97%	3%	7.1%	1.9%	0.1%	4.6%	86.3%
East Tawas City	2,951	4%	96%	0	1.7%	0	20.5%	77.8%
Tawas City	2,005	4%	96%	<0.1%	2.2%	5.7%	27.7%	64.4%
Whittemore City	476	4%	96%	2.3%	2.9%	5.1%	19.3%	70.4%
IOSCO COUNTY	27,339	94%	6%					

Total Population 27,339

*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

Iosco County's current solid waste management system is functioning well, and it provides an effective mean 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 Iosco County is transported primarily to the Whitefeather Landfill in Bay County and the Waters Landfill in Crawford County for final disposal. This plan also authorizes the disposal of solid waste from Iosco County at landfills in Clare County (Northern Oaks Recycling & Disposal Facility), in Montmorency County (Montmorency-Oscoda Landfill), and in Presque Isle County (Elk Run Landfill). These landfills have sufficient capacity to provide for Iosco County's solid waste disposal needs for the next 10 years and beyond.

The separation and collection of recyclable materials occurs through drop-off sites that are furnished by the private solid waste industry and by the Neighbors Volunteer Coalition, a private non-profit group, in Oscoda Township. The private solid waste industry also collects corrugated paper from businesses throughout the county.

Composting programs in Iosco County are operated by the Cities of East Tawas and Tawas City. These communities furnish curbside collection of grass, leaves, and brush to their residents. The Iosco Conservation District owns a compost turner that is available to all government units for a rental fee.

It is the conclusion of this planning process that the current solid waste management system is best-suited to meet Iosco County's needs for solid waste collection, transportation, materials recovery, and disposal. Consequently, the current system has been selected to remain in place for the time period covered by this plan update.

SELECTED ALTERNATIVES

Iosco County's selected alternative is to retain the current management system. An overview of the major components of this system follows.

1. Collection and Transportation of Solid Waste. The existing collection and transportation system will remain in place. Solid waste collection services will continue to be provided to all county residents, businesses, and industries. These services will continue to mainly be provided by private enterprise through a free market system that utilizes both municipal contracts and individual arrangements with solid waste haulers. However, it is not this plan's intent to preclude involvement by municipalities from providing solid waste collection services to citizens within their respective jurisdictions. The plan also encourages local units of government to continue to arrange for solid waste services through municipal contracts, although such arrangements are certainly not mandated.

2. Disposal of Solid Waste. Licensed Type II landfills in Clare, Bay, Crawford, Montmorency, and Presque Isle Counties will meet Iosco County's solid waste disposal needs for the planning period.

3. Recycling. Under the selected alternative, continuation and improvement of the current recycling collection programs is encouraged. All local governments are encouraged to provide recycling opportunities for their residents, either through arrangements for drop-off sites or the provision of curbside collection for recyclables. Presently, few local governments provide curbside recycling for their residents through private sector contracts or other means. Recycling services are expected to continue to be

provided by the private solid waste industry, and by the Neighbors Volunteer Coalition in Oscoda. However, this does not preclude other entities -- such as environmental organizations, private non-profit groups, and others -- from becoming involved in recycling activities. The plan encourages the involvement of such groups in materials recovery efforts.

4. Composting. The plan advocates the continuation of the current composting programs in Tawas City and East Tawas. "Backyard" composting by residents will also continue to be encouraged. All other municipalities are encouraged to provide composting opportunities for their residents as needs dictate, either through curbside collection of yard wastes or through local drop-off sites. Composting services may also be furnished by the private sector. The plan does not limit the ability of any public or private entity to establish a composting site and program.

5. Separation of Household Hazardous Wastes. There is presently no formal hazardous waste collection program in place. The high costs associated with such programs generally preclude the County from directly providing this type of service. However, the County should work in partnership with the private solid waste industry to explore ways to provide opportunities for separation and collection of household hazardous wastes from residents. Also, the Northern Oaks Recycling and Disposal Facility in Clare County annually holds a Household Hazardous Waste Collection Day. Iosco County residents will be eligible to participate in this program .

6. Resource Conservation and Waste Reduction. Resource conservation and waste reduction will be encouraged through the voluntary efforts of residents, businesses, and industries. The County should investigate ways to expand public information and education in this area.

7. Public Information and Education. Current educational efforts will be continued under the selected system, such as the programs that are available through the Iosco Conservation District. The private solid waste industry also conducts informational programs for local schools and others. The County should investigate ways to coordinate and enhance these efforts.

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

Objective 1b: Encourage new and innovative materials and energy recovery technologies.

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

Objective 2a: Arrange for adequate landfill space with counties in the surrounding area to meet the County's solid waste disposal needs.

Goal 3: 3. Encourage continued participation by the private sector 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 continued and expanded use of the private solid waste industry and 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.

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

Objective 4c: Encourage the development of non-landfill, alternative technologies for solid waste disposal, such as conversion of solid waste to fuels such as alcohol.

Goal 5: Promote governmental, institutional, commercial, and industrial recycling capabilities.

Objective 5a: Review local government and public institution procurement policies and and encourage the appropriate entities to revise them as necessary to further encourage the use of recycled and recyclable materials.

Objective 5b: Encourage the development and implementation of recycling programs for all feasible materials.

Goal 6: Encourage the creation and expansion of markets for recycled materials, and the use of recyclable and recycled materials by government, business, industry, and the public.

Objective 6a: Review local government and public institution procurement policies and and encourage the appropriate entities to revise them as necessary to further encourage the use of recycled and recyclable materials.

Objective 6b: Encourage appropriate local, state, and federal legislation to provide incentives for waste reduction, source separation, and recycling.

☐ Note: Additional goals and objectives are listed on attached pages.

DATA BASE

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 Iosco County were obtained from the most recent DEQ "Report of Solid Waste Landfilled in Michigan" for the period of October 1, 1998 through September 30, 1999 and from information furnished by the private solid waste industry. The report on volumes landfilled showed that 67,347 cubic yards of solid waste generated in Iosco County were disposed of at licensed Type II landfills. No Type III solid waste disposal was reported for the period indicated. The main facilities presently used for disposal are the Waters Landfill located in Crawford County and the Whitefeather Landfill in Bay County.

Data on local resource recovery programs show that approximately 415 tons of recyclable materials were collected and marketed during 1999. This quantity also represents roughly 1,250 cubic yards of material that would have otherwise been placed in landfills. Also, a presently unknown quantity of yard wastes were collected and composted during 1999. This represents additional material that was diverted from 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 Iosco County with more than ten years of capacity.

TOTAL QUANTITY OF SOLID WASTE GENERATED:
68,597 ☐Tons or ☒Cubic Yards in one year (identify unit of time)

TOTAL QUANTITY OF SOLID WASTE NEEDING DISPOSAL:
67,347☐Tons or ☒Cubic Yards in one year (identify unit of time)

DATA BASE

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

The following is a listing of the solid waste disposal areas that Iosco County presently utilizes to meet its disposal needs. The current landfills are located in surrounding counties. Detailed descriptions of these disposal areas are included on the following pages. Additional disposal facilities that the County will use to meet its disposal needs under the updated plan are listed in the "Selected Management System" section.

Type II Landfills (County Location):
Whitefeather Landfill (Bay County)
Waters Landfill (Crawford County)

Transfer Station:
Tawas Transfer Station (Iosco County)

DATA BASE

FACILITY DESCRIPTIONS

Facility Type: Type II Landfill

Facility Name: Whitefeather Landfill

County: Bay Location: Town: 17N Range: 4E Section(s): 2

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 (sale pending)

Operating Status (check)		Waste Types Received (check all that apply)	
☒	open	☒	residential
☐	closed	☒	commercial
☒	licensed	☒	industrial
☐	unlicensed	☒	construction & demolition
☐	construction permit	☒	contaminated soils
☐	open, but closure pending	☒	special wastes *
		☐	other:

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

Site Size:

Total area of facility property:	106	acres
Total area sited for use:	56.5	acres
Total area permitted:	56.5	acres
Operating:	24.5	acres
Not excavated:	32	acres
Current capacity:	4,175,153	☐ tons or ☒ yds^3
Estimated lifetime:	18.8	years
Estimated days open per year:	260	days
Estimated yearly disposal volume:	380,000	☐ tons or ☒ yds^3

(if applicable)
Annual energy production:

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

FACILITY DESCRIPTIONS

Facility Type: Type II Landfill

Facility Name: Waters Landfill

County: Crawford Location: Town: 28N Range: 8E Section(s): 4

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

Operating Status (check)		Waste Types Received (check all that apply)	
☒	open	☒	residential
☐	closed	☒	commercial
☒	licensed	☒	industrial
☐	unlicensed	☒	construction & demolition
☐	construction permit	☒	contaminated soils
☐	open, but closure pending	☒	special wastes *
		☐	other: ____

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

Site Size:

Total area of facility property:	256	acres
Total area sited for use:	252	acres
Total area permitted:	79	acres
Operating:	9.7	acres
Not excavated:	64.87	acres
Current capacity:	5,700,000	☐ tons or ☒ yds^3
Estimated lifetime:	20	years
Estimated days open per year:	313	days
Estimated yearly disposal volume:	200,000	☐ tons or ☒ yds^3

(if applicable)
Annual energy production:

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

FACILITY DESCRIPTIONS

Facility Type: Transfer Station

Facility Name: Tawas Transfer Station

County: Iosco Location: Town: 22N Range: 8E Section(s): 14

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: Whitefeather Landfill, Bay County

☐ Public ☒ Private Owner: Waste Management

Operating Status (check)		Waste Types Received (check all that apply)	
☒	open	☒	residential
☐	closed	☒	commercial
☒	licensed	☒	industrial
☐	unlicensed	☒	construction & demolition
☐	construction permit		contaminated soils
☐	open, but closure pending		special wastes *
		☐	other:

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

Site Size:

Total area of facility property:	7.28	acres
Total area sited for use:	NA	acres
Total area permitted:	NA	acres
Operating:	NA	acres
Not excavated:	NA	acres
Current capacity:	200	tons/day (estimated throughput)
Estimated lifetime:	NA	years
Estimated days open per year:	250	days
Estimated yearly disposal volume:	NA	☐ tons or ☒ yds^3

(if applicable)
Annual energy production:

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

DATA BASE

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 Iosco County is accomplished largely by the private solid waste industry.

In most communities, solid waste collection services are provided under either municipal contracts or individual subscriptions with private firms. The one exception is Grant Township, which furnishes collection services directly to residents.

City Departments of Public Works in Tawas City and East Tawas collect yard wastes at curbside from residences.

Recycling drop-off sites are available in AuSable, Plainfield and Tawas Townships, and in the cities of East Tawas and Tawas City. Recyclable materials may also be dropped off at the Tawas Transfer Station on Aulerich Road in Baldwin Township and the Neighbors Volunteer Coalition drop-off site on Missile Street in Oscoda Township. Also, the private solid waste industry collects corrugated paper for recycling from businesses throughout the County.

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

Solid Waste Collection Services Information
Iosco County

Community	1 Service Provider	2 Service Type		3 Payment Method	4 Additional Services	5 Transfer Station		6 Landfill
Townships		Curbside	Drop-off Site			Type A	Type B	
Alabaster	WM	X		S	RB			Whitefeather
Au Sable	WM Travis	X	X	I	RD, RB			Whitefeather MOSL
Baldwin	WM	X		S	RB	X		Waters
Burleigh	WM, Sunrise White's	X	X	I	RB		X	Whitefeather
Grant	Grant Twp.	X		S	RB			Whitefeather
Oscoda	WM Travis	X	X	I	RB		X	Whitefeather MOSL
Plainfield	WM	X	X	S, I	RD, RB		X	Waters
Reno	WM, Sunrise White's	X		I	RB			Whitefeather Waters
Sherman	WM, Sunrise White's	X		I	RB			Whitefeather Waters
Tawas	WM, Sunrise White's	X		I	RD, RB			Whitefeather Waters
Wilber	WM, Sunrise Travis	X		I	RB			Whitefeather MOSL, Waters
Cities								
East Tawas	WM	X		S	RD, RB, YW			Waters
Tawas City	WM	X		S	RD. RB, YW			Waters
Whittemore	WM, Sunrise White's	X		I	RB			Whitefeather Waters

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:

WM	Waste Management
Sunrise	Sunrise Disposal
Travis	Travis Sanitation
White's	White's Disposal

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 ("Subscription 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 Indicates the landfill(s) where the solid waste generated in the community is taken for final disposal:

Whitefeather	Whitefeather Landfill, Bay County
Waters	Waters Landfill, Crawford County
MOSL	Montmorency-Oscoda Sanitary Landfill, Montmorency County

DATA BASE

EVALUATION OF DEFICIENCIES AND PROBLEMS

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

As part of the plan update process, the Iosco County Solid Waste Management Planning Committee (SWMPC) considered problems and deficiencies in the current solid waste system. The following is a compilation of the committee's responses on this topic:

1. There should be some type of hazardous waste collection.

2. Recycling opportunities should be strengthened & expanded. However, options are limited by the availability of markets for materials.

3. Local composting programs should be expanded as opportunities occur.

4. Illegal dumping in the County is a concern.

5. The recent consolidation in the solid waste industry has created concerns that industry competition will decrease which will, in turn, lead to higher prices for customers.

6. Insufficient volumes of recyclable materials are generated locally to make recycling economically feasible, due to the low population nature of the County.

DATA BASE

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.

From 1990 to 1998, Iosco County's population is estimated to have declined by 16.9%. This represents an average annual population loss of about 2%. However, projections developed by the Michigan Information Center (Department of Management and Budget) indicate that Iosco County's population is now growing. This plan allows for a modest population growth rate of 2% per year. On this basis, the county population will reach 26,894 by 2005 and 28,239 by 2010.

Population estimates for the municipalities within the county are available through 1998. During 1990 through 1998, most local government units experience net population losses of around 13% to 14.5^%. During this period, the net loss in Oscoda Township was over 19%, and it exceeded 21% in the City of East Tawas. However, most of the actual population losses occurred during 1991 through 1994. Since 1994, populations with the local units have been on the upswing, and it appears likely that this trend will continue into the next decade.

The county population tends to be concentrated in the eastern part, near the Lake Huron shoreline. One population center includes Tawas City, East Tawas, and the surrounding townships of Tawas and Baldwin. The townships of Oscoda and Au Sable form another population center along US-23 at the northern end of the county. Together, these communities make up nearly 75% 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. These areas are expected to remain the centers of both population and solid waste generation for the five-year and ten-year planning periods.

Information on recent population trends in Iosco County, and projections for both population growth and solid waste generation over the next 10 years are shown on the attached pages.

Iosco County
Current Annual Solid Waste Generation & Disposal

Disposal Facility	Type II Solid Waste	Type III Solid Waste
Whitefeather (Bay)	39,123 cubic yards	0
Waters (Crawford)	28,224 cubic yards	0
Total	**67,347 cubic yards**	**0**

Source: "Report of Solid Waste Landfilled in Michigan October 1, 1998 – September 30, 1999," Michigan Department of Environmental Quality, Waste Management Division, February 9, 2000.

Recent Iosco County Population Trends

1990 Census	1996 Estimate	1998 Estimate	% Change 1990 – 1998	Average Change Per Year
30,209	24,708	25,111	-16.9%	-2.1%

Source: Michigan Information Center, Department of Management and Budget, 1999.

Iosco County
Population and Solid Waste Generation Projections

	2000	2005	2010
County Population	27,339	30,073	33,080
Annual Solid Waste Generation	67,350 cubic yards	70,718 cubic yards	74,253 cubic yards

Note: Projections based on growth in population and solid waste generation of about one percent (1%) per year,

DATA BASE

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.

Iosco County is located along the eastern shore of Lake Huron within one of Northern Michigan's most popular tourism areas. Several manufacturing firms related to the auto industry, health care services, and various mining operations also contribute to the local economy.

Forested lands occupy roughly two-thirds of the county, and large portions of this are held in public ownership through the Huron National Forest and various State Forest tracts.

Land cover data for Iosco County and its municipalities were tabulated from the Michigan Resource Information System (MIRIS). The major land cover types for the county as a whole are:

- Forested 66%
- Agriculture & Open Land 19%
- Water Bodies & Wetlands 9%
- Urban 6%

As previously described, the county population centers are the Tawas City/East Tawas and the Oscoda/Au Sable Township areas. Together, these communities make up nearly three quarters 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. These areas are expected to remain the centers of both population and solid waste generation for the five-year and ten-year planning periods.

DATA BASE

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: Retain the Current Management System
Alternative A represents the "status quo" alternative and is always an option. This assumes the continuation of the current management system (i.e., continued use of the out-of-county landfills) without any major changes. The Whitefeather and Waters Landfills would continue to meet Iosco County's disposal needs. However, this alternative would include the addition of the Northern Oaks Landfill in Clare County and the Elk Run Landfill in Presque Isle County to the list of disposal facilities authorized by the plan update. Recycling and composting would be continued as they are currently practiced, without any major expansion efforts.

Advantages:
- ☐ Acceptance of current system
- ☐ New costs would be minimal
- ☐ No new sites or facilities required
- ☐ No major institutional or administrative changes

Disadvantages:
- ☐ Lack of efforts to improve management system or services to public
- ☐ No mechanism to increase materials recovery beyond current levels
- ☐ No mechanisms to increase awareness and involvement by government and citizens.

Alternative B: Existing Landfills with Enhanced Recycling & Composting.
Under this option, the use of landfills located outside the county for disposal would be practiced as described for Alternative A. However, attention would also focus on the expansion of recycling and composting opportunities within the county.

Under the present system, recycling and composting efforts are primarily being conducted by the private solid waste industry. Alternative B would call for greater involvement by county and local government in promoting and coordinating materials recovery programs.

Advantages:
- ☐ Increased levels of materials recovery (recycling & composting)

☐ Greater public involvement & awareness
☐ Conservation of landfill space
☐ Low capital costs — minimal facility requirements

Disadvantages:
☐ Some funding required for program establishment & activities
☐ Requires change — always some difficulties with acceptance
☐ Requires greater coordination efforts

Alternative C: Regional Solid Waste Management System.
This alternative calls for the creation of a regional solid waste management system in cooperation with several surrounding 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, 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.

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

Disadvantages:
☐ Political barriers to intergovernmental cooperation
☐ Higher costs associated with potential regional processing facilities
☐ Difficulties in siting any new solid waste facilities

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. Using this point system, each committee member assigned a numerical score for each of the evaluation factors for each of the three alternatives. For each evaluation factor, the point values assigned by the members were added together to obtain a raw score for each factor. The points assigned for all the evaluation factors were then added to obtain a total score for each alternative plan. This evaluation process was performed for each alternative plan for both the five-year and ten-year planning periods.

Based on the results of the SWMPC's evaluation process, Alternative A, Retain the Current Management System, is the preferred alternative. Further details on the evaluation process and results may be found in the appendix.

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:

Iosco County's selected alternative is to retain the current management system. An overview of the major components of this system follows.

1. Collection and Transportation of Solid Waste. The existing collection and transportation system will remain in place. Solid waste collection services will continue to be provided to all county residents, businesses, and industries. These services will continue to mainly be provided by private enterprise through a free market system that utilizes both municipal contracts and individual arrangements with solid waste haulers. However, it is not this plan's intent to preclude involvement by municipalities from providing solid waste collection services to citizens within their respective jurisdictions. The plan also encourages local units of government to continue to arrange for solid waste services through municipal contracts, although such arrangements are certainly not mandated.

2. Disposal of Solid Waste. Licensed Type II landfills in Clare, Bay, Crawford, Montmorency, and Presque Isle Counties will meet Iosco County's solid waste disposal needs for the planning period.

3. Recycling. Under the selected alternative, continuation and improvement of the current recycling collection programs is encouraged. All local governments are encouraged to provide recycling opportunities for their residents, either through arrangements for drop-off sites or the provision of curbside collection for recyclables. Presently, few local governments provide curbside recycling for their residents through private sector contracts or other means. Recycling services are expected to continue to be provided by the private solid waste industry, and by the Neighbors Volunteer Coalition in Oscoda. However, this does not preclude other entities -- such as environmental organizations,

profit groups, and others -- from becoming involved in recycling activities. The plan encourages the involvement of such groups in materials recovery efforts.

4. Composting. The plan advocates the continuation of the current composting programs in Tawas City and East Tawas. "Backyard" composting by residents will also continue to be encouraged. All other municipalities are encouraged to provide composting opportunities for their residents as needs dictate, either through curbside collection of yard wastes or through local drop-off sites. Composting services may also be furnished by the private sector. The plan does not limit the ability of any public or private entity to establish a composting site and program.

5. Separation of Household Hazardous Wastes. There is presently no formal hazardous waste collection program in place. The high costs associated with such programs generally preclude the County from directly providing this type of service. However, the County should work in partnership with the private solid waste industry to explore ways to provide opportunities for separation and collection of household hazardous wastes from residents. Also, the Northern Oaks Recycling and Disposal Facility in Clare County annually holds a Household Hazardous Waste Collection Day. Iosco County residents will be eligible to participate in this program .

6. Resource Conservation and Waste Reduction. Resource conservation and waste reduction will be encouraged through the voluntary efforts of residents, businesses, and industries. The County should investigate ways to expand public information and education in this area.

7. Public Information and Education. Current educational efforts will be continued under the selected system, such as the programs that are available through the Iosco Conservation District. The private solid waste industry also conducts informational programs for local schools and others. The County should investigate ways to coordinate and enhance these efforts.

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]
Iosco	None	None			

[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]
Iosco	None	None Planned	____	____	____
____	____	____	____	____	____
____	____	____	____	____	
____	____	____	____	____	____
____	____	____	____	____	
____	____	____	____	____	

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

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

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

EXPORT AUTHORIZATION

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]
Iosco	Clare		____	____	P
Iosco	Bay		____	____	P
Iosco	Crawford		____	____	P
Iosco	Presque Isle		____	____	P
Iosco	Montmorency	____	____	____	P
____	____	____	____	____	____

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

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

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

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]
Iosco	None identified	None planned	____	____	____
____	____	____	____	____	
____	____	____	____	____	
____	____	____	____	____	
____	____	____	____	____	
____	____	____	____	____	____

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

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

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

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:

Northern Oaks (Clare County)

Whitefeather (Bay County)

Waters (Crawford County)

Elk Run (Presque Isle County)

Montmorency-Oscoda Landfill
(Montmorency County)

Type A Transfer Facility:

Tawas Transfer Station

Type B Transfer Facility:

Plainfield Township

Type III Landfill:
None

Processing Plant:
None

Incinerator:
None

Waste Piles:
None

Waste-to-Energy Incinerator:
None

Other:

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.

SELECTED SYSTEM

FACILITY DESCRIPTIONS

Facility Type: Type II Landfill
Facility Name: Northern Oaks Recycling & Disposal Facility
County: Clare Location: Town:19N Range:4W 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

Operating Status (check)		Waste Types Received (check all that apply)	
☒	open	☒	residential
☐	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:
WWTP filter cake, sludge

Site Size:

Total area of facility property:	320	acres
Total area sited for use:	76	acres
Total area permitted:	76	acres
Operating:	19	acres
Not excavated:	57	acres
Current capacity:	8,755,100	☐ tons or ☒ yds^3
Estimated lifetime:	43	years
Estimated days open per year:	260	days
Estimated yearly disposal volume:	409,000	☐ tons or ☒ yds^3

(if applicable)
Annual energy production:

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

SELECTED SYSTEM

FACILITY DESCRIPTIONS

Facility Type: Type II Landfill
Facility Name: Whitefeather Development Company

County: Bay Location: Town: 17N Range: 4E Section(s): 2

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

If facility is an Incinerator or a Transfer Station, list the final disposal site and location for Incinerator ash or Transfer Station wastes :
☐ Public ☒ Private Owner: Republic Services

Operating Status (check)		Waste Types Received (check all that apply)	
☒	open	☒	residential
☐	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

Site Size:

Total area of facility property:	752	acres
Total area sited for use:	106	acres
Total area permitted:	56.5	acres
Operating:	24.5	acres
Not excavated:	32.0	acres
Current capacity:	4,175,153	☐ tons or ☒ yds^3
Estimated lifetime:	18.8	years
Estimated days open per year:	260	days
Estimated yearly disposal volume:	380,000	☐ tons or ☒ yds^3

(if applicable)
Annual energy production:

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

SELECTED SYSTEM

FACILITY DESCRIPTIONS

Facility Type: Type II Landfill
Facility Name: Waters Landfill

County: Crawford Location: Town: 28N Range: 8E Section(s): 4

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

Operating Status (check)		Waste Types Received (check all that apply)	
☒	open	☒	residential
☐	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:

Site Size:

Total area of facility property:	256	acres
Total area sited for use:	252	acres
Total area permitted:	79	acres
Operating:	9.7	acres
Not excavated:	64.87	acres
Current capacity:	5,700,000	☐ tons or ☒ yds^3
Estimated lifetime:	20	years
Estimated days open per year:	313	days
Estimated yearly disposal volume:	200,000	☐ tons or ☒ yds^3

(if applicable)
Annual energy production:

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

SELECTED SYSTEM

FACILITY DESCRIPTIONS

Facility Type: Type II Landfill

Facility Name: Elk Run Sanitary Landfill

County: Presque Isle Location: Town: 33N Range: 2E Section(s): 5

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

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

☐ Public ☒ Private Owner: Republic Services of Michigan

Operating Status (check)		Waste Types Received (check all that apply)	
☒	open	☒	residential
☐	closed	☒	commercial
☒	licensed		industrial
☐	unlicensed	☒	construction & demolition
☐	construction permit	☒	contaminated soils
☐	open, but closure pending	☒	special wastes *
		☐	other:

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

Site Size:

Total area of facility property:	120 acres
Total area sited for use:	42 acres
Total area permitted:	42 acres
Operating:	3 acres
Not excavated:	39 acres
Current capacity:	3,400,000 ☐ tons or ☒ yds^3
Estimated lifetime:	35 years
Estimated days open per year:	28 days
Estimated yearly disposal volume:	60,000 ☐ tons or ☒ yds^3

(if applicable)

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

SELECTED SYSTEM

FACILITY DESCRIPTIONS

Facility Type: Type II Sanitary Landfill

Facility Name: Montmorency-Oscoda Sanitary Landfill

County: Montmorency Location: Town:29N Range:3E Section(s): 6

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 :

X Public ☐ Private Owner: Montmorency & Oscoda Counties

Operating Status (check)		Waste Types Received (check all that apply)	
X	open	X	residential
☐	closed	X	commercial
X	licensed	X	industrial
☐	unlicensed	X	construction & demolition
X	construction permit	☐	contaminated soils
☐	open, but closure	☐	special wastes *
☐	pending	☐	other: _

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

Site Size:

Total area of facility property:	80	acres
Total area sited for use	80	acres
Total area permitted:	80	acres
Operating:	3-4	acres
Not excavated:	37-40	acres
Current capacity:	3,500,000	☐ tons or X yds^3
Estimated lifetime:	30	years
Estimated days open per year:	310	days
Estimated yearly disposal volume:	145,000	☐ tons or X yds^3

(if applicable)
Annual energy production:

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

SELECTED SYSTEM

FACILITY DESCRIPTIONS

Facility Type: Transfer Station

Facility Name: Tawas Transfer Station

County: Iosco Location: Town: 22N Range: 8E Section(s): 14

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: Whitefeather Landfill, Bay County

☐ Public ☒ Private Owner: Waste Management

Operating Status (check)		Waste Types Received (check all that apply)	
☒	open	☒	residential
☐	closed	☒	commercial
☒	licensed	☒	industrial
☐	unlicensed	☒	construction & demolition
☐	construction permit		contaminated soils
☐	open, but closure pending		special wastes *
		☐	other:

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

Site Size:

Total area of facility property:	7.28	acres
Total area sited for use:	NA	acres
Total area permitted:	NA	acres
Operating:	NA	acres
Not excavated:	NA	acres
Current capacity:	200	tons/day (estimated throughput)
Estimated lifetime:	NA	years
Estimated days open per year:	250	days
Estimated yearly disposal volume:	NA	☐ tons or ☒ yds^3

(if applicable)
Annual energy production:

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

SOLID WASTE COLLECTION SERVICES AND TRANSPORTATION:

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

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. Also, this plan does not preclude public (government) entities from providing solid waste magement services.

RESOURCE CONSERVATION EFFORTS:

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

Effort Description	Est. Diversion Tons/Yr		
	Current	5th yr	10th yr
Waste reduction education efforts aimed at residents, businesses, & industries	0	674	1,350

☐ 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 Space Conserved Yds^3/Yr		
	Current	5th yr	10th yr
Efforts limited to those practiced by the private sector in collecting, transporting, and disposing of solid waste; and collecting & marketing recyclable materials: compacting, baling, shredding, etc.	Unknown		

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

Overview of Resource Recovery Programs:

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

Please refer to the discussion of recycling and composting on page III-19.

☒ Recycling programs within the County are feasible. Details of existing and planned programs are included on the following pages.

☐ Recycling programs for the County have been evaluated and it has been determined that it is not feasible to conduct any programs because of the following:

SELECTED SYSTEM

☒ Composting programs within the County are feasible. Details of existing and planned programs are included on the following pages.

☐ Composting programs for the County have been evaluated and it has been determined that it is not feasible to conduct any programs because of the following:

☐ Programs for source separation of potentially hazardous materials are feasible and details are included on the following pages.

☒ Separation of potentially hazardous materials from the County's waste stream has been evaluated and it has been determined that it is not feasible to conduct any separation programs because of the following:

It is not presently feasible for Iosco County or the municipalities within the county to conduct such programs due to the high costs involved. Residents are encouraged to participate in the annual Household Hazardous Waste Collection Day at the Northern Oaks Landfill in Clare County. Also, the updated plan calls for the County to work with the private sector to explore opportunities for providing these services in Iosco County in the future.

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 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.

In Iosco County, recycling drop-off sites are provided in AuSable, Plainfield, Tawas and Oscoda Townships, and in the cities of East Tawas and Tawas City. The site in Oscoda Charter Township offers bimonthly collection and is operated by the Neighbors Volunteer Coalition Inc. (NVCI), a private, non-profit organization. The other sites have monthly collection and are operated by a private solid waste hauler.

Materials collected include cardboard, newsprint, mixed paper, steel ("tin") cans and miscellaneous ferrous metals, aluminum, # 1 and # 2 plastics, and both clear and colored glass.

Collection of corrugated paper from businesses is also offered throughout the county by the private solid waste collection industry.

Composting in Iosco County frequently occurs as home composting due to the rural nature of the area. Curbside collection of grass, leaves, and brush from residences takes place in the cities of East Tawas and Tawas City through the municipal Departments of Public Works. These curbside programs are operated weekly from May through November. The two cities also utilize a compost turner that is furnished through the Soil and Water Conservation District for a monthly rental fee. This piece of equipment is available to all local governments in the county.

SELECTED SYSTEM

TABLE III-1

RECYCLING:

Program Name	Service Area[1]	Public or Private	Collection Point[3]	Collection Frequency[4]	Materials Collected[5]	Program Management Responsibilities[2] Development	Operation	Evaluation
Neighbors Volunteer Coalition Inc.	Oscoda Charter Twp	Private	d	bimonthly	ABCDEF	6	6	6
Au Sable Twp	Au Sable Twp	Public	d	m	ABCDEF	Twp	5	Twp
Plainfield Twp	Plainfield Twp	Public	d	m	ABCDEF	Twp	5	Twp
Tawas Twp	Tawas Twp	Public	d	m	ABCDEF	Twp	5	Twp
City of East Tawas	East Tawas	Public	d	m	ABCDEF	City	5	City
City of Tawas City	Tawas City	Public	d	m	ABCDEF	City	5	City
Business collection	Countywide	Private	o	w	C	5	5	5

☐ 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 26); 5 = Private Owner/Operator; 6 = Other (Identified on page 26).

[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 27.

TABLE III-2

COMPOSTING:

Program Name	Service Area[1]	Public or Private	Collection Point[3]	Collection Frequency[4]	Materials Collected[5]	Program Management Responsibilities[2] Development	Operation	Evaluation
Tawas City Composting	Tawas City	Public	c	w Sp Su Fa	G L W	3	3	3
East Tawas Composting	East Tawas	Public	c	w Sp Su Fa	G L W	3	3	3

☐ 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 26); 5 = Private Owner/Operator; 6 = Other (Identified on page 26).

[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 27.

TABLE III-3

SOURCE SEPARATION OF POTENTIALLY HAZARDOUS MATERIALS:

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

Program Name	Service Area[1]	Public or Private	Collection Point[3]	Collection Frequency[4]	Materials Collected[5]	Program Management Responsibilities[2] Development	Operation	Evaluation
NONE								
		____	____	____	____	____	____	____
		____	____	____	____	____	____	____
		____	____	____	____	____	____	____
		____	____	____	____	____	____	____
		____	____	____	____	____	____	____
		____	____	____	____	____	____	____
		____	____	____	____	____	____	____
		____	____	____	____	____	____	____

☐ 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 26); 5 = Private Owner/Operator; 6 = Other (Identified on page 26).

[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. 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.

TABLE III-4

PROPOSED RECYCLING:

Program Name (if known)	Service Area[1]	Public or Private	Collection Point[3]	Collection Frequency[4]	Materials Collected[5]	Program Management Responsibilities[2] Development	Operation	Evaluation
No new programs proposed		____	____	____	____	____	____	____
		____	____	____	____	____	____	____
		____	____	____	____	____	____	____
		____	____	____	____	____	____	____
		____	____	____	____	____	____	____
		____	____	____	____	____	____	____
		____	____	____	____	____	____	____
		____	____	____	____	____	____	____
		____	____	____	____	____	____	____

☐ 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 26); 5 = Private Owner/Operator; 6 = Other (Identified on page 26).

[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 27.

TABLE III-5

PROPOSED COMPOSTING:

Program Name, (if known)	Service Area[1]	Public or Private	Collection Point[3]	Collection Frequency[4]	Materials Collected[5]	Program Management Responsibilities[2] Development	Operation	Evaluation
No new programs proposed								

☐ 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 26); 5 = Private Owner/Operator; 6 = Other (Identified on page 26).

[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 27.

TABLE III-6

PROPOSED SOURCE SEPARATION OF POTENTIALLY HAZARDOUS MATERIALS:

Program Name, (if known)	Service Area[1]	Public or Private	Collection Point[3]	Collection Frequency[4]	Materials Collected[5]	Program Management Responsibilities[2] Development	Operation	Evaluation
NONE		____	____	____	____	____	____	____
		____	____	____	____	____	____	____
		____	____	____	____	____	____	____

☐ 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 26); 5 = Private Owner/Operator; 6 = Other (Identified on page 26).

[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. 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:

Neighbors Volunteer Coalition Inc. (NVCI): responsible for operation of recycling collection program in Oscoda Charter Township.

Other:

The Iosco Conservation District (USDA, Natural Resources Conservation Service) will be responsible for educational & promotional activities for resource recovery (recycling & composting) programs. The private solid waste management industry and the municipalities within the county are responsible for furnishing recycling & composting options to county residents, businesses, and industries.

PROJECTED DIVERSION RATES:

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

Collected Material:	Projected Annual Tons Diverted:			Collected Material:	Projected Annual Tons Diverted:		
	Current	5th Yr	10th Yr		Current	5th Yr	10th Yr
A. TOTAL PLASTICS:	12.25	13.5	15	G. GRASS AND LEAVES:	____	____	
B. NEWSPAPER:	249	274	300	H. TOTAL WOOD WASTE:	____	____	
C. CORRUGATED CONTAINERS:	54	60	65	I. CONSTRUCTION AND DEMOLITION:	____	____	
D. TOTAL OTHER PAPER:	71	78	86	J. FOOD AND FOOD PROCESSING:	____	____	
E. TOTAL GLASS:	21	23	25	K. TIRES:	____	____	
F. OTHER MATERIALS:				L. TOTAL METALS:	8.25	9	10
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 Material:	In-State Markets	Out-of-State Markets	Collected Material	In-State Markets	Out-of-State Markets
A. TOTAL PLASTICS:	100%	____	G. GRASS AND LEAVES:	____	
B. NEWSPAPER:	100%	____	H. TOTAL WOOD WASTE:	____	
C. CORRUGATED CONTAINERS:	100%	____	I. CONSTRUCTION AND DEMOLITION:	____	
D. TOTAL OTHER PAPER:	100%	____	J. FOOD AND FOOD PROCESSING	____	
E. TOTAL GLASS:	100%	____	K. TIRES:	____	
F. OTHER MATERIALS:			L. TOTAL METALS:		
F1.____	____	____	F3.____	100%	
F2.____	____	____	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]	Delivery Medium[2]	Targeted Audience[3]	Program Provider[4]
1	o, e, ot	p, s (3rd grade)	EG
2	o, e, w, ot	p, i, s	EG
3	o, e	p, s	EG
4	w, o, n, e, ot	p, b, i, s	EG
5	f, e	p, s	EG
6	o, e, ot	b (agric.)	EG

EG = Iosco Conservation District / Natural Resources Conservation Service
Topic 1: "other" = classrooms; Topic 2: "other" = compost turner made available to communities & ag. producers; Topics 5 & 6: "other" = at County Fair, Home Builders' Show, workshops, classroom demonstrations, and one-on-one exchanges. Topic 6 = manure management.

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

[2] Identified by 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 Timeline gives a range of time in which the component will be implemented such as "1995-1999" or "On-going." Timelines may be adjusted later, if necessary.

TABLE III-7

Management Components	Timeline
Resource Conservation & Waste Reduction	Ongoing
Collection & transportation	Ongoing
Recycling	Ongoing
Composting	Ongoing
Landfilling	Ongoing
Recycling Education	Ongoing

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.

No new disposal areas may be sited under this plan.

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)

Iosco County has well over 10 years of disposal capacity at various facilities identified in this plan. Therefore, a siting process for new facilities is not required.

SOLID WASTE MANAGEMENT COMPONENTS[1]

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 THE 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 must be ensured through the assignment of management responsibilities.

The East Central Michigan Planning and Development Regional Commission (ECMPDR) has been assigned the responsibility of overseeing the plan update. ECMPDR, 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 Iosco 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 most parts of Iosco County, either through municipal contracts or individual subscriptions with homes and businesses. Grant Township is the only public agency in the county that presently operates a solid waste collection and transportation system. The private sector and any public entities that wish to do so 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 the private solid waste industry.

In Iosco County, no new solid waste disposal facilities may be sited under this Plan Update.

D. Financial Capabilities

The municipalities and residents of Iosco County have the capability to finance the collection and transportation of solid waste by entering into contracts with private haulers, or by operating publicly-owned collection systems. Iosco 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.

E. Regulation and Enforcement

Regulations for construction and operation of solid waste facilities are defined by state legislation, particularly Act 451. The Michigan Department of Environmental Quality is the enforcement body for compliance with Act 451 within the county. Locally, the Iosco County Board of Commissioners has the authority to identify and bring suit for violations of this plan.

Recommended Management System

This plan update recommends the continuation of the existing management system. The Iosco County Board of Commissioners will have the primary responsibilities for overseeing and coordinating the implementation of this plan. The County Board may delegate responsibilities to other County departments and boards.

The County Board of Commissioners may also establish advisory boards or similar entities that it finds necessary to assist in carrying out this plan. Finally, the County Board may hire or contract with qualified personnel to assist in plan implementation. The county may also contract with the regional solid waste planning agency (the current DPA) as needed.

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

IDENTIFICATION OF RESPONSIBLE PARTIES

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

Resource Conservation:

Source or Waste Reduction – All citizens, businesses, and industries through voluntary efforts. Educational efforts led by Iosco Conservation District.

Product Reuse - All citizens, businesses, and industries through voluntary efforts. Educational efforts led by Iosco Conservation District.

Reduced Material Volume - All citizens, businesses, and industries through voluntary efforts. Educational efforts led by Iosco Conservation District.

Increased Product Lifetime - All citizens, businesses, and industries through voluntary efforts. Educational efforts led by Iosco Conservation District.

Decreased Consumption - All citizens, businesses, and industries through voluntary efforts. Educational efforts led by Iosco Conservation District.

Resource Recovery Programs:

Composting – Private solid waste industry, municipalities, residents.

Recycling – Iosco Conservation District (promotion & education), Neighbors Volunteer Coalition Inc. (Oscoda area), municipalities, businesses, industries, residents, private solid waste industry.

Energy Production – Not included in plan.

Volume Reduction Techniques: Private solid waste industry and NVCI (collection, disposal, & recycling operations). Also residents, businesses, and industries through voluntary efforts.

ELECTED SYSTEM

Collection Processes: Private solid waste industry & municipalities.

Transportation: Private solid waste industry.

Disposal Areas:

Processing Plants –Private industry

Incineration –Private industry

Transfer Stations – Type B: private solid waste industry & municipalities. Type A: private solid waste industry.

Sanitary Landfills – Private solid waste industry.

Ultimate Disposal Area Uses: Private solid waste industry with input from host municipalities.

Local Responsibility for Plan Update Monitoring & Enforcement: County Board (plan implementation monitoring); County Board (plan enforcement); Michigan DEQ (general Act 451 enforcement).

Educational and Informational Programs: Iosco Conservation District

Documentation of acceptance of responsibilities is contained in Appendix D.

LOCAL ORDINANCES AND REGULATIONS AFFECTING SOLID WASTE DISPOSAL

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

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

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

A. Geographic area/Unit of government:

Type of disposal area affected:

Ordinance or other legal basis:

Requirement/restriction:

B. Geographic area/Unit of government:

Type of disposal area affected:

Ordinance or other legal basis:

Requirement/restriction:

C. Geographic area/Unit of government:

Type of disposal area affected:

Ordinance or other legal basis:

Requirement/restriction:

D. Geographic area/Unit of government:

Type of disposal area affected:

Ordinance or other legal basis:

Requirement/restriction:

E. Geographic area/Unit of government:

Type of disposal area affected:

Ordinance or other legal basis:

Requirement/restriction:

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

☐ Additional listings are on attached pages.

Iosco County and the municipalities within the county are authorized to adopt and implement local regulations governing the following subjects in regard to any solid waste disposal facilities that may be sited in accordance with this plan:

1. Facility design elements: greenbelts, landscaping, screening, and fencing.
2. Hours of facility operation.
3. Control of noise, litter, dust, odors, and pest species.
4. Operating records and reports.
5. Site security.
6. Monitoring of wastes accepted and prohibited.
7. Prohibition of open burning of yard wastes.

APPENDIX

ADDITIONAL INFORMATION

REGARDING THE

SELECTED

SYSTEM

Iosco County Solid Waste Management Plan Update

EVALUATION OF RECYCLING

The following provides additional information regarding implementation and evaluations of various components of the Selected System.

An overview of current recycling programs in Iosco County has been presented in the "Overview of Resource Recovery Programs" section in the main body of the plan document on page III-19.

In Iosco County, recycling drop-off sites are provided in AuSable, Plainfield, Tawas and Oscoda Townships, and in the cities of East Tawas and Tawas City. The site in Oscoda Charter Township offers bimonthly collection and is operated by the Neighbors Volunteer Coalition Inc. (NVCI), a private, non-profit organization. The other sites have monthly collection and are operated by a private solid waste hauler.

Materials collected include cardboard, newsprint, mixed paper, steel ("tin") cans and miscellaneous ferrous metals, aluminum, # 1 and # 2 plastics, and both clear and colored glass.

Collection of corrugated paper from businesses is also offered throughout the county by the private solid waste collection industry.

Composting in Iosco County frequently occurs as home composting due to the rural nature of the area. Curbside collection of grass, leaves, and brush from residences takes place in the cities of East Tawas and Tawas City through the municipal Departments of Public Works. These curbside programs are operated weekly from May through November. The two cities also utilize a compost turner that is furnished through the Soil and Waster Conservation District for a monthly rental fee. This piece of equipment is available to all local governments in the county.

Resource recovery education efforts are also conducted in Iosco County, mainly through activities sponsored by the Iosco County Conservation District and the USDA Natural Resources Conservation Service.

The current resource recovery programs in Iosco County are functioning well, and they provide all residents with an opportunity to participate. There are no major obstacles or impediments known to exist at the local level. Participation rates among residents continue to improve. Educational efforts will be continued under the updated plan, and improved as opportunities arise. Negative factors that affect the current recycling programs are the volatility of the markets for recyclable materials, and the present low market prices. However, these factors are beyond the county's control.

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 Iosco County. The quantities of various materials that are available for recovery have been estimated based on the solid waste components identified for similar rural areas and current solid waste generation estimates for the County. The following estimates are based on total annual solid waste generation of about 22,450 tons.

Material	% of Waste Stream	Annual Quantity (Tons)
Paper (all types)	15%	3,368
Plastics	9%	2,021
Glass	5%	1,123
Ferrous metals	7%	1,572
Aluminum	0.8%	180
Yard waste	4%	898

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: Equipment is currently selected by private the solid waste industry and NVCI as their needs dictate. No major problems have been encountered in the selection of this equipment.
COMPOSTING: Municipalities that provide some form of yard waste collection generally utilize normal public works equipment such as portable chippers for brush. The Iosco Conservation District owns a compost turner that is available for rent by municipalities and agricultural producers. No specific problems with equipment selection have been reported and no major new equipment needs have been identified.

Proposed Programs:
No new programs or equipment needs have been identified.

Site Availability & Selection

Existing Programs:
RECYCLING: Programs will continue to operate at their existing sites. No specific site needs have been identified. However, any municipality that wishes to establish a recycling drop-off site for use by residents is encouraged to do so.
COMPOSTING: No specific site needs have been identified. 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.
There are no commercial composting facilities in the county, and these parameters are not monitored for the existing municipal programs.

Existing Programs:

Program Name:	pH Range	Heat Range	Other Parameter	Measurement Unit

Proposed Programs:

Program Name	pH Range	Heat Range	Other Parameter	Measurement Unit

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 Iosco 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 Iosco County Board of Commissioners may negotiate written inter-county agreements with the counties specified in the "Current Export Authorization" section of this plan (Table 2-A) for acceptance of solid waste generated in Iosco County for disposal at landfills located in the specified counties. Note that this plan does not ***require*** inter-county agreements. Agreements will be negotiated only if they are required by a county that accepts solid waste from Iosco County.

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	Unknown	Voluntary efforts by private enterprise: businesses, industries & institutions
Resource Recovery Programs	Unknown	Private industry, municipalities, customer fees
Volume Reduction Techniques	Unknown	Private enterprise
Collection Processes	Unknown	Private enterprise & customer fees
Transportation	Unknown	Private enterprise & customer fees
Disposal Areas	Unknown	Private enterprise & customer fees
Future Disposal Area Uses	Unknown	Private enterprise & host counties
Management Arrangements	Unknown – minor cost	Iosco County Board of Commissioners
Educational & Informational Programs	Unknown	Iosco County Conservation District

[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. The selected plan is essentially a continuation of the current management system.

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 the available 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 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 facilites 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. Iosco County has access to sufficient capacity for the next 10 years and beyond. There is no need to site a new landfill or any other disposal facilities.

EXISTING DISPOSAL AREAS

The selected plan relies on the existing landfills in Clare, Bay, Crawford, Montmorency, and Presque Isle Counties to provide disposal capacity for the next 10 years. No new landfills will be required.

ENERGY CONSUMPTION AND PRODUCTION

The selected plan relies on landfills located outside Iosco County for the disposal of the County's solid waste. The current system results in greater energy consumption than if solid waste only had to be transported to a disposal facility located in Iosco County.

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. No methane recovery currently takes place at the landfills identified in this plan.

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. Major components already in place
2. System is accepted by the public
3. Minimal costs
4. No new sites or facilities required
5. No major institutional changes required

DISADVANTAGES:

1. No strong incentive to increase materials recovery much beyond current levels

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 B: ENHANCED MATERIALS RECOVERY
Under this option, use of the present landfills outside the county as the primary means of disposal would continue. However, attention would focus on the expansion of recycling and composting opportunities within the county.

ALTERNATIVE C: REGIONAL SOLID WASTE MANAGEMENT SYSTEM
This alternative called for the creation of a regional solid waste management system in cooperation with several surrounding counties. This option would involve the creation of a formal solid waste management authority or similar entity.

Alternative B

SYSTEM COMPONENTS:

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

RESOURCE CONSERVATION EFFORTS:

Voluntary measures by consumers, businesses, and industries.

VOLUME REDUCTION TECHNIQUES:

Use of volume reduction equipment by private solid waste industry & materials recovery programs: compactors, balers, shredders.

RESOURCE RECOVERY PROGRAMS:

1. Expanded curbside recycling in municipalities
2. Yard waste collection by private industry & municipalities.
3. Home composting by residents.

COLLECTION PROCESSES:

Collection mainly by private solid waste industry under municipal contracts & individual subscriptions.

TRANSPORTATION:

Transportation mainly by private solid waste industry.

DISPOSAL AREAS:

Landfills located outside of Iosco County

INSTITUTIONAL ARRANGEMENTS:

1. Arrangements for solid waste collection & transportation under municipal contracts and individual subscriptions with residents & businesses.
2. Inter-county agreements may be required between Iosco County and counties where available landfills are located.

EDUCATIONAL AND INFORMATIONAL PROGRAMS:

Countywide education programs conducted by County, MSU Extension, Natural Resources Conservation Service, or other entity.

CAPITAL, OPERATIONAL, AND MAINTENANCE COSTS:

Specific costs are unknown. Operating costs would be greater than the existing system due to cost for increased collection and transportation of recyclable materials.

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.

The technical and economic feasibility of implementing this alternative (enhanced materials recovery) were judged to be less desirable than the selected system. Also, this alternative would consume more energy due to expanded collection and transportation of recyclable materials.

Also, opportunities for materials recovery are widely available under the selected system. There is no documented demand for additional services in this regard. Under the selected system, local governments are free to establish resource recovery programs in any manner they feel best suits the needs of their residents. This arrangement was judged to be preferable to mandating recovery programs under Alternative B.

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. Increased levels of materials recovery

2. Greater conservation of landfill space through diversion.

3. Low capital costs due to minimal facility requirements.

DISADVANTAGES:

1. Higher operating costs for expanded collection & transportation of recyclable materials

2. Municipalities would need to accept expanded responsibilities for contracting for solid waste services.

3. Municipalities & residents would need to accept higher costs for expanded recycling collection, either curbside or through establishment of additional drop-off sites.

Alternative C

SYSTEM COMPONENTS:

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

RESOURCE CONSERVATION EFFORTS:
Voluntary measures by consumers, businesses, and industries.

VOLUME REDUCTION TECHNIQUES:
Use of volume reduction equipment by private solid waste industry & materials recovery programs: compactors, balers, shredders.

RESOURCE RECOVERY PROGRAMS:
1. Potential development of regional MRF and composting facility.
2. Regional marketing of recyclable materials and compost

COLLECTION PROCESSES:
Collection mainly by private solid waste industry under contracts with regional solid waste authority or similar entity.

TRANSPORTATION:
Transportation mainly by private solid waste industry.

DISPOSAL AREAS:
Landfills located in other counties

INSTITUTIONAL ARRANGEMENTS:

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:
Programs carried out by multi-county authority

CAPITAL, OPERATIONAL, AND MAINTENANCE COSTS:

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 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.

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 not succeed.

2. 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 re-evaluated in the future as the solid waste management systems in the region continue to evolve.

ADVANTAGES AND DISADVANTAGES OF THE NON-SELECTED SYSTEM:

Each solid waste management system has pros and cons relating to its implementation within the County. Following is a summary of the major advantages and disadvantages for this non-selected system.

ADVANTAGES:

1. Regional collection & marketing of recyclable materials.

2. Regional purchasing of recycled products.

3. Potential cost savings through regional contracts for solid waste services.

DISADVANTAGES:

1. Political barriers to establishing multi-county authority.

2. Higher costs for regional processing facilities.

3. Opposition to siting any new solid waste facilities.

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. Time for public comment was reserved on the agenda for each meeting of the Planning Committee.

2. Notices of each Planning Committee meeting were distributed to all municipalities in the County in advance of each meeting.

3. 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.

4. The draft plan was distributed to all municipalities in the County and adjacent counties for review.

5. A general notice announcing the public hearing on the draft plan was published at least 30 days prior to the hearing.

6. 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.

PUBLIC PARTICIPATION

PUBLIC INVOLVEMENT PROCESS: A description of the process used, including dates of public meetings, copies of public notices, documentation of approval from solid waste planning committee, County board of commissioners, and municipalities.

The public involvement process is described on the preceding page. The Solid Waste Management Planning Committee met on the following dates:

June 9, 1999
September 8, 1999
January 31, 2001
May 31, 2001 (Public Hearing)

PLAN APPROVALS:
The updated County Solid Waste Management Plan was approved by the County Solid Waste Management Planning Committee on May 31, 2001.

The updated Solid Waste Management Plan was approved by the Iosco County Board of Commissioners on July 5, 2001.

The updated Solid Waste Management Plan was submitted to the municipalities within Iosco County in July 2001.

The updated Solid Waste Management Plan was approved by 67% of the municipalities in the County in March 2002.

The updated Solid Waste Management Plan was submitted to the Michigan Department of Environmental Quality in March 2002.

The updated Solid Waste Management Plan was approved by the Michigan Department of Environmental Quality on _____, 2002.

PLANNING COMMITTEE APPOINTMENT PROCEDURE:

The County Board of Commissioners developed a list of potential candidates for the Planning Committee, including several individuals who had been involved in the preparation of the County's previous Solid Waste Plan under Act 641. After reviewing the list of candidates, the County Board appointed the 14 member Planning Committee in March 1998. Additional appointments were made as necessary over the course of the plan update to fill vacancies.

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. James Hager, Hager Sanitation
2. Herbert Travis, Travis Sanitation
3. Justine Hamilton, Waste Management
4. Kay Bissonette, Recycle Oscoda

One representative from an industrial waste generator:

1. Vacant

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

1. Teresa DeLage, Iosco Soil & Water Conservation District
2. Clyde Soucie

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

1. Larry Erickson, County Board of Commissioners, Committee Chair

One representative from township government:

1. Gary Kellan, Assistant Superintendent, Oscoda Charter Township

One representative from city government:

1. Ronald Leslie, City Manager, East Tawas (City Council designee)

One representative from the regional solid waste planning agency:

1. Robert Cudney, East Central Michigan Planning & Development Regional Commissioner

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

1. Chesley Summerville
2. Alvin Akers
3. Herbert Taylor

East Central Michigan Planning & Development Regional Commission
Designated Solid Waste Management Planning Agency for Iosco County
3144 Davenport Avenue, Suite 200
Saginaw, Michigan 48602
Telephone 517-797-0800

Notice of Public Meeting

Iosco County Solid Waste Management Planning Committee

Date: Wednesday, January 31, 2001

Time: 5:30 p.m.

Place:
Iosco County Building
County Board of Commissioners Meeting Room
Tawas City, Michigan 48763

Agenda

1. CALL TO ORDER
2. APPROVAL OF AGENDA
3. COMMUNICATIONS
4. COMMITTEE REVIEW OF DRAFT SOLID WASTE PLAN UPDATE *
5. CONSIDER RELEASE OF DRAFT PLAN FOR PUBLIC REVIEW
   A. Establish 3-month review period
   B. Schedule public hearing
   C. Approve release & distribution of draft plan by DPA
6. PUBLIC COMMENT
7. SET DATE OF NEXT MEETING
8. ADJOURNMENT

* NOTE: PLEASE BRING YOUR COPY OF THE DRAFT PLAN!

East Central Michigan Planning & Development Regional Commission
Designated Solid Waste Management Planning Agency for Iosco County
3144 Davenport Avenue, Suite 200
Saginaw, Michigan 48602
Telephone 517-797-0800

Memorandum

March 1, 2001

TO: All Townships and Cities in Iosco County

FROM: Doug Bell, ECMPDR, and the
Iosco County Solid Waste Management Planning Committee

RE: Draft Iosco County Solid Waste Management Plan Update

A copy of the draft Iosco County Solid Waste Management Plan Update is enclosed for your review and comment. The updated County Solid Waste Management Plan has been prepared in accordance with Part 115 of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended.

The proposed Solid Waste Management Plan is available for public review and comment through the close of business on **June 4, 2001**.

Written comments on the draft plan should be sent to the East Central Michigan Planning and Development Regional Commission, 3144 Davenport Avenue, Suite 200, Saginaw, MI 48602; telephone 517-797-0800; fax 517-797-0896. Please submit your comments by mail or fax so that they are received no later than **June 4, 2001**.

Please keep this document on file, and make it available to municipal officials (Township Board or City Council) and other interested persons.

Please also note that a public hearing has been scheduled for **May 31, 2001** to receive written and verbal comments on the draft plan. A notice confirming the time and place of the public hearing will be published and distributed to each municipality at a later date.

Your views on the updated Iosco County Solid Waste Management Plan are welcomed and encouraged.

Enclosure

Iosco County Solid Waste Management Planning Committee
Wednesday, January 31, 2001
Board of Commissioners Meeting Room
Iosco County Courthouse
Tawas City MI 48763

Minutes

1. **Call to Order.** The meeting was called to order at 5:30 p.m. by Chairman Erickson. Members present: Akers, Cudney, DeLage, Erickson, Hager, Leslie, Soucie, Soucie, Summerville, Taylor. Others present: Doug Bell, representing Designated Planning Agency.

2. **Approval of Agenda.** Motion by Summerville, support by Taylor to approve the agenda. Ayes: All. Motion carried.

3. **Communications.** None received.

4. **Review of Draft Solid Waste Plan Update.** The committee reviewed the draft plan that had been prepared by the Designated Planning Agency, noting corrections and additions as necessary. In terms of the solid waste industry, the committee noted that Herb Travis (Travis Sanitation) was operating mainly at the northern end of the county and using the Montmorency-Oscoda Landfill for disposal. They also noted that Brian Hager was operating Sunrise Disposal in the area. In general, the committee took the position that the county should be encouraged to look at all non-landfill technologies for recycling and waste conversion or processing.

5. **Release of Draft Plan for Public Review.** Doug Bell reviewed the next steps required in the plan review and approval process. Motion by Summerville, support by Cudney to release the draft plan for a three-month public review period beginning March 1st and to hold the public hearing on Thursday, May 31st at 5:30 p.m. Ayes: all. Motion carried.

6. **Public Comment.** None.

7. **Next Meeting Date.** The next regular meeting would be the public hearing on May 31, unless the Chair called a meeting during the interim.

8. **Adjournment.** Motion by Soucie, support by Cudney to adjourn the meeting. Ayes: all. Motion carried and the meeting was adjourned at 6:50 p.m.

Respectfully submitted,

Douglas A. Bell, Recording Secretary
Designated Solid Waste Management Planning Agency

East Central Michigan Planning & Development Regional Commission
Designated Solid Waste Management Planning Agency for Iosco County
3144 Davenport Avenue, Suite 200
Saginaw, Michigan 48602
Telephone 517-797-0800

Memorandum

March 1, 2001

TO: Designated Solid Waste Management Planning Agencies for Alcona, Arenac, and Ogemaw Counties

FROM: Doug Bell, ECMPDR, and the Iosco County Solid Waste Management Planning Committee

Doug Bell

RE: Draft Iosco County Solid Waste Management Plan Update

A draft copy of the Iosco County Solid Waste Management Plan Update is enclosed for your review and comment. The updated County Solid Waste Management Plan has been prepared in accordance with Part 115 of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended.

The proposed Solid Waste Management Plan is available for public review and comment through the close of business on **June 4, 2001**.

Written comments on the draft plan should be sent to the East Central Michigan Planning and Development Regional Commission, 3144 Davenport Avenue, Suite 200, Saginaw, MI 48602; telephone 517-797-0800; fax 517-797-0896. Please submit your comments by mail or fax so that they are received no later than **June 4, 2001**.

Please also note that a public hearing has been scheduled for **May 31, 2001** to receive written and verbal comments on the draft plan. A notice confirming the time and place of the public hearing will be published and distributed to each planning agency at a later date.

Your views on the updated Iosco County Solid Waste Management Plan are welcomed and encouraged.

Enclosure

Public Notice of Availability
Iosco County Solid Waste Management Plan Update

The Iosco County Solid Waste Management Planning Committee (SWMPC) has prepared an update of the Iosco County Solid Waste Management Plan. The updated County Solid Waste Management Plan has been prepared in accordance with Part 115 of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended.

The draft Solid Waste Management Plan will be available for public review and comment through the close of business on June 4, 2001. The draft plan is available for inspection at the Iosco County Board of Commissioners Office, Iosco County Building, Tawas City, MI 48763 during regular business hours. The plan is also available for inspection at the East Central Michigan Planning and Development Regional Commission, the designated solid waste planning agency for Iosco County, at the address given below. The draft plan is also being sent to each township and city in Iosco County.

Written comments on the draft plan should be sent to the East Central Michigan Planning and Development Regional Commission, 3144 Davenport Avenue, Suite 200, Saginaw, MI 48602; telephone 517-797-0800; fax 517-797-0896.

Please also note that a public hearing has been scheduled for May 31, 2001 at the County Building to receive written and verbal comments on the draft plan. A separate notice of the public hearing will be published and circulated at a later date.

Your views on the Iosco County Solid Waste Management Plan Update are welcomed and encouraged.

Notice to be published once as close as possible to March 1, 2001 (March 6th)

Notice of Public Hearing
Iosco County Solid Waste Management Plan Update

The Iosco County Solid Waste Management Planning Committee will hold a public hearing on the proposed update of the Iosco County Solid Waste Management Plan. The public hearing will be held as follows:

Date: Thursday, May 31, 2001
Time: 5:30 p.m.
Place: County Board Meeting Room
Iosco County Building
Tawas City, Michigan 48763

The purpose of the hearing is to accept public comments on the proposed Solid Waste Management Plan update. Both written and verbal comments will be accepted at the hearing.

The plan is available for inspection and copying at cost at the Iosco County Board of Commissioners Office, Iosco County Building, Tawas City, Michigan 48763, during regular business hours. The plan is also available for inspection at the East Central Michigan Planning and Development Regional Commission, the designated solid waste planning agency for Iosco County, at the address given below. The plan has also been sent to each township and city in the County.

Written comments on the proposed plan update will be accepted through the close of business on June 4, 2001. Written comments on the draft plan should be sent to the East Central Michigan Planning and Development Regional Commission, 3144 Davenport Avenue, Suite 200, Saginaw, MI 48602; telephone 989-797-0800; fax 989-797-0896. Please submit written comments so that they are received no later than June 4, 2001.

Your views on the updated Iosco County Solid Waste Management Plan are welcomed and encouraged.

* Please have this published at the earliest opportunity.
Thanks! - Doug Bell

East Central Michigan Planning & Development Regional Commission
Designated Solid Waste Management Planning Agency for Iosco County
3144 Davenport Avenue, Suite 200
Saginaw, Michigan 48602
Telephone 517-797-0800

Notice of Public Meeting

Iosco County Solid Waste Management Planning Committee

Date: Thursday, May 31, 2001

Time: 5:30 p.m.

Place:
Iosco County Building
County Board of Commissioners Meeting Room
Tawas City, Michigan 48763

Agenda

1. CALL TO ORDER

2. APPROVAL OF AGENDA

3. COMMUNICATIONS
   A. DEQ review comments on draft Solid Waste Plan
   B. Other

4. PUBLIC HEARING ON DRAFT SOLID WASTE PLAN UPDATE
   A. Overview of the Solid Waste Plan Update (Doug Bell, ECMPDR)
   B. Open Public Hearing
   C. Review written comments received on the draft plan.
   D. Accept verbal comments on the draft plan from those in attendance.
   E. Close public hearing.

5. CONSIDER PLANNING COMMITTEE APPROVAL OF SOLID WASTE PLAN UPDATE

6. SET DATE OF NEXT MEETING (If required)

7. ANY OTHER BUSINESS

8. ADJOURNMENT

Iosco County Solid Waste Management Planning Committee
Thursday, May 31, 2001
Board of Commissioners Meeting Room
Iosco County Courthouse
Tawas City MI 48763

1. **Call to Order.** The meeting was called to order at 5:30 p.m. by Chairman Soucie. Members present: Akers, Cudney, DeLage, Hager, Kellan, Soucie, Summerville, Taylor. Others present: Bell.

2. **Approval of Agenda.** Motion by Akers, support by Kellan to approve the agenda. Ayes: All. Motion carried

3. **Communications**

   A. **Review DEQ Comments on Draft Plan.** Copies of the comments on the draft plan submitted by DEQ had previously been mailed to committee members.

4. **Public Hearing on the Draft Solid Waste Plan Update**
   Motion by Cudney, support by Akers to open the public hearing. Ayes: all. Motion carried. Doug Bell, representing ECMPDR, gave a brief overview of the plan update. He also reviewed the DEQ comments that had been received under "Communications" and proposed minor changes in the plan to address the DEQ comments. The committee asked that the 2000 Census figures for population be incorporated in the plan. No other written comments on the plan had been received, and no members of the public were in attendance. Motion by Cudney, support by Taylor to close the public hearing. Ayes: all. Motion carried.

5. **Approval of Solid Waste Plan Update.** Motion by Summerville, support by Akers to approve the plan update with the changes and corrections noted, and to submit the plan to the County Board for approval as soon as possible, provided that no objections to the plan were received by the close of business on June 4, 2001. Ayes: All. Motion Carried.

6. **Other Business.** Bell stated that as long as there were no objections to the plan from the County Board, it would probably not be necessary for the committee to hold another meeting.

7. **Adjournment.** Motion by Summerville, support by Akers to adjourn the meeting. Ayes: All. Motion carried. The meeting was adjourned at 6:20 p.m.

Respectfully submitted,

Douglas A. Bell

Douglas A. Bell, Recording Secretary
Designated Solid Waste Management Planning Agency

Iosco County
Board of Commissioners

COURT HOUSE
Tawas City, Michigan 48763

RESOLUTION

DATE: JULY 5, 2001

THE HONORABLE BOARD OF COMMISSIONERS:

WHEREAS, the County entered into an agreement with ECMPDR for updating the Iosco County Solid Waste Management Plan and

WHEREAS, the plan has been completed with all necessary steps

NOW THEREFORE BE IT RESOLVED, that the Iosco County Board of Commissioners hereby approve the Iosco County Solid Waste Management Plan as revised March 1, 2001.

Move: _____
Larry Erickson

Support: _____

Roll Call: Ayes 5

Nays 0

Absent 0

Resolution for Action on the
IOSCO COUNTY SOLID WASTE MANAGEMENT PLAN UPDATE
by Local Units of Government

WHEREAS, Iosco County has prepared an updated Solid waste Management in accordance with Park 115 of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended; and

WHEREAS, the Iosco County Board of Commissioners has now approved the plan as prepared and submitted by the County Solid Waste Management Planning Committee; and

WHEREAS, The City of Tawas City has reviewed the updated Solid Waste Plan and its recommendations;

NOW, THEREFORE, BE IT RESOLVED that the City Council of this municipality hereby approves the Iosco County Solid Waste Management Plan Update in accordance with Act 451, as amended.

Resolution declared adopted at a Regular Meeting of the City Council of Tawas City held on August 6, 2001.

Signed

Edward J. Nagy, Mayor

Attest

Judith A. Werth, City Clerk

(SBM 824)

City of East Tawas

760 Newman Street ◆ PO Box 672 ◆ East Tawas, Michigan 48730-0672
989.362.6161 ◆ fax 989.362.6736 ◆ cityhall@easttawas.com
www.easttawas.com

Resolution for Action on the Iosco County
Solid Waste Management Plan Update

At a regular meeting of the East Tawas City Council held on the 20th day of August, 2001, the following preamble and resolution were offered by Councilwoman O'Connor and seconded by Councilman Bolen.

WHEREAS, Iosco 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 Iosco County Board of Commissioners has now approved the plan as prepared and submitted by the County Solid Waste Management Planning Committee; and

WHEREAS, The City of East Tawas has reviewed the updated Solid Waste Plan and its recommendation,

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of East Tawas hereby approves the Iosco County Solid Waste Management Plan Update in accordance with Act 451, as amended.

Yes: Bolen, Cano, Elliott, Klenow, Look, and O'Connor.
No: None.
Absent: Freel.

RESOLUTION DECLARED ADOPTED.

I, Blinda A. Baker, Clerk of the City of East Tawas, do hereby certify that the above resolution is a true and complete copy of a Resolution adopted by the East Tawas City Council at a Regular meeting held on the 20th day of August, 2001, and that said meeting was conducted and public notice of said meeting was given pursuant to and in full compliance with the Open Meetings Act, being Act 267, Public Acts of Michigan, 1976, and that the minutes of said meeting were kept and will be or have been made available as required by said Act.

Blinda A. Baker

Blinda A. Baker, City Clerk

Resolution for Action on the
Iosco County Solid Waste Management Plan Update by
Local Units of Government

WHEREAS, Iosco 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 Iosco 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 Tawas
(Township/City) *(Name of Local Unit)*

has reviewed the updated Solid Waste Plan and its recommendations;

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

municipality hereby Approves
(Approves/Disapproves)

the Iosco County Solid Waste Management Plan Update in accordance with Act 451, as amended.

Resolution declared adopted at a regular meeting of the board
(Board/Council)

of Tawas Township held on August 13, 2001
(Name of Local Unit) *(Date)*

Chief Elected Official Clerk

RECEIVED
AUG 20 2001
IOSCO

Resolution for Action on the
Iosco County Solid Waste Management Plan Update by
Local Units of Government

WHEREAS, Iosco 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 Iosco 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 (*Township/City*) of Baldwin (*Name of Local Unit*)

has reviewed the updated Solid Waste Plan and its recommendations;

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

municipality hereby Approves (*Approves/Disapproves*)

the Iosco County Solid Waste Management Plan Update in accordance with Act 451, as amended.

Resolution declared adopted at a regular meeting of the Board (*Board/Council*)

of Baldwin Township (*Name of Local Unit*) held on August 13 (*Date*), 2001.

James Svoboda, Supervisor
Chief Elected Official

Jean Davison
Clerk

Resolution for Action on the
Iosco County Solid Waste Management Plan Update by
Local Units of Government

WHEREAS, Iosco 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 Iosco 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 Alabaster
(Township/City) *(Name of Local Unit)*

has reviewed the updated Solid Waste Plan and its recommendations;

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

municipality hereby approves
(Approves/Disapproves)

the Iosco County Solid Waste Management Plan Update in accordance with Act 451, as amended.

Resolution declared adopted at a regular meeting of the Board
(Board/Council)
of the Township of Alabaster held on August 13, 2001
(Name of Local Unit) *(Date)*

Chief Elected Official

Clerk

Resolution for Action on the
Iosco County Solid Waste Management Plan Update by
Local Units of Government

WHEREAS, Iosco 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 Iosco County Board of Commissioners has now approved the plan as prepared and submitted by the County Solid Waste Management Planning Committee; and

WHEREAS, The Charter Township of AuSable
(Township/City) *(Name of Local Unit)*

has reviewed the updated Solid Waste Plan and its recommendations;

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

municipality hereby approves
(Approves/Disapproves)

the Iosco County Solid Waste Management Plan Update in accordance with Act 451, as amended.

Resolution declared adopted at a regular meeting of the Township Board
(Board/Council)
of AuSable held on August 20, 2001.
(Name of Local Unit) *(Date)*

Chief Elected Official

Clerk

RECEIVED
AUG 23 2001

RECEIVED
OCT 15 2001

Resolution for Action on the
Iosco County Solid Waste Management Plan Update by
Local Units of Government

WHEREAS, Iosco 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 Iosco 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 Plainfield
(Township/City) *(Name of Local Unit)*

has reviewed the updated Solid Waste Plan and its recommendations;

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

municipality hereby Approves
(Approves/Disapproves)

the Iosco County Solid Waste Management Plan Update in accordance with Act 451, as amended.

Resolution declared adopted at a regular meeting of the Board
(Board/Council)
of Plainfield Township held on Aug. 15, 2001.
(Name of Local Unit) *(Date)*

Chuck Parkinson
Chief Elected Official

Elaine J. Bielby
Clerk

CHARTER TOWNSHIP OF OSCODA

RESOLUTION NO. 2001-20

A RESOLUTION APPROVING OF THE IOSCO COUNTY SOLID WASTE MANAGEMENT PLAN UPDATE.

****

WHEREAS, Iosco 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 Iosco County Board of Commissioners has now approved the plan as prepared and submitted by the County Solid Waste Management Planning Committee; and

WHEREAS, The Charter Township of Oscoda has reviewed the updated Solid Waste Management Plan and its recommendations;

NOW THEREFORE BE IT RESOLVED, that the Charter Township of Oscoda Board of Trustees does hereby approves the Iosco County Solid Waste Management Plan Update in accordance with Act 451, as amended.

Moved by: Bissonette Supported By: Smith

Yeas: Copland, Manderochio, Bissonette, Falletich, Alexander, Smith

Nays: None

Absent:: Keonig

I, Diane R. Manderochio, hereby certify that the foregoing is a true copy of Resolution No. 2001-20 that was adopted by the Board of Trustees of the Charter Township of Oscoda, County of Iosco, State of Michigan, during a scheduled meeting that was held on August 27, 2001.

Dated: August 28, 2001

Diane R. Manderochio

Diane R. Manderochio, Clerk

Resolution for Action on the
Iosco County Solid Waste Management Plan Update by
Local Units of Government

WHEREAS, Iosco 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 Iosco 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 GRANT
(Township/City) *(Name of Local Unit)*

has reviewed the updated Solid Waste Plan and its recommendations;

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

municipality hereby APPROVES
(Approves/Disapproves)

the Iosco County Solid Waste Management Plan Update in accordance with Act 451, as amended.

Resolution declared adopted at a regular meeting of the BOARD
(Board/Council)

of GRANT TOWNSHIP held on JAN 7 ~~2001~~ 2002
(Name of Local Unit) *(Date)*

Fred M. Fry
Chief Elected Official

Jacqueline Mary
Clerk

Resolution for Action on the
Iosco County Solid Waste Management Plan Update by
Local Units of Government

WHEREAS, Iosco 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 Iosco 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 (*Township/City*) of RENO (*Name of Local Unit*)

has reviewed the updated Solid Waste Plan and its recommendations;

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

municipality hereby APPROVES (*Approves/Disapproves*)

the Iosco County Solid Waste Management Plan Update in accordance with Act 451, as amended

Resolution declared adopted at a regular meeting of the BOARD (*Board/Council*)

of RENO TWP. (*Name of Local Unit*) held on 3-11-02 (*Date*), ~~2001~~

T. A. Bellville

Chief Elected Official

Cheryl M. Hobbs

Clerk Deputy

TERRY BELLVILLE
RENO TOWNSHIP SUPERVISOR
7240 M-65
WHITTEMORE, MI 48770

Resolution for Action on the
Iosco County Solid Waste Management Plan Update by
Local Units of Government

WHEREAS, Iosco 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 Iosco 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 Sherman
(Township/City) *(Name of Local Unit)*

has reviewed the updated Solid Waste Plan and its recommendations;

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

municipality hereby not acted on due to insufficient time for whole board to go over
(Approves/Disapproves)

the Iosco County Solid Waste Management Plan Update in accordance with Act 451, as amended.

Resolution declared adopted at a regular meeting of the Board
(Board/Council)
of Sherman Township held on 8-6, 2001.
(Name of Local Unit) *(Date)*

_____ Mildred Letreine

Chief Elected Official Clerk

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AUG 14 2001

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: Develop and distribute materials recovery education materials.

Lead Responsibilities: Iosco Conservation District

Timeline: Ongoing

ACTION # 2: Promote establishment of additional municipal composting operations.

Lead Responsibilities: Iosco Conservation District

Timeline: Ongoing

ACTION # 3: Continue to promote recycling efforts on a countywide basis.

Lead Responsibilities: Iosco Conservation District

Timeline: Ongoing

ACTION # 4: Investigate ways to expand and promote opportunities for separation & collection of household hazardous wastes.

Lead Responsibilities: County Board, private solid waste industry.

Timeline: Initiate investigations & discussions within 6 months after DEQ approval of plan update.

ACTION # 5: Review implementation progress and recommend adjustments as necessary.

Lead Responsibilities: County Board of Commissioners.

Timeline: Initiate at 6 months after DEQ approval; review progress at 6-month intervals thereafter.

Resolutions

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

None

ATTACHMENTS

Listed Capacity

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

Letters from various landfill operators will be attached as they are received.

NORTHERN OAKS RECYCLING AND DISPOSAL FACILITY
A WASTE MANAGEMENT COMPANY

P.O. Box 813
513 N. County Farm Road
Harrison, Michigan 48625
(517) 539-6111

September 27, 2000

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

Dear Mr. Bell:

Pursuant to your request for information this shall serve that Northern Oaks Recycling and Disposal Facility has sufficient capacity to receive waste from Arenac, Gladwin, Ogemaw, Roscommon and Iosco Counties for the next 10 years.

If you require further information please do not hesitate to contact me.

Respectfully,

Richard Leszcz
Manager

ROGER D. FRYE, CHAIRMAN
DENNIS KAUFFMAN, VICE- CHAIRMAN
RAYMOND WEGMEYER, SEC./TREAS
RICHARD E. HERMANSON
MICHAEL HUNT
TOM MULLANEY
SANDY CUNNINGHAM, EXEC. SECRETARY

MONTMORENCY OSCODA ALPENA Solid Waste Management AUTHORITY
P. O. Box 789, Atlanta, MI 49709
(517) 785-2066 Phone
(517) 785-4183 Fax

October 2, 2000

Mr. Douglas A. Bell, AICP
Project Consultant
214 East State Street
Clare, MI 48617

Dear Mr. Bell:

In response to your September 27th correspondence, please be advised that it is the intention of the Montmorency-Oscoda-Alpena Solid Waste Management Authority Board to accept waste generated in the County's as listed with export authorization in the Montmorency-Oscoda Solid Waste Management Plan, which includes Ogemaw, Roscommon, and Iosco County's.

However, on 6/16/00, the Board directed that all County's with export authorization be advised that we are not in a position to guarantee disposal capacity to any County with the exception of Montmorency, Oscoda and Alpena County's, as Member-County's of the Montmorency-Oscoda-Alpena Solid Waste Management Authority Board.

We will continue to accept refuse from the County's with export authorization, however, we must reserve the right to limit the quantity accepted.

If you require additional information, please contact this office.

Sincerely,

Sandy Cunningham

Sandy Cunningham
Executive Secretary

cc: Landfill Authority Board

WASTE MANAGEMENT

11375 Sherman Rd.
Frederic, MI 49733
(517) 732-3553
(517) 732-1398 Fax

October 9, 2000

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

RE: Arenac, Gladwin, Ogemaw, Roscommon, and Iosco Counties Solid Waste Plan Updates

The following is in response to your request for documentation regarding the disposal of the above listed counties waste at the Waters Landfill in Crawford County.

Solid waste that is generated in the above listed counties can be accepted for disposal at Waters Landfill. Disposal capacity for the above listed counties will be available in accordance with the Crawford County Solid Waste Plan.

If you have any questions, please call me at (517) 732-3553

Sincerely,

Debora L Johnston

Debora Johnston
Site Engineeer

Cc: Crawford County
Maple Forest Township

REPUBLIC WASTE SERVICES

36850 Van Born Rd.
P.O. Box 68
Wayne, MI 48184
734-641-3555
734-729-8890 Fax

November 30, 2000

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

RE: Acceptance for Disposal & Assurance of Landfill Capacity

Dear Mr. Bell,

Republic Services of Michigan hereby acknowledges receipt of your letter dated September 27, 2000, wherein the following Counties of Arenac, Gladwin, Ogemaw, Roscommon, and Iosco, request capacity assurance to meet the needs of their respective County's updated solid waste management plan for the next ten years.

Republic will commit and accept up to 100 percent of the daily and annual volume generated within Arenac, Gladwin, Ogemaw, Roscommon and Iosco Counties at the following Republic owned and operated facilities: the Whitefeather Landfill, located in Bay County, the Elk Run Landfill, located in Presque Isle County, and the Brent Run Landfill in Genesee County. We will commit this capacity for the ten-year planning period commencing upon the date of approval of the updated plan by the MDEQ.

Republic looks forward to assisting these counties in planning for their long-term disposal needs. Please feel free to contact us if there is any other means in which we can provide assistance.

Respectfully,

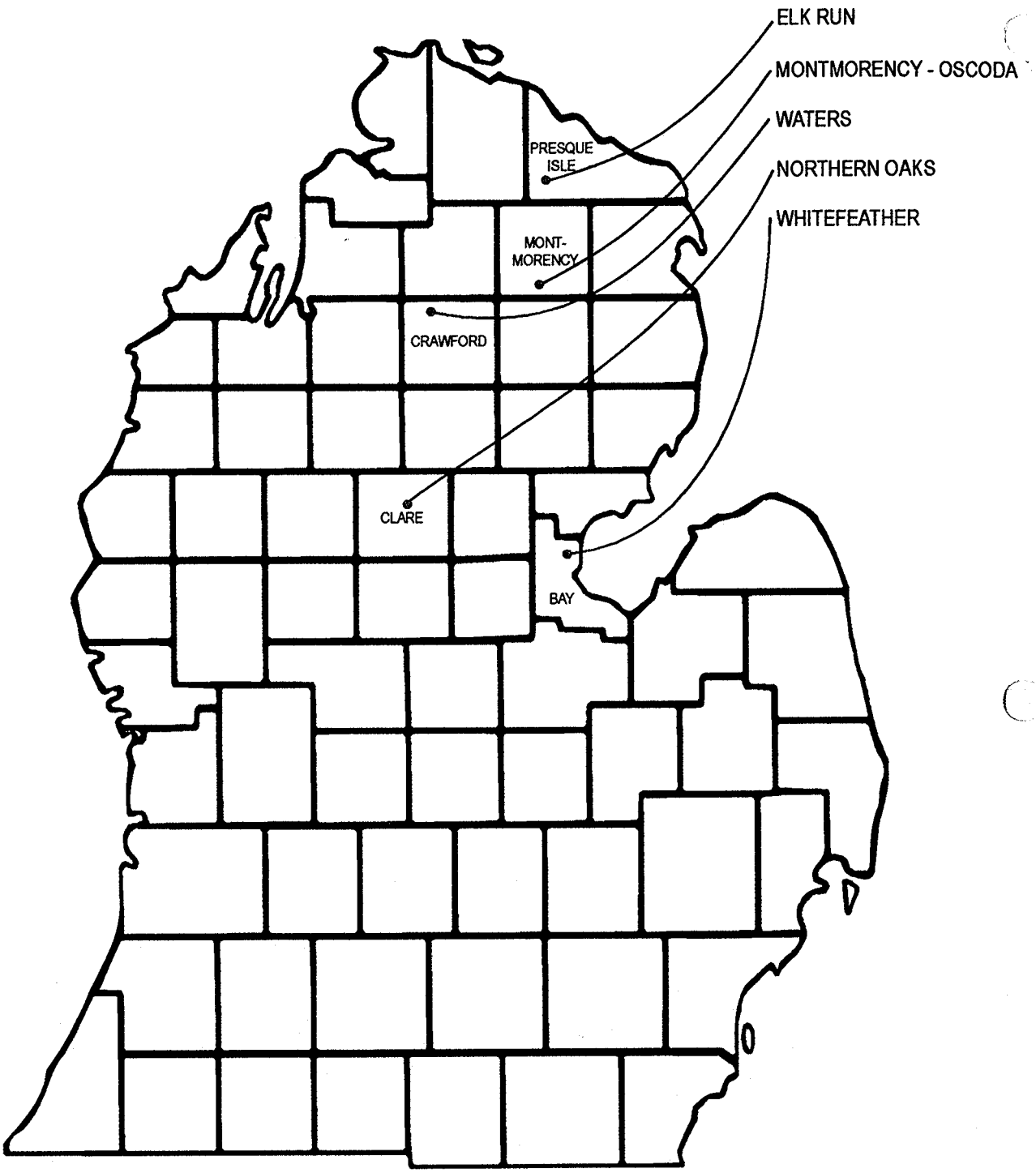
Stephanie Glyssøn
Director of Governmental Affairs

Cc: Matt Neely, Republic Waste

ATTACHMENTS

Maps

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



Landfill Locations

ATTACHMENTS

Inter-County Agreements

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

Special Conditions

Special conditions affecting import or export of solid waste.

None