



STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
LANSING



JENNIFER M. GRANHOLM
GOVERNOR

STEVEN E. CHESTER
DIRECTOR

April 1, 2003

Ms. Clarice Sperry, Chairman
Ogemaw County Board of Commissioners
806 West Houghton
West Branch, Michigan 48661

Dear Ms. Sperry:

The Department of Environmental Quality (DEQ) received the locally approved update to the Ogemaw County (County) Solid Waste Management Plan (Plan) on September 30, 2002. Except for the items indicated below, the Plan is approvable. As outlined in the December 30, 2002 letter to you from Ms. Christina Miller, DEQ, Waste and Hazardous Materials Division (WHMD), and as confirmed in the letter from Mr. Gary R. Klacking, Ogemaw County Clerk, dated January 8, 2003, on behalf of the Ogemaw County Board of Commissioners (BOC), the DEQ makes the following modifications to the Plan:

On [page III-28-1, Item C](#) states: "A reasonable number of copies of the application may be required at the discretion of the designated planning agency." Section 11538(3) of Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, requires that a siting mechanism not be subject to discretionary acts by the local planning entity. The phrase "reasonable number of copies" does not clearly define the number of copies that may be required. Therefore, this sentence shall be changed to read, "A reasonable number of copies of the application, not to exceed 20 copies, may be required at the discretion of the designated planning agency."

On [page III-28-2, Item F](#), No. 1 discusses the opportunity for the County to refuse siting of a facility as long as 66 months of available capacity has been established. Section 11537a of Part 115 states in part: "If any county is able to demonstrate to the department that it has at least 66 months of available capacity, that county may refuse to utilize its siting mechanism until the county is no longer able to demonstrate 66 months of capacity....." The decision is to refuse the use of the siting mechanism, which means this decision cannot be part of the siting criteria. Therefore, Item F, No. 1 will be deleted from the Siting Process.

On [page III-28-4, Item H](#) states that the applicant will have the opportunity to provide additional information if the proposal is found to be inconsistent. There is no time frame or default action established for the designated planning agency to make their

determination if this process should need to occur. From the conversation Ms. Miller had with Mr. Douglas Bell, Project Consultant to Ogemaw County, if the applicant resubmits information because the proposal has been determined to be inconsistent, then the proposal shall have to go through the entire siting process. If the applicant disagrees with the County's determination of consistency, the applicant could also request the DEQ to make a determination of consistency as part of the review of a construction permit application. Item H does not clearly convey either of the options mentioned above; therefore, in order to alleviate any discrepancy, Item H shall be deleted from the Plan.

On [page III-29-2, Item E](#) identifies the BOC as the authority to identify and bring suit for violations of the Plan. However, on page III-31, "Local Responsibility for Plan Update Monitoring & Enforcement," the entity identified for implementation and monitoring is the Solid Waste Management Advisory Board.

Further on [page III-31](#), the County only identifies the DEQ as the enforcing body. The Plan must recognize an entity from the County to provide for enforcement of the Plan. From the conversation with Mr. Bell, the BOC will take responsibility for implementation, monitoring, and enforcement of the Plan. Therefore, the BOC shall be added to each of the sections.

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 that 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 the County's 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. 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.

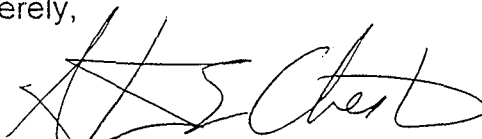
Ms. Clarice Sperry

Page 3

April 1, 2003

The DEQ applauds your efforts and commitment in addressing the solid waste management issues in the County. If you have any questions, please contact Ms. Rhonda Oyer Zimmerman, Chief, Solid Waste Management Unit, Storage Tank and Solid Waste Section, WHMD, at 517-373-4750.

Sincerely,



Steven E. Chester

Director

517-373-7917

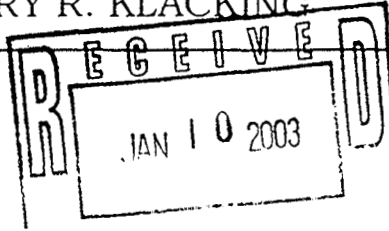
cc: Senator Tony Stamas
Representative Dale Sheltrown
Mr. Gary R. Klacking, Ogemaw County Clerk
Mr. Douglas Bell, Project Consultant to Ogemaw County
Mr. Stanley F. Pruss, Deputy Director, DEQ
Ms. Carol Linteau, Legislative Liaison, DEQ
Mr. George W. Bruchmann, DEQ
Mr. Lonnie C. Lee, DEQ
Mr. Terry Walkington, DEQ
Ms. Rhonda Oyer Zimmerman, DEQ ✓
Ms. Christina Miller, DEQ
Ogemaw County File

OGEMAW COUNTY CLERK

GARY R. KLACKING

CHERYL MOLLARD
ADMIN. ASSISTANT

COUNTY OF OGEMAW
34th JUDICIAL CIRCUIT



8 January, 2003

COPY

Christina Miller
Solid Waste Mgt. Unit/Waste Mgt. Div
525 West Allegan Street – POB 30241
Lansing MI 48909-7741

Dear Ms. Miller:

Please be advised the Ogemaw County Board of Commissioners has reviewed your letter dated 30 December 2002.

The Board concurs with the DEQ administratively making the modicaitions to the Plan as part of the DEQ's approval of the plan.

Should you have any questions please contact me.

Respectfully,

A handwritten signature in cursive script that reads "Gary R. Klacking".

Gary R. Klacking
County Clerk

GRK

cc: Douglas Bell/Project Consultant
file

East Central Michigan Planning & Development Regional Commission
Designated Solid Waste Management Planning Agency for Ogemaw County
3144 Davenport Avenue, Suite 200, Saginaw MI 48602
Telephone 989-797-0800

September 27, 2002

Waste & Hazardous
Materials Division

SEP 30 2002

Ms. Lynn Dumroese
Solid Waste Management Unit
Waste Management Division
Department of Environmental Quality
P.O. Box 30241
Lansing MI 48909

RE: Ogemaw County Solid Waste Management Plan Update

Dear Lynn:

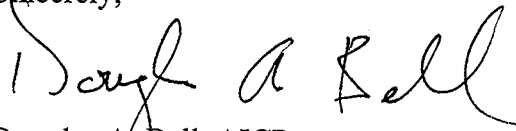
The locally approved Ogemaw County Solid Waste Management Plan update is enclosed for DEQ review and approval.

The municipal resolutions include 12 approvals out of 17 local units. One municipality disapproved the plan, and four municipalities did not respond.

A copy of the plan on computer disk will be furnished under separate cover.

Thank you for your assistance and review. Please contact me if you have any questions.

Sincerely,



Douglas A. Bell, AICP
Project Consultant to Ogemaw County

Enclosures

c: Sue Fortune, ECMPDR

Ogemaw County Solid Waste Management Plan Update

Approved by the Ogemaw County Solid Waste Management
Planning Committee
January 1999

Approved by the
Ogemaw County Board of Commissioners
July 2001

Approved by 67% of the
Ogemaw County Municipalities
August 2002

Submitted to the
Michigan Department of Environmental Quality
For Approval
September 2002

Prepared by the
Ogemaw 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

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.

~~September 30, 2002~~

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.

<u>Municipality</u>	<u>Original Planning County</u>	<u>New Planning County</u>
---------------------	---------------------------------	----------------------------

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, 3535 State Street, Saginaw, Michigan, 48602 (2) Ogemaw County Clerk, Ogemaw County Building, 806 W. Houghton Ave, West Branch, Michigan 48661.

Ogemaw County Solid Waste Management Plan

Table of Contents

Section	Page
Executive Summary	I-1
I. Introduction	I-4
Goals and Objectives	I-4
II. Data Base	II-1
Solid Waste Disposal Areas	II-2
Solid Waste Facility Descriptions	II-3
Collection and Transportation Infrastructure	II-7
Evaluation of Deficiencies and Problems	II-8
Demographics	II-9
Land Development	II-10
Solid Waste Management Alternatives	II-11
III. Selected Solid Waste Management System	III-1
Import/Export Authorizations	III-3
Solid Waste Disposal Areas	III-6
Collection and Transportation Infrastructure	III-12
Resource Conservation Efforts	III-13
Waste Reduction, Recycling, & Composting Programs	III-14
Resource Recovery Management Entities	III-24
Timetable for Selected System Implementation	III-27
Siting Procedure	III-28
Management Components	III-29
Local Ordinances	III-32
IV. Capacity Certification	IV-1
Appendix A: Additional Information Regarding the Selected System	
Evaluation of Recycling	A-1
Detailed Features of Recycling & Composting Programs	A-2
Coordination Efforts	A-5
Costs & Funding	A-6
Evaluation Summary	A-7
Advantages & Disadvantages	A-10
Appendix B: Non-Selected Systems	B-1

Table of Contents

Section	Page
Appendix C: Public Participation and Approval	C-1
Appendix D: Attachments	D-1

EXECUTIVE SUMMARY

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

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

Township or Municipality Name	Population	% Land Use		% of Economic Base*				
		Rural	Urban	Ag	For	Ind	Com	Other
Churchill Twp	1,273	98%	2%	14.2%	0	0.3%	2.2%	83.3%
Cumming Twp	773	97%	3%	25.8%	0	0.9%	4.7%	68.6%
Edwards Twp	1,312	98%	2%	23.7%	0	1.3%	0.6%	74.4%
Foster Twp	810	98%	2%	1.3%	0	0.2%	1.4%	97.1%
Goodar Twp	429	98%	2%	0.9%	0	0	10.0%	89.1%
Hill Twp	1,741	95%	5%	0.6%	0	0	25.7%	73.7%
Horton Twp	1,029	95%	5%	9.4%	0	1.9%	4.4%	84.4%
Klacking Twp	484	99%	1%	11.2%	0	0	1.4%	74.8%
Logan Twp	616	99%	1%	29.0%	0	<0.1%	2.6%	68.4%
Mills Twp	3,575	90%	10%	0.7%	0	0.2%	3.3%	95.8%
Ogemaw Twp	952	95%	5%	5.0%	0	1.4%	15.9%	77.7%
Richland Twp	610	98%	2%	20.1%	0	0	2.5%	77.4%
Rose Twp	1,419	98%	2%	1.2%	0	0	3.0%	95.8%
West Branch Twp	2,583	93%	7%	10.9%	0	4.5%	23.1%	61.5%
Prescott Village	352	2%	98%	Included with Richland Twp				
Rose City	747	2%	98%	0	0	14.2%	45.8%	40.0%
West Branch City	2,085	2%	98%	0	0	9.9%	46.8%	43.3%
Ogemaw County	20,790	97%	3%	7.3%	0	1.6%	8.6%	82.5%
Total Population	20,790							

*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

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

The recovery of recyclable materials from the solid waste stream presently takes place in the county on a limited basis. This is accomplished through the operation of recycling drop-off sites in the City of West Branch and some townships.

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

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

SELECTED ALTERNATIVES

Ogemaw County's selected alternative is to retain the current collection and disposal system while also focusing on enhanced materials recovery efforts. 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 consider the benefits of arranging 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 and Montmorency Counties will continue to meet Ogemaw County's solid waste disposal needs for the planning period.

3. Recycling. Under the selected alternative, the City of West Branch drop-off site will continue to accept recyclable materials. 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, no local governments provide curbside recycling for their residents through private sector contracts or other means. Recycling services are expected to continue to be mainly provided by private enterprise. 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. Collection of yard wastes from residents for composting will be continued by the private sector. Currently, these services are limited to Churchill and Mills Townships. "Backyard" composting by residents will also continue to be encouraged. The City of West Branch will continue to operate a composting site. 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. Again, it is expected that composting services will continue to be furnished by the private sector. The plan, however, does not intend to limit the ability of any local government unit to establish a composting site and program.

5. Separation of Household Hazardous Wastes. There is presently a Groundwater Stewardship program in the county that is aimed at hazardous wastes associated with agriculture. The County should investigate ways to expand this program to serve non-farm residents as well. The County should also 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.

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 MSU Extension. 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 to meet the County's solid waste disposal needs.

INTRODUCTION

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 expanded use of private/non-profit organizations for operating and coordinating formal efforts in recycling and resource recovery.

Goal 4 Develop an integrated solid waste management system that includes waste reduction, source separation, recycling, composting, and landfilling as its major components.

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

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

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

Objective 5a: Review local government and public institution procurement policies 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 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 Ogemaw County were obtained from the most recent DEQ "Report of Solid Waste Landfilled in Michigan" for the period of October 1, 1996 through September 30, 1997 and from the records kept by the private solid waste industry. The report on volumes landfilled showed that 73,809 cubic yards of solid waste generated in Ogemaw County were disposed of at licensed Type II landfills. No Type III solid waste disposal was reported. The main facilities presently used for disposal are the Northern Oaks RDF located in Clare County and the Whitefeather Landfill in Bay County. A small quantity of solid waste (85 cubic yards) was also disposed of in Crawford County at the Waters Landfill during the reporting period that ended September 30, 1997.

Data on recycling collected by private industry show that approximately 1,200 cubic yards of material were collected and marketed during 1997. This quantity also represents 1,200 cubic yards of material that would have otherwise been placed in landfills. Also, a presently unknown quantity of yard wastes and other acceptable organic materials were collected and composted during 1997. 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 Ogemaw County with more than ten years of capacity.

TOTAL QUANTITY OF SOLID WASTE GENERATED:

75,009 Tons or Cubic Yards in one year (identify unit of time)

TOTAL QUANTITY OF SOLID WASTE NEEDING DISPOSAL:

73,809 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 Ogemaw County presently utilizes to meet its disposal needs. With the exception of a Type A transfer station, all of these facilities are located in surrounding counties. Detailed descriptions of these disposal areas are included on the following pages. Note that additional disposal facilities may be identified in Section III concerning the *Selected Management System*.

Type II Landfills (County Location):

Whitefeather Landfill (Bay County)
Northern Oaks Recycling & Disposal Facility (Clare County)
Waters Landfill (Crawford County)

Type A Transfer Station:

West Branch Township (Ogemaw County)

Type B Transfer Stations

Churchill Twp
Cumming Twp
Foster Twp
Goodar Twp
Klacking Twp
Ogemaw Twp
Richland Twp
Rose Twp

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: Republic Services

Operating Status (check)

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

Waste Types Received (check all that apply)

- residential
- commercial
- industrial
- construction & demolition
- contaminated soils
- special wastes *
- other: _____

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

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	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds ³
Estimated lifetime:	18.8	years
Estimated days open per year:	260	days
Estimated yearly disposal volume:	380,000	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> 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: 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)

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

Waste Types Received (check all that apply)

- residential
- commercial
- industrial
- construction & demolition
- contaminated soils
- special wastes *
- other: _____

* Explanation of special wastes, including a specific list and/or conditions:
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 yds³
Estimated lifetime: 43 years
Estimated days open per year: 260 days
Estimated yearly disposal volume: 409,000 tons or yds³

(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)

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

Waste Types Received (check all that apply)

- residential
- commercial
- industrial
- construction & demolition
- contaminated soils
- special wastes *
- other: _____

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

Site Size:

Total area of facility property:	<u>256</u>	acres
Total area sited for use:	<u>252</u>	acres
Total area permitted:	<u>79</u>	acres
Operating:	<u>9.7</u>	acres
Not excavated:	<u>64.87</u>	acres
Current capacity:	<u>5,700,000</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds ³
Estimated lifetime:	<u>20</u>	years
Estimated days open per year:	<u>313</u>	days
Estimated yearly disposal volume:	<u>200,000</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds ³

(if applicable)

Annual energy production:		
Landfill gas recovery projects:	<u>NA</u>	megawatts
Waste-to-energy incinerators:	<u>NA</u>	megawatts

FACILITY DESCRIPTIONS

Facility Type: Type A Transfer Station

Facility Name: West Branch Transfer Station

County: Ogemaw Location: Town: _____ Range: _____ Section(s): _____

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)

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

Waste Types Received (check all that apply)

- residential
- commercial
- industrial
- construction & demolition
- contaminated soils
- special wastes *
- other: _____

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

Site Size:

Total area of facility property: _____ acres
 Total area sited for use: NA acres
 Total area permitted: NA acres
 Operating: NA acres
 Not excavated: NA acres
 Current capacity: _____ tons or yds³
 Estimated lifetime: NA years
 Estimated days open per year: _____ days
 Estimated yearly disposal volume: NA tons or yds³

(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 Ogemaw County is accomplished almost exclusively by the private solid waste industry.

Private solid waste collection firms that operated in Ogemaw County formerly included Waste Management and City Environmental Services. Due to the merger between USA Waste and Waste Management, City Environmental became part of the new Waste Management.

In the City of West Branch and Mills Township, solid waste collection services are provided under municipal contracts with a private firm. Mills Township also provides curbside collection of yard wastes from residences under its contract. The City of West Branch also provides a municipal composting site.

In the rest of the county, a "free market" system that includes various arrangements for solid waste collection services exists. This includes arrangements for drop-off (transfer station) sites to serve residents, and individual arrangements with residents and businesses for service through subscriptions with private haulers.

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

**Ogemaw County
Solid Waste Collection & Transportation Information**

Community	1 Service Provider	2 Service Type		3 Payment Method	4 Additional Services	5 Transfer Station		6 Landfill
		Curbside	Drop-off Site			Type A	Type B	
Townships								
Churchill	WM	X	X	I, G, S	RB, RD, YW		X	Northern Oaks
Cumming	WM	X	X	I, G	RB, RD		X	Northern Oaks
Edwards	WM	X		I	RB			Northern Oaks
Foster	WM	X	X	I, G	RB		X	Northern Oaks
Goodar	WM	X	X	I, G	RB		X	Northern Oaks
Hill	WM	X		I	RB			Northern Oaks
Horton	WM	X		I	RB			Northern Oaks
Klacking	WM	X	X	I, G	RB		X	Northern Oaks
Logan	WM	X		I	RB			Northern Oaks
Mills	WM	X		S	RB, RD, YW			Northern Oaks
Ogemaw	WM	X		I, G	RB		X	Northern Oaks
Richland	WM	X	X	I, G	RB		X	Northern Oaks
Rose	WM	X	X	I, G	RB		X	Northern Oaks
West Branch	WM	X	X	I, G	RB	X		Northern Oaks
Village								
Prescott	WM	X		I	RB			Northern Oaks
Cities								
Rose City	WM	X		S	RB			Northern Oaks
West Branch	WM	X	X	G, S	RB, RD, CS YW			Northern Oaks

**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

2. **Service Type.** These columns are marked to indicate whether solid waste is picked up from residences (curbside service) or must be transported to a drop-off site (transfer station or similar arrangement).

3. **Payment Method.** The following codes to indicate the method of payment for services:

I Individuals billed directly for service

G Services are paid for from the local government's General Fund

S A special fee is levied for trash collection, such as a special assessment

4. **Additional Services.** The following codes indicate any additional services that are available.

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

RB Collection of specified recyclable materials from businesses is provided.

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

YW Separate collection of yard waste is provided to residences.

CS A site where residents may drop off yard waste for composting is provided in the community.

5. **Transfer Station.** The columns are marked if a transfer station is located in the community.

Type A transfer stations are generally enclosed facilities where solid waste is mechanically unloaded from commercial collection vehicles. The waste is often compacted for transport to a landfill in large loads.

Type B transfer stations generally consist of roll-off units or "dumpster" containers where residents may directly deposit their garbage. The containers are picked up or emptied by collection vehicles for transport to a landfill.

6. **Landfill.** This entry Indicate the landfill where the solid waste generated in the community is taken for final disposal.

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 Ogemaw 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 (possibly annual drop-off).
2. Frost laws (weight restrictions on roads) complicate collection efforts.
3. Need a County-wide garbage collection requirement.
4. Need greater awareness of recycling; there should be mandatory curbside pickup with realistic incentives.
5. Need better methods of yard waste collection — possibly curbside collection of leaves & grass by vacuum truck.
6. The current system fails to inform people of their options for disposal as well as their responsibility to do so.
7. Current system leaves too much to the individual & fails to provide people with the knowledge to be able to make the right choices.
8. We must develop programs to educate the consumer.
9. Need to generate the money and manpower to create and manage the necessary programs.

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 1997, Ogemaw County's population is estimated to have grown by 12.2%. This represents an annual growth rate of 1.74%. If this trend continues, the county population will reach 23,175 by 2003 and 25,191 by 2008.

Population estimates for the municipalities within the county are available through 1996. Population growth within the local government units during 1990 through 1996 ranged from 6.6% to 12.7%. The greatest population increases were seen in Churchill, Cumming, and Foster Townships. Each of these townships grew by 12.7%. Nine other local units of government grew by over 12% during this period.

The county population centers are the City of West Branch/West Branch Township, Mills Township, and Rose City/Rose Township areas. Together, these communities make up over 50% of the total county population. These areas also represent the centers for manufacturing, retail trade, and services within the county. Consequently, these communities are also the county's centers of solid waste generation. The three areas are expected to remain the centers of both population and solid waste generation for the five-year and ten-year planning periods.

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

Ogemaw County
Current Annual Solid Waste Generation & Disposal

Disposal Facility	Type II Solid Waste	Type III Solid Waste
Northern Oaks RDF (Clare)	6,459 cubic yards	0
Whitefeather (Bay)	67,265 cubic yards	0
City Environmental (Crawford)	85 cubic yards	0
Total	73,809 cubic yards	0

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

Ogemaw County Population Trends

1990 Census	1996 Estimate	1997 Estimate	% Change 1990 – 1997	Average Change Per Year
18,681	20,802	20,955	12.2%	1.74%

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

Ogemaw County
Population and Solid Waste Generation Projections

	1998	2003	2008
County Population	21,320	23,175	25,191
Annual Solid Waste Generation	75,093 cubic yards	81,626 cubic yards	88,727 cubic yards

Projections calculated based on estimated 1997 population of 20,955 and FY 97 solid waste volume of 73,809 cubic yards landfilled. Rate of increase of both population & solid waste landfilled was assumed to be 1.74% 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.

Land cover data for Ogemaw 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:

Woodlands	59%
Agriculture & Open Land	32%
Water Bodies & Wetlands	6%
Urban	3%

As previously described, the county population centers are the West Branch City/West Branch Township, Mills Township, and Rose City/Rose Township areas. Together, these communities make up over 50% of the total county population. These areas also represent the centers for manufacturing, retail trade, and services within the county. Consequently, these communities are also the county's centers of solid waste generation. The three areas are expected to remain the centers of both population and solid waste generation for the five-year and ten-year planning periods.

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. 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 Landfill with Enhanced Recycling & Composting.

Under this option, use of the present landfills outside the county for disposal would be continued. However, attention would 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 B, Enhanced Materials Recovery, is the preferred alternative for both the five-year and ten-year planning periods. 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:

Ogemaw County's selected alternative is to retain the current collection and disposal system while also focusing on enhanced materials recovery efforts. 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 consider the benefits of arranging for solid waste services through municipal contracts, although such arrangements are certainly not mandated.
2. Disposal of Solid Waste. Licensed Type II landfill s in Clare, Bay, Crawford, and Montmorency Counties will meet Ogemaw County's solid waste disposal needs for the planning period.
3. Recycling. Under the selected alternative, the City of West Branch drop-off site will continue to accept recyclable materials. 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, no local governments provide curbside reccycling for their residents through private sector contracts or other means. Recycling services are expected to continue to be mainly provided by private enterprise. However,

SELECTED SYSTEM

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. Collection of yard wastes from residents for composting will be continued by the private sector. Currently, these services are limited to Churchill and Mills Townships. "Backyard" composting by residents will also continue to be encouraged. The City of West Branch will continue to operate a composting site. 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. Again, it is expected that composting services will continue to be furnished by the private sector. The plan, however, does not intend to limit the ability of any local government unit to establish a composting site and program.

5. Separation of Household Hazardous Wastes. There is presently a Groundwater Stewardship program in the county that is aimed at hazardous wastes associated with agriculture. The County should investigate ways to expand this program to serve non-farm residents as well. The County should also 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.

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 MSU Extension. 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.

SELECTED SYSTEM

IMPORT AUTHORIZATION

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

Table 1-A

CURRENT IMPORT VOLUME AUTHORIZATION OF SOLID WASTE

IMPORTING COUNTY	EXPORTING COUNTY	FACILITY NAME ¹	AUTHORIZED QUANTITY/ DAILY	AUTHORIZED QUANTITY/ ANNUAL	AUTHORIZED CONDITIONS ²
Ogemaw	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.

SELECTED SYSTEM

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

Table 1-B

**FUTURE IMPORT VOLUME AUTHORIZATION OF SOLID WASTE
CONTINGENT ON NEW FACILITIES BEING SITED**

IMPORTING COUNTY	EXPORTING COUNTY	FACILITY NAME ¹	AUTHORIZED QUANTITY/ DAILY	AUTHORIZED QUANTITY/ ANNUAL	AUTHORIZED CONDITIONS ²
Ogemaw	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.

SELECTED SYSTEM

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
Ogemaw	Clare		—	—	P
Ogemaw	Bay		—	—	P
Ogemaw	Crawford		—	—	P
Ogemaw	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.

SELECTED SYSTEM

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
Ogemaw	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.

SELECTED SYSTEM

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 Landfill (Crawford County)

Montmorency-Oscoda

Sanitary Landfill

(Montmorency County)

Type B Transfer Facility:

Churchill Twp

Cumming Twp

Foster Twp

Goodar Twp

Type A Transfer Facility:

Waste Management Facility
(West Branch Twp)

Klacking Twp

Ogemaw Twp

Richland Twp

Rose Twp

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: 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: Republic Services

Operating Status (check)

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

Waste Types Received (check all that apply)

- residential
- commercial
- industrial
- construction & demolition
- contaminated soils
- special wastes *
- other: _____

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

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 yds³
 Estimated lifetime: 18.8 years
 Estimated days open per year: 260 days
 Estimated yearly disposal volume: 380,000 tons or yds³

(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: 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)

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

Waste Types Received (check all that apply)

- residential
- commercial
- industrial
- construction & demolition
- contaminated soils
- special wastes *
- other: _____

* Explanation of special wastes, including a specific list and/or conditions:
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 yds³
 Estimated lifetime: 43 years
 Estimated days open per year: 260 days
 Estimated yearly disposal volume: 409,000 tons or yds³

(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)

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

Waste Types Received (check all that apply)

- residential
- commercial
- industrial
- construction & demolition
- contaminated soils
- special wastes *
- other: _____

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

Site Size:

Total area of facility property: 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 yds³
Estimated lifetime: 20 years
Estimated days open per year: 313 days
Estimated yearly disposal volume: 200,000 tons or yds³

(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)

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

Waste Types Received (check all that apply)

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

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

Site Size:

Total area of facility property: 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 yds³
 Estimated lifetime: 30 years
 Estimated days open per year: 310 days
 Estimated yearly disposal volume: 145,000 tons or X yds³

(if applicable)

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

SELECTED SYSTEM

FACILITY DESCRIPTIONS

Facility Type: Type A Transfer Station

Facility Name: West Branch Transfer Station

County: Ogemaw Location: Town: 22N Range: 2E Section(s): 29

Map identifying location included in Attachment Section: Yes No

If facility is an Incinerator or a Transfer Station, list the final disposal site and location for Incinerator ash or Transfer Station wastes: Whitefeather, Waters, Northern Oaks, Montmorency-Oscoda

Public Private Owner: Waste Management

Operating Status (check)

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

Waste Types Received (check all that apply)

- residential
- commercial
- industrial
- construction & demolition
- contaminated soils
- special wastes *
- other: _____

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

Site Size:

Total area of facility property: 14 acres
 Total area sited for use: NA acres
 Total area permitted: NA acres
 Operating: NA acres
 Not excavated: NA acres
 Current capacity: 100 tons/day throughput
 Estimated lifetime: NA years
 Estimated days open per year: 260 days
 Estimated yearly disposal volume: NA tons or yds³

(if applicable)

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

SELECTED SYSTEM

SOLID WASTE COLLECTION SERVICES AND TRANSPORTATION:

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

The existing collection and transportation system, as previously described, will remain in place. The various solid waste collection and transportation firms doing business in the county may change due to municipal contracts, mergers, and other factors. Also, this plan does not preclude public (government) entities from providing solid waste management services.

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.

Currently, the City of West Branch operates a recycling drop-off site that is available to both city residents and county residents who live outside of the city.

Other recycling efforts in the county are chiefly furnished by the private solid waste management industry. These efforts include recycling drop-off sites that are located in conjunction with Type B transfer stations ("green boxes") in Churchill and Cumming Townships. The private sector also provides the collection of recyclable materials (such as cardboard) from businesses throughout the county. However, no curbside collection of recyclable materials is conducted anywhere in the county.

In regard to composting, the private solid waste industry provides yard waste collection in Churchill and Mills Townships. Also, the City of West Branch operates a composting site where residents may deposit yard wastes. No other formal composting programs are presently available.

There are presently no formal programs for separation or collection of potentially hazardous wastes. The Northern Oaks Landfill in Clare County sponsors an annual household hazardous waste collection day at the landfill site. This program is open to Ogemaw County residents.

- 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 feasible for Ogemaw County or the municipalities within the county to conduct such programs due to the high costs involved. Residents will be encouraged to participate in the household waste collection day at the Northern Oaks Landfill in Clare County. Also, the plan calls for the county to work with the private sector to explore opportunities for providing these services in the 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 the tables on pages III-18, 19, & 20 list the existing recycling, composting, and source separation of hazardous materials programs that are currently active in the County and which will be continued as part of this Plan. The second group of three tables on pages III-21, 22, & 23 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.

Currently, the City of West Branch operates a recycling drop-off site that is available to both city residents and county residents who live outside of the city.

Other recycling efforts in the county are chiefly furnished by the private solid waste management industry. These efforts include recycling drop-off sites that are located in conjunction with Type B transfer stations ("green boxes") in Churchill and Cumming Townships. The private sector also provides the collection of recyclable materials (such as cardboard) from businesses throughout the county. However, no curbside collection of recyclable materials is conducted anywhere in the county.

In regard to composting, the private solid waste industry provides yard waste collection in Churchill and Hills Townships. Also, the City of West Branch operates a composting site where residents may deposit yard wastes. No other formal composting programs are presently available.

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
City of West Branch Recycling	Ogemaw County	Priv	d	d	ABDEF	5,6	5	5,6
Churchill Twp Drop-Off Site	Township	Priv	d	d	ABDEF	5	5	5
Cummings Twp Drop-Off Site	Township	Priv	d	d	ABDEF	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 24); 5 = Private Owner/Operator; 6 = Other (Identified on page 24).

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 25.

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.

<u>Program Name</u>	<u>Service Area</u> ¹	<u>Public or Private</u>	<u>Collection Point</u> ³	<u>Collection Frequency</u> ⁴	<u>Materials Collected</u> ⁵	<u>Program Management Development</u>	<u>Responsibilities Operation</u>	<u>Responsibilities Evaluation</u>
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 24); 5 = Private Owner/Operator; 6 = Other (Identified on page 24).

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.

SELECTED SYSTEM

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
Mills Twp Yard Waste	Mills Twp	Priv	c	w	GL	5	5	5
Churchill Twp Yard Waste	Churchill Twp	Priv	c	w	GL	5	5	5
West Branch City Yard Waste	City	Priv	c	w	GL	5	5	5
West Branch City Compost Site	City	Pub	d	d	GL	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 24); 5 = Private Owner/Operator; 6 = Other (Identified on page 24).

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 25.

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
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 24); 5 = Private Owner/Operator; 6 = Other (Identified on page 24).

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 25.

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 Development	Responsibilities ² 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 24); 5 = Private Owner/Operator; 6 = Other (Identified on page 24).

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 25.

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 24); 5 = Private Owner/Operator; 6 = Other (Identified on page 24).

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.

SELECTED SYSTEM

IDENTIFICATION OF RESOURCE RECOVERY MANAGEMENT ENTITIES:

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

Environmental Groups:

None identified with management responsibilities.

Other:

The County Solid Waste Management Advisory Board 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 for furnishing recycling & composting options to county residents, businesses, and industries.

SELECTED SYSTEM

PROJECTED DIVERSION RATES:

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

Collected Material:	Projected Annual Tons Diverted:			Collected Material:	Projected Annual Tons Diverted:		
	Current	5th Yr	10th Yr		Current	5th Yr	10th Yr
A. TOTAL PLASTICS:	_____	_____	_____	G. GRASS AND LEAVES:	_____	_____	_____
B. NEWSPAPER:	_____	_____	_____	H. TOTAL WOOD WASTE:	_____	_____	_____
C. CORRUGATED CONTAINERS:	_____	_____	_____	I. CONSTRUCTION AND DEMOLITION:	_____	_____	_____
D. TOTAL OTHER PAPER:	_____	_____	_____	J. FOOD AND FOOD PROCESSING:	_____	_____	_____
E. TOTAL GLASS:	_____	_____	_____	K. TIRES:	_____	_____	_____
F. OTHER MATERIALS:				L. TOTAL METALS:	_____	_____	_____
F1. All recyclables	1200 cy	1500	2000	F3. _____	_____	_____	_____
_____	_____	_____	_____	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:	_____	_____	G. GRASS AND LEAVES:	_____	_____
B. NEWSPAPER:	_____	_____	H. TOTAL WOOD WASTE:	_____	_____
C. CORRUGATED CONTAINERS:	_____	_____	I. CONSTRUCTION AND DEMOLITION:	_____	_____
D. TOTAL OTHER PAPER:	_____	_____	J. FOOD AND FOOD PROCESSING	_____	_____
E. TOTAL GLASS:	_____	_____	K. TIRES:	_____	_____
F. OTHER MATERIALS:			L. TOTAL METALS:	_____	_____
F1. All recyclables	100%	_____	F3. _____	_____	_____
F2. _____	_____	_____	F4. _____	_____	_____

SELECTED SYSTEM

EDUCATIONAL AND INFORMATIONAL PROGRAMS:

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

Program Topic ¹	Delivery Medium ²	Targeted Audience ³	Program Provider ⁴
12345	wf	phi	SWMAB
_____	_____	_____	& EX
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

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.

SELECTED SYSTEM

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
1. Establish Solid Waste Management Advisory Board (SWMAB) as management agency responsible for overseeing & coordinating plan implementation.	June 1999
2. Promote expansion of recycling activities to include entire county & all feasible materials.	Initiate in Fall 1999; ongoing thereafter.
3. Develop & distribute materials recovery education materials.	Initiate January 2000; ongoing thereafter.
4. Promote composting options.	Initiate in Spring 2000; ongoing thereafter.
5. Establish & promote a household hazardous waste collection program in cooperation with the existing efforts aimed at agricultural generators.	Initiate in Fall 1999.
6. Encourage municipalities to contract for solid waste services.	Initiate in Fall 1999.
7. Review implementation progress & recommend adjustments as needed.	Initiate 6 months after DEQ approval; at 6-month intervals thereafter.

SELECTED SYSTEM

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.

Incinerators and processing plants may not be sited.


SITING CRITERIA AND PROCESS

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

See the attached siting criteria and process.

Siting Process for Solid Waste Disposal Areas

RETURN TO
APPROVAL
LETTER

- A. Proposals for all new solid waste disposal areas must be found consistent with the criteria contained in this section before a determination of consistency with the County Solid Waste Management Plan may be issued. Any proposal for a disposal area type that is not allowed by the Plan is automatically inconsistent with the Plan unless specifically added to the Plan through a properly approved Plan amendment.
- B. Solid waste facility siting proposals will be reviewed for consistency with the Plan by the designated planning agency and approved by the county solid waste management planning committee according to the procedures outlined in this section. A proposal that is found to be consistent with the Plan shall become part of the Plan upon issuance of a construction permit by the DEQ.
- C. To initiate the review process under this Plan, the applicant shall submit the required information as specified in *Part D* below to the county designated planning agency. A reasonable number of copies of the application may be required at the discretion of the designated planning agency. 
- D. Upon receipt of an application, the designated planning agency (DPA) shall review the application for administrative completeness in accordance with the requirements listed in items 1 and 2 below. If the planning agency determines that the application is not complete, the developer shall be notified and given the opportunity to provide the information required to make the application complete. If no determination on completeness is made within 30 days, the application shall be considered administratively complete.
1. The application shall include a name, address, and telephone number for the applicant (including any partners and ownership interests), the current property owner(s) of the site, any consultants that will be involved in the project, and a designated contact person for the facility developer (if different than the applicant). The application shall specify the type of facility being proposed.
 2. The application shall include the following information on the site and the surrounding area:
 - i. A legal land description of the project area;
 - ii. A site map showing all roadways and principal land features with two (2) miles of the site;
 - iii. A topographic map of the site with contour intervals of no more than ten (10) feet;
 - iv. A map and description of all access roads showing their location, surface type, proposed access point(s) to the facility, and waste hauling routes from access roads to the nearest state trunkline;

SELECTED SYSTEM

- v. A map of the proposed site and surrounding area showing current zoning, location of residences, and the present use of all property within one (1) mile of the site;
- vi. A description of the current site use and ground cover;
- vii. A map showing the locations of all existing structures within 1,200 feet of the perimeter of the site;
- viii. The locations of all existing utilities within 1,200 feet of the site;
- ix. The location of the 100-year floodplain as defined by Rule 323.311 of the administrative rules of Part 31, Water Resources Protection, of Act 451 within 1,200 feet of the site;
- x. The locations of all wetlands as defined by Part 303, Wetlands Protection, of Act 451 within 1,200 feet of the site;
- xi. The locations of all public and private water wells within 2,000 feet of the site; and
- xii. The locations of all surface water (lakes, streams, and drains) within 1,200 feet of the site.
- xiii. The site soil types and general geological characteristics.
- xiv. The application shall contain a written narrative description of the proposed site development and facility design, including the proposed final design capacity.
- xv. The application shall contain a written narrative description of the proposed operations of the facility, including the planned annual usage, anticipated sources and types of solid waste, and the facility life expectancy.
- xvi. If necessary to satisfy the requirements of criterion # 14, the application shall include a signed statement indicating the willingness of the facility developer to provide for road improvements and maintenance.

RETURN TO
APPROVAL
LETTER

E. Within ninety (90) days from the date the application is determined to be administratively complete, the designated planning agency shall complete the consistency review and make its recommendations to the county solid waste management planning committee (SWMPC). The planning committee shall send the county's final written determination of consistency for the proposal to the applicant. The SWMPC shall make its final determination of consistency within ninety (90) days of receiving the designated planning agency's consistency review and recommendations. If the SWMPC fails to make a final determination of consistency within the required ninety (90) days, the proposal shall be considered consistent with the plan by default.

F. To be found consistent with the Plan, a proposed solid waste disposal area must comply with all the siting criteria and requirements described in subparts 1 through 14 below. The proposal shall be evaluated solely upon these criteria:

1. If the proposed facility is a sanitary landfill and the County has 66 months or more of disposal capacity remaining for all solid waste generated in the County, the County may, at its discretion, refuse to allow this siting procedure to be used.



SELECTED SYSTEM

Remaining disposal capacity shall be determined by the DPA by using the solid waste generation data contained in this plan and the capacity calculations on page IV-1. Furthermore, the DPA shall verify the capacity remaining at each of the disposal facilities authorized in this plan at the time an application is received.


2. The active work area for new facilities or expansions to existing facilities shall not be located closer than 500 feet to adjacent road rights-of-way, lakes, or perennial streams.
3. The active work area for new facilities or expansions to existing facilities shall not be located closer than 1,000 feet to domiciles existing at the time the application is submitted.
4. The active work area for new facilities or expansions to existing facilities shall not be located closer than 800 feet to adjacent property lines.
5. A sanitary landfill shall not be located within 10,000 feet of a licensed airport runway.
6. A facility shall not be located in a 100 year floodplain as defined by Rule 323.311 of the administrative rules of Part 31, Water Resources Protection, of Act 451.
7. A facility shall not be located in a wetland regulated by Part 303, Wetlands Protection, of Act 451, unless a permit is issued
8. A facility shall not be located on lands enrolled under Part 361, Farmland and Open Space Preservation, of Act 451.
9. A facility shall not be located in an area defined in Section 32301 of Part 323, Shorelands Protection and Management, of Act 451, or in areas of unique habitat as defined by the Department of Natural Resources, Natural Features Inventory.
10. A facility shall not be located in a designated historic or archaeological area as defined by the State Historic Preservation Officer (SHPO).
11. A facility shall not be located in an area of groundwater recharge as defined by the United States Geological Survey or in a wellhead protection area approved by the Michigan Department of Environmental Quality.
12. A facility shall not be located or permitted to expand on land owned by the United States of America or the State of Michigan. Disposal areas may be located on state land only if both of the following conditions are met:
 - a. Thorough investigation and evaluation of the proposed site by the facility developer indicates, to the satisfaction of the DEQ, that the site is suitable for such use.
 - b. The state determines that the land may be released for disposal area purposes

SELECTED SYSTEM

and the facility developer acquires the property in fee title from the state in accordance with state requirements for such acquisition.

13. Solid waste facilities may only be sited on property that is zoned agricultural, commercial, industrial, or other designation that specifically permits such facilities at the time the facility developer applies for a determination of consistency under the Plan. Facilities may not be located on property that is zoned residential.
14. A facility shall be located on a paved, all weather "Class A" road. If a facility is not located on such a road, the facility developer shall provide a signed statement that indicates their willingness to provide for upgrading and maintenance of the road serving the facility.

G. If the applicant does not agree with the consistency determination made by the County solid waste management planning committee, the applicant may request that the DEQ determine the consistency of the proposal with the Plan as part of DEQ review of a construction permit application.

H. If the proposal is found to be inconsistent with the Plan, the applicant may provide additional information to address the identified deficiencies. The designated planning agency may only determine consistency on such a re-submittal in regard to the criteria originally found to be deficient. 

I. The final determination of consistency with the Plan shall be made by the DEQ upon the applicant's submission of an application for a construction permit.

RETURN TO
APPROVAL
LETTER

SELECTED SYSTEM

SOLID WASTE MANAGEMENT COMPONENTS¹

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

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

B. Collection and Transportation of Solid Waste

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

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.

There is currently no county agency with the administrative and technical capabilities to operate a solid waste disposal facility. The County Board of Public Works has the legal authority to own and operate a solid waste facility in accordance with this plan and applicable laws. However, the County Board of Public Works is not currently authorized to take on this responsibility.

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

D. Financial Capabilities

The municipalities and residents of Ogemaw County have the capability to finance the collection and transportation of solid waste by entering into contracts with private haulers. Ogemaw 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 Ogemaw County Board of Commissioners has the authority to identify and bring suit for violations of this plan.



RETURN TO
APPROVAL
LETTER

Recommended Management System

The updated plan recommends the establishment of a single advisory body at the county level to oversee plan implementation, in coordination with the County Board of Public Works. This body would address various tasks and make recommendations within the areas specified in the plan. The advisory body will represent the same groups as specified for planning committees in Act 451. However, to distinguish the role of the advisory board from that of the planning committee, the body will be called the Ogemaw County Solid Waste Management Advisory Board (SWMAB). The Advisory Board may require staff assistance to carry out its duties, and the county may assign staff for this purpose. Alternatively, the county may contract with the regional solid waste planning agency (the current DPA) or other qualified personnel to assist the SWMAB as needed.

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

SELECTED SYSTEM

IDENTIFICATION OF RESPONSIBLE PARTIES

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

Resource Conservation:

Source or Waste Reduction – All citizens, businesses, and industries. Educational & promotional efforts led by Solid Waste Management Advisory Board (SWMAB).

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

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

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

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

Resource Recovery Programs:

Composting – Private solid waste industry, municipalities, residents.

Recycling – SWMAB (promotion & education), municipalities, businesses, industries, residents, private solid waste industry.

Energy Production – Not included in plan.

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

SELECTED SYSTEM

Collection Processes: Private solid waste industry & municipalities.

Transportation: Private solid waste industry.

Disposal Areas:


Processing Plants – Not permitted under plan.

Incineration – Not permitted under plan.

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: SWMAB (plan implementation monitoring); Michigan DEQ (Act 451 enforcement). 

Educational and Informational Programs:

Documentation of acceptance of responsibilities is contained in Appendix D.

RETURN TO
APPROVAL
LETTER

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.

1. Ancillary facility design elements, such as 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.

CAPACITY CERTIFICATIONS

Every County with less than ten years of capacity identified in their Plan is required to annually prepare and submit to the DEQ an analysis and certification of solid waste disposal capacity validly available to the County. This certification is required to be prepared and approved by the County Board of Commissioners.

- This County has more than ten years capacity identified in this Plan and an annual certification process is not included in this Plan.
- Ten years of disposal capacity has not been identified in this Plan. The County will annually submit capacity certifications to the DEQ by June 30 of each year on the form provided by DEQ. The County's process for determination of annual capacity and submission of the County's capacity certification is as follows:

CAPACITY CALCULATIONS

The following summarizes the listed capacity for the various facilities that Iosco County will use to meet its disposal capacity requirements.

<u>Facility</u>	<u>Capacity (cubic yards)</u>	<u>Life Expectancy (Years)</u>
Northern Oaks (Clare County)	8,755,100	43
Whitefeather (Bay County)	4,175,153	18
Waters (Crawford County)	5,700,000	20
Montmorency-Oscoda (Montmorency County)	3,500,000	30
TOTAL	22,130,253	

Over the next ten years (2001 – 2010), Ogemaw County is projected to generate a total volume of about 800,000 cubic yards of solid waste. This figure is based on current disposal volumes and projected county growth. The figure has not been adjusted for any additional diversion that may occur due to increases in materials recovery volumes. For final disposal volumes, a compaction ratio of 2:1 has been assumed. On this basis, Ogemaw County will require 400,000 cubic yards of landfill capacity for the next 10 years. This represents about 1.8% of the total capacity shown above.

Based on the listed capacity available at the landfills shown above, Ogemaw County has access to sufficient disposal capacity for over 30 years.

APPENDIX

ADDITIONAL INFORMATION

REGARDING THE

SELECTED

SYSTEM

Ogemaw County

EVALUATION OF RECYCLING

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

Currently, the City of West Branch operates a recycling drop-off site that is available to both city residents and county residents who live outside of the city.

Other recycling efforts in the county are chiefly furnished by the private solid waste management industry. These efforts include recycling drop-off sites that are located in conjunction with Type B transfer stations ("green boxes") in Churchill and Cumming Townships. The private sector also provides the collection of recyclable materials (such as cardboard) from businesses throughout the county. However, no curbside collection of recyclable materials is conducted anywhere in the county.

In regard to composting, the private solid waste industry provides yard waste collection in Churchill and Mills Townships. Also, the City of West Branch operates a composting site where residents may deposit yard wastes. No other formal composting programs are presently available.

There are presently no formal programs for separation or collection of potentially hazardous wastes. The Northern Oaks Landfill in Clare County sponsors an annual household hazardous waste collection day at the landfill site. This program is open to Ogemaw County residents.

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 Ogemaw County. The volumes of various materials have been estimated based on the solid waste components identified in the previous (1989) County Solid Waste Plan and current solid waste generation estimates. The following estimates are based on total annual solid waste generation of about 25,000 tons.

Material	% of Waste Stream	Annual Quantity (Tons)
Paper (all types)	15%	3,750
Plastics	9%	2,250
Glass	5%	1,250
Ferrous metals	7%	1,750
Aluminum	0.8%	200
Yard waste	4%	1,000

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:

Equipment selection is primarily addressed by the private sector in furnishing services for collection of recyclable materials and yard waste. Municipalities that provide some form of yard waste collection utilize normal public works equipment such as portable chippers for brush and vacuum units for leaf collection. No specific problems with equipment selection have been reported and no major new equipment needs have been identified.

Proposed Programs:

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

Site Availability & Selection

Existing Programs:

Recycling drop-off sites are typically established as needed by private industry adjacent to Type B transfer facilities. Private firms that collect yard waste have made adequate arrangements for composting areas, usually adjacent to private landfill sites. Municipalities that collect yard waste and brush generally utilize vacant publicly-owned sites for placement of material.

The City of West Branch has operated a recycling drop-off site on North 4th Street adjacent to a vacant City garage. This site includes a reinforced concrete pad, shed, and compactor units. The continued use of this site in the future was under study by the City and County when this plan update was in preparation.

Proposed Programs:

No new programs or siting needs have been identified.

Composting Operating Parameters:

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

Not applicable: There are no commercial composting operations in the County.

Existing Programs:

<u>Program Name:</u>	<u>pH Range</u>	<u>Heat Range</u>	<u>Other Parameter</u>	<u>Measurement Unit</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

Proposed Programs:

<u>Program Name</u>	<u>pH Range</u>	<u>Heat Range</u>	<u>Other Parameter</u>	<u>Measurement Unit</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

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 Ogemaw 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 Ogemaw County Board of Commissioners may negotiate arrangements with other counties for acceptance of solid waste generated in Ogemaw County. These arrangements may include written inter-county agreements, if required by the importing counties.
3. This updated plan calls for the creation of a Solid Waste Management Advisory Board (SWMAB) to oversee and generally coordinate the implementation of the plan. As such, the SWMAB will work in cooperation with County government, local government units, the private solid waste industry, businesses, industries, institutions, and the general public to facilitate the various actions required to carry out the updated Solid Waste Management Plan.
4. Ogemaw County is a member of the East Central Michigan Planning & Development Regional Commission (ECMPDR). ECMPDR is a regional planning agency and also serves as Ogemaw County's designated solid waste management planning agency. ECMPDR promotes multijurisdictional communication and cooperation among its member counties regarding solid waste management and other issues.

COSTS & FUNDING:

The following estimates the necessary management, capital, and operational and maintenance requirements for each applicable component of the solid waste management system. In addition, potential funding sources have been identified to support those components.

System Component ¹	Estimated Costs	Potential Funding Sources
Resource Conservation Efforts	None	Private enterprise -- voluntary efforts by businesses, industries & institutions.
Resource Recovery Programs	Unknown	Ogemaw County Board of Commissioners, material sales, municipalities, private enterprise.
Volume Reduction Techniques	Unknown	Private enterprise
Collection Processes	Unknown	Private enterprise & customer fees.
Transportation	Unknown	Private enterprise
Disposal Areas	Unknown	Private enterprise & customer fees.
Future Disposal Area Uses	None	Private enterprise & host counties.
Management Arrangements	None or minor cost	Ogemaw County Board of Commissioners
Educational & Informational Programs	None or minor cost	Ogemaw County Board of Commissioners, private enterprise, municipalities.

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

EVALUATION SUMMARY OF THE SELECTED SYSTEM:

The solid waste management system has been evaluated for anticipated positive and negative impacts on the public health, economics, environmental conditions, siting considerations, existing disposal areas, and energy consumption and production which would occur as a result of implementing this Selected System. In addition, the Selected System was evaluated to determine if it would be technically and economically feasible, whether the public would accept this Selected System, and the effectiveness of the educational and informational programs. Impacts to the resource recovery programs created by the solid waste collection system, local support groups, institutional arrangements, and the population in the County in addition to market availability for the collected materials and the transportation network were also considered. Impediments to implementing the solid waste management system are identified and proposed activities which will help overcome those problems are also addressed to assure successful programs. The Selected System was also evaluated as to how it relates to the Michigan Solid Waste Policy's goals. The following summarizes the findings of this evaluation and the basis for selecting this system:

The selected system is technically and economically feasible. All of the major components, including collection, transportation, disposal, recycling, and composting are proven technologies that are currently in place and have been accepted by the public. To a large degree, the selected plan is a continuation of the current management system. The main difference is that the updated plan calls for continued expansion and improvement of materials recovery efforts for recycling and composting.

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

PUBLIC HEALTH

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

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

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

ECONOMICS

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

of materials that could be recycled or reused at a lower cost than the manufacture of new materials.

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

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

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

ENVIRONMENTAL CONDITIONS

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

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

SITING CONSIDERATIONS

The selected system will have minimal impacts on siting because no new facilities are proposed. Landfills are extremely difficult to site because of public opposition and the need to identify an environmentally sound location that will meet all Act 451 requirements. Ogemaw County has access to sufficient capacity for the next 10 years and does not need to site a new landfill.

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

EXISTING DISPOSAL AREAS

The selected plan relies on existing landfills in surrounding counties to provide disposal capacity for the next 10 years. No new landfills will be required. Also, solid waste that is generated in Ogemaw County is currently going to the landfills identified in this plan for disposal. Therefore, the continued acceptance of Ogemaw County solid waste will not have an impact on the operations of the current landfills.

ENERGY CONSUMPTION AND PRODUCTION

The selected plan relies on landfills located in other counties for the disposal of Ogemaw

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

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

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

ADVANTAGES AND DISADVANTAGES OF THE SELECTED SYSTEM:

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

ADVANTAGES:

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

DISADVANTAGES:

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

NON-SELECTED

SYSTEMS

Before selecting the solid waste management system contained within this Plan update, the County developed and considered other alternative systems. The details of the non-selected systems are available for review in the County's repository. The following section provides a brief description of these non-selected systems and an explanation why they were not selected. Complete one evaluation summary for each non-selected alternative system.

ALTERNATIVE A: RETAIN THE CURRENT SYSTEM (STATUS QUO)

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

ALTERNATIVE C: REGIONAL SOLID WASTE MANAGEMENT SYSTEM

This alternative called for the creation of a regional solid waste management system in cooperation with several surrounding counties, such as Arenac, Roscommon, and Gladwin. This option would involve the creation of a formal solid waste management authority or similar entity.

SYSTEM COMPONENTS:

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

RESOURCE CONSERVATION EFFORTS:

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

Alternative C: Same as Alternative A.

VOLUME REDUCTION TECHNIQUES:

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

Alternative C: Same as Alternative A.

RESOURCE RECOVERY PROGRAMS:

Alternative A:

1. Continuation of current recycling collection programs.
2. Yard waste collection by private industry & municipalities.
3. Home composting by residents.

Alternative C:

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

COLLECTION PROCESSES:

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

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

TRANSPORTATION:

Alternative A: Transportation mainly by private solid waste industry.

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

DISPOSAL AREAS:

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

Alternative C: Same as Alternative A.

INSTITUTIONAL ARRANGEMENTS:

Alternative A:

1. Arrangements for solid waste collection & transportation under municipal contracts and individual subscriptions with residents & businesses.

Alternative C:

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

EDUCATIONAL AND INFORMATIONAL PROGRAMS:

Alternative A: No formal countywide programs.

Alternative C:

1. Programs carried out by multi-county authority.

CAPITAL, OPERATIONAL, AND MAINTENANCE COSTS:

Alternative A:

1. No major capital costs.

Alternative C:

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

EVALUATION SUMMARY OF NON-SELECTED SYSTEM:

The non-selected system was evaluated to determine its potential of impacting human health, economics, environmental, transportation, siting and energy resources of the County. In addition, it was reviewed for technical feasibility, and whether it would have public support. Following is a brief summary of that evaluation along with an explanation why this system was not chosen to be implemented.

ALTERNATIVE A:

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

1. Alternative A would have a lower capital cost than the selected system because no new facilities would be required, and the MRF would not be expected to expand its operations. However, revenues from material sales would be lower than for the selected plan.
2. Alternative A would require an even greater reliance on landfills because materials recovery activities would not expand much above current levels.

3. Energy consumption would be greater than for the selected alternative because larger volumes of solid waste would need to be transported to out-of-county landfills for disposal. Also, a lower volume of material would be reused or recovered, representing a greater loss of resources.

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

ALTERNATIVE C

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

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

Conclusions

Alternative C was not selected for the following major reasons:

1. A major problem associated with the alternative is the complexity of creating a regional solid waste authority. In particular, there does not presently appear to be any strong support for this concept. Local governments are likely to perceive the creation of a solid waste authority as a loss of home rule authority. Also, the formation of an authority would likely be perceived as

creating another level of government ("bureaucracy") and would meet with public opposition. The private solid waste industry would probably also oppose the formation of an authority as excessively restrictive or unfairly competitive. Without strong support by elected officials, the public, and private industry, a proposed solid waste authority would not succeed.

2. Many of the objectives of Alternative C could be accomplished informally under the selected system, without the difficulties of establishing a formal authority.
3. There are simply too many technical, economic, and political uncertainties to make a regional system feasible at this time. However, the concept does hold potential, and it should be 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.

ALTERNATIVE A ADVANTAGES:

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

DISADVANTAGES:

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

ALTERNATIVE C

ADVANTAGES:

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

DISADVANTAGES:

1. Significant barriers to formation & acceptance of solid waste authority.
2. Potentially high capital costs for new regional facilities.
3. Opposition by public to siting any solid waste facilities.

PUBLIC PARTICIPATION

PUBLIC PARTICIPATION AND APPROVAL

The following summarizes the processes which were used in the development and local approval of the Plan including a summary of public participation in those processes, documentation of each of the required approval steps, and a description of the appointment of the solid waste management planning committee along with the members of that committee.

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

1. A notice and proposed agenda for each Planning Committee meeting was sent to the chief elected official of each municipality in the County.
2. Time for public comment was reserved on the agenda for each meeting of the Planning Committee.
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.
7. An additional notice was published about 10 days before the close of the public comment period to advise all interested persons of the continued availability of the draft plan and the opportunity to submit comments.

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:

March 17, 1998
April 21, 1998
May 19, 1998
June 23, 1998
July 28, 1998
August 25, 1998
September 29, 1998
October 20, 1998
December 15, 1998
January 26, 1999

PLAN APPROVALS:

The updated County Solid Waste Management Plan was approved by the County Solid Waste Management Planning Committee on January 26, 1999.

The updated Solid Waste Management Plan was approved by the Ogemaw County Board of Commissioners on July 25, 2001.

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

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

The updated Solid Waste Management Plan was submitted to the Michigan Department of Environmental Quality on September 27, 2002.

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

PUBLIC PARTICIPATION

PLANNING COMMITTEE APPOINTMENT PROCEDURE:

The members of the Ogemaw County Board of Commissioners compiled a list of candidates to serve on the committee in each of the areas of representation required by Part 115 of Act 451. After reviewing and discussing the candidates, the County Board appointed the committee on February 25, 1998.

PUBLIC PARTICIPATION

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. Richard Leszcz, Waste Management
2. Jeff Campeau, Waste Management
3. Wayne Follenius, Waste Management
4. Fred Still, City Environmental Services, Committee Vice-Chair

One representative from an industrial waste generator:

1. Bruce Kempel

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

1. Mieka Emerson, West Branch,
2. Joe Kruch, West Branch

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

1. Ron Knight, County Board of Commissioners, Committee Chair

One representative from township government:

1. Robert Dickson, Mills Township Supervisor

One representative from city government:

1. Clarice Sperry, West Branch City Council

One representative from the regional solid waste planning agency:

1. Lila Fegan, East Central Michigan Planning & Development Regional Commission, Committee Secretary

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

1. David LaPoint, Alger
2. Bruce Reetz, West Branch
3. Robert Reid, Lupton

Notice of Public Meeting

**Ogemaw County Solid Waste Management
Planning Committee**

Date: Tuesday, September 29, 1998

Time: 6:00 p.m.

Place:

Ogemaw County Building
806 W. Houghton Avenue
West Branch, Michigan 48661
New Commissioners' Room (2nd Floor)

Agenda

1. CALL TO ORDER
2. APPROVAL OF MINUTES
3. APPROVAL OF AGENDA
4. COMMUNICATIONS
5. WORK SESSION: COUNTY SOLID WASTE MANAGEMENT
PLAN UPDATE
 - a. Review Draft Plan Update (will be mailed separately to SWMPC members on 9/22)
 - b. Establish public review period for draft Plan Update
 - c. Set date for public hearing on draft Plan Update
6. PUBLIC COMMENT
7. ADJOURNMENT

Ogemaw County Solid Waste Committee Meeting

September 29, 1998

Meeting was called to order by Chairman, Ron Knight at 6:08 p.m.

Members Present:

Lila Fegan, Ron Knight, Robert Dickson, Rich Leszez, Robert Reid, Mieka Emerson, Clarise Sperry, Bruce Reetz, David LaPoint, Joe Kruch and Sally Reid, Alternate.

Also present, Doug Bell, Consultant; Tim Jeshnsver, Steve Swenzeyski, Dale E. Behlamer, Ron Zonem, Margaret Winslow, Sue Delhanty, Phil Shaw
Committee members absent: Bruce Kemple.

A MOTION by Rich SUPPORTED by Bob that the July 28th, with correction of Sally Reid present and Bruce Reetz absent and August 25th minutes be approved. ALL AYES. M/C.

Rich also, noted that the merger of waste corps. has a new name of Waste Management, Inc. (WMI).

Ron asked for public comment and Sue stated they were here with a concern on pick-up of solid waste, they had ran a curb side pick-up proposal on the ballot in the August election and it did not pass. Phil stated it was a hazard on people with little income and little waste. They are looking at a cost effective way for everyone to have waste picked up. Doug stated it is not part of the plan as to how to pick up waste but how to dispose of it. Sue: Please keep in mind how to handle the problem and not see it in woods and ditches. Ron: too bad their twp. rejected the pick up as they don't have another alternative and he is not in favor of a county wide millage. A lengthy discussion followed with no solution for W.B. Twp.

We then reviewed the rough draft of the plan with 1200 cu. yd of composting added to the plan. What all is available at Mills Twp.? As of Sept. '98' Jeff Campeau and Fred Still are no longer members of the committee. Recommendations should be made at Oct. meeting to replace them.

Maps and graphs are needed for locations and data on recycle products and quantities of yard waste.

Republic Waste has bought White Feather Facility

Our next meeting is scheduled for October 20th at which time we hope to agree to present the plan to the other governmental bodies and set the date for the public hearing.

MOTION by Bob SUPPORTED BY Clarice to Adjourn. All in favor. M/C.

We adjourned at 7:10 p.m.


Lila Fegan, Secretary

**Public Notice of Availability
Proposed Update of the
Ogemaw County Solid Waste Management Plan**

The Ogemaw County Solid Waste Management Planning Committee (SWMPC) has prepared a draft update of the Ogemaw 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 proposed Solid Waste Management Plan will be available for public review and comment through the close of business on January 26, 1999. The plan is available for inspection and copying at cost at the Ogemaw County Clerk's Office, Ogemaw County Building, 806 W. Houghton Avenue, West Branch, MI 48661 during regular business hours. The draft plan is also being sent to the Clerk of each township, city, and village in Ogemaw County.

The East Central Michigan Planning & Development Regional Commission (ECMPDR) is the designated solid waste management planning agency for Ogemaw County. The draft plan is also available for inspection at the ECMPDR office at 3535 State Street, Saginaw, MI 48602, telephone 517-797-0800.

Written comments on the draft plan should be sent to ECMPDR at the address given above. Written comments may also be sent to ECMPDR by fax at 517-797-0896. Please submit written comments so that they are received by January 26, 1999.

Please also note that a public hearing will be held on December ^{15th} ~~15th or 22nd~~, 1998 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 updated Ogemaw County Solid Waste Management Plan are welcomed and encouraged.

Memorandum

October 27, 1998

TO: Ogemaw County Clerk's Office
Clerk of each Township, Village, and City in Ogemaw County

FROM: Ogemaw County Solid Waste Management Planning Committee

RE: **Draft Ogemaw County Solid Waste Management Plan Update**

A draft copy of the Ogemaw 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 **January 26, 1999**. **Please submit written comments so that they are received no later than January 26, 1999**. Written comments on the draft plan should be sent by mail or fax to the East Central Michigan Planning & Development Regional Commission (ECMPDR), the designated solid waste management planning agency, at the address given below:

East Central Michigan Planning & Development Region
3535 State Street
Saginaw MI 48602
Telephone 517-797-0800
Fax 517-797-0896

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

Please also note that a public hearing has been scheduled for **December 15, 1998** to receive written and verbal comments on the draft plan. A separate 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 Ogemaw County Solid Waste Management Plan are welcomed and encouraged.

Notice of Public Meeting

**Ogemaw County Solid Waste Management
Planning Committee**

Date: Tuesday, December 15, 1998

Time: 6:00 p.m.

Place:

Ogemaw County Building
806 W. Houghton Avenue
West Branch, Michigan 48661
County Commissioners' Meeting Room (1st Floor)

Agenda

1. CALL TO ORDER
2. APPROVAL OF MINUTES
3. APPROVAL OF AGENDA
4. COMMUNICATIONS
5. PUBLIC HEARING ON THE PROPOSED COUNTY SOLID WASTE
MANAGEMENT PLAN UPDATE
6. ANY OTHER BUSINESS
7. PUBLIC COMMENT (For items not on the agenda)
8. ADJOURNMENT

Ogemaw County Solid Waste Committee Meeting

December 15, 1998

Meeting was called to order by Chairman, Ron Knight at 6:00 p.m.

Members Present:

Lila Fegan, Ron Knight, Rich Leszez, Clarise Sperry, Joe Kruch, and Robert Dickson

Also present, Doug Bell, Consultant;

Committee members absent: Bruce Kempel, Mieka Emerson, Wayne Fallemus, Robert Reid, Mieka Emerson, Dave LaPoint, Bruce Reetz & Jeff Campeau

A MOTION by Clarise SUPPORTED by Rich to accept minutes of Oct. 20th
Note: There was not a quarm so the motion and support was withdrawn.
There were no communications.

PUBLIC HEARING: Chairman Ron declared the public hearing open at 6:05.
There was no public.

Doug comments: Clare County is including Ogemaw County in their plan.
Lila asked: Has Crawford County been contacted and asked if we may be included in their plan. Doug answered: That they have been contacted.
Clarise asked: There has been some input from past meetings and how they would be initiated into the plan; such as recycling? Doug answered: This would be part of the administrative Committee. The administrative committee will plan to meet once the plan is approved; could be about May. Clarise asked: would Bd of Comm. need to be asked to approve plan? Doug answered: This committee needs to approve at end of Jan. then any input from the public needs to be addressed then it will go to commissioners and ask for approval.

There have been no comments from the twps. who have received the draft of the plan, so we assume they think it is in order.

A note will go out to municipalities to let them know they have time for any comments and hope they will take time to respond before the next public hearing which will be held on January 26, 1999.

Joe asked Rich about recycling at school and how it could be coordinated Rich said he would contact Tim Johnston and have him contact Joe. Maybe they can work something out.

Packaging products is a big problem and is it always necessary: Committee discussed some of the problems: such as paint, hazardous waste, toxics and how people misuse these products. These are some things the administrative committee will work on.

Public Hearing closed at 6:25 p.m.

Doug announced next meeting will be held on Tues., January 26th at 6 p.m.

IT IS VERY IMPORTANT THAT ALL MEMBERS BE PRESENT

Lila announced this would be her last meeting. The person who represents the board of commissioners on the East Central Michigan Planing Comm. will need to be on this committee as that is who Lila represents.

Lila moved to adjourn at 6:30, supported by Joe. ALL AYES.

Lila Fegan
Lila Fegan, Secretary

OGEMAW SOLID WASTE MANAGEMENT PLAN COMMITTEE

January 26, 1999

Present: Doug. Bell, Robert Dickson, Clarice Sperry, Richard Lesziz, Ron Knight, Clyde Sheltroun, David LaPointe, Joe Kruch, Bruce Reetz

The meeting was called to order by Chairman Ron Knight.

Motion to approve the minutes by Richard, seconded by Robert Dickson. Motion carried.

Review of public comments: Doug Bell reported that only one comment was received following the public hearing, this being a letter from the City of West Branch offering its recycling building to the County of Ogemaw for operation. The chairman noted no action has been taken by the County on this matter. This matter was discussed at great length. It was noted that Mills Township and Cummings Township already have recycling. Clarice explained that a letter had recently gone out to the Townships informing them of the percentage of total use by residents of their townships, and asking that they contribute on that basis. She also noted that the West Branch Recycling Center is included in our solid waste plan and that we have urged efforts toward recycling. She stated that if West Branch does not receive some financial assistance from the townships using it, or the county, it might have to close down the recycling center.

Mr. Dickson suggested consideration of regional recycling centers. He also suggested some type of addition of \$1.00 per parcel to the equalization fees to cover some of the costs within each area. He also noted that we need to look at a composting site.

Ron stated that if the County were to take over the West Branch recycling site there would probably be complaints from Mills and Cummings Townships. Doug suggested some discussions between the City and the County in order to keep the plan operational with recycling efforts being a part of the plan. It was also suggested that this could be presented to the Township Association for discussion by this committee. Doug suggested investigation of recycling and funding on an area-wide basis.

Ron indicated he would bring this up to the County Board of Commissioners and suggested that Clarice be there to discuss it. He noted he would also like to see some Township representation at the meeting.

Doug outlined the procedure for presenting the Solid Waste Plan being that when the Committee members are satisfied with it, then it will need to be

recommended to the County Board of Commissioners. He suggested adding the recommendation regarding the West Branch Center. He noted that after the County Board of Commissioners receives the plan, it then goes to the Townships and municipalities. He stated it will probably not be finalized for 60 days after it goes to the Townships. Doug will add some language to the plan regarding the West Branch Recycling Center.

* [Motion by Richard, seconded by Robert Dickson to approve the plan and send it on to the County Board of Commissioners for their review. Motion carried.

Ron Knight distributed a news item regarding waste coming into the State of Michigan from Canada and other states. Richard stated that they are aware of it coming into the southern part of the State, but that he is not aware that it is coming into the northern part of the State. After some discussion, it was noted by Doug Bell that we cannot address this since the States have no authority to prohibit it. Mr. Dickson suggested the Commissioners pass a resolution regarding this and Richard suggested it be brought up at the Michigan Township Association.

Ron Knight asked if some of the committee would be present at the Board of Commissioners Meeting when the plan is reviewed by them. He will talk to the Board about a date to present the Plan.

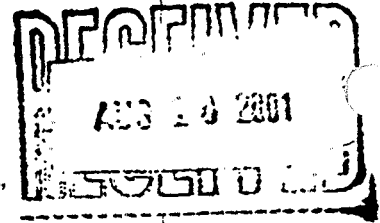
There was no public comment.

Motion to adjourn by Richard, seconded by Robert Dickson. Motion carried. The meeting adjourned at 7:00 P.M.

Clarice L. Sperry
Acting Secretary

Chairman Sperry called a regular meeting of the County Board of Commissioners to order at 7:00 p.m. in the Commissioner's Chambers of the County Building

All stood for the Pledge of Allegiance. Roll call: Present – Clarice Sperry, Clyde Sheltroun, Ron Knight, Rose Walsh, Beverly Scott, John Williams and Joe Bell.



Motion by Scott, second by Bell, the minutes of the July 11, 2001 open meeting be approved as noted. Voice vote. Ayes – all. Motion carried. [7-2-#1]

Motion by Scott, second by Williams, the minutes of the July 11, 2001 closed session be approved as noted. Voice vote. Ayes – all. Motion carried. [7-2-#2]

CORRESPONDENCE:

The Clerk read a letter from Abigail Nelkie. Ms. Nelkie requested the Board to adopt a resolution proclaiming 2002 – The Year of 4-H. Motion by Sheltroun, second by Knight, the Board adopt a resolution hereby proclaiming 2002 – The Year of 4-H. Roll call vote. Ayes – Sperry, Sheltroun, Knight, Walsh, Scott, Williams and Bell. Motion carried. [7-2-#3]

Motion by Sheltroun, second by Knight, the Board appoint Arlene Wolf to the Ogemaw County FIA board. Her term is effective October 1, 2001. Roll call vote. Ayes – Sheltroun, Knight, Walsh, Scott, Williams, Bell and Sperry. Motion carried. [7-2-#4]

Motion by Williams, second by Bell, the Board authorize a maximum of \$1,000 to the Ogemaw County Apportionment Commission for legal expenses for a total of \$4,000. Roll call vote. Ayes – Knight, Walsh, Scott, Williams, Bell, Sperry and Sheltroun. Motion carried. [7-2-#5]

Motion by Scott, second by Walsh, the Board table any formal action on the U.S. Forest Service – Secure Rural Payments Program. Voice vote. Ayes – all. Motion carried. [7-2-#6]

* Motion by Knight, second by Sheltroun, the Board approve the updated Ogemaw County Solid Waste plan. Roll call vote. Ayes – Walsh, Scott, Williams, Bell, Sperry, Sheltroun and Knight. Motion carried. [7-2-#7] The Chairman stated planner Doug Bell informed her the Clare County InterCounty Agreement is not acceptable. Clare County will be contacted to modify the language so that it is suitable.

NEW BUSINESS:

Motion by Williams, second by Knight, the Board adopt Text Amendment #1-2001 as presented. Roll call vote. Ayes – Scott, Williams, Bell, Sperry, Sheltroun, Knight, and Walsh. Motion carried. [7-2-#8]

Motion by Scott, second by Williams, the Board approve the *Easement for Overhead Electric Line* as requested by Consumers Energy and authorize the Chairman to sign. Roll call vote. Ayes – Williams, Bell, Sperry, Sheltroun, Knight, Walsh and Scott. Motion carried. [7-2-#9]

Motion by Knight, second by Williams, the Board appoint Mark Surbrook as the employer representative for the annual MERS conference. Voice vote. Ayes – all. Motion carried. [7-2-#10]

CLERK/TREASURER REPORT:

The Clerk informed the Board our county map supply is low. We can combine an order with the County Road Commission. Motion by Sheltroun, second by Walsh, the Board authorize the purchase of 3,000 county maps in conjunction with an order placement by the Ogemaw County Road Commission with Cadillac Printing & Map Company. Roll call vote. Ayes – Sperry, Sheltroun, Knight, Walsh, Scott, Williams and Bell. Motion carried. [7-2-#11]

**GOODAR TOWNSHIP, OGEMAW COUNTY, STATE OF MICHIGAN
RESOLUTION FOR ACTION ON THE OGEMAW COUNTY SOLID WASTE
MANAGEMENT PLAN UPDATE # 2002-02**

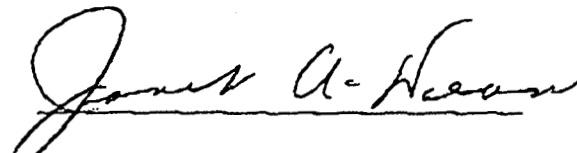
WHEREAS, Ogemaw County has prepared an updated Solid Waste Management Plan in accordance with Part 115 of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended; and

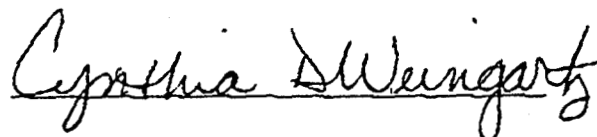
WHEREAS, The Ogemaw County Board of Commissioners has now approved the plan as prepared and submitted by the County Solid Waste Management Planning Committee; and

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

NOW, THEREFORE, BE IT RESOLVED that the Board of Trustees of this municipality hereby Approves the Ogemaw County Solid Waste Management Plan Update in accordance with Act 451, as amended.

Resolution declared adopted at a regular meeting of the Board of Trustees of Goodar Township held on July 16, 2002.


Supervisor


Clerk

BY
GARY R. KLEASING
OGEMAW COUNTY CLERK

02 JUL 24 PM 2:29

00000000

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

WHEREAS, Ogemaw 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 Ogemaw 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 HILL
(Township/City/Village) *(Name of Local Unit)*

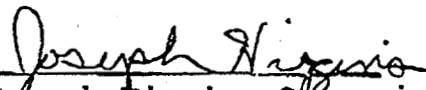
has reviewed the updated Solid Waste Plan and its recommendations;

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

municipality hereby APPROVES
(Approves/Disapproves)

the Ogemaw 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 HILL TOWNSHIP held on JULY 02, 2002.
(Name of Local Unit) *(Date)*


Joseph Higgins, Supervisor
Chief Elected Official


Carol Gillman
Clerk

GARY N. MACKING
OGEMAW COUNTY CLERK

02 JUL 10 PM 1:13

RECEIVED

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

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

WHEREAS, The Ogemaw Twp of Ogemaw
(Township/City/Village) (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 Ogemaw 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 Ogemaw Twp held on Sept 11, 2002.
(Name of Local Unit) (Date)

Joel A. Shelton
SUPERVISOR
Chief Elected Official

J. Virginia Lonsman
Clerk

Post-It® Fax Note 7671		Date 4-19	# of pages 2
To SAG. CO. PLAN.	From Lynne		
Co./Dept. Doug Ben	Co. ECMPDR		
Phone #	Phone #		
Fax # 797-6809	Fax #		

ORIGINALS HERE

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

WHEREAS, Ogemaw 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 Ogemaw 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 KLACKING TOWNSHIP
(Township/City/Village) (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)

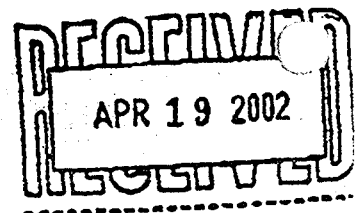
the Ogemaw County Solid Waste Management Plan Update in accordance with Act 451, as amended.

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

of KLACKING held on 4-17-, 2002.
(Name of Local Unit) (Date)

Stephan Swagowski
Chief Elected Official

Linger Houghtaling
Clerk



Horton Township
Regular Meeting
March 11, 2002

Moved by Wolf, second by Koelsch that the following resolution be adopted:

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

WHEREAS: Ogemaw 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 Ogemaw 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 Horton has reviewed the updated Solid Waste Plan and its recommendations;

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

Call for vote: Wolf, Koelsch and Rohrer – Aye. Lehman and Zettel – Absent. Motion carried.

I certify this to be a true excerpt of the minutes of said meeting of the Horton Township Board on the date shown above.

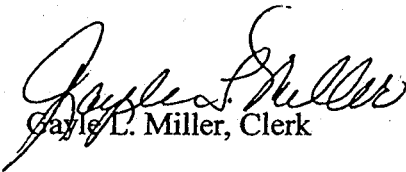


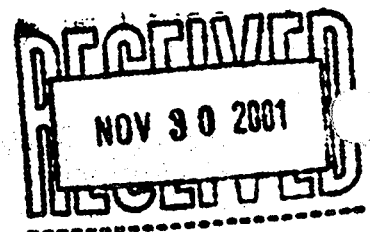
Patricia Rohrer, Horton Township Clerk

CHURCHILL TOWNSHIP
OGEMAW COUNTY

This is a true excerpt from the unapproved Regular Board Meeting minutes which was held on October 1, 2001:

A motion was made by Miller and seconded by Gregg to adopt the Ogemaw County Solid Waste Plan, Res01-10, upon approval of Supervisor. Roll Call Vote: Gregg-yes, Vogan-yes, Clark-yes, Lauria-yes, Miller-yes. Resolution approved. (Since this resolution is extensive, it can be reviewed at the Supervisor's office and will not be contained in the Minutes Book.glm)


Gayle L. Miller, Clerk



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

WHEREAS, Ogemaw 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 Ogemaw 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 Churchill
(Township/City/Village) (Name of Local Unit)

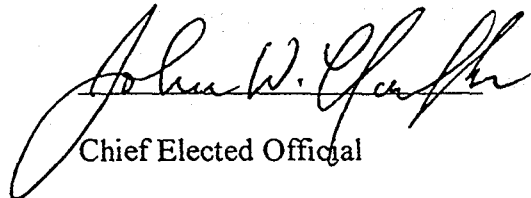
has reviewed the updated Solid Waste Plan and its recommendations;

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

municipality hereby Approves
(Approves/Disapproves)

the Ogemaw 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 Churchill Twp held on Oct 1, 2001.
(Name of Local Unit) (Date)


Chief Elected Official

Clerk

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

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

WHEREAS, The VILLAGE of PRESCOTT
(Township/City/Village) (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 Ogemaw 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 VILLAGE OF PRESCOTT held on 9-10-, 2001.
(Name of Local Unit) (Date)

William A. Cliff

Chief Elected Official

Darla A. Best

Clerk

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

WHEREAS, Ogemaw 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 Ogemaw 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 Richland
(Township/City/Village) (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 Ogemaw 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)

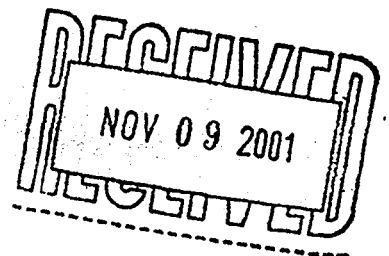
of Richland Township held on November 5, 2001.
(Name of Local Unit) (Date)

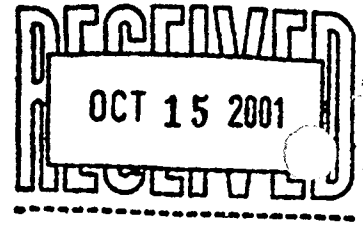
Lila Fegan

Chief Elected Official

Quinn A. Feeley

Clerk





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

WHEREAS, Ogemaw 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 Ogemaw 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 MILLS
(Township/City/Village) *(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 Ogemaw 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 MILLS held on OCTOBER 9, 2001.
(Name of Local Unit) *(Date)*

LANCE VERVOORT
Chief Elected Official

APRIL SCHILS
Clerk



City of West Branch

121 North Fourth Street, West Branch, Michigan 48661
Phone 517-345-0500 • Fax 517-345-4390 • e-mail cityhall@westbranch.com

EXCERPT FROM THE MINUTES OF THE REGULAR MEETING OF THE WEST BRANCH CITY COUNCIL HELD SEPTEMBER 10, 2001:

Motion by Thompson, second by Clark, to adopt the following resolution with regret:

RESOLUTION #01-24

BE IT KNOWN, Ogemaw County has prepared an updated Solid Waste Management Plan in accordance with Part 115 of the Natural Resources and Environmental Protection Act, as amended; and

BE IT KNOWN, the Ogemaw County Board of Commissioners has not approved the plan as prepared and submitted by the County Solid Waste Management Planning Committee; and

BE IT KNOWN, the City of West Branch has reviewed the updated Solid Waste Plan and its recommendations,

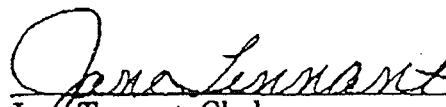
NOW, THEREFORE, BE IT RESOLVED that the Council of this municipality hereby approves the Ogemaw County Solid Waste Management Plan Update in accordance with Act 451, as amended.

Yes – Clark, Ehinger, Frechette, Jackson, Lucas, Thompson

No – None

Motion carried

I, Jane Tennant, West Branch City Clerk, do hereby certify that this is a true excerpt from the minutes of the regular meeting of the West Branch City Council held September 10, 2001.



Jane Tennant, Clerk



"City with a Smile!"

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

WHEREAS, Ogemaw 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 Ogemaw 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 West Branch
(Township/City/Village) (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 Disapproves by consensus
(Approves/Disapproves)

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

We are sending it back for corrections in statements, duplications, unlisted names of businesses, typographical errors, language errors, etc.

Page numbering

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

of _____ held on _____, 2001.
(Name of Local Unit) (Date)

Chief Elected Official

Margaret Winclaw
Clerk

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

WHEREAS, Ogemaw 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 Ogemaw 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 Rose City
(Township/City/Village) *(Name of Local Unit)*


has reviewed the updated Solid Waste Plan and its recommendations;

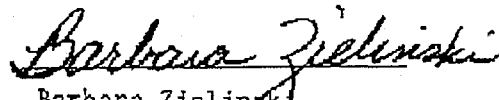
NOW, THEREFORE, BE IT RESOLVED that the Council of this
(Board/Council)

municipality hereby approves
(Approves/Disapproves)

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

Resolution declared adopted at a regular meeting of the City Council
(Board/Council)
of Rose City held on Sept. 4, 2001.
(Name of Local Unit) *(Date)*


Kenneth Sherlund
Chief Elected Official


Barbara Zielinski
Clerk

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

WHEREAS, Ogemaw 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 Ogemaw 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 Edwards
(Township/City/Village) *(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 Ogemaw 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 Edwards Township held on September 10, 2001.
(Name of Local Unit) *(Date)*

Margaret Kartes
(Margaret Kartes)
Chief Elected Official

L. Douglas Brewer
(L. Douglas Brewer)
Clerk

[Handwritten mark]

ATTACHMENTS

APPENDIX D

Plan Implementation Strategy

The following discusses how the County intends to implement the plan and provides documentation of acceptance of responsibilities from all entities that will be performing a role in the Plan.

ACTION #1: Establish the Solid Waste Management Advisory Board (SWMAB) as the body responsible for overseeing and coordinating plan implementation.

Lead Responsibilities: County Board of Commissioners

Timeline: 1999; within 3 months after DEQ approval of plan update.

ACTION #2: Promote expansion of recycling activities to include entire County and all feasible materials.

Lead Responsibilities: SWMAB

Timeline: Initiate in Fall 1999; ongoing thereafter

ACTION #3: Develop and distribute materials recovery education materials.

Lead Responsibilities: SWMAB

Timeline: Initiate January 2000; ongoing thereafter

ACTION #4: Promote composting options.

Lead Responsibilities: SWMAB

Timeline: Initiate in Spring 2000; ongoing thereafter

ATTACHMENTS

ACTION #5: Investigate ways to expand and promote opportunities for separation & collection of household hazardous wastes.

Lead Responsibilities: SWMAB, private solid waste industry.

Timeline: Initiate investigations & discussions in Fall 1999.

ACTION #6: Review implementation progress and recommend adjustments as necessary.

Lead Responsibilities: SWMAB, County Board of Commissioners.

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

ATTACHMENTS

Resolutions

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

None.



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 Glysson
 Director of Governmental Affairs

Cc: Matt Neely, Republic Waste



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



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,

A handwritten signature in black ink that reads "Debora Johnston". The signature is written in a cursive, flowing style.

Debora Johnston
Site Engineer

Cc: Crawford County
Maple Forest Township

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



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
Executive Secretary

cc: Landfill Authority Board

ATTACHMENTS

Listed Capacity

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

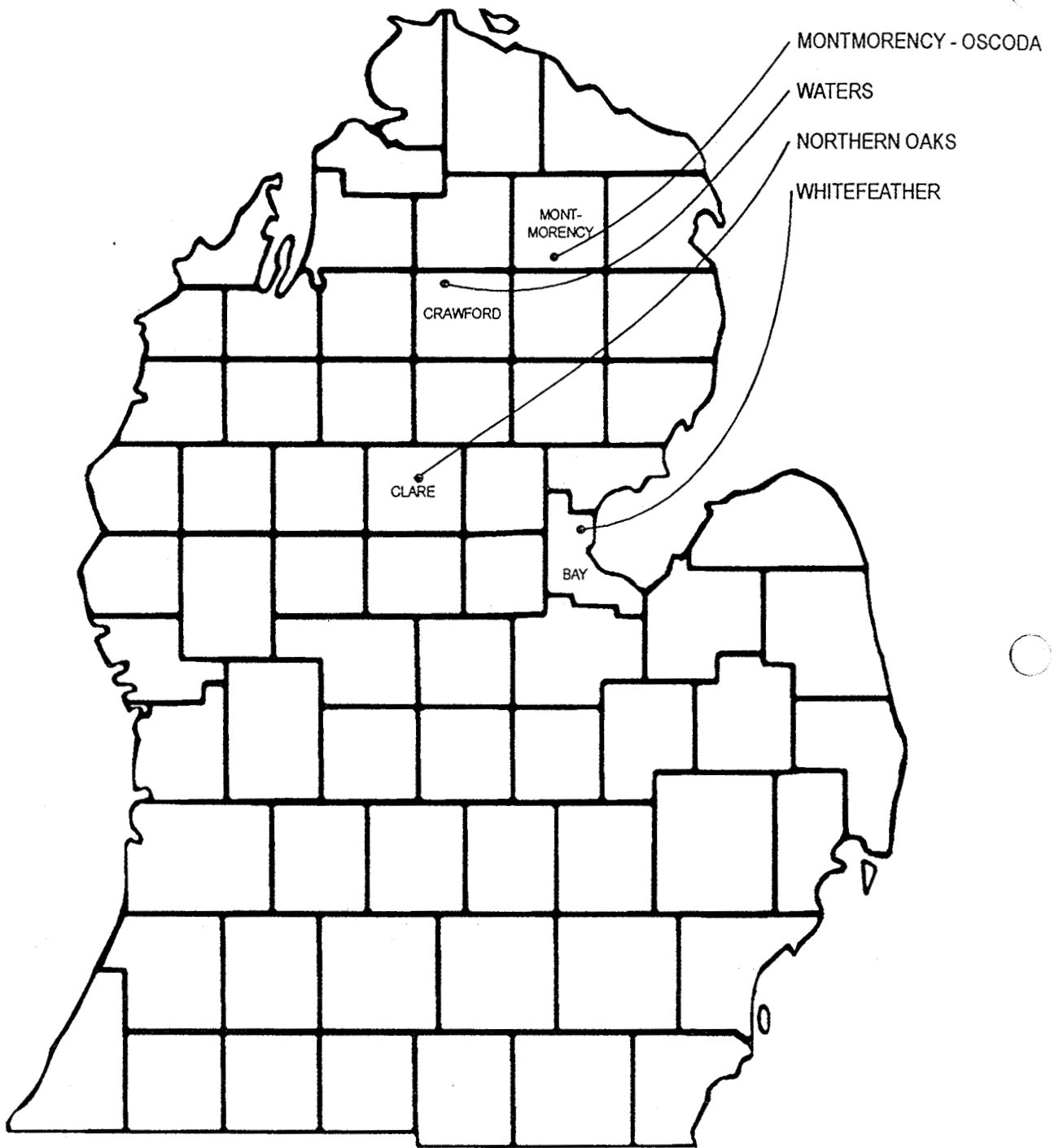
Letters from the individual landfill operators will be attached as they are received.

ATTACHMENTS

Maps

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

See the following page.



Landfill Locations

ATTACHMENTS

Inter-County Agreements

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

None.