STATE OF MICHIGAN

JOHN ENGLER, Governor

DEPARTMENT OF ENVIRONMENTAL QUALITY

"Better Service for a Better Environment"

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

INTERNET: www deq state mi us

RUSSELL J. HARDING, Director

October 30, 2000

Mr. Fred Meissinger, Chairperson
Otsego County Board of Commissioners
225 West Main
Gaylord, Michigan 49735

Dear Mr. Meissinger:

The Department of Environmental Quality (DEQ) received the locally approved update to the Otsego County Solid Waste Management Plan (Plan) on September 1, 2000.

By this letter, this Plan is hereby approved and Otsego County (County) now assumes responsibility for the enforcement and implementation of this Plan. The DEQ would like to thank Otsego County for their efforts in addressing the County's solid waste management issues.

By approving the Plan, the DEQ has determined that it complies with the provisions of Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, and the Part 115 rules concerning the required content of solid waste management plans. Specifically, the DEQ has determined that the Plan identifies the enforceable mechanisms that authorize the state, a county, a municipality, or a person to take legal action to guarantee compliance with the Plan, as required by Part 115. The Plan is enforceable, however, only to the extent the County properly implements these enforceable mechanisms under applicable enabling legislation. The Plan itself does not serve as such underlying enabling authority and the DEQ approval of the Plan neither restricts nor expands the County authority to implement these enforceable mechanisms.

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

If you have any questions, please contact Mr. Seth Phillips, Chief, Solid Waste Management Unit, at 517-373-4750.

Sincerely,

Russell J. Harding
Director
517-373-7917

cc: Senator George A. McManus, Jr.
Representative Kenneth L. Bradstreet
Mr. Arthur R. Nash Jr., Deputy Director, DEQ
Mr. Timothy R. Sowton, Legislative Liaison, DEQ
Mr. Jim Sygo, DEQ
Ms. Joan Peck, DEQ
Mr. Philip Roycraft, DEQ - Cadillac
Mr. Seth Phillips, DEQ
Mr. Stan Idziak, DEQ
Otsego County File

OTSEGO COUNTY
SOLID WASTE MANAGEMENT PLAN

May, 2000

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:

PARICIPATING COUNTIES: Otsego County

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 D.

Municipality	Original Planning County	New Planning County

DESIGNATED PLANNING AGENCY PREPARING THIS PLAN UPDATE:
Northeast Michigan Council of Governments (NEMCOG)

CONTACT PERSON: Diane Rekowski, Director

ADDRESS: 121 E. Mitchell
PO Box 457
Gaylord, MI 49734

PHONE: (517) 732-3551 FAX: (517) 732-5578

E-MAIL: nemcog@northland.lib.mi.us

SEP 01 2000
Waste Managem

CENTRAL REPOSITORY LOCATION(S): Otsego County Building - Commissioners Office
225 W. Main St.
Gaylord, MI 49735

OTSEGO COUNTY

SOLID WASTE MANAGEMENT PLAN

Resolutions for Plan Approval

Approval:

Otsego County Board of Commissioners
City of Gaylord
Village of Vanderbilt
Bagley Township
Charlton Township
Corwith Township
Dover Township
Elmira Township
Hayes Township
Livingston Township
Otsego Lake Township

91% Local Approval Obtained

Resolution Pending:

Chester Township

A RESOLUTION
of Approval for
OTSEGO COUNTY SOLID WASTE MANAGEMENT PLAN

WHEREAS, The Northeast Michigan Council of Governments (NEMCOG) is the designated solid waste planning agency for the county; and,

WHEREAS, NEMCOG and the Otsego County Solid Waste Planning Committee have prepared an update of the county solid waste management plan pursuant to P.A. 451, of 1994, as amended, Part 115, Solid Waste Management, and its Administrative Rules.

NOW THEREFORE BE IT RESOLVED, That Otsego County hereby approves of the 2000 Update of the Otsego County Solid Waste Management Plan.

Moved by Chavey, seconded by Sawicki

to adopt the above resolution at a meeting held on July 11, 2000 (date).

Ayes 9

Nays 0

Abstain 0

Absent 0

Attested by: F. Meissinger

Witnessed by: Evelyn M Pratt

Note: Please mail a copy to: Diane Rekowski, NEMCOG, PO Box 457, Gaylord, MI, 49734

CITY OF GAYLORD

225 W. Main Street • Room 109
Gaylord, Michigan 49735-1393
(517) 732-4060 • Fax (517) 732-8266

August 30, 2000

NEMCOG
P.O. Box 457
Gaylord MI 49735

To Whom It May Concern:

I hereby certify that the following resolution was adopted by the Gaylord City Council at a regular meeting held at 7:00 p.m on Monday, August 28, 2000, in the City Council Chambers, located in the City-County Building, 225 West Main Street, Gaylord, Michigan:

Motion by Council Member Solokis, Supported by Council Member Sharrard,

WHEREAS, the Northeast Michigan Council of Governments (NEMCOG) is the designated solid waste planning agency for the County of Otsego; and,

WHEREAS, NEMCOG and the Otsego County Solid Waste Planning Committee have prepared an update of the County Solid Waste Management Plan pursuant to P.A. 451, of 1994, as amended, Part 115, Solid Waste Management, and its Administrative Rules.

NOW THEREFORE BE IT RESOLVED, that the City of Gaylord hereby approves the 2000 Update of the Otsego County Solid Waste Management Plan.

Ayes: Bates, Brecheisen, Johnson, Mankowski, Sharrard, Solokis and Wambold.
Nays: None.
Absent None. Motion carried.

If you have any questions, please do not hesitate to contact me.

Thank you.

Sincerely,

Rebecca Curtis
City Clerk

Located In The Center Of Northern Lower Michigan

RESOLUTION 13 OF 2000

A RESOLUTION OF APPROVAL FOR OTSEGO COUNTY SOLID WASTE MANAGEMENT PLAN

WHEREAS, The Northeast Michigan Council of Governments (NEMCOG) is the designated solid waste planning agency for the county; and

WHEREAS, NEMCOG and the Otsego County Solid Waste Planning Committee have prepared an update of the county solid waste management plan pursuant to P.A. 451, of 1994, as amended, Part 115, Solid Waste Management, and its Administrative Rules.

NOW THEREFORE BE IT RESOLVED, That the Village of Vanderbilt hereby approves the 2000 Update of the Otsego County Solid Waste Management Plan.

MOVED BY Carrick and SUPPORTED BY Schuster

YES: Carrick, Schuster, Bates, Bush, Forman, Haus, Hawley

NO: None

ABSTAIN: None

ABSENT: None

By: Elizabeth M. Haus
Elizabeth M. Haus, President

I, the undersigned, the Clerk of the Village of Vanderbilt, Otsego County, Michigan, do hereby certify that the foregoing is a true and complete copy of certain proceedings taken by the Vanderbilt Village Council of said municipality at its regular meeting held on August 7, 2000; that said meeting was conducted and public notice of said meetings was given pursuant to and in full compliance with the Open Meetings Act, being Act 267, Public Acts of Michigan, 1976, and that the minutes of said meeting were kept and will be made available as required by said Act.

Dated: July 7, 2000

Sharon L. Duff
Sharon L. Duff, Clerk

I HEREBY CERTIFY, this is a True and Correct Copy of the Record on file in the Office of the COUNTY CLERK, Otsego County, State of Michigan.

Evelyn M. Scott
Otsego County Clerk 8-9-00 Date

A RESOLUTION
of Approval for
OTSEGO COUNTY SOLID WASTE MANAGEMENT PLAN

WHEREAS, The Northeast Michigan Council of Governments (NEMCOG) is the designated solid waste planning agency for the county; and,

WHEREAS, NEMCOG and the Otsego County Solid Waste Planning Committee have prepared an update of the county solid waste management plan pursuant to P.A. 451, of 1994, as amended, Part 115, Solid Waste Management, and its Administrative Rules.

NOW THEREFORE BE IT RESOLVED, That Bagley Twp. Board (Local Government Name) hereby approves of the 2000 Update of the Otsego County Solid Waste Management Plan.

Moved by Szymanski, seconded by Yeager

to adopt the above resolution at a meeting held on August 14 - 00 (date).

Ayes 5

Nays 0

Abstain 0

Absent 0

Attested by: Szymanski

Witnessed by: Richard Sumerix

Note: Please mail a copy to: Diane Rekowski, NEMCOG, PO Box 457, Gaylord, MI, 49734

A RESOLUTION
of Approval for
OTSEGO COUNTY SOLID WASTE MANAGEMENT PLAN

WHEREAS, The Northeast Michigan Council of Governments (NEMCOG) is the designated solid waste planning agency for the county; and,

WHEREAS, NEMCOG and the Otsego County Solid Waste Planning Committee have prepared an update of the county solid waste management plan pursuant to P.A. 451, of 1994, as amended, Part 115, Solid Waste Management, and its Administrative Rules.

NOW THEREFORE BE IT RESOLVED, That Charlton Township (Local Government Name) hereby approves of the 2000 Update of the Otsego County Solid Waste Management Plan.

Moved by Samkowiak, seconded by Huff

to adopt the above resolution at a meeting held on August 14, 2000 (date).

Ayes 5

Nays 0

Abstain 0

Absent 0

Attested by: Ivan H. Maschke Clerk

Witnessed by: Willis L. Walker Supervisor

Note: Please mail a copy to: Diane Rekowski, NEMCOG, PO Box 457, Gaylord, MI, 49734

A RESOLUTION
of Approval for
OTSEGO COUNTY SOLID WASTE MANAGEMENT PLAN

WHEREAS, The Northeast Michigan Council of Governments (NEMCOG) is the designated solid waste planning agency for the county; and,

WHEREAS, NEMCOG and the Otsego County Solid Waste Planning Committee have prepared an update of the county solid waste management plan pursuant to P.A. 451, of 1994, as amended, Part 115, Solid Waste Management, and its Administrative Rules.

NOW THEREFORE BE IT RESOLVED, That Corwith Township (Local Government Name) hereby approves of the 2000 Update of the Otsego County Solid Waste Management Plan.

Moved by Marilyn Cole, seconded by Debbie Whitman

to adopt the above resolution at a meeting held on August 1, 2000 (date).

Ayes 4

Nays 0

Abstain 0

Absent 1

Attested by: Vern J. Kassuba
Vernon J. Kassuba, Supervisor

Witnessed by: Debbie A. Whitman
Debbie A. Whitman, Clerk

Note: Please mail a copy to: Diane Rekowski, NEMCOG, PO Box 457, Gaylord, MI, 49734

A RESOLUTION
of Approval for
OTSEGO COUNTY SOLID WASTE MANAGEMENT PLAN

WHEREAS, The Northeast Michigan Council of Governments (NEMCOG) is the designated solid waste planning agency for the county; and,

WHEREAS, NEMCOG and the Otsego County Solid Waste Planning Committee have prepared an update of the county solid waste management plan pursuant to P.A. 451, of 1994, as amended, Part 115, Solid Waste Management, and its Administrative Rules.

NOW THEREFORE BE IT RESOLVED, That Dover Township (Local Government Name) hereby approves of the 2000 Update of the Otsego County Solid Waste Management Plan.

Moved by Janet C. Kwapis, seconded by Augustus House

to adopt the above resolution at a meeting held on Wednesday, Aug. 8th, 2000 (date).

Ayes 5

Nays 0

Abstain 0

Absent 0

Attested by: Augustus H. House Supervisor

Witnessed by: Janet C Kwapis, clerk

Note: Please mail a copy to: Diane Rekowski, NEMCOG, PO Box 457, Gaylord, MI, 49734

A RESOLUTION
of Approval for
OTSEGO COUNTY SOLID WASTE MANAGEMENT PLAN

WHEREAS, The Northeast Michigan Council of Governments (NEMCOG) is the designated solid waste planning agency for the county; and,

WHEREAS, NEMCOG and the Otsego County Solid Waste Planning Committee have prepared an update of the county solid waste management plan pursuant to P.A. 451, of 1994, as amended, Part 115, Solid Waste Management, and its Administrative Rules.

NOW THEREFORE BE IT RESOLVED, That Elmira Township hereby approves of the 2000 Update of the Otsego County Solid Waste Management Plan.

Moved by Leonard Skop, seconded by Diane Purgiel to adopt the above resolution at a meeting held on August 8, 2000.

Ayes ___5___

Nays ___0___

Abstain ___0___

Absent ___0___

Attested by: Susan Schaedig

Witnessed by: Eric J. Schaedig

Note: Please mail a copy to: Diane Rekowski, NEMCOG, PO Box 457, Gaylord, MI, 49734

HAYES TOWNSHIP, OTSEGO COUNTY
AUGUST 9, 2000
RESOLUTION 2000-5

The Hayes Township Board adopted the following resolution at the August 9, 2000 monthly meeting. This resolution concerns the Otsego County Solid Waste Management Plan.

WHEREAS: The Northeast Michigan Council of Governments (NEMCOG) is the designated solid waste planning agency for the county; and,

WHEREAS: NEMCOG and the Otsego County Solid Waste Planning Committee have prepared an update of the county solid waste management plan pursuant to P.A. 451, of 1994, as amended, Part 115, Solid Waste Management, and its Administrative Rules.

Now Therefore Be It Resolved, That Hayes Township hereby approved of the 2000 Update of the Otsego County Solid Waste Management Plan.

Motion was made by Wayne Tyler, second by Judith Estelle,

Mike Hyde	yes
Judy Estelle	yes
Mary Sanders	yes
Richard Ross	yes
Wayne Tyler	yes

Attested by: Richard Ross
Richard Ross Hayes Township Clerk

Witnessed by: Nancy L. Ross

A RESOLUTION
of Approval for
OTSEGO COUNTY SOLID WASTE MANAGEMENT PLAN

WHEREAS, The Northeast Michigan Council of Governments (NEMCOG) is the designated solid waste planning agency for the county; and,

WHEREAS, NEMCOG and the Otsego County Solid Waste Planning Committee have prepared an update of the county solid waste management plan pursuant to P.A. 451, of 1994, as amended, Part 115, Solid Waste Management, and its Administrative Rules.

NOW THEREFORE BE IT RESOLVED, That Livingston Township hereby approves of the 2000 Update of the Otsego County Solid Waste Management Plan.

Moved by Dipzinski, seconded by Matelski

to adopt the above resolution at a meeting held on July 24, 2000 (date).

Ayes 5

Nays 0

Abstain 0

Absent 0

Attested by: Richard Wojtkowski

Witnessed by: Lisha Ferguson

Note: Please mail a copy to: Diane Rekowski, NEMCOG, PO Box 457, Gaylord, MI, 49734

A RESOLUTION
of Approval for
OTSEGO COUNTY SOLID WASTE MANAGEMENT PLAN

WHEREAS, The Northeast Michigan Council of Governments (NEMCOG) is the designated solid waste planning agency for the county; and,

WHEREAS, NEMCOG and the Otsego County Solid Waste Planning Committee have prepared an update of the county solid waste management plan pursuant to P.A. 451, of 1994, as amended, Part 115, Solid Waste Management, and its Administrative Rules.

NOW THEREFORE BE IT RESOLVED, That Otsego Lake Township (Local Government Name) hereby approves of the 2000 Update of the Otsego County Solid Waste Management Plan.

Moved by Whyte, seconded by Ashworth

to adopt the above resolution at a meeting held on August 17, 2000 (date).

Ayes 3

Nays 0

Abstain 0

Absent 2

Lorraine Markovich
Attested by: Lorraine Markovich, Clk

B Suzanne Whyte
Witnessed by: B. Suzanne Whyte, Trs

Note: Please mail a copy to: Diane Rekowski, NEMCOG, PO Box 457, Gaylord, MI, 49734

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EXECUTIVE SUMMARY

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

OVERALL VIEW OF THE COUNTY

Location

Otsego County is located in the northeastern portion of the lower peninsula. It is bordered on the north by Cheboygan County, on the east by Montmorency County, on the south by Crawford County and on the west by Charlevoix and Antrim Counties. There are eleven municipalities in the county: nine townships: Bagley, Corwith, Charlton, Chester, Dover, Elmira, Hayes, Livingston, and Otsego Lake; one incorporated city: Gaylord and one incorporated village: Vanderbilt.

The county is located on the I-75 corridor which receives extensive tourist traffic from southern Michigan. Centrally located in the northern region, Otsego county is 60 miles from Lake Michigan , 70 miles from Lake Huron and 55 miles from the Straits of Mackinac.

Land Use

Otsego County has a total land and surface water area of 538 square miles. According to the 1994 land use inventory, 60% of the land is forested, 7% agricultural, 2.% surface water, 3% residential, 2% commercial/industrial, 15% nonforest, 10% wetlands, and approximately 1% institution/recreation. State land ownership is approximately 28 % of the total land area.

Water Resources

Otsego County has an abundance of high quality lakes and streams. The County is the headwaters of six major river systems: Au Sable, Black, Manistee, Pigeon, Sturgeon, and Boyne. The Black Pigeon, and Sturgeon rivers are also a part of a larger system, the Cheboygan River Watershed. Wetlands within the county are found primarily along the water courses. Extensive wetland areas border the Au Sable, Black, Manistee, Pigeon, and Sturgeon rivers.

Groundwater is the sole source of drinking water for the residents of Otsego County and provides the base flow to the County's high quality river systems. Groundwater occurs in thick glacial sand and gravel deposits throughout the County. Due to the sand and gravel deposits, the aquifer is extremely vulnerable to contamination. From surface or subsurface discharges.

Economy

Otsego County's local economy is largely dependent upon its natural resources: forestry, tourism, recreation, oil and gas extraction, agriculture and related manufacturing. Its natural resources, in combination with its central location continues to make the County a prosperous and growing region. The following table provides an overview, by municipality, of percentage of land use as rural or urban and economic base.

Otsego County Socio-Economic Percentage

Township or Municipality Name	Population 1995	% Land Use Rural	Urban	% of Economic Base* Ag	For	Ind	Com	Oth
Bagley Twp	5,927	79	21	<1	<1	18	57	24
Charlton Twp	1,078	100	0	2	4	27	49	18
Chester Twp	850	100	0	2	5	15	50	28
Corwith Twp	1,782	100	0	1	3	38	43	15
Dover Twp	601	100	0	<1	1	26	53	19
Elmira Twp	1,244	100	0	<1	1	23	49	27
City of Gaylord	3,896	0	100	<1	1	15	56	28
Hayes Twp	1,223	100	0	<1	1	23	56	20
Livingston Twp	2,446	90	10	<1	1	15	54	30
Otsego Lake Twp	1,679	100	0	<1	<1	20	55	24
Total Population	20,726							

Source: Department of Management and Budget

*Ag = Agriculture; For = Forestry; Ind = Industry; Com = Commercial; Oth = All Other Economic Bases.

EXECUTIVE SUMMARY

CONCLUSIONS

The Otsego County Solid Waste Planning Committee was established utilizing newspaper advertisements and appointments by the Otsego County Board of Commissioners. Once committee positions were filled, the Otsego County Board of Commissioners voted on and approved appointments to the solid waste planning committee.

Committee meetings were then held to obtain input into the overall plan. The current solid waste management system was reviewed and the deficiencies of this system were discussed. In developing the selected system, attempts were made to solve the problems and deficiencies in the present system.

Each solid waste management alternative for Otsego County was assessed based on technical feasibility, economic feasibility, access to land, access to transportation, effects on energy, environmental impacts, public acceptability, and conservation of natural resources. Selection of the solid waste management system was based on the system that would be in the best interest of the residents of Otsego County. The committee then, over a series of meetings reviewed and deliberated on solid waste management options for Otsego County. The following provides an outline of the various components considered in the development of solid waste management alternatives:

Collection:

- Curbside collection
- Annual clean-up days
- Encourage additional Transfer Stations: Type A & B
- Volume-based Pricing
- Franchise collection services

Resource Recovery

- Recycling Coordination with adjacent counties.
- Recycling Volunteer Program only.
- County established Material Recovery Facility.
- Establish new compost sites.
- Increase education on backyard composting.
- Household Hazardous Waste Days

Disposal Import

- List counties able to import into transfer stations.
- No outside counties able to import waste into transfer facilities.

Disposal Export

- Export to Montmorency – Oscoda – Alpena Landfill in Montmorency County and Waste Management Landfill, Inc. in Crawford County
- Waste Management Inc. in Crawford County

The SWPC developed two solid waste management systems based from the above list. The two systems are:

Alternative I. Same solid waste management system as presently available: Curbside collection through private agreements, volunteer recycling program, and disposal at Montmorency-Oscoda-Alpena Sanitary Landfill, and Waste Management Landfill in Waters, MI.

Alternative II. Expanded Solid Waste Management System to include increased cost-effectiveness of collection services, high priority placed on implementing a coordinated county-wide recycling program, an annual household hazardous waste collection program, and primary and contingency disposal at Montmorency-Oscoda-Alpena Sanitary Landfill in Montmorency County, and Waste Management Inc. Landfill in Crawford County.

Selected Alternative

Alternative II was selected as the desired system for solid waste management in Otsego County. The selected system was chosen by a majority vote of the Solid Waste Planning Committee. The following is a brief overview of Alternative II.

Collection
Collection of solid waste will continue through private agreements between individuals and waste hauling firms, and through municipal contracts, if so desired. Townships may continue to provide clean-up days for large item disposal and to discourage illegal disposal.

Resource Recovery
Resource recovery efforts will involve the development and implementation of a county –wide recycling program. The recycling program will review possible coordination efforts with adjacent counties. Resource recovery efforts will also involve establishing an annual household and agricultural hazardous waste collection day. The existing composting facility in the City of Gaylord will continue at its present high level of operation, as well as the Waste Management, Inc. and Corwith Township sites, educational efforts will emphasize backyard composting techniques for those residing in rural areas of the county.

Disposal
Final disposal of solid waste will be at Montmorency -Oscoda-Alpena Sanitary Landfill in Montmorency County, and the Waste Management Sanitary Landfill in Crawford County.

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:

Otsego County Solid Waste Goals and Objectives

Goal 1: Establish and maintain a resource recovery program to reduce the overall dependency on land disposal and to provide for the conservation of natural resources.

Objective 1a: Develop a county-wide recycling program for Otsego County residents in coordination with adjacent counties.

A. Meet with adjacent counties to develop a program for coordinated material processing and marketing.

B. Determine collection system for recyclable materials.

C. Determine drop-off locations, and equipment needs, if determined desired collection system.

D. Determine capital and annual operating and maintenance budget.

E. Secure the financial resources through the development of a funding mechanism to operate and maintain a recycling program.

Objective 1b. Expand and improve composting opportunities in Otsego County.

A. On an annual basis, disseminate educational information to the general public on back yard composting techniques.

B. Conduct a survey with the municipalities to determine composting needs.

C. Develop a composting promotional campaign to increase the awareness and participation of the program.

D. On a biannual basis, determine if there is a need for additional composting sites in the county.

Objective 1c. Develop a Resource Recovery Education program to increase the understanding of the benefits of reducing, reusing, and recycling solid wastes.

A. Develop a marketing plan for the promotion of resource recovery activities.

B. Determine the delivery system for information dissemination (i.e. MSU Extension - brochures available to general public, 4H activity, School calendars, School logo contests, etc.).

B. On an ongoing basis promote resource recovery activities through the local media, churches, schools, etc.

D. Designate an office where the public can direct questions about solid waste management and where they can obtain printed educational materials.

E. Incorporate the "Buy Recycled" theme into the educational program.

Goal 2: Provide for the protection of the public's health and the quality of the natural resources: air, land, ground and surface waters, by increasing the overall efficiency of solid waste collection, transportation, and disposal.

Objective 2a. Coordinate the collection and disposal of household and agricultural hazardous waste with adjacent counties.

A. Annually, organize and hold a household hazardous waste collection day.

B. Develop and distribute educational materials that describe which wastes classify as hazardous and explain proper disposal methods.

C. Meet with other counties in the region to discuss holding a multi-county collection day.

D. Research available hazardous waste disposal programs.

E. Promote existing hazardous waste programs; i.e. Operation Clean Sweep.

Objective 2b. Develop county programs for materials not easily disposed to reduce the potential for dumping of solid waste on forest land.

A. Continue to monitor cleaned- up forest dump sites through the Michigan Community Service Commission program.

B. Meet with townships to develop a program for annual clean-up days throughout the county.

C. Develop and hold annual tire disposal days.

D. Promote area businesses which will take materials: i.e. A&L Iron- scrap metal, AJD Forest Products- scrap wood.

Objective 2c. Inform legislators on the need to provide a funding mechanism for resource recovery initiatives.

A. Communicate to legislators, via letters and meetings on the local need and support for state involvement and financial support for solid waste management

B. Contact Michigan Association of Counties (MAC) for assistance in obtaining legislative support.

C. Promote legislation which would address the packaging of materials and incentives for utilizing recycled materials in manufacturing of products.

Goal 3. Ensure competitive pricing of solid waste collection for consumers.

Objective 3a. Explore other county's approaches to maintaining competitive solid waste management services, which may include volume based pricing, development of transfer stations, etc.

A. Meet to discuss community success with volume based pricing ordinances, transfer station development, contract services, et al.

B. Determine the need for the above mechanisms based on level of competition within county.

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.

Otsego County was included in the 1980 Northeast Solid Waste Stream Assessment. Base data from this Waste Stream Analysis was utilized to determine the quantity and composition of solid waste generated in the 1999 update of the Otsego County Solid Waste Plan. In addition, the 1997 and 1998 "Report of Solid Waste Landfilled in Michigan" published by the Michigan Department of Environmental Quality (DEQ) was used in the determination of solid waste generated in Otsego County.

In 1998, Otsego County generated an estimated 32,150 tons/year of type II residential, commercial, and industrial solid waste. Residential/commercial solid waste data was calculated by staff based on the generation rate of 7.63 lbs/capita/day. The amount of industrial waste generated in the county in 1998 was estimated at 5,333 tons/year resulting in a generation rate of approximately 1.27 lbs/capita/day. This was derived from a survey of industrial waste producers (see page 10 for results of this survey) and the DEQ's report on solid waste landfilled in Michigan. The projected solid waste generation for Otsego County, broken down by township, is shown in the following table. These figures are based on future population trends and do not take into consideration any factors affecting solid waste fluctuations.

Otsego County Solid Waste Generation
Residential Commercial and Industrial Waste

	% of waste stream	1997/98 Volume tons/yr	2000 Volume tons/yr	2005 Volume tons/yr	2010 Volume tons/yr
Bagley Twp	29%	9194	10130	11430	12657
Charlton Twp	5%	1672	1874	2080	2302
Chester Twp	4%	1318	1478	1638	1815
Corwith Twp	5%	1703	1911	2118	2345
Dover Twp	3%	932	1045	1160	1238
Elmira Twp	6%	1930	2162	2400	2656
Hayes Twp	6%	1897	2127	2360	2610
Livingston Twp	12%	3794	4254	4716	5221
Otsego Lake Twp	8%	2605	2919	3238	3585
City of Gaylord	19%	6044	6776	7513	8319
Vanderbilt	3%	1061	1190	1318	1461
Otsego County	100%	32150	36000	39964	44255

Otsego County does not anticipate major problems associated with managing the solid waste generated within its county. Collection of solid waste is currently available through private agreements with private hauling companies. Increase in waste due to increase in tourism and seasonal home development will be handled through private hauling companies. Increases in waste due to population growth will be moderated by the institution of recycling, a household hazardous waste collection program and an educational program to increase participation in resource recovery activities

TOTAL QUANTITY OF SOLID WASTE NEEDING DISPOSAL:

In 1997/9: 32,150 tons/yr
In 2005: 37,964 tons/yr
In 2010: 39,830 tons/yr

Results of Otsego County Industrial Waste Survey

Business	Type of Waste	Amount of Waste	Disposal	Notes
Crossroads Industries	Sawdust/wood pieces Clothing/rags/other wastes	720yd3/yr 1248yd3/yr	 Landfill	 Clothing is reused at resale shop
Georgia-Pacific Corp.	General Industrial Wastes Lunchroom Wastes Fly Ash Special Wastes	1515 tons/year Small Amount	Landfill Special Waste Handlers	Cardboard, tin/metal cans, plastics, newspapers are recycled (12 T/Yr) Scrap metal: 285 T/Yr recycled Others Recycled: Batteries, used oil, used antifreeze, etc. Majority of wood residues that are generated are recycled back into the process.
K-Byte	Cardboard, Packaging, Package Filling, Scrap Plastic, Floor Sweepings	520 yd3/Yr	Landfill	Interested in Cardboard Recycling
Mayfair Plastics, Inc.	Scrap Plastic, Wood Scraps, Cardboard, Dirt/Dust	4680 yd3/Yr	Landfill	Cardboard Recycled
Perfecto Industries	Batteries Paint Oily Water	Small Quantities	Safety Clean	Cardboard Metal Scrap and Wire is recycled
Standard Products	General Garbage, Scraps	4160 yd3	Landfill	

DATA BASE - SOLID WASTE DISPOSAL AREAS

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

Currently, there are no licensed Type II Sanitary Landfills in Otsego County. All solid waste is exported out of the county and transported to the Waste Management, Inc. Landfill in Crawford County. The Montmorency-Oscoda-Alpena Sanitary Landfill will also be utilized for primary disposal for the next five year planning period.

Type B transfer stations are located in Chester and Corwith Townships.

See Attachment C for a map showing the location of transfer stations, disposal sites and relative distances to disposal sites.

FACILITY DESCRIPTIONS

Facility Type: Type II Sanitary Landfill
Facility Name: Montmorency-Oscoda –Alpena Sanitary Landfill

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

Map identifying location included in Attachment Section: Yes

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

Owner: Publicly owned by Montmorency, Oscoda, and Alpena Counties

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

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

Site Size:

Total area of facility property:	80	acres [1]
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	yds3
Estimated lifetime:	30	years
Estimated days open per year:	310	days
Estimated yearly disposal volume:	145,000	yds3

(if applicable)
Annual energy production:

Landfill gas recovery projects:	Will be adding recovery in future
Waste-to-energy incinerators:	NA megawatts

1 Currently in the process of obtaining a construction permit for a new cell
NA -- Not Applicable

FACILITY DESCRIPTIONS

Facility Type: Type B Transfer Station
Facility Name: Charlton-Chester-Dover Township Transfer Station

County: Otsego Location: Town: 30 N Range: 2W Section(s): 15

Map identifying location included in Attachment Section: Yes

If facility is an Incinerator or a Transfer Station, list the final disposal site and location for Incinerator ash or Transfer Station wastes: Waste Management Inc., Landfill in Waters

Owner: Publicly owned by Chester Township

Operating Status (check)	Waste Types Received (check all that apply)
X open	X residential
closed	X commercial
X licensed	industrial
unlicensed	construction & demolition
construction permit	contaminated soils
open, closure pending	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:	acres
Total area permitted:	acres
Operating:	acres
Not excavated:	acres

Current capacity:	yds3
Estimated lifetime:	years
Estimated days open per year:	156 days
Estimated yearly disposal volume:	2080 compacted yds3

(if applicable)
Annual energy production:
Landfill gas recovery projects:
Waste-to-energy incinerators: megawatts

FACILITY DESCRIPTIONS

Facility Type: Type B Transfer Station
Facility Name: Corwith Township Transfer Station

County: Otsego Location: Town: 32 N Range: 3W Section(s): 22

Map identifying location included in Attachment Section: Yes

If facility is an Incinerator or a Transfer Station, list the final disposal site and location for Incinerator ash or Transfer Station wastes: Waste Management Inc., Landfill in Waters

Owner: Publicly owned by Corwith Township

Operating Status (check)	Waste Types Received (check all that apply)
X open	X residential
closed	X commercial
X licensed	industrial
unlicensed	construction & demolition
construction permit	contaminated soils
open, closure pending	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:	acres
Total area permitted:	acres
Operating:	acres
Not excavated:	acres
Current capacity:	yds3
Estimated lifetime:	years
Estimated days open per year:	52 days
Estimated yearly disposal volume:	1158yds3

(if applicable)
Annual energy production:
Landfill gas recovery projects:
Waste-to-energy incinerators: 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.

Collection of residential and commercial solid waste in Otsego County is accomplished by commercial haulers or by individuals transporting their own waste to the landfill or a transfer station. Curbside collection is the most common collection method with door to door pick up service provided in some instances. Otsego County is presently serviced by three commercial firms. The haulers currently serving the county are shown in the following figure.

Solid Waste Collection Services

Service Provider	Public/Private	Service Area	Payment	Disposal Facility
Waste Management, Inc	Private	Otsego County	Customer	Waste Mgmt, Inc Waters, MI
Kam's Sanitation	Private	Otsego County	Customer	Waste Mgmt, Inc. Waters, MI
Alpine Sanitation	Private	Otsego County	Customer	Waste Mgmt, Inc. Waters, MI

Collection of industrial solid waste is also accomplished by commercial haulers. Greenbox containers are typically used onsite to collect discarded materials which are then serviced by hauling firms.

DATA BASE - EVALUATION OF DEFICIENCIES AND PROBLEMS

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

Major deficiencies with regards to solid waste management in Otsego County are a result of recent mergers of waste management companies and a lack of commitment for resource recovery programs which are aimed at reducing the amount of solid waste and household hazardous waste generated and disposed of in a landfill.

Collection of solid waste is accomplished primarily through curbside pick-up, however, recent company mergers have made it difficult for small hauling companies to compete with large waste firms. Currently, the county is serviced primarily by Waste Management, Inc. which owns and operates a hauling service and the Waste Management Inc. Landfill in Waters, MI. All solid waste in the county is flow controlled by ordinance to the Waste Management Inc. Landfill. This has resulted in a competitive disadvantage for small commercial haulers attempting to do business in Otsego County.

Commercial business with containers and township officials operating greenbox transfer stations are also concerned about the lack of competitive bidding for collection services and price increases experienced with the mergers.

Recycling opportunities in the county are limited and lack county-wide coordination. Currently, Kam's Sanitation Service and Waste Management, Inc. are providing limited recycling services. Kam's Sanitation will provide recycling pick-up service for $1.50/bag to residents in the Gaylord area. Waste Management, Inc. provides recycling pick-up services at a reduced fee for corrugated cardboard from businesses and industries. Recycling programs previously offered for residents in the City of Gaylord and for county residents at the City Environmental Service's landfill (currently, Waste Management, Inc. Landfill) are no longer available. This may impact the success of future programs due to the unsuccessful nature of past programs.

Overall, several difficulties exist in starting a recycling program in Otsego County due to inherent impediments. These include: relatively low volumes based on the low population base, high costs of transporting materials to the market due to the long distance to markets, lack of a large centralized collection/storage site, and lack of recycling equipment.

Household hazardous waste and pesticides used in agriculture are also a concern. The current solid waste management system does not provide a means for proper disposal of agricultural and household hazardous waste. There is a lack of knowledge among the residents about the proper way to dispose of household hazardous waste. Safe disposal methods for items that can be properly disposed of in landfills needs to be included on product label.

Additionally, there is a lack of an effective means for disposal of white goods. These items are often disposed of on state forest land. A need exists to develop a coordinated program within Otsego County for the disposal of household hazardous waste and white goods.

Education of the public was also determined to be a major deficiency associated with proper solid waste management. Limited information is made available to the public on proper means of disposal of items that may be safely disposed , composted, or taken by local salvage dealers. The committee expressed education of the public as a high priority especially necessary for a successful resource recovery program.

DATA BASE - DEMOGRAPHICS

The following presents 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. If generation data was extrapolated from yearly data, then it was calculated using 365 days per year, unless otherwise noted.

The Northeast Region of Michigan's Lower Peninsula is experiencing an increase in population. As the state's population ages, people are moving from urban to rural areas, seeking a higher quality of life than that found in the cities. Second home development is increasing throughout northeast Michigan and is expected to continue to increase as more people reach the retirement age.

Otsego County's percentage population growth has been among the highest in the state. The population increased by 19.8 percent from 1980 – 1990. From 1990 – 1995, the population increased by an estimated 15.6 percent, making Otsego County tied with Keweenaw county as the fastest growing county in the entire state. This trend of increasing population is expected to continue as more people retire and move to northern Michigan.

The major population center of Otsego County is the City of Gaylord. The population density in Otsego County ranges from 8 to 300 persons per square mile, except in the City of Gaylord where population density is 700 to 1200 persons per square mile. From 1970 – 1990, population density in Otsego County increased between 25 to greater than 100 %, except in the City of Gaylord where population density increased only 6 to 9 % (See maps in Attachment C). Between 1990 – 1994, the percent change in population density increased 6 to 16 %, with the exception of Elmira Township, which experienced a 25 to 75 % increase. Housing units, an indicator of seasonal population, saw a 10 to greater than 125 % increase in the county from 1970 – 1980. From 1980 – 1990, housing units increased, although at a slower rate, except in Corwith Township where housing units declined.

Considering Otsego County's past and present population growth, population projections predict that the County's substantial growth will continue to occur into the next century. Concurrently, the trend of increased housing, an indicator of seasonal population, is also expected to continue as more people retire and move seasonally to less populated areas of the state.

Centers of solid waste generation coincide with major population centers in the county. The major center of solid waste generation in Otsego County is the City of Gaylord. The City of Gaylord is expected to remain the center of solid waste generation in Otsego County for the next five year and ten year periods. It is not anticipated that industrial waste generation will change significantly over the next five and ten year periods.

OTSEGO COUNTY
POPULATION PROJECTIONS

	1995	2000	2005	2010
Otsego County	20,726	23,236	25,762	28,529
Bagley Twp	5,927	6,645	7,368	8,159
Charlton Twp	1,078	1,208	1,340	1,484
Chester Twp	850	953	1,056	1,170
Corwith Twp	1,098	1,232	1,365	1,512
Dover Twp	601	674	747	827
Elmira Twp	1,244	1,394	1,546	1,712
City of Gaylord	3,896	4,368	4,843	5,363
Hayes Twp	1,223	1,371	1,520	1,683
Livingston Twp	2,446	2,742	3,040	3,366
Otsego Lake Twp	1,679	1,882	2,087	2,311
Village of Vanderbilt	684	767	850	942

Source: Michigan Department of Management and Budget

Otsego County Solid Waste Generation
Residential Commercial and Industrial Waste

	% of waste stream	1997/98 Volume tons/yr	2000 Volume tons/yr	2005 Volume tons/yr	2010 Volume tons/yr
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Corwith Twp	5%	1703	1911	2118	2345
Dover Twp	3%	932	1045	1160	1238
Elmira Twp	6%	1930	2162	2400	2656
Hayes Twp	6%	1897	2127	2360	2610
Livingston Twp	12%	3794	4254	4716	5221
Otsego Lake Twp	8%	2605	2919	3238	3585
City of Gaylord	19%	6044	6776	7513	8319
Vanderbilt	3%	1061	1190	1318	1461
Otsego County	100%	32150	36000	39964	44255

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 use trends in Otsego County indicate residential development occurring in and around the City of Gaylord, along lakes, streams, and adjacent to major roads. Commercial development occurs primarily in the City of Gaylord, in Bagley and Livingston Townships and along roads, especially M-32. Industrial development is primarily located in the City of Gaylord. Overall, agriculture is slightly declining in the county.

Future trends indicate that residential development will continue to follow roads and will be clustered around lakes and rivers. Development will most likely occur on nonforest, upland forest, and agricultural lands. Commercial and industrial development will be concentrated around the City of Gaylord and along M-32. Second home development will steadily increase as more people retire and move north. This will continue the trend of splitting off large parcels into smaller 5 and 10 acre sites

DATA BASE - SOLID WASTE MANAGEMENT ALTERNATIVES

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.

Each solid waste management alternative for Otsego County was assessed based on the following:

- Technical Feasibility
- Economic Feasibility
- Access to Land
- Access to Transportation
- Effects on Energy
- Environmental Impacts
- Public Acceptability
- Resource Conservation
- Waste Reduction
- Pollution Prevention
- Resource Recovery
- Ultimate Disposal Area Uses
- Institutional Arrangements

The majority of the selected alternatives focus on either sanitary landfilling, transfer stations, recycling, composting or combinations of each, a brief review of each follows:

Sanitary Landfilling: Sanitary landfilling is a cost-effective system in northern Michigan when implemented on a multi-county basis. Present landfill sites exist and the public is accustomed to their location and costs. Potential environmental risks include groundwater contamination.

Modular Incineration: Conversion of solid waste to energy is very attractive, however, a lack of markets makes this alternative prohibitively costly. Air pollution has also been problematic at existing facilities.

Volume Reduction: Volume reduction benefits from large scale shredding and baling of solid waste is not cost-effective since the region has excess landfill capacity and the cost of equipment is extremely high. For vehicle volume reduction, the rear loading packer truck is the most cost-effective vehicle for the region.

Transfer Stations: Transfer stations can be a very cost-effective method of transporting solid waste in rural areas or when long hauls are necessary to dispose of solid waste at a multi-county landfill.

Recycling: Recycling rates high public acceptability. Volume reduction through recycling and composting can be achieved in Montmorency and Oscoda Counties, however, with the current markets, subsidy may be necessary for program success. A multi-county recycling effort would be most cost-effective for the region. Recycling of specific materials continues to be cost-effective for certain businesses and industries.

Composting: Composting is the least costly and energy intensive method of disposing of solid waste, especially in a rural region. Composting provides a reusable resource with economic value, and can be implemented individually or on a county-wide basis.

The Otsego County Solid Waste Planning Committee met and reviewed solid waste management options in the following areas:

Collection:

- Curbside collection
- Annual clean-up days
- Encourage additional Transfer Stations: Type A & B
- Volume-based Pricing
- Franchise collection services

Resource Recovery

- Recycling Coordination with Emmet County. Compartmentalized containers strategically located throughout county. Hauled to Emmet County facility. Educational efforts coordinated with existing agencies and Emmet County.
- Recycling Coordination with Crawford County and adjacent Counties. Strategy is currently being developed on coordination opportunities.
- Recycling Volunteer Program only.
- Private non-profit established Recycling Facility.
- Establish new compost sites.
- Increase education on backyard composting.
- Household Hazardous Waste Collection

Disposal Import

- List counties able to import into transfer stations.
- No outside counties able to import waste into transfer facilities.

Disposal Export

- Counties where Otsego County Solid Waste may be disposed.

The SWPC then developed two solid waste management systems based from the above list. The two systems are:

I. Same solid waste management system as presently available: Curbside collection through private agreements, volunteer recycling program, and disposal at Montmorency-Oscoda Alpena Sanitary Landfill in Montmorency County, and Waste Management Landfill in Crawford County.

II. Expanded Solid Waste Management System to include increased cost-effectiveness of collection services; high priority placed on implementing a coordinated county-wide recycling program ; annual household hazardous waste collection; and primary and contingency disposal at the Montmorency-Oscoda-Alpena Sanitary Landfill in Montmorency County, and Waste Management Inc. Landfill in Crawford County.

ALTERNATIVE 1: CURBSIDE COLLECTION IN COMBINATION WITH EXISTING TRANSFER STATIONS; VOLUNTEER RESOURCE RECOVERY INITIATIVES; DISPOSAL AT WASTE MANAGEMENT, INC LANDFILL.

This alternative maintains the present management system currently in place in Otsego County. Collection of solid waste will continue to be through private agreements with local haulers, township contracts with haulers, and utilization of transfer stations. Recycling and composting operations currently in operation in Otsego County will continue at their present level of operation. Backyard composting programs will be promoted for the rest of the unpopulated portions of the county. Educational efforts will involve utilizing existing agencies and organizations for information dissemination. Solid waste will continue to be disposed at the Montmorency-Oscoda-Alpena Sanitary Landfill in Montmorency County, and the Waste Management Landfill, Inc. in Crawford County for the next 10 year planning period.

Technical Feasibility

The technical feasibility of the solid waste system selected involves utilization of existing technology. Sanitary landfilling is well proven and the most utilized system of solid waste management in the U.S.

Economic Feasibility

The economic feasibility of selecting this alternative is good. No new funds are necessary to implement this alternative. Educational activities will be subsidized through a combination of existing in-kind support and local donations and grants.

Access to Land

The MOASL is situated on a 40 acre site with an estimated refuse volume of 3,500,000 cubic yards or 20+ years capacity. The Waste Management Inc. Landfill has sufficient land available, with over 250 acres.

Access to Transportation

Access to the Waste Management Landfill in Waters is via I-75 and County Road 612.

Effects on Energy

Sanitary landfilling is an energy intensive system. The disposal of materials which required energy to produce, also require energy to transport to the site and energy to mechanically cover the materials daily. Some energy is conserved by utilizing transfer stations in the more rural areas.

Environmental Impacts

Since this alternative utilizes an existing site, initial environmental impacts have not been considered. The negative environmental impacts primarily concern the development of leachate within the site and the contamination of groundwater. Methane gas can also be a concern, however, technology exists for utilization of gas for operations.

Public Acceptability

Public acceptability will be minimal for a program that does not increase competition or encourage increased efforts for resource recovery programs.

Resource Conservation
Conservation of natural resources will occur through continuation of the recycling programs, and increasing the utilization of backyard composting programs.

Waste Reduction
Waste reduction will be achieved through education. As educational efforts will be limited, it is likely this alternative will not result in significant waste reduction.

Pollution Prevention
This alternative will not increase pollution prevention efforts, but will maintain them at their present level. This alternative does not provide a means to remove household hazardous waste from the waste stream, so these materials will continue to enter the landfill.

Resource Recovery
Resource recovery efforts currently in operation in Otsego County will continue at the present level of operation. This alternative will not increase significantly resource recovery.

Ultimate Disposal Area Uses
It is anticipated that the Waste Management, Inc. Landfill will ultimately be utilized for recreational purposes.

Institutional Arrangements
There will be no additional institutional arrangements with this alternative.

ALTERNATIVE 2: CURBSIDE COLLECTION IN COMBINATION WITH EXISTING TRANSFER STATIONS; INCREASED EMPHASIS ON RESOURCE RECOVERY INITIATIVES; DISPOSAL AT WASTE MANAGEMENT LANDFILL, INC AND THE MONTMORENCY-OSCODA-ALPENA SANITARY LANDFILL (MOASL).

This alternative improves upon the present management system in place in Otsego County by increasing resource recovery efforts and expanding solid waste disposal options. Collection of solid waste will continue to be through private agreements with local haulers, township contracts with haulers, and utilization of transfer stations. Development of a Recycling program for Otsego County will continue to be explored. Composting operations will continue and new sites encouraged in densely developed areas. Backyard composting programs will be promoted for the rest of the less populated portions of the county. Household hazardous waste days, tire pick-up days, and annual clean-up days will be encouraged. Educational efforts will involve utilizing existing agencies and organizations for information dissemination. Solid waste will continue to be disposed at the Waste Management Landfill, Inc. in Crawford County and also at the Montmorency-Oscoda-Alpena Sanitary Landfill (MOASL) in Montmorency County for the next 10 year planning period.

Technical Feasibility

The technical feasibility of sanitary landfilling is well proven and the most utilized system of solid waste management in the U.S. The technical feasibility of recycling and composting is well proven. There are many existing models from which a program can be designed.

Economic Feasibility

The economic feasibility of selecting this alternative is good. Increasing resource recovery will help to offset increasing disposal costs. Expanding disposal options will help to encourage increased competition ultimately lowering collection and disposal fees. Educational activities will be subsidized through a combination of existing in-kind support and local donations and grants.

Access to Land

The Waste Management Inc. Landfill has sufficient land available, with over 250 acres. The MOASL is situated on a 40 acre site with an estimated refuse volume of 3,500,000 cubic yards or 20+ years capacity.

Access to Transportation

Access to the Waste Management Landfill, Inc. in Waters is via I-75 and County Road 612.

Access to the MOASL is via County Road 487. County Road 487 intersects M-32 in Atlanta five miles north of the landfill and County Road 612 two miles south of the landfill. M-32 has undergone safety and surface improvements. Weight restrictions are in effect during periods of frost for County Roads 487 and 612.

Effects on Energy

Sanitary landfilling is an energy intensive system. The disposal of materials which required energy to produce, also require energy to transport to the site and energy to mechanically cover the materials daily. Some energy is conserved by utilizing transfer stations in the more rural areas.

Environmental Impacts
Since this alternative utilizes an existing site, initial environmental impacts have not been considered The negative environmental impacts primarily concern the development of leachate within the site and the contamination of groundwater. Methane gas can also be a concern, however, technology exists for utilization of gas for operations.

Public Acceptability
Public acceptability will be minimal for a program that does not emphasize resource recovery programs.

Resource Conservation
Conservation of natural resources will occur through continuation of the recycling programs, and increasing the utilization of backyard composting programs.

Waste Reduction
Waste reduction will be achieved through education. As educational efforts will be limited, it is likely this alternative will not result in significant waste reduction.

Pollution Prevention
This alternative will not increase pollution prevention efforts, but will maintain them at their present level. This alternative does not provide a means to remove household hazardous waste from the waste stream, so these materials will continue to enter the landfill.

Resource Recovery
Resource recovery efforts currently in operation in Otsego County will continue at the present level of operation. This alternative will not increase significantly resource recovery.

Ultimate Disposal Area Uses
It is anticipated that the Waste Management, Inc Landfill will ultimately be utilized for recreational purposes.

Institutional Arrangements
There will be no additional institutional arrangements with this alternative.

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 addresses collection processes and transportation needs that provide the most cost effective, efficient service. Proposed disposal areas locations and capacity to accept solid waste are identified as well as program management, funding, and enforcement roles for local agencies. Detailed information on recycling programs, evaluation, and coordination of the Selected System is included in Appendix A. Following is an overall description of the Selected System.

Selection of the solid waste management system was based on a system that would provide the best management options and resource recovery opportunities for the residents of Otsego County. Considerations during the decision making process included enhancing competitive commercial service options and improving recycling and composting opportunities throughout the county. The selected system provides the ability to increase competitive collection service; utilizes Corwith, and Charlton-Chester- Dover Townships Transfer Station; initiates a resource recovery program, and utilizes the MOASL in Montmorency County and the Waste Management Landfill in Crawford County as the primary disposal sites for residential, commercial, and industrial solid waste.

Commercial service providers will continue residential, commercial, and industrial pick up in Otsego County. Collection of solid waste will continue to be through private agreements with customers, and through municipal contracts.

Type B transfer stations will continue to be provided, as long as it is economically feasible, by Corwith, and Charlton- Chester-Dover Townships.

The primary solid waste disposal facility for residential, commercial and industrial waste will be the Montmorency-Oscoda–Alpena Sanitary Landfill, in Montmorency County, and Waste Management, Inc. Landfill in Crawford County.

Resource recovery efforts will involve the development and implementation of a recycling program over the next five year planning period. Initially, recycling within Otsego County will be accomplished through the volunteer efforts of Recycle! Otsego County. As a county-wide effort is developed it is anticipated that the volume of materials recycled will increase.

A subcommittee specifically focused on the development of a recycling program for Otsego County residents will be established. The program will explore opportunities for partnerships with neighboring counties for possible joint processing and/or marketing, but will also review the alternative of maintaining its own county program. Initially, the volunteer based program, Recycle! Otsego County, if able through donations, will operate a drop-off center in Gaylord. Long- term plans will likely

include an expansion of the volunteer based program by locating more drop-off sites throughout the county. Short and long-term funding plans will also be developed and are likely to include a combination of the following: a two-year millage for program start-up costs, a surcharge for long-term support of operation, grant procurement from community foundations and state and federal sources, and local donations. Education will be initially with the assistance of the existing agencies, and the Recycle! Otsego County.

Resource recovery efforts will also involve the development of a household and agricultural hazardous waste collection day to provide a safe disposal option for homeowners and farmers hazardous materials. Additionally, composting efforts will be enhanced through educational efforts and the establishment of additional sites if warranted. The existing composting facility in the City of Gaylord will continue to be utilized and educational efforts will emphasize backyard composting techniques for those residing in rural areas of the county.

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

Exporting County	Importing County	Facility Name[1]	Authorized Quantity/ Daily	Authorized Quantity/ Annual	Authorized Conditions[2]
Cheboygan	Otsego	Type B Transfer Stations			
Crawford	Otsego	Type B Transfer Stations			
Emmet	Otsego	Type B Transfer Stations			
Montmorency	Otsego	Type B Transfer Stations			

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

Exporting County	**Importing County**	**Facility Name[1]**	**Authorized Quantity/ Daily**	**Authorized Quantity/ Annual**	**Authorized Conditions[2]**
NA					

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

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

EXPORT AUTHORIZATION

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

Table 2-A

CURRENT EXPORT VOLUME AUTHORIZATION OF SOLID WASTE

Exporting County	Importing County	Facility Name[1]	Authorized Quantity/ Daily	Authorized Quantity/ Annual	Authorized Conditions[2]
Otsego	Montmorency	MOASL	100%	100%	P,C
Otsego	Crawford	Waste Management, Inc.	100 %	100%	P,C
Otsego	Oscoda		100%	100%	P,C
Otsego	Charlevoix		100%	100%	P, C
Otsego	Wexford		100%	100%	P, C
Otsego	Chippewa		100%	100%	P,C

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 Attachment E.

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]**
Otsego	Charlevoix	NA	NA	NA	

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

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

SOLID WASTE DISPOSAL AREAS

The following identifies the names of existing disposal areas which will be utilized to provide the required capacity and management needs for the solid waste generated within the County for the next five years and, if possible, the next ten years. Pages III-7-1 through III-7-5 contain descriptions of the solid waste disposal facilities which are located within the County and the disposal facilities located outside of the County which will be utilized by the County for the planning period. Additional facilities within the County with applicable permits and licenses may be utilized as they are sited by this Plan, or amended into this Plan, and become available for disposal. If this Plan update is amended to identify additional facilities in other counties outside the County, those facilities may only be used if such import is authorized in the receiving County's Plan. Facilities outside of Michigan may also be used if legally available for such use.

Type II Landfill:
Montmorency-Oscoda – Alpena Sanitary Landfill in Montmorency County

Waste Management, Inc. Landfill in Crawford County

Type A Transfer Facility:
None

Type B Transfer Facility:
Charlton-Chester-Dover Township
Corwith Township

Type III Landfill:

Processing Plant:
NA

Incinerator:
NA

Waste Piles:
NA

Waste-to-Energy Incinerator:
NA

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 included in the Attachments Section.

SELECTED SYSTEM

FACILITY DESCRIPTIONS

Facility Type: Type II Sanitary Landfill
Facility Name: Montmorency-Oscoda-Alpena Sanitary Landfill

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

Map identifying location included in Attachment Section: Yes

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

Owner: Publicly owned by Montmorency, Oscoda, and Alpena Counties

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

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

Site Size:

Total area of facility property:	80	acres [1]
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	yds3
Estimated lifetime:	30	years
Estimated days open per year:	310	days
Estimated yearly disposal volume:	145,000	yds3

(if applicable)
Annual energy production:

Landfill gas recovery projects:	Will be adding recovery in future	
Waste-to-energy incinerators:	NA	megawatts

[1] Currently in the process of obtaining a construction permit for a new cell
NA -- Not Applicable

FACILITY DESCRIPTIONS

Facility Type: Type II Sanitary Landfill
Facility Name: Waste Management Inc. of Waters

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

Map identifying location included in Attachment Section: Yes

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

Owner: Waste Management, Inc.

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

* Explanation of special wastes, including a specific list and/or conditions:
Contaminated soils, friable materials

Site Size:

Total area of facility property:	252.2	acres
Total area sited for use:	252.2	acres
Total area permitted:	79.07	acres
Operating:	9.7	acres
Not excavated:	64.87	acres

Current capacity:	8.2 million	yds3
Estimated lifetime:	+ 20	years
Estimated days open per year:	313	days
Estimated yearly disposal volume:	185,000-200,000	yds3

Annual energy production:

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

NA -- Not Applicable

SOLID WASTE COLLECTION SERVICES AND TRANSPORTATION

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

Residential, commercial and industrial solid waste will continue to be collected by private haulers. Curbside collection service by private haulers will be the primary means of residential solid waste collection. Commercial and industrial solid waste generators will continue to utilize private haulers for their solid waste collection and disposal needs. Existing Type B transfer stations will continue to be operated as drop off sites for the general public as long as it remains affordable for the townships.

Existing transportation routes will continue to be utilized to transport solid waste to the landfills. Access to the Waste Management Landfill, Inc. in Crawford County is via I-75 and County Road 612.

Access to the MOASL is via County Road 487. County Road 487 intersects M-32 in Atlanta five miles north of the landfill and County Road 612 two miles south of the landfill. M-32 has undergone safety and surface improvements. Weight restrictions are in effect during periods of frost for County Roads 487 and 612.

Solid Waste Collection Services

Service Provider	Public/Private	Service Area	Payment	Disposal Facility
Waste Management, Inc	Private	Otsego County	Customer	Waste Mgmt, Inc Waters, MI
Kam's Sanitation	Private	Otsego County	Customer	Waste Mgmt, Inc. Waters, MI
Alpine Sanitation	Private	Otsego County	Customer	Waste Mgmt, Inc. Waters, MI

RESOURCE CONSERVATION EFFORTS:

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

Effort Description	**Est. Diversion Tons/Yr**		
	Current	**5th yr**	**10th yr**
Recycling	Negligible	700	1300
Education	Negligible	100	200
Composting	200	400	885

Otsego County is committed to resource conservation efforts to reduce the overall dependency on the landfill. Resource conservation efforts will involve the development of a countywide (possibly multi-county) recycling program, enhancement of the existing composting program, development of a recycled products procurement program, and the initiation of a comprehensive education program.

The county, in partnership with the City of Gaylord, Townships, Recycle! Otsego County, solid waste haulers, and interested organizations and the general public will develop a recycling program for use by its residents. Initially, recycling within Otsego County will be accomplished through the volunteer efforts of Recycle! Otsego County. As a county-wide effort is developed it is anticipated that the volume of materials recycled will increase.

The county-wide recycling program will involve a phased approach over the five-year planning period with the goal of providing recycling opportunities for county residents. Development of the recycling program will be completed in Phase One. This will include the type of program, material processing, capital and annual operating costs projections, and educational program development. Phase Two will explore funding mechanisms and grant opportunities. Short and long-term funding plans will be developed and are likely to include a combination of the following: a two-year millage for program start-up costs, a surcharge for long-term support of operation, grant procurement from community foundations and state and federal sources, and local donations. The final phase will be the implementation of the recycling system and procurement of funding for the determined needs.

Composting of municipal yard waste currently is being accomplished through the City of Gaylord, and Corwith Township. Education of backyard composting methods will be emphasized for the rural component of the county.

The use of recycled products is paramount to increasing the demand and resultant markets for recycled products. Otsego County will analyze the feasibility of procurement of recycled products. Joint purchasing between county organizations and departments will be explored as a

means of making it locally affordable.

Public Education is a key component of the program. Public education will be accomplished in coordination with Recycle! Otsego County, municipalities, MSU Extension, Conservation District, Natural Resource Conservation Service, Health Department, NEMCOG, and other area organizations. A committee will be established which, along with environmental groups, will be responsible for developing an organizational framework from which educational information will be disseminated to the public.

WASTE REDUCTION, RECYCLING, & COMPOSTING PROGRAMS:

Volume Reduction Techniques

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

Technique Description	Est. Air Space Conserved Yds^3/Yr		
	Current	5 th yr	10 th yr
Compaction	200	546	1200

Volume reduction techniques that will continue to be utilized in Otsego County are: compaction achieved in commercial hauling trucks, and compaction achieved at the landfill. Shredding, baling, and other volume reduction techniques are not practiced in Otsego County. There are no plans to increase volume reduction efforts within this planning period.

Overview of Resource Recovery Programs:

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

Recycling Portion of Wastestream

Material	%	2005	5% Goal	2010	10% Goal
Paper	40	15,985 T/Yr	800 T/Yr	17,702 T/Yr	1,770 T/Yr
Plastics	10	3,996 T/Yr	200 T/Yr	4,425 T/Yr	442 T/Yr
Glass	5	1,998 T/Yr	100 T/Yr	2,212 T/Yr	221 T/Yr
Metals	6	2,398 T/Yr	120 T/Yr	2,655 T/Yr	265 T/Yr
Aluminum	1	400 T/Yr	20 T/Yr	442 T/Yr	44 T/Yr

Composting:

	2005	25% Goal	2010	50% Goal
4% of Wastestream	1,598 T/Yr	400 T/Yr	1,770 T/Yr	885 T/Yr

Education

5 Year Goal = 5% Reduction of solid waste through educational efforts.
10 Year Goal = 5% Reduction of solid waste through educational efforts.

The above chart shows the type and volume of material that potentially may be available for recycling and composting. The overall goal of the resource recovery program is to reduce dependency on landfills. Public support for the development and implementation of a resource recovery program in Otsego County is high. It is understood that in order to implement a program, financial support is necessary. If the presently good economic conditions change, then support for implementing a program could diminish. However, the benefits of reducing the amount landfilled and the savings derived from the reuse and recycling of materials have direct social, environmental and economic benefits.

Impediments to recycling include the following:

* Long Distance to Markets
* Unavailable Markets
* Local Financial Support

It is anticipated that the above impediments to recycling can be overcome by addressing these issues in the planning process. Possible solutions could include working cooperatively with neighboring counties in processing or marketing of materials, and with educational needs. In addition, the program will strive to achieve a high quality, dependable product. This will attract long term relationships with markets dependant on volume and quality recyclable materials.

The City of Gaylord currently operates a composting program for its residents. The program involves the collection of leaves in the fall and delivery to the City's Composting site. The product is then provided to its residents for their use. Various aspects of the program will be reviewed, such as nursery expansion, operations, efficiency and the development of an education outreach program. The remaining portion of the county is primarily rural. Backyard composting is the best method for leaf and yard waste disposal and will be promoted through educational outreach.

Elimination of household hazardous materials in the solid waste stream is a high priority for Otsego County. In coordination with the recycling program, a battery disposal program will be pursued. A household hazardous waste day will be developed, possibly in coordination with the landfills and adjacent counties. Funding mechanisms will be explored for program implementation.

_X_ Recycling programs within the County are feasible. Details of existing and planned program 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:

_X_ 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.

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

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

RECYCLING AND COMPOSTING

The following is a brief analysis of the recycling and composting programs selected for the County in this Plan. Additional information on operation of recycling and composting programs is included in Appendix A. The analysis covers various factors within the County and the impacts of these factors on recycling and composting. Following the written analysis, 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.

Various recycling programs were discussed during the course of the planning period. The Solid Waste Planning Committee held several meetings on the development of a recycling program for the county, inviting the local volunteer committee, Recycle! Otsego County to attend. Recycling tours were conducted of the Emmet County Recycling Center to provide information on area recycling programs and possible opportunities for coordination.

Several alternatives were discussed for county-wide application, which included:

- Recycling Coordination with Emmet County. Compartmentalized containers strategically located throughout county. Hauled to Emmet County facility. Educational efforts coordinated with existing agencies and Emmet County.
- Recycling Coordination with Crawford County and adjacent Counties. Crawford County currently is in the process of developing a county-wide system.
- Recycling Volunteer Program only.
- County Recycling Program in partnership with Private groups.

Analyzing the alternatives for selection of the best system for Otsego County included incorporation of past recycling program failures. A program which included a public-private partnership and a sustainable funding mechanism was felt by the committee to be a critical component for a future county-wide initiative. Past programs were based on either the private sector's willingness to provide a recycling component to their waste management system, or the program relied strictly on volunteer efforts and donations. Either case resulted in recycling programs to be discontinued within Otsego County.

The selected recycling alternative involves the development of a program in partnership with the county, the City of Gaylord, Townships, Recycle! Otsego County, solid waste haulers, and interested organizations and the general public will develop a recycling program for use by its residents. Initially, recycling within Otsego County will be accomplished through the volunteer efforts of Recycle! Otsego County. As a county-wide effort is developed it is anticipated that the volume of materials recycled will increase.

The county-wide recycling program will involve a phased approach over the five-year planning period with the goal of providing recycling opportunities for county residents. Development of the recycling program will be completed in Phase One. This will include the type of program, material processing, capital and annual operating costs projections, and educational program development. Phase Two will explore funding mechanisms and grant opportunities. Short and long-term funding plans will be developed and are likely to include a combination of the following: a two-year millage for program start-up costs, a surcharge for long-term support of operation, grant procurement from community foundations and state and federal sources, and local donations. The final phase will be the implementation of the recycling system and procurement of funding for the determined needs.

TABLE III-1

EXISTING RECYCLING

Program Name	Service Area[1]	Public/ Private	Collection Point[3]	Collection Frequency[4]	Materials Collected[5]	Program Management Responsibilities[2] Development	Operation	Evaluation
City of Gaylord	City of Gaylord	Pu	c	w	A,B,C,E,F	City	City	City
Waste Mgmt, Inc	Otsego County	Pr	0	w	C	5	5	5
Kam's San	Gaylord	Pr	c	w	A,B,C,D,F	5	5	5
Lion's Club	Otsego County	Pr	d	w	B	4	4	4

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 = dropoff; 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.

SELECTED SYSTEM

TABLE III-2

EXISTING COMPOSTING

Program Name	Service Area[1]	Public/ Private	Collection Point[3]	Collection Frequency[4]	Materials Collected[5]	Program Management Responsibilities[2] Development	Operation	Evaluation
City Of Gaylord	City	Pu	d	Sp,Fa	L	O=City	O=City	O=City
Waste Mgmt.	Otsego County	Pr	d	Sp.Su,Fa	L,W	5	5	5
Corwith Twp	Corwith Twp.	Pu	d	Sp, Su, Fa	L, W	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 = dropoff; 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-3

EXISTING SOURCE SEPARATION OF POTENTIALLY HAZARDOUS MATERIALS

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

Program Name	Service Area[1]	Public/ 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 = dropoff; 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 and antifreeze; AN = antifreeze; B1 = lead acid batteries; B2 = household batteries; C = cleaners and polishers; H = hobby and art supplies; OF = used oil filters; P = paints and solvents; PS = pesticides and herbicides; PH = personal and health care products; U = used oil; OT = other materials and identified.

TABLE III-4

PROPOSED RECYCLING

Program Name	Service Area[1]	Public/ Private	Collection Point[3]	Collection Frequency[4]	Materials Collected[5]	Program Management Responsibilities[2] Development	Operation	Evaluation
Recycle! Otsego County	Otsego County	Private & Public		c, d	A,B,C,E,F	2,5	2,5	2,5

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 througout 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 = dropoff; 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-5

PROPOSED COMPOSTING

Program Name	Service Area[1]	Public/ Private	Collection Point[3]	Collection Frequency[4]	Materials Collected[5]	Program Management Responsibilities[2] Development	Operation	Evaluation

Same as Existing Composting

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 througout 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 = dropoff; 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-6

PROPOSED SOURCE SEPARATION OF POTENTIALLY HAZARDOUS MATERIALS

Program Name	Service Area[1]	Public/ Private	Collection Point[3]	Collection Frequency[4]	Materials Collected[5]	Program Management Responsibilities[2] Development	Operation	Evaluation
Otsego County	Otsego County	Public	d	Su	AR A AN B2 C H P PS PH (to be determined)	2	2	2

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 througout 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 = dropoff; o = onsite; and if other, explained.
4 Idendtified 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 and 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:

Recycle! Otsego County

Otsego County Conservation District

Other:

District #3 Health Department: Household Hazardous Waste Program Assistance.

Otsego County: Recycling Program Development

MSU Extension: Education Dissemination, Recycling Program Development.

Townships: Participation in Recycling Program Development and Educational outreach.

SELECTED SYSTEM

PROJECTED DIVERSION RATES:

The following estimates the annual amount of solid waste 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:	-	200	400	G. GRASS AND LEAF			
				Total For G & H =		400	885
B. NEWSPAPER:	-			H. TOTAL WOOD WASTE:			
C. CORRUGATED CONTAINERS:	-			I. CONSTRUCTION AND DEMOLITION:			
D. TOTAL OTHER PAPER:	-	800	1770	J. FOOD AND FOOD PROCESSING:			
E. TOTAL GLASS:	-	100	221	K. TIRES:			
F. OTHER MATERIALS:				L. TOTAL METALS:		120	265
F1.				F3.			
F2.				F4.			

MARKET AVAILABILITY FOR COLLECTED MATERIALS:

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

Collected Material:	In-State Markets	Out-of-State Markets	Collected Material	In-State Markets	Out-of-State Markets

Sufficient markets exist for properly sorted and baled materials: plastics, newspaper, metal, corrugated cardboard and glass.

A. TOTAL PLASTICS:	100%	G. GRASS AND LEAVES:	100%
B. NEWSPAPER:	100%	H. TOTAL WOOD WASTE:	100%
C. CORRUGATED CONTAINERS:	100%	I. CONSTRUCTION AND DEMOLITION:	100%
D. TOTAL OTHER PAPER:	100%	J. FOOD AND FOOD PROCESSING	100%
E. TOTAL GLASS:	100%	K. TIRES:	100%
F. OTHER MATERIALS:		L. TOTAL METALS:	100%
F1.		F3.	
F2.		F4.	

EDUCATIONAL AND INFORMATIONAL PROGRAMS:

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

Program Topic[1]	Delivery Medium[2]	Targeted Audience[3]	Program Provider[4]
1	N,O	p,s=K-12	EX, DPA, 0=Recycle! Otsego County, Haulers
2	N,O	P	EX, 0=NRCS, CD
3	R, N, O	p	EX, HD, 0=NRCS, CD

[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.

TIMETABLE FOR SELECTED SYSTEM IMPLEMENTATION

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

TABLE III-7

Management Components	Timeline
Recycling Program	
Program Development	2000-2002
Program Implementation	2002-Ongoing
Resource Conservation Education Program	
Recycling Education Program Development	2000-2001
Recycling Education Program Implementation	2001-Ongoing
Composting Education Program Development	2000-2001
Composting Education Program Implementation	2001-Ongoing
Household Hazardous Waste Education Program Development	2000-2001
Household Hazardous Waste Education Program Implementation	2001-Ongoing
Reduce, Reuse Education Program Development	2000-2001
Reduce, Reuse Education Program Implementation	2001-Ongoing
Household Hazardous Waste Disposal Program	
Program Development	2000-2002
Program Implementation	2002-Ongoing
Composting Program	
Program Implementation	2000-Ongoing

SITING REVIEW PROCEDURES

AUTHORIZED DISPOSAL AREA TYPES

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

Type II and Type III Sanitary Landfills and Solid Waste Incinerators may not be sited by this plan.

Construction of Type B Transfer Facilities, and Resource Recovery Facilities are consistent with this plan.

SITING CRITERIA AND PROCESS

The following process describes the criteria and procedures to be used to site Type A Transfer Facilities, and determine consistency with this Plan.

1. Proposals for all new facilities which include: Type A transfer facilities must be found consistent with the criteria contained in this section before a determination of consistency may be issued. Proposals for a disposal area type not allowed by the Plan are automatically inconsistent with the Plan unless specifically added to the Plan through a properly approved Plan amendment.

2. Solid waste facility siting proposals will be reviewed for consistency with the Plan by the designated planning agency (DPA) and approved by the county solid waste planning committee according to the procedures outlined herein. A proposal that is declared to be consistent with the Plan shall become part of the Plan upon issuance of a construction permit by the DEQ.

3. To initiate the review under this Plan, the facility developer shall submit 15 copies of the information required below to the County Board of Commissioners. Copies will be forwarded by the County Board of Commissioners to the DPA, MDEQ, Health Department, townships and municipality where the siting will occur.

4. A non-refundable application fee will be established by the Otsego County Board of Commissioners. This fee will be reasonable and based on technical assistance time and travel needed to complete the application review.

5. Upon receipt of the application and the non-refundable application fee, the DPA shall review the application for administrative completeness in accordance with the requirements listed in subparts **A** to **E** below. If it is not complete, the developer shall be notified and shall have 30 working days to provide additional information to make the application complete. After all requested information has been submitted by the developer, the DPA will have 30 working days to review the application. If no determination is made within 30 working days, the application shall be considered administratively complete.

A. The application shall include a name, address, and telephone number for the applicant (including partners and other ownership interests), the property owner(s) of the site, any consulting engineers and geologists that will be involved in the project, a designated contact person for the facility developer (if different than the applicant), and shall specify the type of

facility being proposed.

B. The application shall contain information on the site location and orientation. This shall include a legal land description of the project area, a site map showing all roadways and principal land features within two miles of the site, a topographic map with contour intervals of no more that 10 feet for the site, a map and description of all access roads showing their location, type of surface material, proposed access point to facility, haul route from access road to nearest state trunkline, a current map showing the proposed site and surrounding zoning, domiciles, and present usage of all property within one mile of the site.

C. The application shall contain a description of the current site use and ground cover, a map showing the locations of all structures within 1,200 feet of the perimeter of the site, the location of all existing utilities, the location of the 100 year floodplain as defined by Rule 323.3ll of the administrative rules of Part 31, Water Resource Protection, of Act 451, as amended, within 1,200 feet of the site, location of all wetlands as defined by Part 303, Wetlands Protection, of Act 451 within 1,200 feet of the site, and the site soil types and general geological characteristics.

D. The application shall include a general description of the facility and how it functions (for informational purposes in the Permit Review Process) including the types and quantities of waste to be delivered to the facility, the targeted service area (e.g. communities, major commercial and industrial establishments, institutions, and waste haulers) for the facility, useful life and capacities of the facility, description of how each type of material will be handled at the facility, the eventual disposition of the materials to be handled by the facility, the proposed operating schedules (days and hours), a description of any resource recover, recycling and composting activity planned for the site, the expected employment of the facility, a discussion of the economic and engineering feasibility of the final use plan for the site, and the applicant's rationale for developing the facility.

E. If necessary to satisfy the requirement of criterion **6M**, the developer must provide a signed statement indicating its willingness to provide for road improvements and/or maintenance.

6. Upon receipt of the application, the County Board of Commissioners, the Health Department, the township and the municipality shall review the application and send their recommendations and comments to the DPA. This shall be completed within 60 days of submission of the application. If the application is determined to be administratively incomplete, the applicant shall have 45 days to submit missing information.

Within 90 days from the date the application is determined to be administratively complete, the DPA shall complete the consistency review and make their recommendations to the county solid waste management planning committee who shall send the county's written final determination of consistency for the proposal to the applicant. In the event that the DPA or the county solid waste planning committee does not make a consistency determination within 90 days from the date of application the proposal is automatically found consistent with the plan. The siting criteria and requirements described in subparts A to O are the sole standard by which this determination is

made. To be found consistent with the Plan, a proposed solid waste disposal area must comply with all the siting criteria and requirements describe in subparts **A** to **O** below.

A. The active work area for a new facility or expansion of an existing facility shall not be located closer than 1,000 feet from adjacent property lines, road rights-of-way, lakes, and perennial streams.

B. The active work area for a new facility or expansion of an existing facility shall not be located closer than 1,000 feet from domiciles or public schools existing at the time of submission of the application.

C. A sanitary landfill shall not be constructed within 10,000 feet of a licensed airport runway.

D. 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.

E. A facility shall not be located in a wetland regulated by Part 303, Wetlands Protection, of Act 451, unless a permit is issued.

F. A facility shall not be constructed in lands enrolled under Part 361, Farmland and Open Space Preservation , of Act 451.

G. A facility shall not be located in an environmental area (wetlands, steep slopes exceeding 15 %, high risk erosion areas) as defined by 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.

H. A facility shall not be located in an area of groundwater recharge as defined by the United States Geological Survey or in a designated Wellhead Protection Area as approved by the DEQ.

I. A Facility shall not be located in a designated historic or archaeological area defined by the state historical preservation officer.

J. 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:

1. 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.
2. The State determines that the land may be released for landfill purposes and the facility developer acquires the property in fee title from the State in accordance with state requirements for such acquisition.

K. Facilities may only be located on property zoned as agricultural, industrial, or commercial at the time the facility developer applies to the county for a determination of consistency under the Plan. Facilities may be located on unzoned property, but may not be located on property zoned residential.

L. The owner and operator of a facility shall agree to participate with the county on all current and future pollution prevention, recycling and composting activities. The owner and operator will provide a written statement of this agreement.

M. A Facility shall be located on a paved, all weather "Class A" road. If a facility is not on such a road, the developer shall agree to provide for upgrading and/or maintenance of the road serving the facility. The developer will provide a written statement of this agreement.

N. Vegetation belts, buffers, screening and service access areas at facilities shall meet standards which are not less than:

1. Vegetation Belt: A vegetation belt of five (5) feet from the parcel line toward the center of the parcel will be maintained in woody plant vegetation to provide visual screening from roads and adjacent property. The vegetation belt will not include any improvements, buildings or fences except for an entrance drive(s), utilities and identification signs.

2. Buffers: Measuring toward the center of the disposal area property, but not within the 5 foot vegetation belt, a buffer shall be established which:

   a. Shall not be occupied by any structure, storage of equipment, materials, operations, or similar activities;

   b. Shall consist of the following for any side of the parcel that is adjacent to an industrial or commercial zoned area:

      - A buffer area setback of fifty (50) feet, or
      - A berm four (4) feet or more high, not sloped greater than one (1) vertical for each of the same two units horizontal, or
      - A solid wall four (4) feet or more, in height, or

   c. Shall consist of the following for any side of the parcel that is adjacent to all other uses:

      - A buffer area setback of one hundred (100) feet, or
      - A buffer area setback of fifty (50) feet followed by a berm four (4) feet or more high, not sloped great than (1) vertical for each of the same two units horizontal, or
      - A buffer area setback of twenty-five (25) feet followed by a solid wall four (4) feet or more, in height

O. Applicant has submitted a written and signed statement that the disposal area will abide by and remain in compliance with any applicable part of the Michigan Subdivision Control

Act, Michigan Soil Erosion and Sedimentation Control Act, Michigan Construction Code, applicable state air and water pollution standards, local wellhead protection ordinances, applicable building codes, state and local health codes, local noise ordinances and local junk ordinances as determined with the advice of appropriate state and local officials and as specified in the Solid Waste Plan, Local Ordinances and Regulations Section. Submittal by the applicant of this signed statement is required to satisfy this criteria. The adequacy of the submittal will not be used to determine if this criteria has been satisfied.

7. If the proposal is found to be inconsistent with the Plan, the facility developer shall have 90 working days to provide additional information to address the identified deficiencies. The DPA will have 60 working days to determine consistency. The DPA may only determine consistency on such a resubmittal in regards to the criteria originally found deficient. If no consistency determination has been rendered within 60 working days, the developer may request the DEQ to determine consistency of the proposal with the Plan as part of the DEQ review of a construction permit application.

8. In the event that the DPA or the county solid waste planning committee does not make a consistency determination within 60 days for the review of additional information, the proposal is automatically found consistent with the plan.

SOLID WASTE MANAGEMENT COMPONENTS

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

Otsego County Board of Commissioners

The Otsego County Board of Commissioners shall be responsible for the implementation and enforcement of the Otsego County Solid Waste Management Plan. The Otsego County Board of Commissioners has an established Solid Waste Committee which will provide overall direction of the implementation process. The committee will provide oversight to ensure initiation of the public education and resource recovery program, and that objectives are met. The County Solid Waste Committee reports to the County Board of Commissioners, with ultimate decision making resting with the Board of Commissioners.

The Otsego County Board, with County Board approval shall take such actions as necessary to secure funds to provide for the implementation and enforcement of the plan including, but not limited too, applying for federal, state and foundation grants, or other funding sources that may be available, including the levy of a special millage , or solid waste surcharge.

The Otsego County Board of Commissioners is also responsible for any legislative actions that may be necessary to implement the goals of the plan. This includes such as: flow control, recycling incentives, special hazardous waste collection, and related policy in harmony with the state statute.

Northeast Michigan Council of Governments (NEMCOG)

NEMCOG will continue to provide assistance for solid waste planning and implementation for the Otsego County Board of Commissioners, as funds are available. NEMCOG will assist with grant writing to secure the funds for plan implementation, upon request. NEMCOG will continue to promote regional coordination with recycling and other resource recovery efforts. NEMCOG will seek grant funding to enable further assistance with multi-county recycling efforts. NEMCOG will continue to keep the Board updated on regional and statewide solid waste issues. NEMCOG is the designated planning agency for plan update.

Otsego County Soil Conservation District

The Otsego County Soil Conservation District will continue to provide a program for recycling of plastic pesticide containers. In addition, the District will provide technical assistance for public education, recycling, composting and natural resource conservation.

District #3 Health Department

The Health Department will continue to play a significant role in education, recycling and enforcement. The Health Department will respond to requests and complaints regarding possible threats to the public health and safety from solid waste collection, processing and disposal facilities. They will also be involved in the development of a household hazardous waste collection program and will be a primary means of education dissemination to the public.

Natural Resource Conservation Service

The Natural Resource Conservation Service will assist with dissemination of information and literature regarding recycling, composting and household hazardous waste collection programs.

MSU Extension

MSU Extension will assist with public educational and promotional programs necessary for implementing various components of the plan, including recycling, composting and household hazardous waste collection programs. MSU Extension will assist with dissemination of information and literature designed to inform the pubic on matters related to recycling, resource recovery, and conservation.

Recycle Otsego! County

Recycle Otsego! County will be involved with the development of the recycling program for Otsego County and assist with information dissemination.

- **Involvement is not limited to these groups.**

IDENTIFICATION OF RESPONSIBLE PARTIES

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

Resource Conservation: Will achieve through educational activities in partnership with local organizations, as previously mentioned.

Source or Waste Reduction -

Product Reuse -

Reduced Material Volume -

Increased Product Lifetime -

Decreased Consumption -

Resource Recovery Programs:
Composting – City of Gaylord, Waste Management, Inc., Corwith Township

Recycling - County Board of Commissioners in conjunction with Recycle! Otsego County.

Energy Production - None

Volume Reduction Techniques:

Collection Processes: Private enterprise.

SELECTED SYSTEM

Transportation: Private enterprise.

Disposal Areas:
Processing Plants – Private enterprise

Incineration - None

Transfer Stations – Corwith, Charlton-Chester-Dover Townships

Sanitary Landfills - Private enterprise, MOASL

Ultimate Disposal Area Uses:
Will be determined by facility owner.

Local Responsibility for Plan Update Monitoring & Enforcement:

Otsego County Board of Commissioners

Educational and Informational Programs:
NRCS
Otsego County Health Department
MSU Extension
DPA

Documentation of acceptance of responsibilities is contained in Appendix D.

LOCAL ORDINANCES AND REGULATIONS AFFECTING SOLID WASTE DISPOSAL

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

_X_ 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.

Otsego County Solid Waste Flow Control Ordinance to restrict disposal of refuse generated in the County of Otsego. Solid waste disposal in Otsego County is restricted to the following counties: Crawford, Montmorency, Oscoda, Wexford, Chippewa, or Charlevoix.

_____ 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:

_x_ 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.

Regulations meeting these qualifications may be adopted and implemented by the appropriate governmental unit without additional authorization from, or formal amendment to, the Solid Waste Management Plan. Allowable areas of local regulation include:

1. Certain ancillary construction details, such as landscaping and screening
2. Hours of operation
3. Noise, litter, odor and dust control
4. Operation records and reports
5. Facility security
6. Composting and recycling (ie volume based pricing ordinance, no burn ordinance)
7. Local Franchising.

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.

_X_ This County has more than ten years capacity identified in this Plan and an annual certification process is not included in this Plan.

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

Otsego County has more than ten years of capacity available for solid waste disposal. The Montmorency-Oscoda-Alpena Sanitary Landfill has a current capacity of 3,500,00 yds^3 and an estimated lifetime of 30 years. Additionally, the Waste Management, Inc. Landfill in Waters, has a current capacity of 8.2 million yds^3 and an estimated lifetime of more than 20 years. Documentation that Otsego County has access to the disposal capacity at the Montmorency-Oscoda–Alpena Sanitary Landfill and the Waste Management, Inc. Landfill in Waters is contained in Attachment B.

APPENDIX A

ADDITIONAL INFORMATION

REGARDING THE

SELECTED

SYSTEM

APPENDIX A

DETAILS OF RECYCLING PROGRAM DEVELOPMENT AND IMPLEMENTATION:

EVALUATION OF RECYCLING

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

Recycling and composting programs rate high in public acceptability. However, past recycling efforts involving both the private and non-profit sector, resulted in discontinuance of the service leaving many residents with a negative attitude towards recycling. Volume reduction through recycling and composting can be achieved in Otsego County, however, with the current markets, subsidy for program success will be necessary. A public/private recycling initiative is therefore necessary to ensure long-term success of the program.

Program development will take place over the next several years involving both public and private entities as well as interested citizens. The committee will consider whether an independent approach is best or whether coordinating with other counties is more cost-effective. Otsego County could operate their program independent of other counties, however, the more volume of materials the better the chance of a break-even operation. A capital, and operation and management budget will be developed to assess the best approach for the county–wide program. The best available option will then be chosen for recycling program implementation. A financial strategy will also be developed to look at long-term funding options. In addition, incentives to encourage homeowner participation in the recycling program will be explored.

However, if the presently good economic conditions change, then support for implementing a program could diminish. However, the benefits of reducing the amount landfilled and the savings derived from the reuse and recycling of materials have direct social, environmental and economic benefits.

Impediments to recycling include the long distance required to transport goods to markets, sometimes unavailable markets, and lack of local financial support. Recycling opportunities in the county are limited and lack county-wide coordination. Currently, Waste Management, Inc., Kam's Sanitation, and the Lion's Club are providing limited recycling opportunities. The former landfill operation (City Environmental Services) did provide drop-off of recyclables at the Landfill, but this service is no longer available. Several difficulties exist in starting a recycling program in Otsego County, such as low volume, especially in rural areas, high costs of transporting materials to the market, lack of a large centralized collection/storage site, and lack of recycling equipment. It is anticipated that the above impediments to recycling can be overcome by increasing the volume of materials. This can be accomplished through the development of a multi-county approach, or by paying for the cost of a material recycling facility. In addition, the program can strive to achieve a high quality, dependable product which will attract long term relationships with markets dependant on volume and quality recyclable materials.

The technical feasibility of recycling is well proven. Public health concerns in regards to groundwater contamination and methane gas production will be reduced with increasing recycling as less material will be landfilled. Recycling reduces the dependency on landfills, the environmental impacts associated with landfilling and the overall energy needed to produce products from raw materials.

Composting is a well proven means of disposing of yard wastes. Composting is the least costly and least energy intensive method of disposing of solid waste, especially in a rural region. Composting provides a reusable resource with economic value and can be implemented individually or on a county-wide basis. Public health impacts are minimized due to a reduction in the amount of solid waste being landfilled. Due to the reduction of solid wastes being landfilled, environmental health impacts at the landfill, such as leachate formation and potential ground water contamination, are minimized. Composting reduces the amount of energy required to transport and landfill yard wastes.

APPENDIX A

DETAILED FEATURES OF RECYCLING AND COMPOSTING PROGRAMS:

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

Recyclable component of solid waste stream (1980 NEMCOG Solid Waste Stream Assessment)

Material	% of waste stream	Amount of waste stream (tons/day)	Amount recycled 25% participation (tons/day)	Amount recycled 10 % participation (tons/day)
Paper	48%	42	10.5	4.2
Plastics	9.2%	8	2	0.8
Metals	6.6%	6	1.4	0.6
Glass	3.3%	2.9	0.7	0.3

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:
Limited equipment currently exists within the county for a recycling program operation. Equipment needs and costs will be assessed as part of the development of the overall program.

Proposed Programs:
The recycling programs which are likely to be analyzed will either be an independent program or one in which processing is coordinated with an adjacent or nearby county. The collection of materials will likely be curbside in the densely populated areas with containers in the more rural portions of the county. The containers and materials collected will then be picked up and taken to a central processing facility for sorting and baling.

APPENDIX A

Site Availability & Selection

Recycling Programs:
Currently, Recycle! Otsego County is in the process of leasing a large building in the City of Gaylord for the drop-off of recyclable materials. Program development will involve establishing a committee to work with existing efforts and build upon the program for county-wide recycling service.

Drop-off sites for collection of recyclable materials, if selected, will be located in areas which are convenient for the public to access.

Composting Program:
The City of Gaylord operates and maintains a composting program for its city residents. In addition, Corwith Township, and the Waste Management Landfill, Inc., also maintain composting sites at their respective disposal areas.

APPENDIX A

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.

Existing Programs:

Program Name	pH Range	Heat Range	Other Parameter	Measurement Unit

City of Gaylord does not currently monitor for these parameters.

Proposed Programs:

Program Name	pH Range	Heat Range	Other Parameter	Measurement Unit

None proposed at this time.

APPENDIX A

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.

The Otsego County Board of Commissioners is ultimately responsible for implementing the Solid Waste Management Plan, as part of its duties as general governance. The Board of Commissioners and its personnel will coordinate the solid waste implementation activities with local municipalities, agencies, organizations, and planning commissions. The Board of Commissioners has charged the County Planning Commission and City of Gaylord Planning Commissions to be aware of any pertinent ordinances or approved land use plans within the county, and any pertinent restrictions or requirements contained in plans for air quality, water quality, or waste management which may be required to meet state or federal standards. Any county-level decisions affecting current or anticipated programs for solid waste management, air quality, water quality or land use planning will be made only after thorough consultation with the county and City of Gaylord planning commissions.

APPENDIX A

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	Estimated Costs	Potential Funding Sources
Resource Conservation Efforts	$20,000	User Fees Community Foundations State Grant Programs Federal Grant Programs Inkind Sources
Recycling Program: Costs will vary dependent upon the program developed. The following are estimates based on a drop-off program. **Year One** Roll-off Bins (30yd3): 10 @ $6,000 Processing Cost: $6.75/yd Transportation Costs: $200/bin Processing and Transportation $ City: @ 52 wks = $21,000 Twps (9) @ $4,830 = $43,470	**Approximate Cost: $124,470.00** $60,000 $64,470	.2 mills = approx. $150,000 State and Federal Grants Donations Surcharge Foundations
Composting Program City of Cheboygan New Site Development Household Hazardous Waste Program	Increased labor costs Varies depending on site selection Varies up to an estimate $10,000/day	Inkind Municipalities User fee Millage User Fee
Volume Reduction Techniques	$5,000	Inkind Sources Community Foundations State Grant Programs Federal Grant Programs
Educational & Informational	$5,000-$30,000	Inkind Sources Community Foundations State Grant Programs Federal Grant Programs
Management Arrangements	Will be determined	Will be determined

Costs and funding sources for the recycling program are currently in the development stage. Funding sources to be explored will include: user fees, community foundations, and state and federal grant programs.

Local agencies such as: Otsego County Conservation District, District #3 Health Department, Natural Resource Conservation Service, MSU Extension will provide outreach activities through existing work activities. Material will be available at these various offices, and disseminated through various newsletters. Funding will be sought through local foundations to assist with the costs of development and printing of educational materials.

APPENDIX A

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:

Selection of the solid waste management system was based on which system was best for the residents of Otsego County. This alternative provides for primary and contingency solid waste disposal at the Montmorency- Oscoda - Alpena Sanitary Landfill in Atlanta, and the Waste Management, Inc. Sanitary Landfill in Crawford County. Emphasis will be placed on reducing the dependency on landfills. Recycling and composting will be an integral component of this system and present recycling and composting programs will be improved and expanded. A county-wide recycling program will be developed to provide convenient service for residents throughout the county. Composting sites currently operating in the City of Gaylord, Corwith Township and the Waste Management Landfill in Crawford County will continue their operations. Backyard composting programs will be promoted for the rest of the rural portions of the county. Household hazardous waste collection programs will be developed and implemented on an annual basis. Annual clean-up days for big items will be encouraged. Education will be a key component of the program emphasizing reduce, reuse, and recycle.

Technical Feasibility
The technical feasibility of sanitary landfilling is well proven and the most utilized system of solid waste management in the U.S. The technical feasibility of recycling and composting is well proven.

Economic Feasibility
The economic feasibility of implementing the resource recovery initiatives will require additional funds.

Access to Land
Between the two authorized landfills there is more than enough capacity and land for landfill expansion to serve Otsego County for the planning period.

Access to Transportation
Existing transportation routes will be utilized for solid waste delivery to the landfills.

Access to the Waste Management Landfill, Inc. in Crawford County is via I-75 and County Road 612.

Access to the MOASL is via County Road 487. County Road 487 intersects M-32 in Atlanta five miles north of the landfill and County Road 612 two miles south of the landfill. M-32 has undergone safety and surface improvements. Weight restrictions are in effect during periods of frost for County Roads 487 and 612.

Effects on Energy
Sanitary landfilling is an energy intensive system. The disposal of materials which required energy to produce, also require energy to transport to the site and energy to mechanically cover the materials daily. Some energy will be conserved by utilizing transfer stations. Recycling of materials can reduce the overall energy costs for production of goods. Energy savings will be realized by the recycling of materials.

Environmental Impacts
Since this alternative utilizes an existing site, initial environmental impacts have not been considered. The negative environmental impacts primarily concern the development of leachate within the site and the contamination of groundwater. Methane gas can also be a concern, however, technology exists for utilization of gas for operations. Recycling of materials will reduce the overall environmental impacts related to the manufacturing of products.

Public Acceptability
Public acceptability for this alternative is expected to be good since it will increase options for solid disposal locations by establishing additional transfer stations and provides for increased recycling and composting opportunities.

Conservation of Natural Resources
Conservation of natural resources will occur through expanding resource recovery programs.

Selection Process
The selected system was chosen by a majority vote of the Solid Waste Planning Committee.

APPENDIX A

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. Increases local competition by allowing for disposal of solid waste at the MOASL

2. Enhances current programs for recycling and composting.

3. Allows for coordination and recycling program development between public/private entities.

4. Coordinates with existing agencies and organizations.

5. Provides a cost-effective means of providing increased services in recycling.

6. More household hazardous waste will be removed from the waste stream and less will be landfilled.

7. Reduces resource recovery costs for residents.

DISADVANTAGES:

1. Additional funds will be necessary to implement county wide recycling program

2. Additional involvement is necessary by County and local agencies to implement Plan.

APPENDIX B

NON-SELECTED SYSTEMS

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

APPENDIX B

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

ALTERNATIVE 1: CURBSIDE COLLECTION IN COMBINATION WITH EXISTING TRANSFER STATIONS; VOLUNTEER RESOURCE RECOVERY INITIATIVES; DISPOSAL AT WASTE MANAGEMENT, INC LANDFILL.
This alternative maintains the present management system currently in place in Otsego County Collection of solid waste will continue to be through private agreements with local haulers, township contracts with haulers, and utilization of transfer stations. Recycling and composting operations currently in operation in Otsego County will continue at their present level of operation. Backyard composting programs will be promoted for the rest of the unpopulated portions of the county. Educational efforts will involve utilizing existing agencies and organizations for information dissemination. Solid waste will continue to be disposed at the Montmorency-Oscoda-Alpena Sanitary Landfill in Montmorency County, and the Waste Management Landfill, Inc. in Crawford County for the next 10 year planning period.

Technical Feasibility
The technical feasibility of the solid waste system selected involves utilization of existing technology. Sanitary landfilling is well proven and the most utilized system of solid waste management in the U.S.

Economic Feasibility
The economic feasibility of selecting this alternative is good. No new funds are necessary to implement this alternative. Educational activities will be subsidized through a combination of existing in-kind support and local donations and grants.

Access to Land
The MOASL is situated on a 40 acre site with an estimated refuse volume of 3,500,000 cubic yards or 20+ years capacity. The Waste Management Inc. Landfill has sufficient land available, with over 250 acres.

Access to Transportation
Existing transportation routes will continue to be utilized to transport solid waste to the landfills. Access to the Waste Management Landfill, Inc. in Crawford County is via I-75 and County Road 612.

Access to the MOASL is via County Road 487. County Road 487 intersects M-32 in Atlanta five miles north of the landfill and County Road 612 two miles south of the landfill. M-32 has undergone safety and surface improvements. Weight restrictions are in effect during periods of frost for County Roads 487 and 612.

Effects on Energy
Sanitary landfilling is an energy intensive system. The disposal of materials which required energy to produce, also require energy to transport to the site and energy to mechanically cover the materials daily. Some energy is conserved by utilizing transfer stations in the more rural areas.

Environmental Impacts
Since this alternative utilizes an existing site, initial environmental impacts have not been considered. The negative environmental impacts primarily concern the development of leachate within the site and the contamination of groundwater. Methane gas can also be a concern, however, technology exists for utilization of gas for operations.

Public Acceptability
Public acceptability will be minimal for a program that does not increase competition or encourage increased efforts for resource recovery programs.

Resource Conservation
Conservation of natural resources will occur through continuation of the recycling programs, and increasing the utilization of backyard composting programs.

Waste Reduction
Waste reduction will be achieved through education. As educational efforts will be limited, it is likely this alternative will not result in significant waste reduction.

Pollution Prevention
This alternative will not increase pollution prevention efforts, but will maintain them at their present level. This alternative does not provide a means to remove household hazardous waste from the waste stream, so these materials will continue to enter the landfill.

Resource Recovery
Resource recovery efforts currently in operation in Otsego County will continue at the present level of operation. This alternative will not increase significantly resource recovery.

Ultimate Disposal Area Uses
It is anticipated that the Waste Management, Inc. Landfill will ultimately be utilized for recreational purposes.

Institutional Arrangements
There will be no additional institutional arrangements with this alternative.

APPENDIX B

ADVANTAGES AND DISADVANTAGES OF THE NON-SELECTED SYSTEM:

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

ADVANTAGES:

1 Minimal costs.

2. Existing recycling and composting programs would be maintained.

3. Little involvement by local government for solid waste management.

DISADVANTAGES:

1. Minimal material recovery.

2. Expansion of resource recovery programs not likely.

3. Problems with marketing recycled material.

4. Little effort towards reduction, reuse.

5. No household hazardous waste program. Hazardous waste still being landfilled.

6. With few changes to existing system, current problems will likely continue.

APPENDIX C

PUBLIC PARTICIPATION

AND APPROVAL

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.

The process for establishing the Otsego County Solid Waste Planning Committee involved advertisement in the Gaylord Herald times and also through nominations from the Otsego County Committee on Solid Waste. Once the committee positions were filled, the Otsego County Board of Commissioners voted on and approved the committee.

Committee meetings were then held to obtain input into the overall plan. The following provides an overview of the meetings and accomplishments.

APPENDIX C 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. See Attachment G for documentation of the Public Involvement Process.

Meeting #1 July 29, 1999

I. Solid Waste Overview
II. Election of Chair
III. Procedures for Meetings
IV. Develop Solid Waste Goals & Objectives
V. Identification of issues/problems/deficiencies
VI. Determine alternatives (disposal options) to be reviewed
VII. Development of Resource Recovery Options

Meeting #2 August 26, 1999

I. Development of Goals and Objectives
II. Discussion of resource recovery options

Meeting #3 October 6, 19989

I. Crawford County Update
II. Resource Recovery Program Development
III. Disposal Options Discussion
IV. Review Draft

Meeting #4 November 1, 1999

I. Discussion with Recycle! Otsego County
II. Recycling Program Discussion
III. Solid Waste Management Alternatives

Meeting #5 January 5, 2000

I Solid Waste Management Systems Discussion
II. Alternatives Discussion

Meeting # 6 February 23, 2000

I. Review of Alternatives
II. System Selection
III. Review of Plan
IV. Approval for Public Comment Period

Public Input February 24 , 2000 – May 26, 2000

I Conduct Public Hearing
II. Write up comments

Meeting #7 June 14, 2000

I. Review comments, and make any necessary changes to Plan.
II. Approve Plan, send to County for action.

APPENDIX C PUBLIC PARTICIPATION

PLANNING COMMITTEE APPOINTMENT PROCEDURE:

The process for establishing Otsego County Solid Waste Planning Committee involved advertisement in the Gaylord Herald Times Newspaper. After responses from the advertisement were received, the Otsego County Board of Commissioners requested committee appointments and solicited potential members for the various categories. Once the committee positions were filled, the Otsego County Board of Commissioners voted on and approved the committee.

APPENDIX C 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. Kam Ensing, Kam's Sanitation
2. Ken Paquet, Waste Management, Inc.
3. Jerry Weiss, Waste Management, Inc.
4. Jamie Joseph, Alpine Sanitation

One representative from an industrial waste generator:
1. Bruce Popowitz, Georgia-Pacific.

Two representatives from environmental interest groups from organizations that are active within the County:
1. Jacque Korn, Soil Conservation District
2. Sharon Brown, Recycle! Otsego County

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

One representative from township government:
1. Tom Wagar, Otsego Lake Township Trustee

One representative from city government:
Joe Wambold, Gaylord City Council

One representative from the regional solid waste planning agency:
1. Rich Sawicki, NEMCOG Board

Three representatives from the general public who reside within the County:
1. Sue Smethurst
2. Brian Techel
3. Mary Sanders

APPENDIX D

PLAN IMPLEMENTATION STRATEGY

&

DOCUMENTATION OF ACCEPTANCE OF RESPOSIBILTIES

APPENDIX D

Plan Implementation Strategy

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

The Otsego County Board of Commissioners is ultimately responsible for implementing the Solid Waste Management Plan, as part of its duties as general governance. The Board of Commissioners, through its established Solid Waste Committee, will coordinate the solid waste implementation activities with local municipalities, agencies, organizations, and planning commissions.

The County's Solid Waste Planning Committee will oversee the implementation of the Solid Waste Plan. It is likely that money to fund plan implementation will be limited, so the county will utilize existing agencies. The City of Gaylord will continue to incorporate recycling services in its hauling contracts and operate its municipal composting program. NRCS, MSU Extension, Otsego County CD and the Otsego County Health Department will be involved in Education Dissemination. The Health Department will also be involved in the development of a household hazardous waste program.

Subcommittees will be established to help with implementation of the Selected Solid Waste Management System. Subcommittees will address the development of a county-wide recycling program, household hazardous waste disposal program, and composting program. An education subcommittee will be established to assemble educational materials dealing with recycling, composting, household hazardous waste collection, resource conservation, and volume reduction. The education subcommittee will also assess what new types of educational materials are needed, if any, and develop an effective dissemination strategy. Existing agencies within the county will be utilized to disseminate the information to the general public.

The Otsego County Board of Commissioners is responsible for enforcing the Solid Waste Management Plan.

Documentation of Acceptance of Responsibility

***Recycle!* Otsego County**

P.O. Box 2111 Gaylord, Michigan 49734
Phone: (517)732-2992 Fax: (517)705-2412
Federal ID # 38-3476612

June 27, 2000

Diane Rekowski
NEMCOG
P.O. Box 457
Gaylord, Michigan 49734

RE: Otsego County Solid Waste Plan Upadate

Dear Diane:

We have had the opportunity to review the material in the updated version of Otsego County's Solid Waste Plan and are pleased with what we have read.

The interest to have a recycling center in our community is overwhelming and we are looking forward to being able to open once we have secured the donations to purchase the necessary equipment.

We have already established our markets for the materials we anticipate on taking and are awaiting the capital to purchase our equipment.

Should you have any questions, please do not hesitate in calling. I can be reached at (517)732-2992.

RECYCLE! OTSEGO COUNTY

Kam L. Ensing
President

NORTHWEST MICHIGAN COMMUNITY HEALTH AGENCY

ESTABLISHED IN 1930 AS DISTRICT HEALTH DEPARTMENT NO. 3

Administrative Office

ANTRIM	ANTRIM	CHARLEVOIX	EMMET	OTSEGO
P.O. Box 246	205 Grove Street	220 W. Garfield	2233 Mitchell Park	95 Livingston Blvd.
Bellaire, MI 49615	Mancelona, MI 49659	Charlevoix, MI 49720	Petoskey, MI 49770	Gaylord, MI 49735
231 533 8670	231 587 5044	231 547 6523	231 347 6014	517 732 1794
Fax 231 533 8450	Fax 231 587 5313	Fax 231 547 6238	Fax 231 347 2861	Fax 517 732 3285

June 28, 2000

Diane Rekowski
NEMCOG
PO Box 457
Gaylord, MI 49735

Re: Otsego County proposed solid waste plan

Dear Diane:

This office would support the continuation and expansion of recycling as well as the education of county residents on source reduction and household hazardous waste management.

Such programs should serve to minimize threats to the environment and garner support for the development and continuation of future programs for solid waste management in the Otsego County area.

Northwest Michigan Community Health Agency would offer support for this and other programs which promote the best management of solid waste. Please contact this office should you have areas in which this local health department can be of service.

Sincerely,

William R. Lubs, R.S.
Otsego County Environmental Health Supervisor

WRL:cdc

OTSEGO CONSERVATION DISTRICT

800 LIVINGSTON BLVD.
4th FLOOR, STE. 4A
GAYLORD, MI 49735
PH: (517) 732-4021

BOARD OF DIRECTORS

STEVE TOMASKI
JOHN MILBOCKER
BARBARA FLEMING
FRED MEISSINGER
JIM MYLER

OFFICE STAFF

JACQUE S. KORN
CONSERVATIONIST
CRAIG KASMER
FORESTER
JULIE KURAS
ADMINISTRATIVE ASSISTANT
PATRICIA OSBURN
ADMINISTRATOR

July 13, 2000

NEMCOG
Diane Rekowski
P.O. Box 457
121 E. Mitchell
Gaylord, MI 49734

From: Otsego Conservation District

RE: Otsego County Proposed Solid Waste Plan

Dear Diane Rekowski:

The Otsego Conservation District agrees to continue to provide recycling of plastic pesticide containers through the Michigan Groundwater Stewardship Program. In addition, the District will provide technical assistance for public education, recycling, composting and natural resource conservation. Enclosed please find information referring to some of our programs.

Sincerely,

Steve Tomaski
Chairman

USDA

United States Department of Agriculture

Natural Resources Conservation Service

Gaylord Field Office
800 Livingston Blvd., Suite 4A
Gaylord, MI 49735-8321
517-732-6526 (t); 517-731-0744 (f)

July 14, 2000

Diane Rekowski
Northeast Michigan Council of Governments
P.O. Box 457
Gaylord, MI 49734

Re: Otsego County Solid Waste Plan Implementation

Dear Diane:

The USDA Natural Resources Conservation Service will provide technical information regarding capability, use, and management of soils and other natural resources; will assist with dissemination of information and literature regarding recycling, composting, and household hazardous waste collection programs.

Sincerely,

Jacque S. Korn

Jacque S. Korn
Resource Conservationist

Providing technical assistance to landowners, landusers, and units of government under the auspices of the Otsego Conservation District.

The Natural Resources Conservation Service works hand-in-hand with the American people to conserve natural resources on private lands

AN EQUAL OPPORTUNITY PROVIDER AND EMPLOYER

ATTACHMENTS

ATTACHMENTS

ATTACHMENT A: Attorney Opinion
Opinion from Otsego County Prosecuting Attorney on disposal options.

ATTACHMENT B: Listed Capacity
Documentation from landfills that the County has access to their listed capacity.

ATTACHMENT C: Maps
Map showing locations of solid waste disposal facilities used by the County.

Map of percent change in population density from 1970 to 1990 in Northeast Michigan.

Map of percent change in population from 1970 to 1990 in Northeast Michigan.

ATTACHMENT D: Inter-County Agreements
Copies of Inter-County agreements with other counties (if any).

ATTACHMENT E: Special Conditions
Special conditions affecting import or export of solid waste.

ATTACHMENT F: Tipping Fee Projections
Tipping fee projections for the Montmorency-Oscoda Sanitary Landfill.

ATTACHMENT G: Public Involvement Process
Documentation of the Public Involvement Process.

ATTACHMENT A

Opinion

Otsego County
office of the
Prosecutor

P.O. Box 367 - Gaylord, MI 49734
517-731-0276 - Fax 517-732-7112

KEVIN L. HESSELINK
Prosecuting Attorney

MICHAEL A. ROLA
Chief Assistant

DAVID G. BANISTER
Assistant

KAREN L. ELGAS
Office Manager

BRENDA GOODRICH
Clerk/Typist

BRENDA VOLANT
Clerk/Typist

ROBERTA WOJCIK
Child Support Secretary
517-731-0296

CATHY BARAGREY
Victim Advocate
517-731-0244

December 16, 1999

Diane Rekowski, Director
NEMCOG
P. O. Box 457
Gaylord, MI. 49734

Re: Otsego County Solid Waste Management Plan Opinion Request

Director Rekowski:

You have requested that I provide you with an opinion on the following issue: Whether Otsego County is able to export waste to the counties listed in Section 3 of Exhibit D of the 1996 lawsuit settlement (City Environmental v Crawford County, et al.)

I have taken the liberty of forwarding your request to attorney James Cotant, co-counsel for Otsego County in the lawsuit referenced above. After reviewing the lawsuit settlement language, it is the opinion of both Mr. Cotant and myself that Otsego County may lawfully export waste to the counties listed in Section 3 of the Amended Flow Control Ordinance.

I trust that this opinion is sufficient for your needs. Feel free to contact me if you have any questions.

Sincerely,

Kevin Hesselink

Kevin L. Hesselink
Otsego County Prosecuting Attorney
County Civil Counsel

KLH/kle

STATE OF MICHIGAN

IN THE CIRCUIT COURT FOR THE COUNTY OF OTSEGO

CITY ENVIRONMENTAL SERVICES, INC. OF WATERS, a Michigan Corp.,

Plaintiff,

v

THE COUNTY OF CRAWFORD, A Michigan Municipal Corporation, and **THE COUNTY OF OTSEGO**, a Michigan Municipal Corporation, and **THE CRAWFORD-OTSEGO SOLID WASTE MANAGEMENT AUTHORITY**, a Municipal Authority, jointly and severally,

Defendants.

_____/

Case No. 95-6409 CK(D)

Hon. Richard M. Pajtas

STIPULATED ORDER OF SETTLEMENT

TRUE COPY
MAY 13 1996
OTSEGO COUNTY CLERK

Thomas M. Fallucca (P33805)
Attorney for Plaintiff
City Environmental Services, Inc.
3400 East Lafayette
Detroit, Michigan 48207
313-567-4700

Mark S. Lorence (P43561)
Co-Counsel for Plaintiff
City Environmental Services, Inc.
521 W. Main
Gaylord, Michigan 49735-1860
517-732-5150

John B. Huss (P15297)
Crawford County Prosecuting Attorney
Counsel for Defendant Crawford County
Crawford County Courthouse
Grayling, Michigan 49738
517-348-2841

Peter L. Gustafson (P24621)
Warner Norcross & Judd LLP
Co-Counsel for Defendant
Crawford County
900 Old Kent Building
111 Lyon, NW
Grand Rapids, Michigan 49503
616-752-2000

James C. Cotant (P12247)
Bensinger, Cotant, Menkes & Aardema
Co-Counsel for Defendant Otsego County
308 W. Main
P.O. Box 1000
Gaylord, Michigan 49735
517-732-7536

J. Michael Smith (P24530)
Miller Johnson Snell & Cummiskey
Attorneys for Defendant The Crawford-Otsego Solid Waste Management Authority
800 Calder Plaza Building
Grand Rapids, Michigan 49503
616-459-8311

"Municipal Waste" means street cleaning, municipal sludges, demolished building material, trees, brush, leaves, stumps, asphalt, concrete, industrial ash from municipal facilities and other inert materials collected by employees or agents of a municipality.

"Person" means any individual, proprietorship, firm, public or private corporation, partnership, trust, public or private agency or any other entity, or group of such persons.

"Site-Separated Materials" means recyclable materials (including, but not limited to, bottles, cans, newspaper, corrugated containers, grass, leaves, brush, yard trimmings, and metals) that are separated from solid waste after collection from a site of generation by a waste hauler or by the operators of the Crawford-Otsego Landfill to which it is delivered.

"Solid Waste" means garbage, rubbish, ashes, incinerator ash, incinerator residue, and industrial sludges, solid commercial and solid industrial waste, and animal waste generated in Otsego County provided, however, that this definition shall not include hazardous waste, municipal waste, nonacceptable landfill items, site-separate materials, source separated materials, human body waste, liquid or other waste regulated by statute, ferrous or nonferrous scrap directed to a scrap metal processor or to a reuser of ferrous or nonferrous products, and slag or slag products directed to a slag processor or to a reuser of slag or slag products.

"Source-Separated Materials" means recyclable materials (including, but not limited to, bottles, cans, newspapers, plastics, corrugated containers, metals, grass, leaves, brush, and yard trimmings) that are separated from solid waste prior to the collection of solid waste from a site of generation by a waste hauler.

"Unacceptable Landfill Items" means materials detrimental to the operation of the Landfill, including but not limited to burning or smoldering materials or ash, tires, batteries, and cars.

Sec. 2. All Solid Waste generated in the County shall be disposed of frequently enough to protect the public health.

Sec. 3. After the Effective Date, it shall be unlawful for any person residing in Otsego County to dispose of Solid Waste, other than by delivering or causing the delivery of Solid Waste to the Crawford-Otsego Landfill or a disposal facility located in any other state or county or the Counties of Montmorency, Oscoda, Wexford, Chippewa or Charlevoix. This Section shall not apply to Hazardous Waste, Unacceptable Landfill Items, waste generated by any Person that is disposed of at it's own sanitary landfill licensed pursuant to Part 115 of Act 451, Public Acts of Michigan, 1995, or waste which is permitted under state law or rules promulgated by the Department to be disposed of at the site of generation. Delivery of Hazardous Waste to the Crawford-Otsego Landfill shall be deemed a violation of this Ordinance.

COUNTY

Sec. 4. Upon a violation of any provision of this Ordinance, the County may seek criminal prosecution and may seek legal and/or equitable relief in a court of competent jurisdiction.

Sec. 5. Any person who shall violate a provision of this Ordinance shall be guilty of a misdemeanor, punishable by a fine not to exceed $100.00, or by imprisonment not exceeding 90 days, or both such fine and imprisonment. Each day that a violation occurs or continues shall be deemed a separate offense.

ATTACHMENT B

Listed Capacity

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

WASTE MANAGEMENT

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

July 10, 2000

Diane Rekowski
Otsego County Solid Waste Management Planning Committee
PO Box 457
Gaylord, Michigan 49735

RE: Disposal Capacity
Waste Management - Waters Landfill

Dear Ms. Rekowski,

The purpose of this letter is to certify that Waters Landfill located in Crawford County has sufficient disposal capacity to accept Otsego County's waste. Waters Landfill has a total permitted capacity of 6,968,000 bank cubic yards. Therefore, more than 66 months of capacity is available to Otsego County.

Otsego County can rely on Waters Landfill for its future disposal needs. Please feel free to contact me if I can provide any further information.

Sincerely,
Waste Management

Debora L. Johnston
Divisional Engineer

c: Chad Crawford, WM - Waters

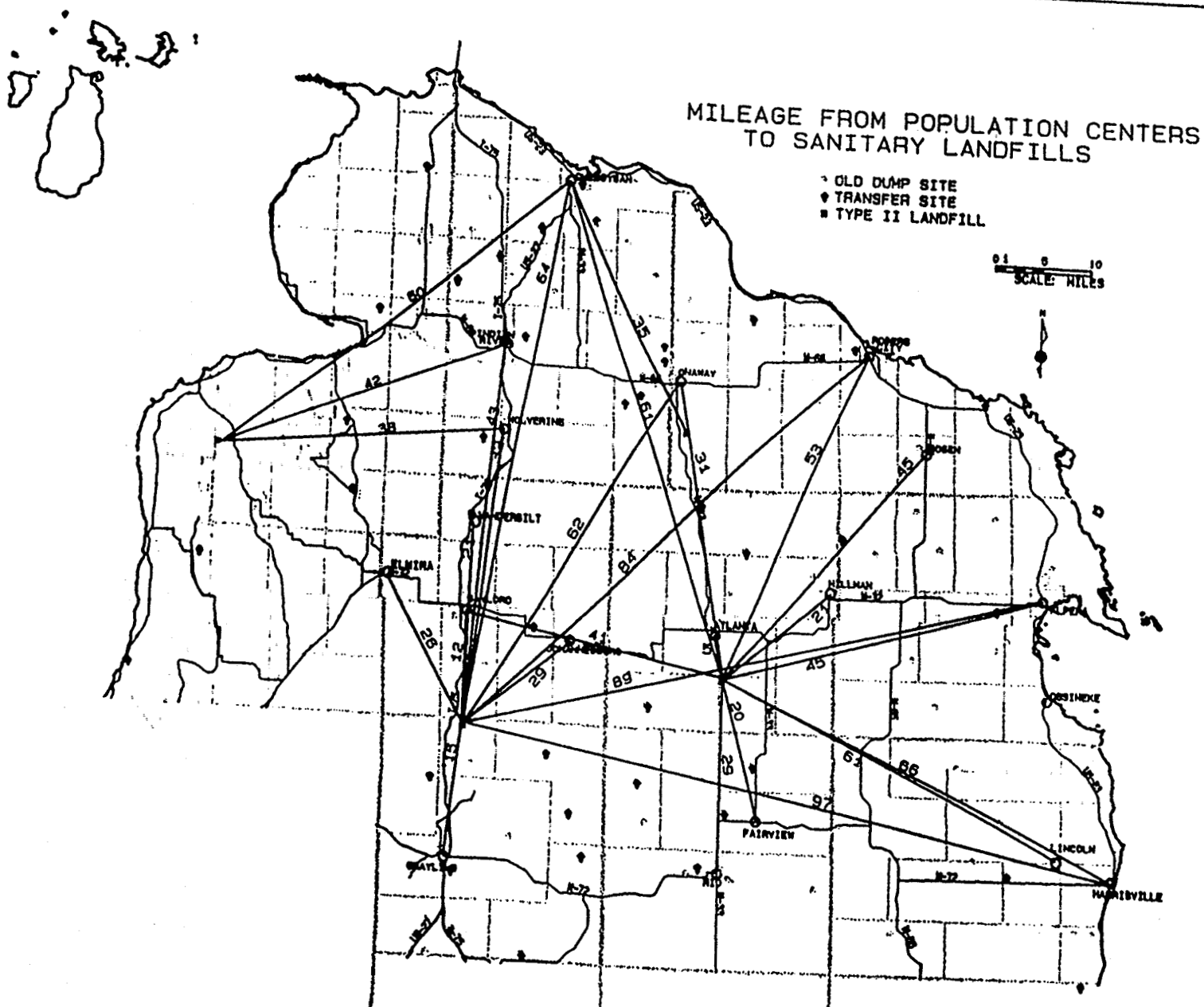
ATTACHMENT C

Maps

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

Map of percent change in population density from 1970 to 1990 in Northeast Michigan.

Map of percent change in population from 1970 to 1990 in Northeast Michigan.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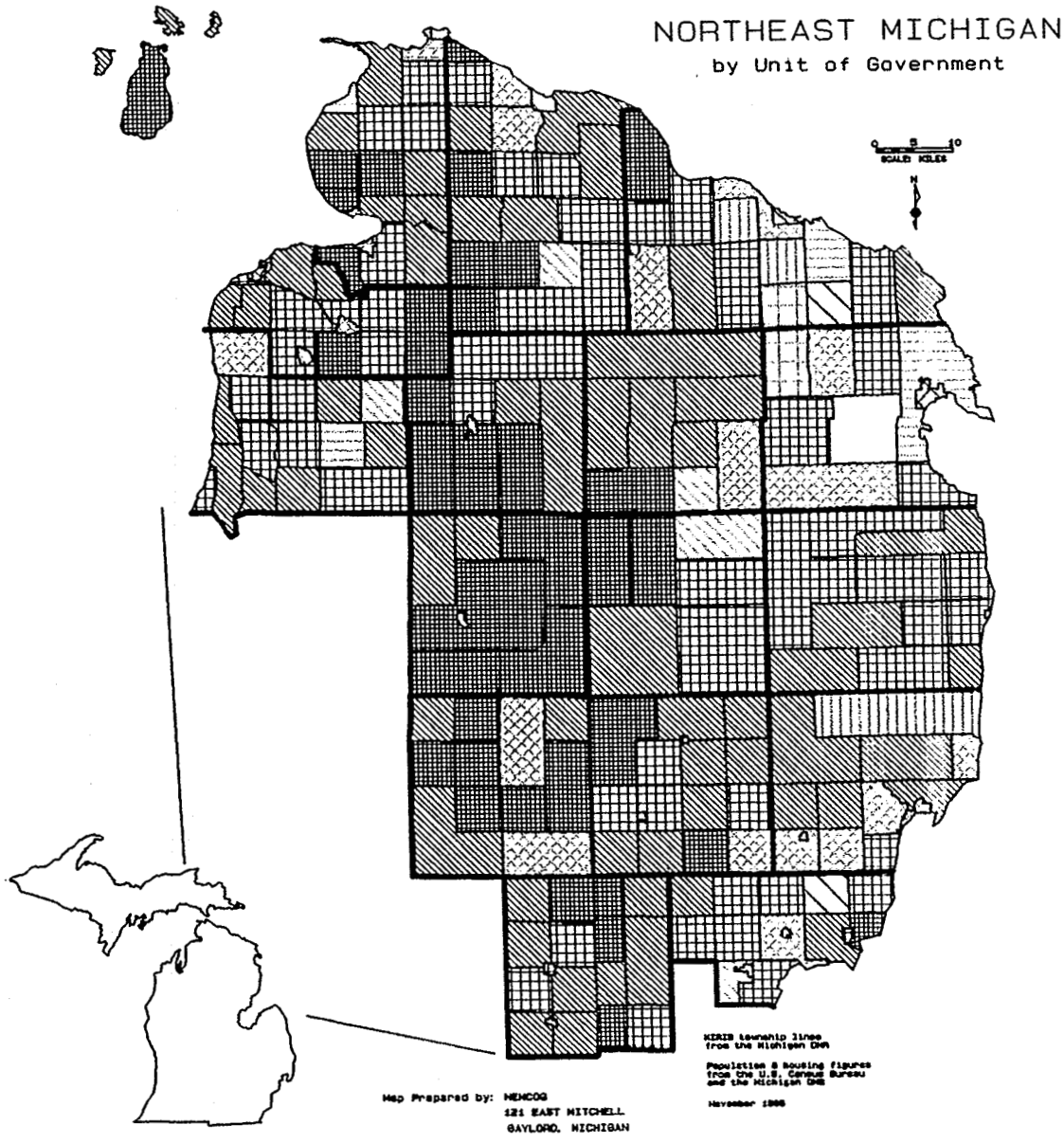


% Change 1970 - 1990

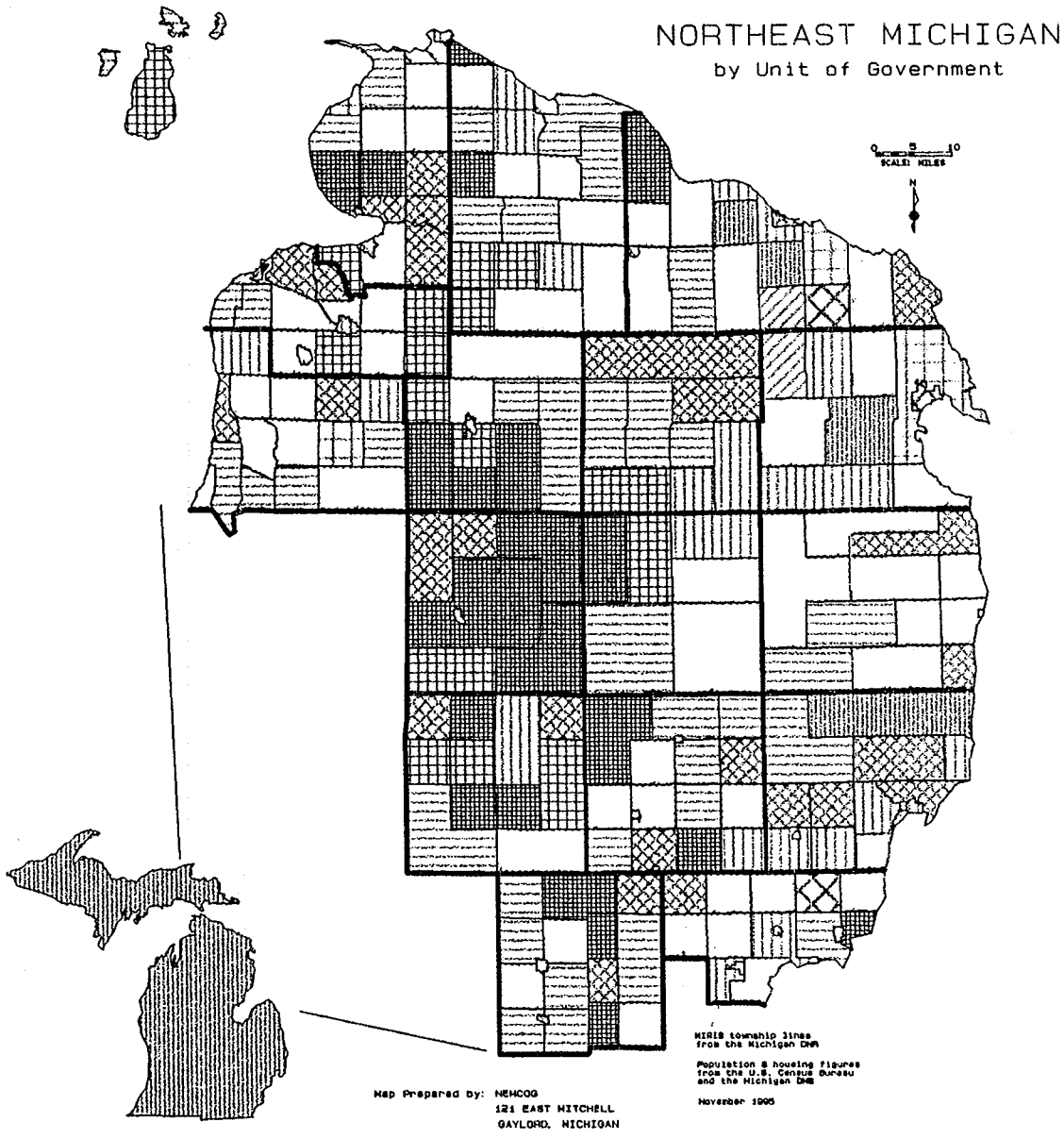
Population Density

Legend

- -16.01% & Less
- -9.01% to -16.00%
- -6.01% to -9.00%
- -4.01% to -6.00%
- -1.01% to -4.00%
- -1.00% to 1.00%
- 1.01% to 4.00%
- 4.01% to 6.00%
- 6.01% to 9.00%
- 9.01% to 16.00%
- 16.01% to 25.00%
- 25.01% to 75.00%
- 50.01% to 100.0%
- 100.01% & Greater

Change in Persons
Per Square Mile

NEMCOG GIS Program



POPULATION

% CHANGE: 1970-1990

Legend

- -10.00% & Less
- -9.99% to -1.01%
- -1.00% to 1.00%
- 1.01% to 5.00%
- 5.01% to 10.00%
- 10.01% to 25.00%
- 25.01% to 50.00%
- 50.01% to 75.00%
- 75.01% to 100.00%
- 100.01% to 125.0%
- 125.01% & Greater

Northeast Michigan
16 Counties by MCD

NEMCOG GIS Program

ATTACHMENT D

Inter-County Agreements

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

NONE

ATTACHMENT E

Special Conditions

Special conditions affecting import or export of solid waste.

None

ATTACHMENT F

Tipping Fee Projections

Tipping fee projections for the Montmorency-Oscoda –Alpena Sanitary Landfill.

MONTMORENCY/OSCODA LANDFILL PROJECTION
145,000 CYD/YR @$10/CYD; 10 YR BOND PAYBACK

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
EXPENSES CAPITAL										
Cell Construction Area (Acres)	-	5.4	2.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0
Cell Construction	$0	$2,400,000	$800,000	$800,000	$800,000	$400,000	$400,000	$400,000	$400,000	$400,000
Financial Assurance			A	A	A	B	B	B	B	B
Cash	$0	$0	$293,760	$108,800	$108,800	$108,800	$54,400	$54,400	$54,400	$54,400
Financial Test	$579,828	$0	$684,720	$253,600	$253,600	$253,600	$126,800	$126,800	$126,800	$126,800
Bonding Required	$0	$2,400,000	$735,472	$655,229	$748,520	$455,094	$465,491	$531,767	$607,480	$693,973
EXPENSES ANNUAL										
Financial Assurance (Cash)	$0	$0	$293,760	$108,800	$108,800	$108,800	$54,400	$54,400	$54,400	$54,400
Operations and Capping	$651,200	$671,900	$750,000	$750,000	$750,000	$800,000	$800,000	$800,000	$800,000	$800,000
Bond Payment	$128,800	$128,100	$341,712	$446,429	$539,720	$646,294	$711,091	$777,367	$853,080	$939,573
Total	$780,000	$800,000	$1,385,472	$1,305,229	$1,398,520	$1,555,094	$1,565,491	$1,631,767	$1,707,480	$1,793,973
REVENUE ANNUAL										
Total Potential CYD/Yr	85,000	145,000	145,000	145,000	145,000	150,000	150,000	150,000	150,000	150,000
Tipping Fee - Gale	$10	$10	$10	$10	$10	$10	$10	$10	$10	$10
Tipping Fee - Average	$9.30	$10	$10	$10	$10	$10	$10	$10	$10	$10
Total	$790,500	$1,450,000	$1,450,000	$1,450,000	$1,450,000	$1,500,000	$1,500,000	$1,500,000	$1,500,000	$1,500,000
BALANCE (Not including cell construction)	$10,500	$650,000	$64,528	$144,771	$51,480	($55,094)	($65,491)	($131,767)	($207,480)	($293,973)
NET CASH	$10,500	$650,000	$0	$0	$0	$0	$0	$0	$0	$0

NOTE: This spreadsheet utilizes many assumptions and estimates to allow an indication of future financing of the Landfill expansion. Capital Consultants Engineers is NOT an accounting firm and this spreadsheet does not represent a business plan.

The principle assumptions utilized for these calculations are as follows:

- Bond payments are for prior year bonding required for cell construction with a TEN year payback at SEVEN % interest
- Financial assurance "Cash" is 30% of the overall financial assurance required
- Financial assurance "Financial Test" is 70% of the overall financial assurance required
- The refuse volume is 145,000 CYD/Yr, the maximum anticipated with Montmorency, Oscoda, and Alpena counties refuse
- The tipping fee for the new landfill will be $10/CYD

MONTMORENCY/OSCODA LANDFILL PROJECTION
145,000 CYD/YR @$11/CYD; 10 YR BOND PAYBACK

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
EXPENSES CAPITAL										
Cell Construction Area (Acres)	-	5.4	2.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0
Cell Construction	$0	$2,400,000	$800,000	$800,000	$800,000	$400,000	$400,000	$400,000	$400,000	$400,000
Financial Assurance			A	A	A	B	B	B	B	B
Cash	$0	$0	$293,760	$108,800	$108,800	$108,800	$54,400	$54,400	$54,400	$54,400
Financial Test	$579,828	$0	$684,720	$253,600	$253,600	$253,600	$126,800	$126,800	$126,800	$126,800
Bonding Required	$0	$2,400,000	$590,472	$489,583	$559,290	$233,922	$212,828	$243,130	$277,747	$317,293
EXPENSES ANNUAL										
Financial Assurance (Cash)	$0	$0	$293,760	$108,800	$108,800	$108,800	$54,400	$54,400	$54,400	$54,400
Operations and Capping	$651,200	$671,900	$750,000	$750,000	$750,000	$800,000	$800,000	$800,000	$800,000	$800,000
Bond Payment	$128,800	$128,100	$341,712	$425,783	$495,490	$575,122	$608,428	$638,730	$673,347	$712,893
Total	$780,000	$800,000	$1,385,472	$1,284,583	$1,354,290	$1,483,922	$1,462,828	$1,493,130	$1,527,747	$1,567,293
REVENUE ANNUAL										
Total Potential CYD/Yr	85,000	145,000	145,000	145,000	145,000	150,000	150,000	150,000	150,000	150,000
Tipping Fee - Gate	$10	$11	$11	$11	$11	$11	$11	$11	$11	$11
Tipping Fee - Average	$9.30	$11	$11	$11	$11	$11	$11	$11	$11	$11
Total	$790,500	$1,595,000	$1,595,000	$1,595,000	$1,595,000	$1,650,000	$1,650,000	$1,650,000	$1,650,000	$1,650,000
BALANCE (Not including cell construction)	$10,500	$795,000	$209,528	$310,417	$240,710	$166,078	$187,172	$156,870	$122,253	$82,707
NET CASH	$10,500	$795,000	$0	$0	$0	$0	$0	$0	$0	$0

NOTE: This spreadsheet utilizes many assumptions and estimates to allow an indication of future financing of the Landfill expansion. Capital Consultants Engineers is NOT an accounting firm and this spreadsheet does not represent a business plan.

The principle assumptions utilized for these calculations are as follows:

- Bond payments are for prior year bonding required for cell construction with a TEN year payback at SEVEN % interest
- Financial assurance "Cash" is 30% of the overall financial assurance required
- Financial assurance "Financial Test" is 70% of the overall financial assurance required
- The refuse volume is 145,000 CYD/Yr, the maximum anticipated with Montmorency, Oscoda, and Alpena counties refuse
- The tipping fee for the new landfill will be $11/CYD

MONTMORENCY/OSCODA LANDFILL PROJECTION
145,000 CYD/YR @$12/CYD; 10 YR BOND PAYBACK

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
EXPENSES CAPITAL										
Cell Construction Area (Acres)	-	5.4	2.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0
Cell Construction	$0	$2,400,000	$800,000	$800,000	$800,000	$400,000	$400,000	$400,000	$400,000	$400,000
Financial Assurance			A	A	A	B	B	B	B	B
Cash	$0	$0	$293,760	$108,800	$108,800	$108,800	$54,400	$54,400	$54,400	$54,400
Financial Test	$579,828	$0	$684,720	$253,600	$253,600	$253,600	$126,800	$126,800	$126,800	$126,800
Bonding Required	$0	$2,400,000	$445,472	$323,938	$370,061	$12,750	$0	$0	$0	$0
EXPENSES ANNUAL										
Financial Assurance (Cash)	$0	$0	$293,760	$108,800	$108,800	$108,800	$54,400	$54,400	$54,400	$54,400
Operations and Capping	$651,200	$671,900	$750,000	$750,000	$750,000	$800,000	$800,000	$800,000	$800,000	$800,000
Bond Payment	$128,800	$128,100	$341,712	$405,138	$451,261	$503,950	$505,765	$505,765	$505,765	$505,765
Total	$780,000	$800,000	$1,385,472	$1,263,938	$1,310,061	$1,412,750	$1,360,165	$1,360,165	$1,360,165	$1,360,165
REVENUE ANNUAL										
Total Potential CYD/Yr	85,000	145,000	145,000	145,000	145,000	150,000	150,000	150,000	150,000	150,000
Tipping Fee - Gate	$10	$12	$12	$12	$12	$12	$12	$12	$12	$12
Tipping Fee - Average	$9.30	$12	$12	$12	$12	$12	$12	$12	$12	$12
Total	$790,500	$1,740,000	$1,740,000	$1,740,000	$1,740,000	$1,800,000	$1,800,000	$1,800,000	$1,800,000	$1,800,000
BALANCE (Not including cell construction)	$10,500	$940,000	$354,528	$476,062	$429,939	$387,250	$439,835	$439,835	$439,835	$439,835
NET CASH	$10,500	$940,000	$0	$0	$0	$0	$39,835	$39,835	$39,835	$39,835

NOTE: This spreadsheet utilizes many assumptions and estimates to allow an indication of future financing of the Landfill expansion. Capital Consultants Engineers is NOT an accounting firm and this spreadsheet does not represent a business plan.

The principle assumptions utilized for these calculations are as follows:

- Bond payments are for prior year bonding required for cell construction with a TEN year payback at SEVEN % interest
- Financial assurance "Cash" is 30% of the overall financial assurance required
- Financial assurance "Financial Test" is 70% of the overall financial assurance required
- The refuse volume is 145,000 CYD/Yr, the maximum anticipated with Montmorency, Oscoda, and Alpena counties refuse
- The tipping fee for the new landfill will be $12/CYD

ATTACHMENT G

Public Involvement Process

Documentation of the Public Involvement Process.

Northeast Michigan Council of Governments
NEMCOG

Phone: (517) 732-355
Fax: (517) 732-557
email: nemcog@northland.lib.mi.u
P.O. Box 457 • 121 E. Mitchell • Gaylord, MI 4973

MEETING NOTICE

Otsego County Solid Waste Planning Committee
June 14, 2000
1:00 p.m.
NEMCOG Office
121 E. Mitchell
Gaylord, MI

Agenda

I. Call To Order

II. Members Present

III. Minutes of Previous Meeting

IV. Review of Public Comments & Plan

V. Public Comment

VI. Approval of Plan and forward to County Board of Commissioners

VII. Adjournment

Northeast Michigan Council of Governments
NEMCOG

Phone: (517) 732-355
Fax: (517) 732-557
email: nemcog@northland.lib.mi.u
P.O. Box 457 • 121 E. Mitchell • Gaylord, MI 4973

Minutes
of the
Otsego County Solid Waste Planning Committee
June 14, 2000
2:00p.m.
NEMCOG Office
Gaylord, MI

Call To Order: The meeting was called to order at 2:00 p.m. by Chair Ron Chavey.

Members Present: Mary Sanders, Ron Chavey, Jim Gatrell, Jerry Weiss, Richard Sawicki. DPA: Diane Rekowski

Minutes of Previous Meeting: The minutes of the previous meetings were approved as presented.

Review of Public Comments: There was no public comment received throughout the public review period or at the public hearing held on May 4, 2000 except for the DEQ review.

Review of Plan: D. Rekowski outlined the changes that were made to the Plan based on the DEQ comments. A significant comment by the DEQ was take out the flow control ordinance or change the export authorization page to reflect the counties which Otsego County can export their solid waste to. The committee decided it was best to change the Plan to reflect the Flow Control Ordinance.

Public Comment: No public comment.

Approval of Plan and forward to County Board of Commissioners: M. Sanders moved, seconded by R. Sawicki to approve the Plan, with the changes, and forward it to the County Board of Commissioners. Ayes, all motion carried.

Adjournment: The meeting was adjourned at 3:00 p.m..

Northeast Michigan Council of Governments
NEMCOG

Phone: (517) 732-35
Fax: (517) 732-55
email: nemcog@northland.lib.mi
P.O. Box 457 • 121 E. Mitchell • Gaylord, MI 497

DATE: June 7, 2000

TO: Otsego County Solid Waste Planning Committee

FROM: Diane Rekowski

RE: June 14, 2000 Meeting

Due to scheduling conflicts, the meeting time has been changed to 2:00 p.m.

Sunday, June 11, 10 a.m. to 3 p.m.

The show is divided into two main divisions: Horticultural (single stalks of iris) and must be grown by the exhibitor; Artistic (arrangements, and arts and crafts).

Arrangements must contain iris, but don't have to be grown by the exhibitor. Arts and crafts exhibitions will display images of iris.

At this year's show, American Iris Society accredited judges from as far aw as close as attending will zome so they ing their own

Those wi must have the the communit to 10 a.m.

For further at 517-826-31 786-5386 or 4605, or visit *www.jjeweb.n fisher@jjemai*

Red Cross to conduct blo

BAGLEY TWP. — The American Red Cross will host a blood drive on Friday, June 16 at the Gaylord Evangelical Free Church, 1649 M-32 5:45 p.m.

Longtime donors are en

Call 517-732-1111 to advertise

Elmira Towns removal and Schaedig (51

NOTICE OF NEW

MEETING NOTICE

Otsego County Solid Waste
Planning Committee
June 14, 2000
1:00 p.m.
NEMCOG Office
121 E. Mitchell
Gaylord, MI

NOTICE OF A PUBLIC HEARING ON THE PROPOSED 2000-01 BUDGET

Please take notice that there will be a public hearing regarding the proposed 2000-01 budget at a regular meeting of the Board of Education of
GAYLORD COMMUNITY SCHOOLS
GAYLORD, MICHIGAN

DATE OF MEETING:

John. Trevor joins sibli
Grandparents are Ra
of Clinton Twp., Barb
China, Mich., and Willi
bara Hoav of Gulliver,
granparents are Robe
Reiman of Zephyr Hi
Jeanette Davinney of

March 23: Jimmy
Mays of Lewiston, a s
Woodrow. Nicholas
Abigail, 2. Grandparer
ald and Wendy
Ossineke, Robert a
Frame of Curran and
of Whitmore Lake.
parents are Mike an
Huff of Harrodsburg, K

March 23: Zilcom
Kelly Jones of Gayl
Kobe Jacob. Grandmo
nie Kirk of Gaylord.

March 24: Jason
Natalie Ostrander of
daughter, Hannah Rae
ents are Jerry Ostran
lord, Kim Ostrander
Bradford Smith of
Heights, Mary O'Mear
and Beth Smith of Ph
grandparents are Dic
of Gaylord, Shirley
Gaylord, Florence Smit
nesburg and Irene
Canada.

March 29: Wayn

Northeast Michigan Council of Governments
NEMCOG

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Fax: (517) 732-5578
email: nemcog@northland.lib.mi.us
P.O. Box 457 • 121 E. Mitchell • Gaylord, MI 49734

Otsego County Solid Waste Planning Committee

Public Hearing
May 4, 2000
7:00 p.m.
Multi-Purpose Room
Alpine Center
Gaylord, MI

The Public Hearing was opened by Chair Ron Chavey at 7:05 p.m..

Committee Members Present: Ron Chavey, Richard Sawicki, Mary Sanders, Jerry Weiss. DPA: Diane Rekowski.

An overview of the plan update was provided by R. Chavey and D. Rekowski. The public was then invited to provide public comments on the plan. There was no public comment on the Otsego County Solid Waste Management Plan.

Open discussion then took place on the solid waste management plan.

The hearing was closed at 7:30 p.m.

Northeast Michigan Council of Governments
NEMCOG

Phone: (517) 732-3551
Fax: (517) 732-5578
email: nemcog@northland.lib.mi.us
P.O. Box 457 • 121 E. Mitchell • Gaylord, MI 49734

MEETING NOTICE

Otsego County Solid Waste Planning Committee

PUBLIC HEARING

May 4, 2000

7:00 p.m.

Commissioner's Room

Otsego County/City Building

Gaylord, Michigan

Northeast Michigan Council of Governments
NEMCOG

Phone: (517) 732-355
Fax: (517) 732-557
email: nemcog@northland.lib.mi.us
P.O. Box 457 • 121 E. Mitchell • Gaylord, MI 4973

MEMORANDUM

DATE: March 3, 2000

TO: Officials of Surrounding Counties and Other Interested Officials

FROM: Diane Rekowski

RE: Otsego County Solid Waste Plan

The Otsego County Solid Waste Management Plan was recently authorized by the Otsego County Solid Waste Planning Committee for public review and comment. The 90-day public comment period began on February 24, 2000 and will end May 26, 2000.

A public hearing will be held on Thursday, May 4, 2000; 7:00 p.m. at the Otsego County/City Building, Commissioner's room in Gaylord.

Any comments on the Plan can be sent to NEMCOG at the above address.

A copy of the Otsego County Solid Waste Management Plan is available for Public Review at all Otsego County Township Hall's, as well as in the Otsego County Coordinator's Office and the Otsego County Clerk's Office in the County/City Building in Gaylord. Notification will be provided in the Gaylord Herald Times as to the Public Hearing date and where the solid waste plans are available for review.

Please do not hesitate to contact me if you should have any questions or concerns.

ing opened for public com
regular meeting was resu
increasing board supplies t
for Trustees, Clerk, Treasu
bursement to .32/mi. Appro
4% increase; increased the
approved installation of a m
FY-2001 budget by cost c
$79.00. A motion to approve
The meeting was adjourned

NOTICE

A PUBLIC HEARING on the proposed 2000 Update to the Otsego County Solid Waste Management Plan will be held 7:00 p.m. on Thursday, May 4, 2000 in the Commissioner's Room, at the Otsego County/City Building, Gaylord, Michigan. The plan is available for review at the County Clerk's office and the County Coordinator's office in Gaylord or at any of the township halls with in the county. Written comments will be accepted until May 26, 2000, and can be sent to NEMCOG, P.O. Box 457, Gaylord, MI 49734.

922-1770.

Registration is continuous through the first day of classes.

in resources director

activities, including policy development, labor relations, health and safety, recruitment, classifications and selections, training, payroll and employee benefits.

In announcing Harris' selection, Director Cool said, "Mr. Harris brings to this crucial position a diverse and impressive record of leadership, experience and achievement. He is highly regarded in his

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(231) 946-3661
Elk Rapids
(231) 264-5532
Petoskey
(231) 439-3600
Bay City
(517) 893-9750

PUBLIC NOTICE

The Northeast Michigan Consortium is seeking qualified bidders to complete a career development strategic planning initiative in the counties of Alcona, Alpena, Cheboygan, Crawford, Montmorency, Oscoda, Otsego and Presque Isle. Stages of the process will include an environmental scan/report card; community out-
[illegible] strategic assets and comprehensive plan development and
[illegible] Development of Career Development.

Northeast Michigan Council of Governments
NEMCOG

Phone: (517) 732-3551
Fax: (517) 732-5578
email: nemcog@northland.lib.mi.us
P.O. Box 457 • 121 E. Mitchell • Gaylord, MI 49734

MEETING NOTICE

Otsego County Solid Waste Planning Committee
February 23, 2000
6:30 p.m.
NEMCOG Office
121 E. Mitchell
Gaylord, MI

Agenda

I. Call To Order

II. Members Present

III. Minutes of Previous Meeting

IV. Plan Review

V. Solid Waste Management Systems selection

VI. Approval for Public Comment
- A. Public Process Timeframe
- B. Public Hearing Date

VII. Public Comment

VIII. Adjournment

Northeast Michigan Council of Governments
NEMCOG

Phone: (517) 732-3551
Fax: (517) 732-5578
email: nemcog@northland.lib.mi.us
P.O. Box 457 • 121 E. Mitchell • Gaylord, MI 49734

Minutes
of the
Otsego County Solid Waste Planning Committee
February 23, 2000
6:30p.m.
NEMCOG Office
Gaylord, MI

Call To Order: The meeting was called to order at 6:30 p.m. by Chair Ron Chavey.

Members Present: Mary Sanders, Ron Chavey, Kam Ensing, Sharon Brown, Jim Gatrell, Bruce Popwitz, Jerry Weiss. DPA: Diane Rekowski

Minutes of Previous Meeting: The minutes of the previous meetings were approved as presented.

Plan Review: D. Rekowski reviewed the draft plan with the committee members. Discussion then took place over the two alternatives. Alternative I maintains essentially the same collection and resource recovery program as present with primary and contingency disposal at the Waste Management, Inc. facility in Crawford County and the Montmorency-Oscoda-Alpena Landfill in Montmorency County. Alternative II has the same collection system as present, however, more emphasis is placed on developing a county-wide recycling program, with solid waste disposal options at the Waste Management, Inc. facility in Crawford County and the Montmorency-Oscoda-Alpena Landfill in Montmorency County.

Solid Waste Management Systems Selection:
Kam Ensing moved, seconded by Jerry Weiss to select Alternative II as the desired solid waste management system for Otsego County. Ayes all, motion carried.

Approval for Public Comment: Sharon Brown moved, seconded by Mary Sanders to authorize the Plan for public comment. Ayes all, motion carried.

The 90 Public Comment Period will start February 24th and end May 26, 2000.

The public hearing will be held on May 4, 2000, 7:00 p.m. at the Multi-Purpose Room of the Alpine Center.

Public Comment: None

Adjournment: The meeting was adjourned at 7:45 p.m..

/lord, State of Michigan on, ... taxes paid by Mortgagee with interest thereon. No ... County Records. September 3, 1997 in Liber 651, Page 342, (... ay of January, 2000. ... suit or proceeding at law or in equity having been ... County Records and was assigned by said ... legal costs, charges, and expenses, including the ... thereafter assigned and distributed to the pers

MEETING NOTICE

Otsego County Solid Waste Committee
February 23, 2000 at 6:30 p.m.
Northeast Michigan Council of Government's Conference Room
121 E. Mitchell, Gaylord, Michigan

NORTHERN MICHIGAN COMMUNIT MENTAL HEALTH SERVICES

thin and adjacent to its corporate limits. NOW THEREFORE, in consideration of
ENT granting such PERMIT the GOVERNMENTAL BODY agrees that:
thfully fulfill all permit requirements and will indemnify, save harmless, represent a
he State of Michigan, Michigan Transportation Commission, the DEPARTMENT, a
's, agents, and employees thereof and those GOVERNMENTAL bodies performi
ctivities for the DEPARTMENT and all officers, agents, and employees thereof, pu
a maintenance contract from any and all claims of every kind for injuries to, or dea
nd all persons and, for loss of, or damage to property, and environmental damage c
tion and from attorney's fees and related costs arising out of, under, or by reason c
ence of the GOVERNMENTAL BODY'S facilities and/or its installation, constructior
n, maintenance, or other activities which are being performed under the terms of th
on, over and/or under the state trunkline right-of-way, except claims resulting from the
ligence or willful acts or omissions of said DEPARTMENT, its officers, agents, employ-
d contracting governmental bodies and officers, agents, employees thereof, perform-
nit activities.

PARTMENT shall not be subject to any obligations or liabilities by vendors and con-
s of the GOVERNMENTAL BODY, or their subcontractors or any other person not a
o the PERMIT without its specific prior written consent and notwithstanding the
ce of the PERMIT.

by its own violation and/or request by the DEPARTMENT, promptly restore and/or will
physical or operating damages to any state trunkline right-of-way resulting or arising
he installation, construction, operation, and/or maintenance of the GOVERNMENTAL

LOT 382, PLAT OF INDIAN HILLS, BEING A SUBDIVISION OF PART OF SECTION 32, TOWN 30 NORTH, RANGE 4 WEST, ACCORDING TO THE RECORDED PLAT THEREOF AS RECORDED AT LIBER 2 OF PLATS, PAGE 90, OTSEGO COUNTY RECORDS, COMMONLY KNOWN AS 5678 TURKEY FOOT TRAIL, GAYLORD, MICHIGAN. TAX PARCEL NO. 072-180-000-382-00.

The redemption period shall be six (6) months from the date of such sale unless determined to be abandoned in accordance with MCL 600.3241a; MSA 27A.3241(1), in which case the redemption period shall be thirty (30) days from the date of such sale.

Dated: January 20, 2000

THE CIT GROUP/CONSUMER FINANCE, INC.,
Assignee of Mortgagee
WARDROP & WARDROP P.C.
By: Thomas M. Wardrop (P38268)
Attorney for Assignee of Mortgagee
Suite 150 - Frey Building

LEGAL

STATE OF MICHIGAN
CIRCUIT COURT
COUNTY OF OTSEGO
FILE NO. 99-8293-CH(D)
HONORABLE ALTON T. DAV

ROBERT A. KING and CONSTANCE A. husband and wife,
Plaintiffs,
v.
JACKSON RILING, JOYCE MYRTLE RILI ALD WESCOAT, EDWARD J. BENTLEY, M. BENTLEY, PATRICIA FOSTER, DO WESCOAT, HELEN WESCOAT, PAT COMPANIES, FLORENCE SARISCANY, E

Attorneys and Counselors
3015O Telegraph Road, Suite 1000
Bingham Farms, MI 48025
File #990808612
Cougars

Northeast Michigan Council of Governments
NEMCOG
Phone: (517) 732-3551
Fax: (517) 732-5578
email: nemcog@northland.lib.mi.us
P.O. Box 457 • 121 E. Mitchell • Gaylord, MI 49734

MEETING NOTICE

Otsego County Solid Waste Planning Committee
January 5, 2000
3:30 p.m.
NEMCOG Office
121 E. Mitchell
Gaylord, MI

Agenda

I. Call To Order

II. Members Present

III. Minutes of Previous Meeting

IV. Solid Waste Management Systems Discussion
- A. Collection
- B. Resource Recovery program
- C. Disposal

V. Public Comment

VI. Next Meeting

VII. Adjournment

Northeast Michigan Council of Governments
NEMCOG

Phone: (517) 732-3551
Fax: (517) 732-5578
email: nemcog@northland.lib.mi.us
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Minutes
of the
Otsego County Solid Waste Planning Committee
January 5, 2000
NEMCOG Office

Call To Order: The meeting was called to order by Chair Ron Chavey.

Members Present: Ron Chavey, Richard Sawicki, Ken Paquet, Bruce Popowitz, Mary Sanders. A quorum was not present. Public: James Gatrell, Richard Wojttkowiak. DPA: Diane Rekowski

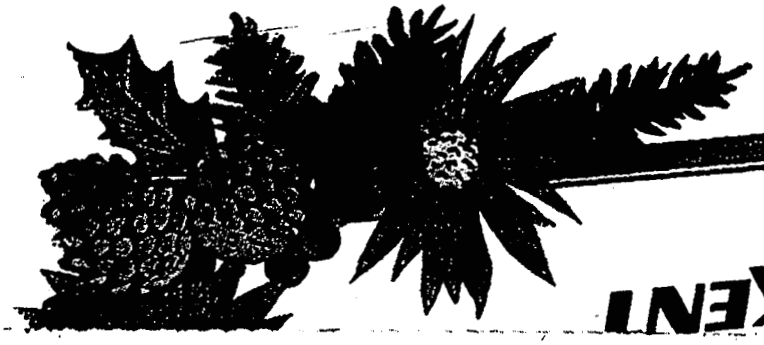
Minutes of Previous Meeting: No action taken.

Solid Waste Management Systems Discussion: The committee reviewed the Solid Waste Plan components and discussed the preferred alternative. D. Rekowski will draft the rest of the Plan based on the committee's discussion.

Public Comment: No public comment.

Next Meeting: The next meeting will be February 23, 2000 at 6:30 p.m..

Adjournment: The meeting was adjourned at 4:50 p.m..



D KENT

ROMAN CATHOLIC DIO

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Brighten Someone's Day!

Place a Happy Note in the classifieds!

517-732-1111

MEETING NOTICE

Otsego County Solid Waste Planning Committee
January 5, 2000
3:30 p.m.
NEMCOG Office
121 E. Mitchell
Gaylord, MI

meeting was adjourned at 6:47 p.m.

CHESTER TOWNSHIP

Regular Monthly Board Meeting

November 9, 1999

The meeting was called to order at 7:00 p.m. with board members present except Olsen. Deputy Treasurer Latuszek was present in Olsen's absence. Six others were present. The board took action to pay bills. The board also recommended approval of ZBA Case #ZBA90985-CR on property located at 1692 Wildflower Trail. Applicant McDonald was seeking a setback variance for an addition to his dwelling contrary to article 14. The board then heard public comment; The board rescinded a motion from the 10-13-99 meeting awarding the snow plowing bid to Olsen

CITY MINUTES

November 22, 1999

eting of the Gaylord City Council was opened with prayer by Council Memt
.00 p.m. on Monday, November 22, 1999, in the City Council Chambers, loc
unty Building, 225 West Main Street, Gaylord, Michigan. The Pledge of
owed the invocation.

ent: Bates, Johnson, Mankowski, Sotokis, Tholl, Wambold and Brecheisen.

nt: None.

urces (MDNR) has recently acquired abandoned railroad rights-of-way in
r Michigan connecting Mackinaw City with Alanson, Mackinaw City with
eboygan with Hawks, and Cheboygan with Gaylord much of which through
of the Michigan Natural Resources Commission and the Michigan Natural
t Fund which it administers, and, WHEREAS the majority of these rights-of-
, undeveloped for multi-purpose trail use for the benefit of local residents ar
HEREAS, local construction projects to improve these corridors will add co
local economies of the area and, subsequently, enhance the area's tourism
l attractiveness on a year round basis, and, WHEREAS, "TEA 21" federal
nhancement grant funds still are available to pay for a significant portion of
ents it applied for by qualified applicants, as well as other public funding
VHEREAS, the Michigan Department of Natural Resources (MDNR) is qualific
d in seeking and administering such grant funding and would provide a mos
tity agency for such an area wide project. NOW, THEREFORE, BE IT
the Michigan Department of Natural Resources (MDNR) is encouraged to
nly on a timely basis for the necessary funding to cover planning, engineeri

Northeast Michigan Council of Governments
NEMCOG

Phone: (517) 732-3551
Fax: (517) 732-5578
email: nemcog@northland.lib.mi.us
P.O. Box 457 • 121 E. Mitchell • Gaylord, MI 49734

Date: 12/03/99

To: Otsego County Solid Waste Planning Committee

From: Diane Rekowski DR

RE: Next Meeting

The December 8th Otsego County Solid Waste Planning Committee meeting has been changed to January 5, 2000 at 3:30p.m.. I apologize for any inconvenience this may have caused.

Happy Holidays!

Northeast Michigan Council of Governments
NEMCOG

Phone: (517) 732-355
Fax: (517) 732-557
email: nemcog@northland.lib.mi.us
P.O. Box 457 • 121 E. Mitchell • Gaylord, MI 4973

MEETING NOTICE

Otsego County Solid Waste Planning Committee
November 1, 1999
6:30 p.m.
NEMCOG Office
121 E. Mitchell
Gaylord, MI

Agenda

I. Call To Order

II. Members Present

II. Minutes of Previous Meeting

IV. Resource Recovery Program Development
A. Recycling Program Discussion

V. Public Comment

VI. Next Meeting

VII. Adjournment

Northeast Michigan Council of Governments
NEMCOG

Phone: (517) 732-3551
Fax: (517) 732-5578
email: nemcog@northland.lib.mi.us
P.O. Box 457 • 121 E. Mitchell • Gaylord, MI 49734

Minutes
of the
Otsego County Solid Waste Planning Committee
November 1, 1999
6:30p.m.
NEMCOG Office

Call To Order: The meeting was called to order at 6:30 p.m. by Chair Ron Chavey.

Members Present: Mary Sanders, Ron Chavey, Kam Ensing, Sharon Brown, Ken Paquet, Bruce Popwitz, Jerry Weiss, Sue Smethurst. DPA: Rick Deuell. Guests: William Redpoth, Bill Lawes,

Resource Recovery Program Development

Recycling Program Discussion: Recycle! Otsego County, Inc. (ROC) members explained the purpose of their organization and plans for recycling in Otsego County. The group will have a drop-off facility which is located behind Tri-County Meats. Dec. 1st will be taking materials on a limited basis. Materials that will be taken include: tin, aluminum, glass. Will eventually take cardboard and plastics. ROC is in the process of working towards 501(c)3 status. Education of public will take place through news articles, radio announcements, articles in organization's newsletters.

Existing programs were then discussed:

- Waste Management is currently recycling 3 semi loads per week of corrugated cardboard. Customers are charged one-half cost of waste collection fee.
- A&L recycles scrap metal.
- Lion's Club have a trailer at Carter's Food Center for newspapers.
- Upper Great Lakes Tire Co. recycles tires.
- Cross Roads Industries- accepts styro-peanuts.

Discussion then took place on the need for a strong education program. Major emphasis is needed in Plan. A Recycling Coordinator is needed for educational purposes. Education is needed in schools
Public Comment: No Public Comment.

Next Meeting: The next meeting will be December 8th at 3:30 p.m.

Adjournment: The meeting was adjourned at 7:50 p.m.

ices

'son

dren; and two sisters, Jane Baisel of Grand Ledge and Joan Miller of Lansing.

Funeral services will be held Saturday, Oct. 23 at 11 a.m. from the Nelson Funeral Home, the Rev. Gerald Rehagen officiating. Burial will be in Fairview Cemetery.

Visitation was at the Nelson Funeral Home on Friday from 1 to 4 p.m. and 7 to 9 p.m. and will be on Saturday from 9 a.m. until the time of services.

Memorial contributions may be made to Alzheimer's Research, through the Nelson Funeral Home, 135 N. Center Ave., Gaylord, MI 49735.

ert Sr.

sion and edited the Oldsmobile magazine "Team" until his retirement in 1966 to complete a home on Beaver Island where he and his wife resided every summer for over 30 years.

He is survived by six children: Alice Louise Scovie, self-employed, of Marshall; George Louis Egbert Jr., a retired Army officer of Alabama; James Frank Egbert, a retired Air Force officer of Florida; Daniel Joseph Egbert, a retired Air Force officer and insurance executive of California; Lynn Joseph Egbert, chief executive officer of the Michigan Association of Home Builders in Lansing; and Lynda Mary Evers, self-employed, of Kalamazoo and a member of the Michigan Women's Commission. He is also survived by 16 grandchildren and 22 great-grandchildren.

The family suggests contributions in his name to the American

MEETING NOTICE

Otsego County Solid Waste Planning Committee
November 1, 1999 at 6:30 p.m.
NEMCOG Office
121 E. Mitchell, Gaylord, MI

North Central
MICHIGAN COLLEGE

Presents...

Computers for the Terrified

Learn the basics in Computers
- Hardware Knowledge
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When: November 4, 6:00 - 8:00 p.m.
Where: Alpine Regional Center
Cost: $25, must register by Nov. 1
Please call: (517) 731-5001

NOTICE

NORTHERN MICHIGAN COMMUNITY MENTAL HEALTH
Is recruiting members for its Consumer Council

The purpose of this Council is to provide input to the Northern Michigan Community Mental Health Board regarding its services and programs.

The Consumer Council has a membership of at least 12 individuals. Council membership is representative of the three major service populations: adults and children who receive mental health services, and persons with developmental disabilities.

All consumers, family members and advocates are encouraged to apply.

For an application, or for more information, please contact your local Northern Michigan Community Mental Health office or call (231) 347-7890.

Rent or Buy

Northeast Michigan Council of Governments
NEMCOG

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Fax: (517) 732-5578
email: nemcog@northland.lib.mi.us
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MEETING NOTICE

Otsego County Solid Waste Planning Committee
October 6, 1999 **
4:00 p.m.
NEMCOG Office
121 E. Mitchell
Gaylord, MI

Agenda

I. Call To Order

II. Members Present

III. Minutes of Previous Meeting

IV. Crawford County Update- Patrick Merrill, Crawford County Environmental Enforcer

V. Resource Recovery Program Development
- A. Recycling Program
- B. Composting program

VI. Disposal Options for Alternatives

VI. Public Comment

VII. Next Meeting

VIII. Adjournment

**** Note meeting date has been changed from that previously scheduled.**

Northeast Michigan Council of Governments
NEMCOG
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Fax: (517) 732-5578
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P.O. Box 457 • 121 E. Mitchell • Gaylord, MI 49734

Minutes of the
Otsego County Solid Waste Planning Committee
10/6/99
NEMCOG Office
121 E. Mitchell
Gaylord, MI

Call To Order: The meeting was called to order at 4:00p.m.

Members Present: Rich Sawicki, Ron Chavey, Ken Paquet, Jerry Weiss, Sharon Brown, Bruce Popowitz, Susan Smethurst, Mary Sanders.
DPA: Diane Rekowski

Minutes of Previous Meeting: R. Sawicki moved, seconded by S. Smethurst to approve the minutes as presented. Ayes all, motion carried.

Crawford County Update: Pat Merrill, Environmental Enforcer for Crawford County, provided an overview of his responsibilities in his position. Pat monitors the Waste Management, Inc. Landfill and provides environmental assistance in the county. The position is funded by the settlement of the landfill lawsuit. The Waste Management Landfill in Waters accepts waste from 21 counties and has doubled in volume since he started. He also informed the Committee that he held a household hazardous waste day in June and a tire disposal day for residents of Crawford County in September. Monies from the landfill lawsuit settlement paid for the household hazardous waste day, while the disposal cost for tires were $1.50/auto tire off rim and $2.00/auto tire on rim. Both days were successful and he expressed interest in coordinating events with other counties in the future. Pat also informed the committee on the multi-county recycling effort that is currently underway with representatives attending from Crawford, Roscommon, Antrim, Kalkaska, and Otsego counties.

Resource Recovery Program Development: Discussion then took place on the Goals and Objectives that were developed based on the input from the previous meeting, and the Resource Recovery portion of the Plan. A worksheet was distributed to assist in developing preferred solid waste management systems alternatives. D. Rekowski suggested that a meeting be dedicated to developing the resource recovery program for Otsego County with the volunteer group currently meeting to organize a recycling program.

Public Comment: No public comment.

Next Meeting: The next meeting will be held with the volunteer recycling group on November 1, 1999, 6:30 p.m. at the NEMCOG office.

Adjournment: The meeting was adjourned at 5:30 p.m.

C NOTICE

red for filing with the FCC in Washington, D.C. he licenses of Stations WGKI, Channel 33, Vanderbilt, Michigan, from GRK Productions asting II, Inc. The general partners of GRK Productions, Inc. and Channel 33 Limited Partnership's sole general partner is GRK tors, and shareholders of GRK Productions, The officers, directors and 10% or greater ing II, Inc. are Joseph Fuchs, Jeffrey Smith, ard Kohos, John Adams, and Randall Smith. ts, and related materials are on file for public Road, Cadillac, Michigan.

MEETING NOTICE

Otsego County Solid Waste
Planning Committee
October 6, 1999
4:00 p.m.
NEMCOG Office
121 E. Mitchell
Gaylord, MI

CKS AUCTIONEERING

NEER: Don Horrocks Home: (231) 627-7813
TIONEER: Brad Ormsbee (231) 597-0174

be made by cash or
ases must be made in full
uncements made during the
atter. No property to be
ed for.

CONDITIONS

Each item in the auction is being sold "AS IS" without warranty or guarantee intended or implied of any kind, including merchantability or fitness for particular purposes. Each item is the sole responsibility of the purchaser from the moment the item is sold. All informationcontained in this brochure was derived from sources believed to be correct but is not guaranteed by the auctioneers. Not responsiblefor accidents or stolen items. Auction service acts as selling agents only. No guarantee or liabilities assumed.

SALE

r 9, 1999 • 10:00 A.M.
iver Lawrence
opinabee

perty, furniture and appliances.
l of good quality.
Mullett Lake. New modular with
so selling older home next door
one lot.

HOUSE

22nd • 6:30 p.m.-8:30 p.m.
5th • 2:00 p.m.-4:00 p.m.
5th • 2:00 p.m.-4:00 p.m.

JCTIONEERING

ocks Home: (231) 627-7813
Ormsbee (231) 597-0174

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ended or implied of any kind, including merchantability or fitness for particular
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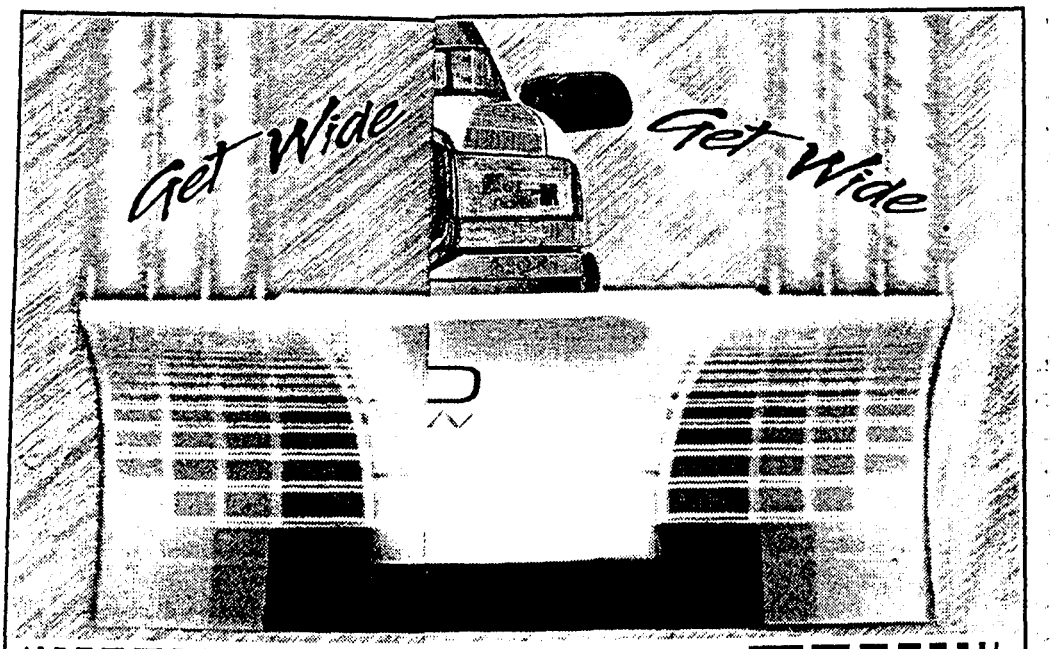

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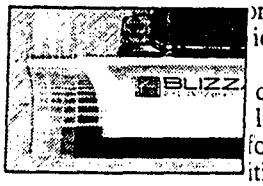

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CARGO MATE

Northeast Michigan Council of Governments
NEMCOG

Phone: (517) 732-355
Fax: (517) 732-557
email: nemcog@northland.lib.mi.u
P.O. Box 457 • 121 E. Mitchell • Gaylord, MI 4973

DATE: September 23, 1999

TO: Otsego County Solid Waste Planning Committee

FROM: Andra Ziemke, Administrative Assistant

RE: Emmet County Recycling Tour

Due to lack of response, the Emmet County Recycling Tour planned for September 28, 1999, has been canceled.

Northeast Michigan Council of Governments
NEMCOG

Phone: (517) 732-3551
Fax: (517) 732-5578
email: nemcog@northland.lib.mi.us
P.O. Box 457 • 121 E. Mitchell • Gaylord, MI 49734

MEETING/TOUR NOTICE

The Otsego County Solid Waste Planning Committee will meet at the NEMCOG Offices on September 28,1999 at 8:45 a.m., for the Emmet County Recycling Tour. Departure will be at 9:00 a.m.

Feel free to invite anyone else that might be interested in the tour. Depending on the number of attendees, a bus may be provided. Otherwise car pooling may be necessary.

Please RSVP by September 17, 1999 so that the transportation can be planned.

RSVP to Andra - Phone & Voice Mail: 517-732-3551 ext10.
Fax: 517-732-5578

Northeast Michigan Council of Governments
NEMCOG

Phone: (517) 732-3551
Fax: (517) 732-5578
email: nemcog@northland.lib.mi.us
P.O. Box 457 • 121 E. Mitchell • Gaylord, MI 49734

Date: 9/22/99

To: Municipalities

From: Diane Rekowski

RE: Otsego County Solid Waste Management Survey

The Otsego County Solid Waste Management Committee has recently initiated the development of the update to the 1989 Solid Waste Management Plan for Otsego County. In order to adequately address the needs of the county, the committee needs your input on solid waste management issues. We would appreciate your time in completing the enclosed survey and returning it to us in the self-addressed, stamped envelope.

Thank you for your assistance and feel free to contact me if you should have any questions.

Northeast Michigan Council of Governments

NEMCOG

Phone: (517) 732-3551
Fax: (517) 732-5578
email: nemcog@northland.lib.mi.us
P.O. Box 457 • 121 E. Mitchell • Gaylord, MI 49734

Otsego County Solid Waste Management

Survey of Municipal Needs

1. Municipality: _____

2. Does your municipality operate a greenbox transfer station for residential solid waste collection?

   _____ Yes _____ No

   If yes: (a) what is your annual operating costs for transfer station?

   Expenditures:

   Staff: _____

   Hauling/disposal fees: _____

   Other: _____

   Total: _____

   Revenues:

   Disposal Charges: _____

   Tax Subsidy: _____

   Total: _____

   (b) How many days per week is the transfer station open? _____

   (c) What are the hours of operation? _____

   (d) Types of waste received: _____ residential _____ commercial _____ large items

   _____ other, please explain _____

3. Does your municipality hold clean-up days for large item disposal? _____ Yes _____ No

   If yes: (a) how often? _____

   If no: why not? _____

   _____

4. Does your municipality offer a recycling program? _____ Yes _____ No

   If yes, (a) What materials are accepted for recycling? _____

   _____

   _____

   _____

c:\excel(AZ)\Otsego Co SW Survey of Municipal Needs.xls

(b) What are the charges for recycling? _____

_____

(c) How are the materials marketed? _____

_____

6. In your opinion, would your board be supportive of a county-wide recycling program?

_____ Yes _____ No

Please provide any comments: _____

_____

_____

_____

7. Would your municipal board be willing to finance a drop-off box for recyclable material collection (cost for a container is approximately $5,000 - $6,000)?

_____ Yes _____ No

Please provide any comments: _____

_____

8. Are there adequate composting sites available for the disposal of yard waste in your community?

_____ Yes _____ No

If no, please explain _____

_____

9. Is the present solid waste management system in Ostego County adequate to meet your community's needs?

_____ Yes _____ No

Please explain: _____

_____

_____

_____

10. Please list any other concerns that you may have regarding solid waste management issues in Otsego County:

_____

_____

_____

_____

_____

_____

'theast Michigan Council of Governments
NEMCOG

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Fax: (517) 732-5578
email: nemcog@northland.lib.mi.us
P.O. Box 457 • 121 E. Mitchell • Gaylord, MI 49734

MEETING NOTICE

Otsego County Solid Waste Planning Committee
August 26, 1999
2:00 p.m.
NEMCOG Office
121 E. Mitchell
Gaylord, MI

Agenda

I. Call To Order

II. Members Present

III. Minutes of Previous Meeting

IV. Development of Goals and Objectives

V. Resource Recovery Discussion
   A. Recycling Program
   B. Composting program

VI. Public Comment

VII. Next Meeting

VIII. Adjournment

Northeast Michigan Council of Governments
'EMCOG

Phone: (517) 732-355
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email: nemcog@northland.lib.mi.u
P.O. Box 457 • 121 E. Mitchell • Gaylord, MI 4973

Minutes of the
Otsego County Solid Waste Planning Committee
8/26/99
NEMCOG Office
121 E. Mitchell
Gaylord, MI

Call To Order: The meeting was called to order at 2:00p.m. by Chair Ron Chavey

Members Present: Rich Sawicki, Ron Chavey, Jerry Weiss, Ken Paquet, Joe Wambold, Bruce Popowitz, Susan Smethurst, Mary Sanders, Bruce Popowitz
DPA: Diane Rekowski

Minutes of Previous Meeting: Moved by R. Sawicki, seconded by S. Smethurst to approve the minutes as presented. Ayes all, motion carried.

Development of Goals and Objectives: D. Rekowski distributed sample goals and objectives to help guide the development of Otsego County's solid waste management goals and objectives. After much discussion, it was decided that D. Rekowski will draft goals and objectives from the discussion for committee review.

Resource Recovery Discussion: Discussion then took place on recycling program development for Otsego County. It was decided that a survey would be sent to all municipalities in Otsego County to better understand problems at the township/city/village level and to also guage the level of support for recycling. It was pointed out that Otsego County's past efforts in recycling had failed leaving a negative feeling in the county. A program, if developed would have to be funded and government would need to play a role if it was to be successful. Committee members see supporting the existing efforts for recycling and working with adjacent counties for processing and marketing. Discussion followed on Emmet County's successful recycling program. It was decided to tour the facility, arrangements will be made and committee members notified of date and time of tour.

Other Business:
R. Chavey informed the committee that Jacque Korn of the Natural Resource Conservation Service (NRCS), will not be able to serve on this committee. Members indicated that her input would be extremely valuable and will follow-up to see if NRCS would reconsider.

Public Comment: No public comment.

Next Meeting Date: The next meeting will be September 30, 1999, 4:00p.m. at the NEMCOG office in Gaylord. **(*Note:* Meeting Date has been changed to October 6, 1999; 4:00p.m. at the NEMCOG office).**

Adjournment: R. Sawicki moved, seconded by J. Weiss to adjourn the meeting. Ayes all, motion carried.

Goals and Objectives Worksheet

Each county must develop goals and objectives which will direct the county's efforts regarding solid waste management.

Goals -- the end result which the county wants to achieve, described in one broad statement.

Objectives -- the means by which the goals will be met, described in concise statements which have measurable outcomes.

At a minimum, goals must reflect two major purposes of the 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.

State Goals

Committee members should also consider how local goals and objectives fit into Michigan's ultimate solid waste management goal of reducing land disposal to only unusable residues by 2005. Michigan intends to achieve this by obtaining or exceeding the following goals:

Reduction	8 - 12 %
Reuse	4 - 6 %
Composting	8 - 12 %
Recycling	20 - 30 %
Waste-to-Energy	35 - 45 %
Landfill	10 - 20 %

Goal I. _____

_____

Objective: _____

_____

Objective: _____

_____

Objective: _____

_____

Objective: _____

Goal II. _____

_____

Objective: _____

Objective: _____

_____

Objective: _____

_____

Objective: _____

Goal III. _____

_____

Objective: _____

Objective: _____

_____

ews.
ceived friends Fri-
ne Bellaire Chapel of
Funeral Homes. Pri-
y services were held and
in Lakeview Cemetery

of flowers, the family
contributions to the Bel-
mmunity Fund Athletic
PO Box 998, Bellaire,

tion to his wife, he is sur-
a daughter, Paulette
of Mancelona; seven
Lloyd of Carleton, Glenn
Haven, Waynn, Lowell,
Ronald and Bruce, all of
three sisters, Lorraine
LaVigne of Newport,
Barton) Cook of Gaylord
garet (John) Kuzych of
andchild, J. Philip

s preceded in death by a
J. Pospech.

chips and coke, plus a satellite Internet demonstration with their new computers.

The school is located at 1377 M-32 East.

Gaylord Herald Times
517-732-1111

MEETING NOTICE

Otsego County Solid Waste
Planning Committee
August 26, 1999
2:00 p.m.
NEMCOG Office
121 E. Mitchell
Gaylord, MI

NOTICE

Boyne Falls School Board has approved the State Aid Act Section 105 C "Schools of Choice". This section allows pupil's residing in a contiguous district located in another intermediate district to attend Boyne Falls School. Schools effected by this are Gaylord Community Schools, Wolverine Community Schools, and Vanderbilt Area Schools.

NOTICE IS HEREBY GIVEN that a Special Meeting of the City of Gaylord Zoning Board of Appeals will be held at 7:00 p.m. on Wednesday, August 25, 1999, in the City Council Chambers, located in the City-County Building, 225 West Main Street, Gaylord, Michigan, for consideration of the following:

Request by Kevin Johnson for an Outer Wall Covering Variance on Lots 4, 5 and 6, Dale Drive, C-2, Central Commercial District.

The public is encouraged to attend.

Rebecca Curtis,
City Clerk

erect a 250' freestanding telecommunications tower with top-mounted antennas at 5013 M-32 East, Chester Township, T30N, R2W, Section 9, zoned AR.

CASE NO. PC-90525-LN
NPI Wireless is seeking a Special Use Permit, according to Article 18, to erect a 250' freestanding telecommunications tower at 867 Winters Road, Livingston Township, T31N, R3W, Section 4, zoned AR.

CASE NO. PC-90526-CR
NPI Wireless is seeking a Special Use Permit, according to Article 18, to erect a 250' freestanding telecommunications tower at 8714 M-32 East, Chester Township, T30N, R2W, Section 13, zoned AR.

CASE NO. PC-90527-OL
NPI Wireless is seeking a Special Use Permit, according to Article 18 to erect a 250' freestanding telecommunications tower off Old State Road west, east of I-75, Otsego Lake Township, T29N, R3W, Section 17, zoned FR.

OTHER BUSINESS

CASE NO. PC-90656-TEXT
Public hearing on Zoning Ordinance text changes on access driveways.

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spineless judges and prosecutors, all in the name of "justice." In many cases, the outlaws do it all over

outdoors writer and sportsman whose column appears each Saturday in the Gaylord Herald Times.

Northeast Michigan Council of Governments
NEMCOG

Phone: (517) 732-3551
Fax: (517) 732-5578
email: nemcog@northland.lib.mi.us
P.O. Box 457 • 121 E. Mitchell • Gaylord, MI 49734

MEETING NOTICE

Otsego County Solid Waste Planning Committee
July 29, 1999
2:00 p.m.
NEMCOG Office
121 E. Mitchell
Gaylord, MI

Agenda

I. Call To Order

II. Members Present

III. Election of Chair

IV. Solid Waste Management Planning Overview

V. Review of Otsego County Solid Waste Management System

VI. Development of Goals and Objectives

A. Identification of Problems

B. Goals and Objectives

VII. Public Comment

VIII. Next Meeting

A. Recycling Discussion
B. Committee meeting date

IX. Adjournment

Minutes of the
Otsego County Solid Waste Planning Committee
7/29/99
NEMCOG Office
121 E. Mitchell
Gaylord, MI

Call To Order: The meeting was called to order at 2:00p.m.

Members Present: Rich Sawicki, Jacque Korn, Thomas Wagar, Kam Ensing, Ron Chavey, Ken Paquet, Joe Wambold, Bruce Popowitz, Susan Smethurst, Mary Sanders.
DPA: Diane Rekowski

Introductions: Members were introduced and the purpose of the committee was discussed.

Election of Chair: Ken P. moved, seconded by J. Wambold to elect Ron Chavey as Chair of the Solid Waste Planning Committee. Ayes all, motion carried.

Waste System Overview: Discussion then took place on the solid waste management system presently operating in Otsego County. Ken P. explained past mergers of the waste management companies which resulted in USA Waste and Waste Management, Inc. merging as Waste Management, Inc. Waste Management, Inc. owns and operates the landfill located in Waters, and the hauling firm which operates throughout the State. Waste Management, Inc. is the primary hauling company in Otsego County, there are two smaller companies: Alpine Sanitation and Kam's Sanitation Service operating in the county.

Two Type B transfer stations are located in the county for residential use one in Corwith Township, the other servicing residents in Chester, Charlton and Dover Townships.

Annual clean -up days are offered in Corwith Township and the Village of Vanderbilt.

Resource Recovery Activities:

Recycling
K. Paquet informed the committee that Waste Managment, Inc. is currently collecting cardboard and taking it to their Cheboygan County Type A transfer station for baling and shipping.

K. Ensing reported that they offer a curbside collection program in the Gaylord area for $1.50/bag. The recyclable materials are then taken to a Material Recovery Facility (MRF) in Big Rapids. He is currently working with a group in Otsego County to develop a non-profit recycling center in the Gaylord area.

City of Gaylord no longer mandates recycling, however many businesses continue to recycle

corrugated cardboard.

Composting: City of Gaylord has a good composting program in place with collection of leaves and brush in spring and fall. Corwith Township also composts leaves.

Solid Waste Management Deficiencies
Discussion then took place over deficiencies within the present solid waste management system in Otsego County.

Collection: Problems have occurred with the contracting of Otsego Lake Township's solid waste. Although the yearly costs are low, $72.00/residence/year, there have been residences not receiving weekly services. New drivers do not know the township well, and will miss homes.

Collection services for seasonal residents is probably not adequate. Greenbox containers could help, it was felt that many people are using the rest areas to dispose of their garbage.

Collection and disposal of household hazardous waste was felt to be an important problem The previous millage election for the development of a household hazardus waste collection center was defeated years ago. It was felt that items that can be safely disposed, i.e. latex paints should have disposal methods printed on labels. A program is needed in the county to keep this waste out of the landfill.

Education was felt to be lacking and is a key component of resouces recovery programs. Using area events would be a good promotional tool.

Communicating with industry is important to find out what they are doing with their waste and recyclables and what problems they are encountering.

Public Comment: No public comment.

Next Meeting Date: The next meeting will be August 26, 1999; 2:00p.m. at the NEMCOG office in Gaylord.

Adjournment: R. Sawicki moved, seconded by K. Ensing to adjourn the meeting. Ayes all, motion carried.

Solid Waste Planning Committee
Responsibilities

1). Assist in the preparation of the Plan by providing advice, and consultation which includes:

a. Review DPA's work plan, and ensure DPA is fulfilling requirements of Act.

b. Identify local policies and priorities

c. Insure coordination and public participation

d. Advise counties or municipalities

e. Review work elements

f. Authorize the plan for Public Comment and Review

g. Review public comments and make any necessary changes to Plan.

h. Approve the plan.

Solid Waste Plan Update
Overview

I. Part 115 of Natural Resource Protection Act - Formerly P.A. 641

A. First Plans developed in early 1980's under P.A.641.

B. Statute requires Plans to be updated every 5 years. Plans were updated in late 1980's. Since that time, there were many attempts to change legislation, however, only minor changes were made (see P.A. 153). State each year, since 1994, sent a letter to counties delaying the Plan updates. Any changes to the Plans had to go through the amendment process.

C. State codified environmental laws, PA 641 is now Part 115 of Natural Resource Protection Act.

D. Summer of 1997, State notified Counties of intent to Update Plans (without any funding). Counties had to respond back to State by early fall, of their intention of updating Plans (Yes or No). State has only had 5 negative responses from counties.

E. Otsego County chose to update Plan and designate NEMCOG as DPA.

F. Process begins.

G. Act mandates either a county, multi-county or regional planning committee be established.. Historically, there was a regional planning committee. However, during the course of the amendments, many of the counties chose to have their own committee. The role of the committee is to provide input and to ensure public process.

II. Changes to Solid Waste Plans - PA 153

A. New format. Standardized for entire State.

B. Landfill Capacity requirements changed from 20 to 10 years.

C. 5 1/2 year landfill siting criteria.

D. Statutory criteria based siting process (defined in Act).

E. Annual county capacity certification with default - some plans may need.

Solid Waste Plan Development
Outline

I. Solid Waste Planning Committee Formation (SWPC)

__ A. County Advertises, send notices for SWPC members MTA, industry, etc.
__ B. County selects members
__ C. County approves committee appointments

II. DPA and County Organize Meeting

__ A. Notice in paper 10 days prior to meeting.
__ B. Send notice to members 10 days prior to meeting.
__ C. Post notice in county building.
__ D. Send notice to municipalities and other affected counties, groups.

III. SWPC Meetings

__ A. Minimum of 4 quarterly meetings.
__ B. First meeting Elect Chair.
__ C. First meeting establish procedures to review and act upon materials (determine quorum; majority of 14 members, or majority of those members present).
__* D. Review SWPC Responsibilities.
__ E. Determine public repository.
__ F. Develop plan and recycling concept.
__ G. Allow for public questions and comment at meetings.
H. Meeting held to authorize Plan for its release for public hearing.
__ I. Meeting after Public hearing to review comments, make any changes, and to approve plan.

IV. Public Input

__ A. Provide copies of Plans for public review - library, county building, townships, all municipalities.
__ B. Plan is placed on public notice.
__ C. Conduct 90 day public comment and review period. Hold Public Hearing on Plan. Public hearing to be held prior to the end of the public comment period.
__ D. Notice in paper of 90 public comment period and Public Hearing, not less than 30 days before such hearing. Include where to review plan, where to send comments, date, time and place of public hearing.
__ E. DPA prepares a complete record of the public hearing proceedings, and this record is copied for the general public upon request after the public hearing
__ F. After the review and comment period, all of the comments from the reviewing agencies shall be submitted with the plan to the County.
__ G. Record public attendance at public meetings.
__ H. Record citizen concerns and questions.

V. Plan Adoption

__ A. SWPC meets to review comments, and make any necessary changes, after the public hearing.

__ B. SWPC approves Plan by majority of committee.

__ C. Within 30 days of closing of the public comment period the Plan is submitted to County.

__ D. County either approves or disapproves the plan

__ E. If disapproved:

__ Plan goes back to the SWPC with a statement of objections.

__ Within 30 days, the SWPC meets to review objections and returns the Plan to the County with its recommendations.

__ County approve the recommendations as submitted or make changes and state the reasons for the changes.

__ F. If approved, Plan goes to municipalities for 67% approval.

__ G. 67% of the municipalities approves plan.

__ Plan is forwarded to State DEQ for approval.

__ H. If not approved by 67% of the municipalities:

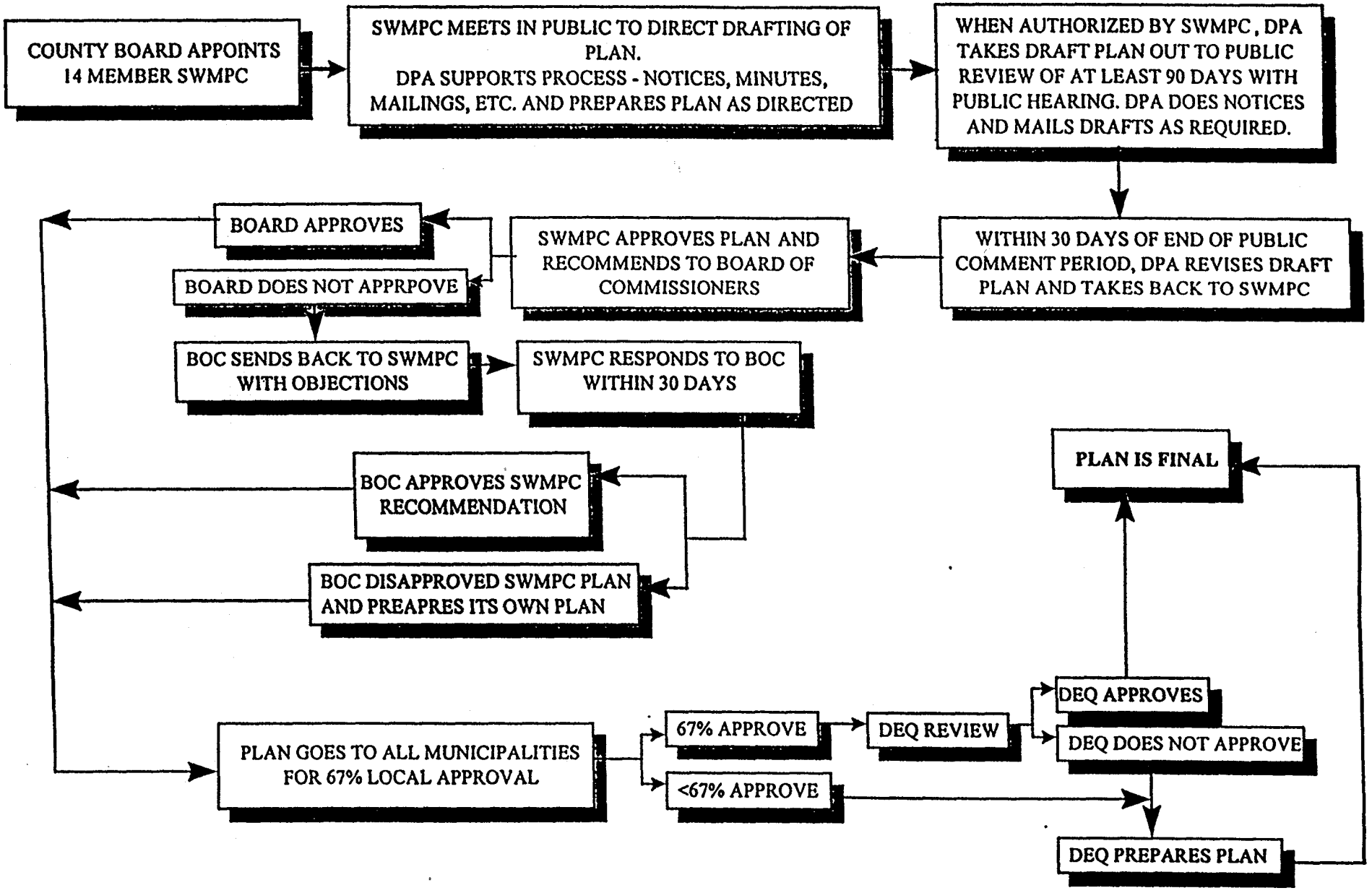
__ The Director of the DEQ prepares the Plan, which is final.

__ I. Submit copies of the votes by local entities.

__ J. Copies of the Plan and all local actions are included in documents in the Plan repository.

VI. Director's Plan Approval

__ A. Plan is submitted to State for Approval



PLAN APPROVAL PROCESS

ding the Gaylord Herald Times.

OTSEGO COUNTY PLANNING & ZONING

800 Livingston Boulevard, Suite 4-E
Gaylord, Michigan 49735
517-731-0253 • Fax 517-731-4711

Agenda for the Otsego County Zoning Board of Appeals regular meeting to be held Tuesday, July 27, 1999, at 7:00 p.m., in the Multi-Purpose Room of the J. Richard Yuill Building (Alpine Center, enter door 6), 800 Livingston Boulevard, Gaylord, Michigan. For further information, contact the Planning and Zoning office at the address and phone number above.

ALL APPLICANTS OR THEIR REPRESENTATIVES MUST BE PRESENT

CASE NO. ZBA-90352-BY
James W. Bernthal seeks a zoning variance from Article 15, Lots near water, to have a storage shed within the greenbelt on Dixon Lake. Property is located at 2143 W. Dixon Lake Dr., Bagley Township, T30N, R3W, Section 14, zoned RR. This case was tabled at the previous meeting at the request of the applicant.

MEETING NOTICE

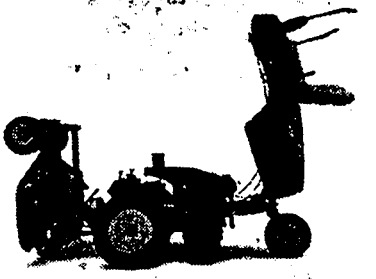
OTSEGO COUNTY SOLID WASTE COMMITTEE
July 29, 1999
2:00 p.m.
Northeast Michigan Council of Government's Conference Room
121 E. Mitchell
Gaylord, Michigan

NOTICE OF PU
CITY OF

The City of Gaylord will hold a Public He
of Gaylord Recreation Plan 1996-2000.

July 2
7:00
City-County Building
225 W. Main Street

The public is invited to attend this Public
ments to the City Council. Written comm
1999. Copies of the proposed amendme
at the City Office, Room 109, 225 W.
through Friday, 8:30 a.m. to 4:30 p.m.



g
owing.

Senior

Northeast Michigan Council of Governments

NEMCOG

Phone: (517) 732-3551
Fax: (517) 732-5578
email: nemcog@northland.lib.mi.us
P.O. Box 457 • 121 E. Mitchell • Gaylord, MI 49734

DATE: July 16, 1999

TO: Interested City, Village and County Officials

FROM: Diane Rekowski, Director

This is to notify you that the solid waste planning process has been initiated in Otsego County for the purpose of updating the current plan. The first Otsego County Solid Waste Planning Committee meeting will be held July 29, 1999 at 1:00 p.m. at the NEMCOG Office in Gaylord. I have enclosed an agenda for your information.

Please feel free to contact me if you should have any comments or questions.

Northeast Michigan Council of Governments

NEMCOG

Phone: (517) 732-3551
Fax: (517) 732-5578
email: nemcog@northland.lib.mi.us
P.O. Box 457 • 121 E. Mitchell • Gaylord, MI 49734

Date: 7/15/99

To: Otsego County Solid Waste Planning Committee Members

From: Diane Rekowski

RE: Solid Waste Planning Meeting

The first meeting of the Otsego County Solid Waste Planning Committee will be held on July 29, 1999; 1:00p.m. at the NEMCOG Office in Gaylord. I have enclosed a copy of the 1989 Otsego County Solid Waste Management Plan, the agenda, and background information, for your review.

I look forward to working with you on the committee and please do not hesitate to contact me if you should have any comments or questions.

Otsego Co SW mail list 7/99

Ken Paquet
6037 Mullett Woods Shore Dr.
Cheboygan MI 49721

Jane Brannon, Clerk
Charlevoix County
203 Antrim St.
Charlevoix I 49720

Kam Ensing
Kam's Sanitation
PO Box 2008
Gaylord MI 49734

Vicky Pyrzynski, Clerk
Cheboygan County
PO Box 70
Cheboygan MI 49721

Laura Sexton, Clerk
Antrim County
PO Box 520
Bellaire MI 49617

Jerry Weiss
Waters Landfill
11375 Sherman
Frederic MI 49733

Ron Chavey, Commissioner
Otsego County
3571 W. Otsego Lake Drive
Gaylord MI 49735

John J. Ozoga, III
DEQ/1955 North I-75
Grayling MI 49738

Sharon Brown
600 Jensen
Gaylord MI 49735

Joe Wambold
Gaylord Council Member
302 S. Center Ave.
Gaylord MI 49735

Pat Rodgers, Clerk
Kalkaska County
PO Box 10
Kalkaska MI 49646

Jacque Korn
District Conservationist
800 Livingston Blvd Ste 4A
Gaylord MI 49735

Tom Wagar, Trustee
Otsego Lake Township
9515 Old 27 South
Gaylord MI 49735

Sandra Moore, Clerk
Crawford County
200 W. Michigan Ave
Grayling MI 49721

Rich Sawicki
NEMCOG
141 Fallow Drive
Gaylord MI 49735

Seth Philips / Chief DEQ
PO Box 30241
Lansing MI 48909-7741

Susan Rhode, Clerk
Presque Isle County
PO Box 110
Rogers City MI 49779

Sue Smethurst
Volunteer Center
615 S. Elm
Gaylord MI 49735

Bruce Popowitz
512 W. Mitchell
Gaylord MI 49735

N. Cunningham, Clerk
Montmorency County
PO Box 415
Atlanta MI 49709

Brian Techel
2656 Hayes Tower Road
Gaylord MI 49735

Jamie Joseph
Alpine Sanitation
4144 Stowe Ln
Gaylord MI 49735

Patsy Peters, Clerk
Oscoda County
PO Box 399
Mio MI 48647

Mary Sanders, Supervisor
Hayes Township
7200 Hayes Tower Road
Gaylord MI 49735

Joe Duff, Manager
City of Gaylord
225 W. Main
Gaylord MI 49735

Lambert Chard, Coord.
Otsego County
140 Pinecrest Drive
Gaylord MI 49735

Rebecca Curtis, Clerk
City of Gaylord
225 W. Main
Gaylord MI 49735

Elizabeth Haus, President
Village of Vanderbilt
606 Garfield
Vanderbilt MI 49797

Shirley Jenkins, Supervisor
Bagley Township
PO Box 191
Gaylord MI 49734

Sandy Cunningham, Secty.
Montmorency County
PO Box 415
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