STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
LANSING

JOHN ENGLER
GOVERNOR

RUSSELL J. HARDING
DIRECTOR

February 26, 2002

Mr Roland Sweeney, Chairman
Baraga County Board of Commissioners
16 North Third Street
L'Anse, Michigan 49946-1085

Dear Mr. Sweeney:

In accordance with Section 11533(6) of Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, the Department of Environmental Quality (DEQ) prepared the Baraga County (County) Solid Waste Management Plan Update (Plan).

The Plan, as written by the DEQ, adequately meets the solid waste disposal needs of the County for the next five-year period. Further, by your letter dated November 8, 2001, the Baraga County Board of Commissioners has been identified as the responsible entity to take legal action to guarantee compliance with the Plan, as required by Part 115. Therefore, the Plan is hereby approved and issued to the County.

If you have any questions, please contact Ms. Rhonda Oyer Zimmerman, Chief, Solid Waste Management Unit, Waste Management Division, at 517-373-4750.

Sincerely,

Arthur R Nash

Russell J. Harding ACTING
Director
517-373-7917

cc: Senator Donald Koivisto
Representative Rich Brown
Mr. Arthur R. Nash Jr., Deputy Director, DEQ
Mr. Thomas M. Hickson, Legislative Liaison, DEQ
Mr. Jim Sygo, DEQ
Ms. Joan Peck, DEQ
Mr. Robert Schmeling, DEQ – Marquette
Ms. Rhonda Oyer Zimmerman, DEQ
Ms. Christina Miller, DEQ
Baraga County File

BARAGA COUNTY

SOLID WASTE MANAGEMENT PLAN

Prepared by
Michigan Department of Environmental Quality
Waste Management Division

1997 PLAN UPDATE COVER PAGE

Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), and the Part 115 administrative rules, requires that each County have a Solid Waste Management Plan Update (Plan) approved by the 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 in that format.

DATE SUBMITTED TO THE DEQ: N/A

DESIGNATED PLANNING AGENCY PREPARING THIS PLAN UPDATE:
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EXECUTIVE SUMMARY

The following summarizes the Solid Waste Management System selected to manage solid waste within Baraga County (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 would take precedence over the executive summary.

It is the intention of this Plan to provide the County with the mechanism to dispose of its solid waste within the rules and regulations contained in the NREPA.

OVERALL VIEW OF THE COUNTY

With a permanent residency of 8,487 people (1995 estimate), the County ranks 81st in the state in terms of population The major sectors of the economy include manufacturing, particularly durable goods; the service sector, primarily the tourism industry; and the governmental sector, through the correctional facility located in the city of Baraga.

The population of the County has grown slowly from 7,954 people in 1990 to 8,487 people in 1995, an increase of only 6 7 percent in five years. However, based on U.S. Census data, the population of the County will decline slightly over the next 10 years.

The following information was obtained from the state of Michigan, Department of Management and Budget (DMB), and through information provided by the County and Western Upper Peninsula Planning and Development Region (WUPPDR).

County				
Baraga County				
Municipality	**Population**		**% Land Use**	
	1990	*1995*	*Rural*	*Urban*
Baraga County Total	7,954	8,487		
Arvon Twp.	422	450	100	
Baraga Twp.	1,601	1,708	100	
Covington Twp.	651	695	100	
L'Anse Twp.	1,667	1,779	100	
Spurr Twp.	231	247	100	
Baraga Village	1,231	1,313		100
L'Anse Village	2,151	2,295		100
Total	7,954	8,487	100	100

Percent of Economic Base

County Baraga County Township or Municipality Name				
	Agricultural	*Manufacturing*	*Commercial*	*Other*
Baraga County Total	3.08	32.38	32.56	31.98
Arvon Twp.	4.46	33.34	32.14	30.36
Baraga Twp.*	4.97	32.22	30.38	32.43
Covington Twp.	3.14	35.43	32.74	28.70
L'Anse Twp.**	1.85	31.69	33.74	32.72
Spurr Twp.	0	41.86	39.53	18.60
Baraga Village	2.1	24.71	37.18	36.03
L'Anse Village	1.54	28.30	35.47	34.70

* Includes the Village of Baraga
** Includes the Village of L'Anse

CONCLUSIONS

The DEQ is limited in its knowledge of the County; however, the current solid waste system used in the County appears adequate to handle the County's disposal needs for the planning period.

The County should decrease its dependency on landfills by encouraging recycling, composting, and resource conservation efforts through education, participation in regional recycling programs, and/or the establishment of additional local programs.

SELECTED ALTERNATIVES

Alternative I. Essentially the same Solid Waste Management System that is currently in place, including solid waste collection through private agreements and volunteer recycling and composting programs

Alternative II. Solid waste collection in the County controlled and conducted by the County through the establishment of a permanent County Solid Waste Management Department. Mandatory residential, commercial, and industrial waste collection, recycling and composting programs, and household hazardous waste collection would be required by countywide regulations and enforced by the County Solid Waste Management Department.

The two alternatives were evaluated and ranked for public acceptability, economics, environmental and public health impacts, feasibility, and other factors. The results were the selection of Alternative I.

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 Plan works toward the following goals through actions designed to meet the objectives described under the respective goals, which they support:

Goal 1: Establish and maintain a Solid Waste Management System which provides for the protection of public health and the environment.

Objective 1a: Encourage reduced reliance on sanitary landfills as a means for waste disposal.

Objective 2a: Encourage source reduction methods.

Objective 3a: Encourage composting practices.

Goal 2: Promote cost-effective methods of collection, disposal, and resource recovery of solid waste in a manner which will protect the health, safety, and welfare of the citizens living in the County

Objective 2a: Ensure compliance with all Federal and state of Michigan Solid Waste Laws, Rules, and Regulations.

Objective 2b: Establish a cost-effective disposal system for all solid wastes generated within the County.

Goal 3: Promote involvement by the public and local units of government in solid waste management planning.

Objective 3a: Provide mechanisms for the public to provide input that can lead to improvements in solid waste management.

Objective 3b: Encourage public participation in the decision making process of solid waste planning through education.

DATABASE

The amount of residential waste generated was calculated from estimated population figures for five-year intervals from 2000 to 2010 for each municipality in the County. Commercial and industrial waste estimates were calculated using employment forecast figures per Standard Industrial Classification Codes for the same intervals. These figures were derived from the 1990 County Profile, based on U.S. Census data and the state of Michigan, DMB website.

The residential, commercial, and industrial waste generation numbers in the following table were calculated by using generation rates empirically derived by analyses conducted by Resource Recycling Systems, Inc Residential totals were based on 365 days per year. Commercial and industrial totals were based on 260 days per year except for the retail and services categories, which were based on 360 days per year. These figures do not take into consideration any other factors affecting solid waste fluctuations including seasonal population influxes. However, municipal estimates were adjusted for urban and rural land use percentages in each municipality Totals have been converted to tons per year.

Year	Residential[1]		Commercial[2]		Industrial[3]		Total
	Population	Waste Generated (tons/yr)	Commercial Employment	Waste Generated (tons/yr)	Industrial Employment	Waste Generated (tons/yr)	Total Waste Generated (tons/yr)
1995	8,487	6,908	2,763	2,066	2,748	2,461	11,435
2000	8,400	6,837	2,735	2,044	2,720	2,436	11,318
2005	8,200	6,674	2,670	1,996	2,655	2,378	11,048
2010	8,100	6,593	2,637	1,971	2,623	2,349	10,914
2015	8,000	6,512	2,605	1,947	2,590	2,320	10,779

[1] Based on an average of 4.46 pounds solid waste generated per person per day and 365 days per year.
Population based on U S Census data

[2] Based on an average of 5 75 pounds solid waste generated per person per day and 260 days per year.
Commercial employment data from the Michigan Jobs Commission

[3] Based on an average of 6 89 pounds solid waste generated per person per day and 260 days per year
Industrial employment data from the Michigan Jobs Commission

TOTAL QUANTITY OF SOLID WASTE GENERATED IN BARAGA COUNTY:
11,318 Tons Per Year
TOTAL QUANTITY OF SOLID WASTE NEEDING DISPOSAL:
9,418 Tons Per Year

Database

Inventory 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. Detailed facility descriptions are on the following pages

Landfill /Disposal Area	Type	County
K & W Landfill	Type II Sanitary Landfill	Ontonagon County
Wood Island Landfill	Type II Sanitary Landfill	Alger County
Houghton County Transfer Station	Type A Transfer Station	Houghton County
Peninsula Sanitation Transfer Station	Type A Transfer Station	Houghton County

Database

FACILITY DESCRIPTIONS

Facility Type: Type II Sanitary Landfill

Facility Name: K & W Landfill, Inc

County: Ontonagon Location: Town: 51N Range: 38W Section(s): S1/2, N1/4 and N1/2, SE 1/4, Section 28

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

If facility is an incinerator or a transfer station, list the final disposal site and location for incinerator ash or transfer station wastes:

☐ Public ☒ Private Owner: Waste Management, Inc

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

* Explanation of special wastes, including a specific list and/or conditions:
Special permit conditions allow petroleum contaminated soils and Niagara Paper Mill sludge as daily cover

Site Size:

Total area of facility property:	87	acres
Total area sited for use:	55	acres
Total area permitted:	55	acres
Operating:	20	acres
Not excavated:	35	acres
Current capacity:	2.7m	tons
Estimated lifetime:	26	years at the present disposal rate
Estimated days open per year:	256	days
Estimated yearly disposal volume:	100,000	tons

(if applicable)
Annual energy production:

Landfill gas recovery projects:	N/A	megawatts
Waste-to-energy incinerators:	N/A	megawatts

Database

FACILITY DESCRIPTIONS

Facility Type: Type II Sanitary Landfill

Facility Name: Wood Island Landfill Waste Management Inc.

County: Alger Location: Town: 46N Range: 18W Section: SE1/4, Section 18 and E1/2, Section 19

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

If facility is an incinerator or a transfer station, list the final disposal site and location for incinerator ash or transfer station wastes:

☐Public ☒ Private Owner: Wood Island Waste Management, Inc

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

* Explanation of special wastes, including a specific list and/or conditions:
Foundry sand, fly ash and auto shredder fluff.

Site Size:

Total area of facility property:	322	acres
Total area sited for use:	23.12	acres
Total area permitted:	17.34	acres
Operating:	9.71	acres
Not excavated:	5.78	acres
Current capacity:	813,000	yd^3
Estimated lifetime:	12	years
Estimated days open per year:	312	days
Estimated yearly disposal volume:	80,000	tons

(if applicable)
Annual energy production:

Landfill gas recovery projects:	N/A	megawatts
Waste-to-energy incinerators:	N/A	megawatts

Database

FACILITY DESCRIPTIONS

Facility Type: Type A Transfer Station

Facility Name: Peninsula Sanitation

County: Houghton Location: 1108 Enterprise Drive, Houghton, Michigan

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

If facility is an incinerator or a transfer station, list the final disposal site and location for incinerator ash or transfer station wastes: K&W Landfill, Ontonagon County

☐ Public ☒ Private Owner: Waste Management, Inc.

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

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

Site Size:

Total area of facility property:	_____	acres
Total area sited for use:	_____	acres
Total area permitted:	_____	acres
Operating:	_____	acres
Not excavated:	_____	acres
Current capacity:	_____	☐ tons or ☐ yds^3
Estimated lifetime:	_____	years
Estimated days open per year:	260	days
Estimated yearly disposal volume:	15,000	tons

(if applicable)
Annual energy production:

Landfill gas recovery projects:	N/A	megawatts
Waste-to-energy incinerators:	N/A	megawatts

Database

FACILITY DESCRIPTIONS

Facility Type: Type A Transfer Station

Facility Name: Houghton County Solid Waste Transfer Station

County: Houghton Location: Town: 54N Range: 34W Section(s): 1

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

If facility is an incinerator or a transfer station, list the final disposal site and location for incinerator ash or transfer station wastes: Wood Island Landfill Alger County

☒ Public ☐ Private Owner: Houghton County

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

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

Site Size:

Total area of facility property:	1.84	acres
Total area sited for use:	1.84	acres
Total area permitted:	1.84	acres
Operating:	_____	acres
Not excavated:	_____	acres
Current capacity:	_____	☐ tons or ☐ yds^3
Estimated lifetime:	_____	years
Estimated days open per year:	300	days
Estimated yearly disposal volume:	9,000	tons

(if applicable)
Annual energy production:

Landfill gas recovery projects:	N/A	megawatts
Waste-to-energy incinerators:	N/A	megawatts

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

Service Provider	Public/Private	Service Area	Payment	Disposal Facility
Peninsula Sanitation	Private	Baraga Co	Customer	K & W

Solid waste is gathered and transported by the above solid waste collector in properly licensed and maintained waste hauling vehicles over existing county and state roads to the final disposal areas. A map indicating the locations of the nearby sanitary landfills and a map of the County road system are included in the attachments section following page D-4.

K & W = K & W Landfill, Ontonagon County

EVALUATION OF DEFICIENCIES AND PROBLEMS

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

Only one company picks up and hauls waste within the County. This may result in reduced competition and possibly higher disposal costs.

The collection of residential solid waste in areas beyond population centers throughout the County requires a high expenditure of time and energy because of their remoteness and the cost of transportation.

Recycling is hindered by the cost of transporting the materials to distant markets, the limited availability of marketable quantities of recyclables in low population areas of the County, the improper separation of the recycled items, the volunteer nature of the program, and the lack of participation and coordination between governmental units.

There is no program for collecting household hazardous waste.

DEMOGRAPHICS

The following presents the current and projected population densities and centers for the next five and ten-year periods, and the identification of current and corresponding projected centers of solid waste generation, including industrial solid waste for the next five and ten-year periods as related to the Selected Solid Waste Management System. Solid waste generation data is expressed in tons and it was calculated by using 365 days per year for residential solid waste estimates, and 260 days for commercial and industrial solid waste estimates

The Northwest region of Michigan's Upper Peninsula is expected to decrease slightly in population Due to its remoteness and lack of large industry, it is unlikely that there will be a large population increase in the County in the future.

The major population centers in the County are the villages of L'Anse and Baraga. The areas of greatest residential and commercial solid waste generation are assumed to coincide with these concentrations of population in the County.

Major areas of industrial solid waste should be clustered where the principal employers of the County are concentrated.

Table 1 on the next page illustrates the estimated change in population for the various municipalities over the next five and ten-year periods.

Table 1 Estimated Population by Year[1]

Municipality	Population		
	2005	*2010*	*2015*
Arvon Twp.	441	437	432
Baraga Twp.	1,673	1,656	1,639
Covington Twp.	680	673	666
L'Anse Twp.	1,742	1,724	1,707
Spurr Twp.	241	239	236
Baraga Village	1,287	1,273	1,260
L'Anse Village	2,248	2,225	2,202
Baraga County Total	8,200	8,100	8,000

[1] The percentage change per five-year period of the total County population is derived from the Department of Management and Budget publication, Preliminary Population Projections to the Year 2020 in Michigan Counties February 25, 2000.

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 the County indicate residential development occurring along lakes, rivers, and adjacent to major roads. Commercial and industrial development is also tied to major roads, and to population centers such as Baraga and L'Anse.

Future trends show that residential development will continue to follow existing roads and will be clustered around lakes and rivers. Commercial and industrial development will be concentrated in currently existing population centers. Additional development will most likely occur on non-forest, upland forest, and agricultural lands.

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 the County was assessed based on the following criteria in relation to the County's disposal needs:

Technical Feasibility (for the next five and ten-year periods)
Economic Feasibility (for the next five and ten-year periods)
Access to Land [siting] (for the next five and ten-year periods)
Access to Transportation (for the next five and ten-year periods)
Collection Services
Effects on Energy Consumption (for the next five and ten-year periods)
Environmental Impacts (for the next five and ten-year periods)
Public Acceptability
Waste Volume Reduction
Pollution Prevention
Resource Conservation (including source reduction)
Resource Recovery (including source separation, material, energy, and markets)
Ultimate Disposal Area Uses
Effects on Public Health
Institutional Arrangements

The alternatives were ranked according to how they satisfied the above criteria.

Alternative I: This alternative maintains the management system presently in place in the County. Collection of solid waste will continue through private agreements between local haulers and individual homeowners, businesses, industries, or municipalities, and the use of available transfer stations. Recycling programs currently in operation in the County are expected to continue at the present level. Backyard composting will be promoted in the unpopulated portions of the County. Population centers such as L'Anse may provide areas for composting for their residents. A regular household hazardous waste collection program may be instituted depending on funding and sponsorship. Education efforts to encourage recycling, composting, resource recovery, resource conservation, and volume reduction of waste may involve existing local agencies and organizations. Solid waste will continue to be disposed of at the K & W Landfill in Ontonagon County or the Wood Island Landfill in Alger County for the next five and ten-year planning periods.

Technical Feasibility: Solid waste from the County will continue to be transported and disposed of in sanitary landfills. This form of solid waste disposal is the principal method used in the state of Michigan as well as the entire country. The technology for this system has existed for many years and it will continue to be the primary disposal method for the next five and ten-year periods. The other elements of this alternative, recycling, composting, etc., are also technically feasible based on past experience.

Database

Economic Feasibility: Sanitary landfills are presently the most cost-effective way to dispose of solid waste even though rising fuel costs and consolidation of landfill ownership may increase the overhead of collecting, trucking, and disposing of the solid waste in landfills located outside of the County. For the next five and ten-year periods, this appears to be the most economically feasible method available. As markets for recycled materials develop and stabilize, recycling programs should expand and become a viable alternative to landfill disposal.

Access to Land (siting): The County appears to have sufficient capacity to satisfy the County's solid waste disposal needs through the next five and ten-year periods by exporting its solid waste outside the County to the K & W Landfill in Ontonagon County and the Wood Island Landfill in Alger County.

Access to Transportation: The County has enough primary and secondary paved and unpaved roads to facilitate the collection and hauling of solid waste to the K & W landfill and the Wood Island Landfill. County Class A roads and state highways permit transportation of the solid waste accumulated in the County to out-of-county landfills. This situation will not change for the next five and ten-year periods. (See the County road map in the attachment section).

Collection Services: Waste from the County is collected by a private waste hauler and transported to landfills outside the County. "Curbside" collection is provided by private waste collection and hauling firms operating in the County contracting directly with the residents, businesses; industries, and other organizations they service.

Effects on Energy Consumption: In general, as the population of the County falls, the use of energy is expected to decrease during the next five to ten-year periods identified in the Plan. Recycling educational efforts and increased recycling in the County may decrease overall energy consumption but the amount of energy savings would be difficult to quantify.

Environmental Impacts: For the next five to ten-year periods, this alternative should have positive environmental impacts. Education may expand recycling and composting programs, and minimizing solid waste generation in the County through resource conservation measures would improve the environment by decreasing the waste stream. The institution of a regular household hazardous waste collection program would also remove those materials from potentially polluting the environment.

Public Acceptability: Public support for a Solid Waste Management System rests on low cost, minimum effort, and familiarity with the process. Alternative I is cost effective, requires only the effort to deposit solid waste for collection, and uses a collection, transportation, and disposal system known and recognized by the community. In addition, existing recycling and composting programs in the County are available on a voluntary basis.

Waste Volume Reduction: This is approached on two levels: reducing the amount of waste being generated and disposed of through recycling and resource recovery; and reducing the volume of waste through compaction, shredding, baling, or incineration.

The County encourages a volunteer program of recycling and composting. Recycling containers for old newsprint are provided at the Celotex manufacturing facility in L'Anse. The Tasco Company operates a white goods and scrap steel recycling facility, also located in L'Anse. Peninsula Sanitation offers voluntary recycling bins at its transfer station in nearby Houghton County. The only volume reduction to the waste stream through compaction methods occurs during

collection in the waste hauling trucks and by mobile compactors at the landfills.

Pollution Prevention: Procedures to prevent pollution are restricted to placing solid waste into plastic bags or other sealed containers to prevent exposure to the environment Waste haulers and disposal areas are mandated by state and federal regulations to institute pollution prevention measures and to take remedial action when pollution has occurred

Resource Conservation: The DEQ is unaware of any programs currently in place or proposed by the County. The Plan encourages future development of local resource conservation and waste reduction programs

Resource Recovery: The County encourages a volunteer program of recycling and composting. Recycling containers are provided at the two facilities mentioned above, as well as the Peninsula Sanitation Transfer Station in Houghton County

Ultimate Disposal Area Uses: Information as to the ultimate use of the disposal areas, particularly the sanitary landfills, is the responsibility of the owners and/or operators This data is presently unavailable.

Effects of Public Health: Historically, the collection, transportation, and disposal of solid waste in suitable areas was developed to prevent the buildup of solid waste and eliminate the risk to public health that such an accumulation may cause The current system in the County adequately protects public health.

Institutional Arrangements: The collection, transportation, and disposal of solid waste generated in the County is performed by private waste collection and hauling companies through agreements with residents, businesses, industries, and local governments. The residents of the County bring recycled materials to the collection boxes on a volunteer basis.

Alternative II: This alternative encourages the County to establish a Waste Management Department and enact an ordinance that would give this Waste Management Department powers to mandate the collection of solid waste, to require household, commercial, and industrial recycling, and composting programs, and to regulate the operations of waste haulers in the County

Technical Feasibility: Solid waste from the County will continue to be transported and disposed of in sanitary landfills. This form of solid waste disposal is the principal method used in the state of Michigan as well as the entire country. The technology for this system of solid waste disposal has existed for many years and will continue to be the primary disposal method for the next five and ten-year periods. The other elements of this alternative, mandatory recycling, composting, etc , are also technically feasible based on experience elsewhere.

Economic Feasibility: The creation and operation of a permanent County Solid Waste Management Agency with responsibilities for administrating and enforcing the mandatory recycling, composting, household hazardous materials collection, solid waste collection programs, and monitoring private waste haulers in the County would require a financial commitment by the County It is doubtful, given the limited economic base and small population of the County, that the County would support this alternative.

Access to Land (siting): The County appears to have sufficient capacity to satisfy the County's solid waste disposal needs through the next five and ten-year periods by exporting its solid waste outside

the County to the K & W Landfill in Ontonagon County and the Wood Island Landfill in Alger County. This may preclude the siting of a landfill within Baraga County, although areas exist within the County that are suitable for locating a landfill (See the map of nearby landfills in the attachment section following page D-4.)

Access to Transportation: The County has enough primary and secondary paved and unpaved roads to facilitate the collection and hauling of solid waste to the local transfer stations and the County landfill. This situation will not change for the next five and ten-year periods (See the County road map in the Attachment Section following page D-4.)

Collection: The County would require the collection of solid waste, recycled materials, and yard waste; and would monitor the trucking of these items by private waste collection and hauling companies through the Waste Management Department

Effects on Energy Consumption: A mandatory system such as this one should remove a great deal of material from the solid waste stream which should result in energy savings in the collection and disposal of solid waste and energy savings in the reuse of recycled materials in manufacturing processes

Environmental Impacts: This alternative should have a positive environmental impact The removal of household hazardous materials from the County waste stream, as well as materials separated through recycling, composting, etc., will lessen the risk of pollution of the environment that is always a possibility when handling solid waste disposal.

Public Acceptability: The costs of implementing and enforcing a mandatory solid waste collection system, as outlined in Alternative II, might require the County to introduce or increase fees, levy millage, or otherwise raise funds to run the system. This would certainly be unpopular with the public. In addition, the public is apt to support voluntary programs rather than mandatory programs.

Waste Volume Reduction: This is approached on two levels: reducing the amount of waste being generated and disposed of through recycling and resource recovery, and reducing the volume of waste through compaction, shredding, baling, or incineration.

The County would require participation in a program of recycling and composting Recycling containers would be provided at each of the facilities mentioned above Additional recycling boxes would be set up as demand required

The only volume reduction done to the waste stream via compaction would occur during collection in the waste hauling trucks and by mobile compactors at the landfills.

Pollution Prevention: Procedures to prevent pollution are restricted to placing solid waste into plastic bags or other sealed containers to prevent exposure to the environment. Waste haulers and disposal areas are mandated by state and federal regulations to institute pollution prevention measures and to take remedial action when pollution has occurred. The County will mandate at least one household hazardous waste collection day per year.

Resource Conservation: The County does not intend to institute any resource conservation programs

Resource Recovery: The County would require recycling and composting. Recycling containers

would be provided at each of the facilities mentioned above, and additional bins would be added as the demand increases.

Ultimate Disposal Area Uses: Information as to the ultimate use of the disposal areas, particularly the sanitary landfills, is the responsibility of the owners and/or operators This data is presently unavailable.

Effects of Public Health: The collection, transportation, and disposal of solid waste in suitable areas were developed to prevent the buildup of solid waste and eliminate the risk to public health that such an accumulation may cause. Therefore, general public health would be protected.

Institutional Arrangements: The County would mandate that all County residents and businesses participate in solid waste collection services, recycling, and composting programs. Private waste haulers would still collect and transport the solid waste to landfills and the recycled materials to a material recovery facility (MRF) under the regulations and rules enforced by the designated County Waste Management Agency

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 resource recovery programs. It also addresses collection processes and transportation needs that provide the most cost-effective, efficient service. Proposed disposal area 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:

The Selected System for the County, Alternative I, addresses the proper collection and disposal of solid waste generated by residences, businesses, industries, and farms. This selected system uses a combination of public and private initiatives to reduce the risks to public health and to educate the public on the benefits of proper disposal of solid waste, composting, and recycling. Collection of the solid wastes will be managed by private waste haulers contracted by a combination of local units of government, businesses, industry, and homeowners on an individual basis. These collections include both curbside collections and drop off sites. Public health, DEQ, Department of Transportation (DOT) regulations, and applicable state and county laws will prescribe law enforcement mechanisms for the County.

Solid waste will be transported by private solid waste haulers to approved licensed landfills authorized to accept waste from the County. The DOT rules relating to the proper maintenance of equipment and correct handling of solid waste on highways will be followed.

The continuation of current recycling, composting, and household hazardous waste collection programs will be encouraged and new programs may be explored.

Selected System

IMPORT AUTHORIZATION

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

Table 1-A

CURRENT IMPORT VOLUME AUTHORIZATION OF SOLID WASTE

IMPORTING COUNTY	EXPORTING COUNTY	FACILITY NAME[i]	AUTHORIZED QUANTITY/ DAILY	AUTHORIZED QUANTITY/ ANNUAL	AUTHORIZED CONDITIONS[2]
Baraga	Alger		100%	100%	P
Baraga	Delta		100%	100%	P
Baraga	Dickinson		100%	100%	P
Baraga	Gogebic		100%	100%	P
Baraga	Chippewa		100%	100%	P
Baraga	Houghton		100%	100%	P
Baraga	Iron		100%	100%	P
Baraga	Keweenaw		100%	100%	P
Baraga	Luce		100%	100%	P
Baraga	Mackinac		100%	100%	P
Baraga	Marquette		100%	100%	P
Baraga	Menominee		100%	100%	P
Baraga	Ontonagon		100%	100%	P
Baraga	Schoolcraft		100%	100%	P

Primary Disposal - the disposal capacity which will be used on a routine, daily, or regular basis to meet a county's disposal needs.
Contingency Disposal – disposal capacity whose use is triggered by the actual unavailability of primary disposal capacity, not by economic, business, or convenience considerations.

[i] Facilities are only listed if the exporting county is restricted to using specific facilities within the importing county.
[2] Authorization indicated by P = Primary Disposal; C = Contingency Disposal; * = Other conditions exist and detailed explanation is included in the Attachment Section.

Selected System

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

Table 1-B

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

IMPORTING COUNTY	EXPORTING COUNTY	FACILITY NAME[i]	AUTHORIZED QUANTITY/ DAILY	AUTHORIZED QUANTITY/ ANNUAL	AUTHORIZED CONDITIONS[2]
Baraga	Alger		100%	100%	P
Baraga	Delta		100%	100%	P
Baraga	Dickinson		100%	100%	P
Baraga	Gogebic		100%	100%	P
Baraga	Chippewa		100%	100%	P
Baraga	Houghton		100%	100%	P
Baraga	Iron		100%	100%	P
Baraga	Keweenaw		100%	100%	P
Baraga	Luce		100%	100%	P
Baraga	Mackinac		100%	100%	P
Baraga	Marquette		100%	100%	P
Baraga	Menominee		100%	100%	P
Baraga	Ontonagon		100%	100%	P
Baraga	Schoolcraft		100%	100%	P

EXPORT AUTHORIZATION

[i] 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. See Page III-2 for definitions of primary and contingency disposal.

Selected System

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

IMPORTING COUNTY	EXPORTING COUNTY	FACILITY NAME[1]	AUTHORIZED QUANTITY/DAILY	AUTHORIZED QUANTITY/ANNUAL	AUTHORIZED CONDITIONS[2]
Alger	Baraga		100%	100%	P
Delta	Baraga		100%	100%	P
Dickinson	Baraga		100%	100%	P
Gogebic	Baraga		100%	100%	P
Chippewa	Baraga		100%	100%	P
Houghton	Baraga		100%	100%	P
Iron	Baraga		100%	100%	P
Keweenaw	Baraga		100%	100%	P
Luce	Baraga		100%	100%	P
Mackinac	Baraga		100%	100%	P
Marquette	Baraga		100%	100%	P
Menominee	Baraga		100%	100%	P
Ontonagon	Baraga		100%	100%	P
Schoolcraft	Baraga		100%	100%	P

[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. See Page III-2 for definitions of primary and contingency disposal.

Selected System

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-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

IMPORTING COUNTY	EXPORTING COUNTY	FACILITY NAME[i]	AUTHORIZED QUANTITY/DAILY	AUTHORIZED QUANTITY/ANNUAL	AUTHORIZED CONDITIONS[2]
Alger	Baraga		100%	100%	P
Delta	Baraga		100%	100%	P
Dickinson	Baraga		100%	100%	P
Gogebic	Baraga		100%	100%	P
Chippewa	Baraga		100%	100%	P
Houghton	Baraga		100%	100%	P
Iron	Baraga		100%	100%	P
Keweenaw	Baraga		100%	100%	P
Luce	Baraga		100%	100%	P
Mackinac	Baraga		100%	100%	P
Marquette	Baraga		100%	100%	P
Menominee	Baraga		100%	100%	P
Ontonagon	Baraga		100%	100%	P
Schoolcraft	Baraga		100%	100%	P

[i] 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. See Page III-2 for definitions of primary and contingency disposal.

SOLID WASTE DISPOSAL AREAS

The following identifies the names of existing disposal areas that 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-8 through III-11 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:

K & W Landfill
Wood Island Landfill

Type III Landfill:

Incinerator:

Waste-to-Energy Incinerator:

Type A Transfer Facility:

Peninsula Sanitation Transfer Station
Houghton County Transfer Station

Type B Transfer Facility:

Processing Plant:

Waste Piles:

Other:

Letters from or agreements with the listed disposal areas owners/operators stating their facility capacity and willingness to accept the County's solid waste are in the Attachment Section.

Selected System

FACILITY DESCRIPTIONS

Facility Type: Type II Sanitary Landfill

Facility Name: K & W Landfill

County: Ontonagon Location: Town: 51N Range: 38W Section(s): S1/2, N1/4 and N 1/2, SE1/4, Section 28

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

If facility is an incinerator or a transfer station, list the final disposal site and location for incinerator ash or transfer station wastes:

☐ Public ☒ Private Owner: Waste Management, Inc

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

* Explanation of special wastes, including a specific list and/or conditions:
Special permit conditions allow petroleum-contaminated soils and Niagara Paper Mill Sludge as daily cover

Site Size:

Total area of facility property:	87	acres
Total area sited for use:	55	acres
Total area permitted:	55	acres
Operating:	20	acres
Not excavated:	35	acres
Current capacity:	2.7m	tons
Estimated lifetime:	26	years at the present disposal rate
Estimated days open per year:	256	days
Estimated yearly disposal volume:	100,000	tons

(if applicable)
Annual energy production:

Landfill gas recovery projects:	N/A	megawatts
Waste-to-energy incinerators:	N/A	megawatts

Selected System

FACILITY DESCRIPTIONS

Facility Type: Type A Transfer Station

Facility Name: Peninsula Sanitation

County: Houghton Location: 1108 Enterprise Drive, Houghton, Michigan

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

If facility is an incinerator or a transfer station, list the final disposal site and location for incinerator ash or transfer station wastes: K & W Landfill Ontonagon County

☐Public ☒ Private Owner: Peninsula Sanitation

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

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

Site Size:

Total area of facility property:	____	acres
Total area sited for use:	____	acres
Total area permitted:		acres
Operating:	____	acres
Not excavated:	____	acres
Current capacity:	____	☐ tons or ☐ yds^3
Estimated lifetime:	____	years
Estimated days open per year:	260	days
Estimated yearly disposal volume:	15,000	tons

(if applicable)
Annual energy production:

Landfill gas recovery projects:	N/A	megawatts
Waste-to-energy incinerators:	N/A	megawatts

Selected System

FACILITY DESCRIPTIONS

Facility Type: Type A Transfer Station

Facility Name: Houghton County Solid Waste Transfer Station

County: Houghton Location: Town: 54N Range: 34W Section(s): 1

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

If facility is an incinerator or a transfer station, list the final disposal site and location for incinerator ash or transfer station wastes: Wood Island Landfill, Alger County

☒ Public ☐ Private Owner: Houghton County

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

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

Site Size:

Total area of facility property:	1.84	acres
Total area sited for use:	1.84	acres
Total area permitted:	1.84	acres
Operating:	____	acres
Not excavated:	____	acres
Current capacity:	____	☐ tons or ☐ yds^3
Estimated lifetime:	____	years
Estimated days open per year:	300	days
Estimated yearly disposal volume:	9,000	tons

(if applicable)
Annual energy production:

Landfill gas recovery projects:	N/A	megawatts
Waste-to-energy incinerators:	N/A	megawatts

Selected System

FACILITY DESCRIPTIONS

Facility Type: Type II Sanitary Landfill

Facility Name: Wood Island Landfill

County: Alger Location: Town: 46N Range: 18W Section: SE1/4 Section18 and E1/2 Section19

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

If facility is an incinerator or a transfer station, list the final disposal site and location for incinerator ash or transfer station wastes:

☐Public ☒ Private Owner: Wood Island Waste Management, Inc.

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

* Explanation of special wastes, including a specific list and/or conditions:
Foundry sand, fly ash and auto shredder fluff

Site Size:

Total area of facility property:	322	acres
Total area sited for use:	23.12	acres
Total area permitted:	17.34	acres
Operating:	9.71	acres
Not excavated:	5.78	acres
Current capacity:	813,000	yd^3
Estimated lifetime:	12	years
Estimated days open per year:	312	days
Estimated yearly disposal volume:	80,000	tons

(if applicable)
Annual energy production:

Landfill gas recovery projects:	N/A	megawatts
Waste-to-energy incinerators:	N/A	megawatts

SOLID WASTE COLLECTION SERVICES AND TRANSPORTATION INFRASTRUCTURE

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

Collection services within the County are currently handled by a private waste hauler that collects solid waste in the County and transports it to either the K & W or Wood Island Landfills Refuse collection is also available to all residents in the cities, villages, and townships in the County through a private waste hauler or the residents can elect to haul their own waste to a nearby disposal area.

Waste haulers and County residents are served by state trunklines as well as county maintained primary and secondary roads. (See the County Road map in the Attachment Section.)

Overall, the County is adequately served by the present system of solid waste collection, transportation, and disposal.

RESOURCE CONSERVATION EFFORTS

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

Effort Description	Est. Diversion Tons/Yr.		
	Current	5th Yr.	10th Yr.
No local programs have been identified			

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

Selected System

WASTE REDUCTION, RECYCLING, AND COMPOSTING PROGRAMS

Volume Reduction Techniques

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

Technique Description	Est. Air Space Conserved $Yds^3/Yr.$		
	Current	5th Yr.	10th Yr.
Hauler packer trucks used in solid waste collection	4,327	4,393	4,474
Mobile compactors at landfills	1,300	1,320	1,344

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

Overview of Resource Recovery Programs

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

The County operates a voluntary recycling program. County residents have limited recycling options available to them. However, newsprint recycling is accepted at the Celotex manufacturing facility in L'Anse, and white goods and scrap steel recycling are available at Tasco, also located in L'Anse. Two transfer stations provide drop-off recycling in nearby Houghton County. However specific information is not available for Baraga County. The following table lists the types of materials and the estimated volume recycled per each five-year period beginning in 2000.

Materials	**2000** (tons/yr.)	**2005** (tons/yr.)	**2010** (tons/yr.)
Newspapers	400	400	400
White Goods & Steel	1,500	1,500	1,500
Totals	1,900	1,900	1,900

The expansion of the current voluntary recycling program in the County is hindered by the following factors:

- Low population density complicates the accumulation and transportation of recyclable materials to collection points.
- The cost of overcoming the problems outlined above makes expansion of the program beyond the present level difficult.

The County encourages the composting of yard waste by its residents. The rural nature of the County discourages the large-scale collection of yard waste and brush for composting at a central location, therefore, composting is expected to remain the responsibility of the individual.

Resource conservation is not practiced in the County. The logistics of such a program given the conditions outlined above do not make it feasible except on an individual, voluntary basis.

Selected System

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

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

☐ 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: Composting on any level other than the current voluntary program is not possible at this time. The rural nature of the County and the low-density spread greatly hinder the establishment of a comprehensive, economically viable program.

☐ Programs for source separation of potentially hazardous materials are feasible.

☒ 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: Due to low populations, very little hazardous waste is generated and the cost associated with starting and operating a program is not economically feasible in such a rural area

RECYCLING AND COMPOSTING

The following is a brief analysis of the recycling and composting programs selected for the County in this Plan. Additional information on operation of recycling and composting programs is included in Appendix A The analysis covers various factors within the County and the impacts of these factors on recycling and composting. Following the written analysis, Tables III-1, III-2, and III-3 list the existing recycling, composting, and source separation of hazardous materials programs that are currently active in the County, and which will be continued as part of this Plan Tables III-4, III-5, and III-6 list the recycling, composting, and source separation of hazardous materials programs that are proposed in the future for the County It is not this Plan update's intent to prohibit additional programs or expansions of current programs to be implemented beyond those listed.

The County operates a voluntary recycling program. County residents have limited recycling options available to them. However, newsprint recycling is accepted at the Celotex manufacturing facility in L'Anse and white goods and scrap steel recycling is available at Tasco, also located in L'Anse. Two transfer stations provide drop-off recycling in nearby Houghton County However, specific information is not available for the County.

Composting is voluntary by the waste generator.

Selected System

TABLE III-1

RECYCLING:

Program Name	Service Area[1]	Public or Private	Collection Point[3]	Collection Frequency[4]	Materials Collected[5]	Program Management Responsibilities[2] Development	Operations	Evaluation
Celotex	Planning Area	Private	d	d	B	5	5	
Tasco	Planning Area	Private	d	d	F	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; 5 = Private Owner/Operator; 6 = Other.

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

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

[5] Identified by the materials collected by listing of the letter located by that material type. A = Plastics; B = Newspaper; C = Corrugated Containers; D = Other Paper; E = Glass; F = Metals; P = Pallets; J = Construction/Demolition; K = Tires.

Selected System

TABLE III-2

COMPOSTING:

Program Name	Service Area[i]	Public or Private	Collection Point[3]	Collection Frequency[4]	Materials Collected[5]	Program Management Responsibilities[2] Development	Operations	Evaluation
Voluntary	County wide	Private	o	None	G,L,W	6	6	6

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

[i] 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; 5 = Private Owner/Operator; 6 = Other.

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

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

[5] Identified by the materials collected by listing of the letter located by that material type. G = Grass Clippings; L = Leaves; F = Food; W = Wood; P = Paper; S = Municipal Sewage Sludge; A = Animal Waste/Bedding; M = Municipal Solid Waste.

Selected System

TABLE III-3

SOURCE SEPARATION OF POTENTIALLY HAZARDOUS MATERIALS:

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

Program Name	Service Area[1]	Public or Private	Collection Point[3]	Collection Frequency[4]	Materials Collected[5]	Program Management Responsibilities[2]		
						Development	Operations	Evaluation
No local program identified								

☐ 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; 5 = Private Owner/Operator; 6 = Other.

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

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

[5] Identified by the materials collected by listing of the letter located by that material type. AR = Aerosol Cans; A = Automotive Products except Used Oil, Oil Filters & Antifreeze; AN = Antifreeze; B1 = Lead Acid Batteries; B2 = Household Batteries; C = Cleaners and Polishers; H = Hobby and Art Supplies; OF = Used Oil Filters; P = Paints and Solvents; PS = Pesticides and Herbicides; PH = Personal and Health Care Products; U = Used Oil; OT = Other Materials and identified.

Selected System

TABLE III-4

PROPOSED RECYCLING:

Program Name	Service Area[i]	Public or Private	Collection Point[3]	Collection Frequency[4]	Materials Collected[5]	Program Management Responsibilities[2] Development	Operations	Evaluation
No local program identified								

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

[i] 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; 5 = Private Owner/Operator; 6 = Other.

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

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

[5] Identified by the materials collected by listing of the letter located by that material type. A = Plastics; B = Newspaper; C = Corrugated Containers; D = Other Paper; E = Glass; F = Metals; P = Pallets; J = Construction/Demolition; K = Tires.

Selected System

TABLE III-5

PROPOSED COMPOSTING:

Program Name	Service Area[i]	Public or Private	Collection Point[3]	Collection Frequency[4]	Materials Collected[5]	Program Management Responsibilities[2] Development	Operations	Evaluation
No local program identified								

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

[i] 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; 5 = Private Owner/Operator; 6 = Other.

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

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

[5] Identified by the materials collected by listing of the letter located by that material type. G = Grass Clippings; L = Leaves; F = Food; W = Wood; P = Paper; S = Municipal Sewage Sludge; A = Animal Waste/Bedding; M = Municipal Solid Waste.

Selected System

TABLE III-6

PROPOSED SOURCE SEPARATION OF POTENTIALLY HAZARDOUS MATERIALS:

Program Name	Service Area[i]	Public or Private	Collection Point[3]	Collection Frequency[4]	Materials Collected[5]	Program Management Responsibilities[2] Development	Operations	Evaluation
No local program identified								

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

[i] 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; 5 = Private Owner/Operator; 6 = Other.

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

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

[5] Identified by the materials collected by listing of the letter located by that material type. AR = Aerosol Cans; A = Automotive Products except Used Oil, Oil Filters & Antifreeze; AN = Antifreeze; B1 = Lead Acid Batteries; B2 = Household Batteries; C = Cleaners and Polishers; H = Hobby and Art Supplies; OF = Used Oil Filters; P = Paints and Solvents; PS = Pesticides and Herbicides; PH = Personal and Health Care Products; U = Used Oil; OT = Other Materials and identified.

Selected System

IDENTIFICATION OF RESOURCE RECOVERY MANAGEMENT ENTITIES

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

Environmental Groups:

None identified.

Other:

Selected System

PROJECTED DIVERSION RATES:

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

Collected Material:	Projected Annual tons/yr Diverted: Current	5th Yr	10th Yr
A. TOTAL PLASTICS.			
B. NEWSPAPER:	400	400	400
C. CORRUGATED CONTAINERS:			
D. TOTAL OTHER PAPER:			
E. TOTAL GLASS:			
F. OTHER MATERIALS:			
F1. WHITE GOODS & STEEL	1,500	1,500	1,500
F2.____	____	____	____

Collected Material:	Projected Annual tons/yr Diverted: Current	5th Yr	10th Yr
G. GRASS AND LEAVES:			
H. TOTAL WOOD WASTE:			
I. CONSTRUCTION AND DEMOLITION:			
J. FOOD AND FOOD PROCESSING:			
K. TIRES:			
L. TOTAL METALS:			
F3. ____			
F4. ____			

Selected System

MARKET AVAILABILITY FOR COLLECTED MATERIALS:

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

Collected Material:	In-State Markets	Out-of-State Markets	Collected Material	In-State Markets	Out-of-State Markets
A. TOTAL PLASTICS:		_____	G. GRASS AND LEAVES:		_____
B. NEWSPAPER:	100%	_____	H. TOTAL WOOD WASTE.		_____
C. CORRUGATED CONTAINERS:		_____	I. CONSTRUCTION AND DEMOLITION:		_____
D. TOTAL OTHER PAPER:		_____	J. FOOD AND FOOD PROCESSING		_____
E. TOTAL GLASS:		_____	K. TIRES:		_____
F. OTHER MATERIALS:			L. TOTAL METALS:		_____
F1. White Goods & Steel	100%	_____	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, f, o	p, b, i	EX
2	n, f, o	p, b, i	EX

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

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

[3] Identified by p = general public; b = business; i = industry; s = students with grade levels listed In addition if the program is limited to a geographic area, then that county, city, village, etc. is listed.

[4] Identified by EX = MSU Extension; EG = Environmental Group (Identify name); OO = Private Owner/Operator (Identify name); HD = Health Department (Identify name); DPA = Designated Planning Agency; CU = College/University (Identify name); LS = Local School (Identify name); ISD = Intermediate School District (Identify name); O = Other which is explained.

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

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	Ongoing
Voluntary Composting Program	Ongoing
Educational and Informational Programs*	Ongoing

*Contingent upon funding.

Selected System

SITING REVIEW PROCEDURES

AUTHORIZED DISPOSAL AREA TYPES

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

N/A

SITING CRITERIA AND PROCESS

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

(1) Proposals for all new disposal areas 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) To initiate the review under this Plan, the facility developer shall submit ten copies of the information required below to the Baraga County Board of Commissioners (BOC).

(3) Solid waste facility siting proposals will be reviewed for consistency with the Plan. The BOC may designate or appoint a solid waste planning committee, a technical committee, or a planning agency, as it deems appropriate, to review the solid waste facility proposal for consistency with the Plan according to the procedures outlined herein In that case, the designated planning agency must be appointed within 30 days of the BOC receiving this application. This chosen body shall make a recommendation to the BOC on the consistency of the proposal; however, it is the responsibility of the BOC to make the decision on whether the proposal is consistent with the County Plan. A proposal that is declared to be consistent with the Plan by the BOC shall become part of the Plan upon issuance of a construction permit by the DEQ

(4) Upon receipt of the application from the BOC, the designated planning agency shall have 30 days to review the application for administrative completeness in accordance with the requirements listed in subparts (i)-(vii) below. If it is not complete, the developer shall be notified and

given an opportunity to provide additional information to make the application complete. The developer has 30 working days to provide the requested information. If no determination is made within 30 working days after the reception of the additional information by the designated planning agency, the application shall be considered administratively complete.

(i) The application shall include a name, address, and telephone number for: (1) the applicant (including partners and other ownership interests), (2) the property owner(s) of the site, (3) any consulting engineers and geologists that will be involved in the project, (4) a designated contact person for the facility developer (if different than the applicant), and (5) shall specify the type of facility being proposed.

(ii) 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 than ten 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 roads to nearest state trunkline, and a current map showing the proposed site and surrounding zoning, domiciles, and present usage of all property within one mile of the site.

(iii) The application shall contain a map showing the locations of any permitted oil and gas wells drilled in the section containing the proposed landfill site and in adjacent sections and their current status. The plugging records of any permitted oil and gas wells located on the proposed landfill site shall also be included with the application.

(iv) 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 323.1311 of the administrative rules of Part 31, Water Resources Protection, of the NREPA within 1,200 feet of the site, location of all wetlands as defined by Part 303, Wetlands Protection, of the NREPA within 1,200 feet of the site, and the site soil types and general geological characteristics.

(v) The application shall contain a description of the proposed site and facility design. This shall consist of a written proposal including the final design capacity.

(vi) The application shall contain a description of the operations of the facility and shall provide information indicating the planned annual usage, anticipated sources of solid waste, and the facility life expectancy.

(vii) If necessary to satisfy the requirements of criteria xiii, a signed

statement indicating the willingness of the developer to provide for road improvements and/or maintenance.

(5) Within 45 days from the date the application is determined to be administratively complete, the designated planning agency shall complete the consistency review and make their recommendations to the BOC who shall send the County's written final determination of consistency for the proposal to the applicant. To be found consistent with the Plan, a proposed solid waste disposal area must comply with all the siting criteria and requirements described in subparts (i)-(xiii) below.

As provided by Section 11537a of Part 115, if the County has 66 months of disposal capacity available for all waste generated in the county, the BOC may, at its discretion, refuse to allow this siting procedure to be used.

Siting Criteria

(i) The active work area for a new facility or expansion of an existing facility shall not be located closer than 500 feet from adjacent property lines, road rights-of-way, lakes, and perennial streams.

(ii) 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.

(iii) A new, previously unlicensed sanitary landfill shall not be constructed within 10,000 feet of a licensed airport runway. This restriction does not apply to expansions of existing sanitary landfills.

(iv) A facility shall not be located in a 100-year floodplain as defined by Rule 323.1311 of the administrative rules of Part 31 of the NREPA.

(v) A facility shall not be located in a wetland regulated by Part 303 of the NREPA, unless a permit is issued.

(vi) A facility shall not be constructed in lands enrolled under Part 361, Farmland and Open Space Preservation, of the NREPA.

(vii) A facility shall not be located in a sensitive environmental area as defined in Part 323, Shorelands Protection and Management, of the NREPA, or in areas of unique habitat as defined by the Department of Natural Resources, Natural Features Inventory.

(viii) A facility shall not be located in an area of groundwater recharge as defined by the United States Geological Survey or in a wellhead protection area as approved by the DEQ.

(ix) A facility shall not be located in a designated historic or archaeological area defined by the state historical preservation officer.

(x) A facility shall not be located or permitted to expand on land owned by the United States of America or the state of Michigan. Disposal areas may be located on state land only if both of the following conditions are met:

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

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

(xi) 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.

(xii) The owner and operator of a facility shall sign a statement agreeing to cooperate with the county on all current and future recycling and composting activities.

(xiii) 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 sign a statement agreeing to provide for upgrading and/or maintenance of the road serving the facility.

(6) If the facility developer does not agree with the consistency decision by the BOC or if no consistency determination has been rendered within 45 working days, the developer may request the DEQ to determine consistency of the proposal with the Plan as part of DEQ review of a construction permit application.

(7) If the proposal is found to be inconsistent with the Plan, the facility developer may provide additional information to address the identified deficiencies. The facility developer has 30 days to submit the additional information to the designated planning agency. The designated planning agency may only determine consistency and make its recommendation to the BOC on such a resubmittal in regards to the criteria originally found deficient.

(8) After the additional information provided by the developer to address identified deficiencies has been submitted to the designated planning

agency, the agency has 30 days to make a recommendation to the BOC. Upon receiving the designated planning agency's recommendation, the BOC must determine whether the corrected proposal is consistent with the Plan. If the facility developer does not agree with the consistency decision by the BOC or if no consistency determination has been rendered within 45 working days, the developer may request the DEQ to determine consistency of the proposal with the Plan as part of DEQ review of a construction permit application

(9) The final determination of consistency with the Plan shall be made by the DEQ upon submittal by the developer of an application for a construction permit. The DEQ shall review the determination made by the BOC to ensure that the criteria and review procedures have been properly adhered to by the County.

SOLID WASTE MANAGEMENT COMPONENTS[1]

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

The BOC shall be responsible for the implementation and enforcement of the Plan. The BOC may designate an agency or committee to provide oversight to ensure initiation of the public education program, the operation of recycling and composting programs, the review of the administrative completeness of siting applications and the consistency of solid waste siting proposals, but the ultimate decision making rests with the BOC.

The BOC may take such actions as needed to provide funding for the implementation and enforcement of the Plan including, but not limited to, applying for federal, state, and foundation grants, or using other funding sources that may be available, such as the levy of fees, surcharges, or a special millage. The BOC is also responsible for any legislative actions that may be necessary to accomplish the goals of the Plan that do not conflict with federal or state statutes

The WUPPDR will provide assistance for solid waste planning for the BOC, as funds are available. The WUPPDR will assist with grant writing upon request, will continue to promote regional coordination with recycling and other resource recovery efforts, and will continue to keep the BOC updated on regional and statewide solid waste issues.

[1] Components or sub-components may be added to this table

IDENTIFICATION OF RESPONSIBLE PARTIES

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

Resource Conservation:

Source or Waste Reduction - Voluntary by the waste generator

Product Reuse - Voluntary by the waste generator

Reduced Material Volume - Voluntary by the waste generator.

Increased Product Lifetime - Voluntary by the waste generator.

Decreased Consumption - Voluntary by the waste generator

Resource Recovery Programs:

Composting - Voluntary by the waste generator

Recycling - Voluntary by the waste generator.

Energy Production - None.

Volume Reduction Techniques:

Performed by the waste hauler and by the landfill operator during, and as part of, the collection, transportation, and disposal of solid waste.

Collection Processes:

Private waste haulers (listed on page II-7) through agreements with residents, businesses, industries, and governmental bodies.

Transportation:

Provided by the waste hauler.

Selected System

Disposal Areas:

Processing Plants - None in the County

Incineration - None

Transfer Stations - Peninsula Sanitation Transfer Station, Houghton County
Houghton County Transfer Station, Houghton County

Sanitary Landfills - K & W Landfill, Ontonagon County
Wood Island Landfill, Alger County

Ultimate Disposal Area Uses:

The responsibility for determining the ultimate use that a closed disposal area will have rests with the above landfill owners and operators.

Local Responsibility for Plan Update Monitoring and Enforcement:

Baraga County BOC

Educational and Informational Programs:

Michigan State University Extension office.

Documentation of acceptance of responsibilities is contained in Appendix D.

Selected System

LOCAL ORDINANCES AND REGULATIONS AFFECTING SOLID WASTE DISPOSAL

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

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

N/A

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

A. Geographic area/unit of government: N/A

Type of disposal area affected: N/A

Ordinance or other legal basis: N/A

Requirement/restriction: N/A

B. Geographic area/unit of government: N/A

Type of disposal area affected: N/A

Ordinance or other legal basis: N/A

Requirement/restriction: N/A

☐ 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.

N/A

☐ Additional listings are on attached pages.

CAPACITY CERTIFICATIONS

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

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

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

The estimated total solid waste needing disposal for the County for the next ten-year period is 92,830 tons based on the figures presented on page II-1 (five-years at 11,318 tons/yr., plus five-years at 11,048 tons/yr., minus 1,900 tons of recycled materials diverted from the landfills for each of the ten years). Over that same ten-year period, the total airspace available to the County from the two landfills authorized to accept the County's waste is 2,971,000 tons (2.7 million tons at the K & W Landfill, and 271,000 tons at the Wood Island Landfill).

APPENDIX A

ADDITIONAL INFORMATION

REGARDING THE

SELECTED

SYSTEM

EVALUATION OF RECYCLING

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

Information regarding implementation and evaluations of various components of the Selected System have previously been addressed in the body of the Plan.

DETAILED FEATURES OF RECYCLING AND COMPOSTING PROGRAMS

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

See Tables III-1 and III-2.

See page III-25, Projected Diversion Rates.

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: Celotex Manufacturing facility and Tasco Company use recycling drop-off containers.

Proposed Programs: None.

Site Availability & Selection

Existing Programs: The County encourages a volunteer program of recycling and composting. Recycling containers for old newsprint are provided at the Celotex manufacturing facility in L'Anse. The Tasco Company operates a white good and scrap steel recycling facility also located in L'Anse. Peninsula Sanitation offers voluntary recycling bins at its transfer station in nearby Houghton County.

Proposed Programs: None.

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:

The existing program is voluntary, uncoordinated, and unsupervised Therefore, the operating parameters are not available.

Program Name:	pH Range	Heat Range	Other Parameter	Measurement Unit

Proposed Programs:

Program Name	pH Range	Heat Range	Other Parameter	Measurement Unit

COORDINATION EFFORTS

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

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

The BOC will coordinate the implementation, operation, and enforcement of the Solid Waste Management Plan with federal, state and local municipalities, agencies, organizations, and commissions. This will be done by the BOC through its staff, appointed committees, or various departments of County government at its disposal.

COSTS AND FUNDING

The following chart estimates the necessary management, capital, and operational and maintenance requirements for each applicable component of the Solid Waste Management System. In addition, potential funding sources have been identified to support those components

System Component[1]	Estimated Costs	Potential Funding Sources
Resource Conservation Efforts	None	None
Resource Recovery Programs	None	None
Volume Reduction Techniques	None	None
Collection Processes	Determined by market forces	Fees
Transportation	Determined by market forces	Fees
Disposal Areas	Determined by market forces	Fees
Future Disposal Area Uses	Determined by market forces	Fees
Management Arrangements	Determined by market forces	Fees
Educational & Informational Programs	Unknown	Unknown

[1] These components and their sub-components may vary with each system

EVALUATION SUMMARY OF THE SELECTED SYSTEM

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

A review of the elements of this alternative as outlined in this Plan indicates that Alternative I has been chosen as the selected system because it best meets the solid waste disposal needs of the County for the next five year period The rural nature of the County and the relatively small, scattered population make a comprehensive waste management program, including elements of resource conservation, resource recovery, composting, and source separation of hazardous materials, difficult to implement. However, it is in the County's interest to continue to work toward Michigan's Solid Waste Policy general goal of reducing the state's reliance on landfills as the primary means of solid waste disposal by reducing its own dependence on sanitary landfills. The County can increase recycling, composting, the collection of household hazardous waste, and institute resource conservation through education of its residents and the efforts of concerned citizens using agencies, such as the Michigan State University Extension office.

As the County chose not to prepare this Plan, determination and evaluation of local needs, resources, and program alternatives were the responsibility of the DEQ. Few local program opportunities were identified to the DEQ for inclusion in this Plan. Given that the DEQ cannot mandate, establish, or finance local programs, the available scope of waste management alternatives for the DEQ to include and evaluate as part of this Plan is limited.

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. Technically Feasible.
2. Economically Feasible.
3. Adequate Transportation Network.
4. Sufficient Disposal Capacity.
5. Minimum Environmental Impact.
6. High Public Acceptability.
7. Recycling Options Available.

DISADVANTAGES:

1. Reliance on Voluntary Recycling and Composting Programs.
2. No Resource Recovery Program.
3. No Household Hazardous Waste Collection.
4. No Energy Conservation or Generation.
5. Passive Pollution Prevention Procedures.
6. Minimal Recycling Program Available.

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

NON-SELECTED SYSTEMS

SYSTEM COMPONENTS:

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

RESOURCE CONSERVATION EFFORTS:

The County does not intend to institute any resource conservation programs.

VOLUME REDUCTION TECHNIQUES:

The only volume reduction done to the waste stream would occur during collection in the waste hauling trucks and by mobile compactors at the landfills.

RESOURCE RECOVERY PROGRAMS:

The County would require recycling and composting. Recycling containers would be provided at various locations throughout the County.

COLLECTION PROCESSES:

The County would require the collection of solid waste, recycled materials, and yard waste. The County would regulate the trucking of these items by private waste collection and hauling companies through the County Waste Management Department.

TRANSPORTATION:

The County has enough primary and secondary paved and unpaved roads to facilitate the collection and hauling of solid waste to the K & W Landfill and the Wood Island Landfill. County Class A roads and state highways permit transportation of the solid waste accumulated to out-of-county landfills. This situation will not change for the next five and ten-year periods. (See the County road map in the attachments section).

DISPOSAL AREAS:

Type II Landfill:

K & W Landfill
Wood Island Landfill

Type A Transfer Facility:

Peninsula Sanitation Transfer Station – Houghton County
Houghton County Transfer Station – Houghton County

INSTITUTIONAL ARRANGEMENTS:

The County would require that all County residents and businesses participate in solid waste collection services, recycling, composting, and household hazardous waste collection programs. Private waste haulers would collect and transport the solid waste to landfills, and the recycled materials to a MRF, under the regulations and rules enforced by the designated County Waste Management Department.

EDUCATIONAL AND INFORMATIONAL PROGRAMS:

The County Waste Management Agency would create and implement educational and informational programs that would inform every resident, organization, and business in the County of the format of the mandated solid waste system, its goals, and the advantages to the environment. This may take the form of radio advertisements, newspaper articles, brochures, visits to schools, seminars, and outdoor advertising The costs would be significant.

CAPITAL, OPERATIONAL, AND MAINTENANCE COSTS:

The costs of a mandated Solid Waste Management System, including establishing a County agency to oversee the regulation of waste haulers, the enforcement of solid waste collection, the supervision of mandatory recycling and composting programs, the collection of fees, the operation of educational programs, and the implementation of household hazardous waste collection is difficult to estimate.

EVALUATION SUMMARY OF NON-SELECTED SYSTEM

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

Alternative II was not chosen as the selected Solid Waste Management System because it is not clear if it is economically feasible for the County to fund the cost of establishing and supporting a County agency to implement, operate, and enforce a Plan which mandated solid waste collection, recycling, composting, and regular household hazardous waste collection. The mechanism for funding such a system, particularly through fees or a millage, would be difficult to justify to the County residents. Therefore, public support is hard to gauge.

Additionally, the DEQ cannot mandate establishment of local programs and, without local identification of programs to include in the Plan, we cannot select this alternative as the Selected System.

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. Low Environmental Impact.
2. Technically Feasible.
3. Adequate Transportation Network
4. Household Hazardous Waste Collection.
5. Sufficient Disposal Capacity.
6. Mandatory Recycling and Composting Programs.

DISADVANTAGES:

1. High Cost – May Not Be Economically Feasible.
2. Lack of Public Support
3. No Resource Recovery Program.
4. No Energy Conservation or Generation.
5. The DEQ cannot Mandate Local Programs.

APPENDIX C

PUBLIC PARTICIPATION

AND APPROVAL

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

PUBLIC INVOLVEMENT PROCESS

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

The Michigan Department of Environmental Quality (MDEQ)

ANNOUNCES A PUBLIC MEETING

on the

BARAGA COUNTY SOLID WASTE MANAGEMENT PLAN UPDATE

Monday October 29, 2001 - 7:00 p.m.

Baraga County Court House, Commissioners Meeting Room

16 North Third Street L'Anse, Michigan 49946

The public meeting is held to receive verbal and written comments from the local municipalities and the general public as part of a 30-day comment period beginning October 15, 2001 and ending November 13, 2001. Copies of the Plan may be reviewed at the Baraga County Courthouse, Western U P Planning & Development Regional Commission, 326 Shelden Avenue, Houghton and the Waste Management Division offices of the MDEQ, 608 West Allegan Street, Lansing, Michigan. Visitors will be asked to register and are urged to submit comments in writing as well. Written comments may be submitted to the MDEQ until November 13, 2001 and should be sent to:

Mrs. Christina Miller,
Solid Waste Management Unit Waste Management Division
Michigan Department of Environmental Quality
P.O. Box 30241 Lansing, Michigan 48909.

The Michigan Department of Environmental Quality (MDEQ)

ANNOUNCES A PUBLIC MEETING

on the

BARAGA COUNTY SOLID WASTE MANAGEMENT PLAN UPDATE

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Mrs. Christina Miller,
Solid Waste Management Unit Waste Management Division
Michigan Department of Environmental Quality
P.O Box 30241 Lansing, Michigan 48909

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

March 24, 1998

Mr James Stingle, Executive Director
Western Upper Peninsula Planning
and Development Region
P O Box 365
Houghton, Michigan 49931

Dear Mr Stingle:

This letter is to notify you that the Baraga County Board of Commissioners and the municipalities in Baraga County have declined to prepare the update to the County Solid Waste Management Plan (Plan) required under Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA). On June 13, 1997, the Department of Environmental Quality (DEQ) sent a notice to every Michigan County notifying them that it was time to commence preparation of the next round of updates to Plans Under Section 11533(4) of the NREPA, if a County fails to submit the required Notice of Intent form to the DEQ indicating its acceptance of the responsibility to prepare the Plan update, the DEQ must notify each municipality in that County and offer the municipalities the opportunity to prepare the Plan update On September 19, 1997, the DEQ notified the municipalities in Baraga County of their opportunity to accept responsibility to prepare the Plan update. Under Section 11533(5) of the NREPA, if the municipalities do not accept this responsibility, the DEQ is required to offer the opportunity to prepare the Plan update to the Regional Planning Agency which serves the County The municipalities in Baraga County have not accepted this responsibility Therefore, this letter serves as that notice.

In order for you to accept this responsibility, your governing body must vote to do so. If your governing body agrees to accept this responsibility, then your agency will fulfill the role of the County Board of Commissioners in the preparation and approval of the updated Plan Section 11533(5) of the NREPA requires a Regional Planning Agency to return the Notice of Intent form to DEQ within 90 days of the date of this letter Therefore, your agency must submit the enclosed Notice of Intent form to the DEQ before June 22, 1998 If you do not submit this form by that date, or you do not agree to prepare the update, the DEQ is required to prepare the updated Plan, which shall be the final Plan for the County

Please have your agency's governing body vote on this matter and complete and submit the enclosed Notice of Intent form to the DEQ indicating the results of that vote by the date indicated above. If you accept this responsibility, you should also select an agency to be your designated planning agency (it can be your own agency) to assist you in preparing the Plan. You should also be aware that no funds have been appropriated for solid waste planning grants. Hence, there is no funding available from the State of Michigan to assist you in preparing the Plan update.

We have also enclosed a general guidance document providing some relevant information on the Plan update process. Plans must now be prepared using a standard Plan format. A copy of this format and a guidebook to assist you in completing the format are enclosed and will also be provided to your designated planning agency (if you select an agency other than your own) after you accept responsibility to prepare the Plan and designate that planning agency to the DEQ.

There are some procedural differences in the Plan development process for the Regional Planning Agencies compared to the County/municipal development process. If you choose to prepare the Plan update, staff of the Waste Management Division, Solid Waste Management Unit, will contact you to explain these differences and to otherwise assist you with this matter. Please feel free to call on them if you have any questions. Contact Mr. Seth Phillips, Chief of the Solid Waste Management Unit, at 517-373-4750 or by e-mail at phillish@state.mi.us.

Sincerely,

W. Charles McIntosh Actg

Russell J. Harding
Director
517-373-7917

Enclosures

cc: Mr. Jim Sygo, DEQ
Ms. Joan Peck, DEQ
Mr. Seth Phillips, DEQ
Mr. Robert Schmeling, DEQ-Marquette
Ms. Melinda Keillor, DEQ
Baraga County File

STATE OF MICHIGAN

JOHN ENGLER, Governor

DEPARTMENT OF ENVIRONMENTAL QUALITY

HOLLISTER BUILDING PO BOX 30473 LANSING MI 48909-7973

INTERNET: http://www.deq.state.mi.us

RUSSELL J. HARDING, Director

November 18, 1997

TO: Municipalities in Baraga County

This letter is to notify you that your county Board of Commissioners has declined to prepare the update to the county solid waste management plan (Plan) required under Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended On June 13, 1997, the Department of Environmental Quality (DEQ) sent a notice to every Michigan county notifying them that it was time to commence preparation of the next round of updates to county solid waste management plans. Under Section 11533(4) of Part 115, if a county fails to submit the required Notice of Intent to the DEQ indicating its acceptance of the responsibility to prepare the Plan update, the DEQ must notify each municipality in that county and offer the municipalities the opportunity to prepare the Plan update This letter serves as that notice Section 11533(4) of Part 115, also requires that the DEQ convene a meeting with the municipalities to discuss municipal preparation of the Plan update. Staff in the Waste Management Division (WMD) are available to arrange such a meeting if the municipalities in your county are interested in having one Please contact Mr Seth Phillips, Chief of the Solid Waste Management Unit, at the number indicated at the end of this letter, if you would like the DEQ to arrange this meeting

In order for the municipalities to accept responsibility for preparing the Plan update, each municipality's governing body must vote to do so If a majority of the governing bodies of the municipalities in the county agree to accept this responsibility (each municipality gets one vote), then those municipalities will fulfill, as a group, the role of the county Board of Commissioners in the preparation and approval of the updated Plan Section 11533(4) of Part 115 requires that this decision be made no later than four months after the date of this letter The municipalities should vote whether or not to accept this responsibility and complete and submit the attached Notice of Intent form to the DEQ before March 14, 1998. If the municipalities do not submit this form by that date or a majority of municipalities do not agree to prepare the update, the DEQ must then offer this opportunity to the regional planning agency which serves your county If they do not accept this role, the DEQ is required to prepare the updated Plan, which shall be the final Plan for the county.

Please have the governing body of your municipality vote on this matter and submit the attached form indicating the results of that vote by the date indicated above. If you accept this responsibility, you should also, as a group with the other approving municipalities, select an agency to be your Designated Planning Agency to assist you in preparing the Plan and should proceed to appoint the members of the county solid waste management planning committee as called for in Section 11534 of Part 115. You should also be aware that no funds have been appropriated for solid waste management planning grants. Hence, there is no funding available from the State of Michigan to assist you in preparing the Plan update.

Also attached, in addition to the Notice of Intent Form, is a general guidance document providing some relevant information on the Plan update process. Plans must now be prepared using a standard Plan format. This format and a guidebook to assist you in completing the format will be provided to your Designated Planning Agency if you accept responsibility to prepare the Plan and designate your planning agency to the DEQ. If you want to view this format, it is available to download from our Internet site at http://www.deq.state.mi.us/wmd/sections/swpshome.html.

Staff of the WMD, Solid Waste Management Unit, are available to assist you with this matter and with preparation of the Plan update, if you choose to prepare it. If you have any questions, please feel free to contact Mr. Phillips at 517-373-4750 or Ms. Melinda Keillor, the DEQ staff assigned as county planning coordinator for your county, at 517-373-4741.

Sincerely,

Russell J. Harding
Director
517-373-7917

Attachments

cc: Mr. Jim Sygo, DEQ
Ms. Joan Peck, DEQ
Mr. Seth Phillips, DEQ
Mr. Robert Schmeling II, DEQ - Marquette
Ms. Melinda Keillor, DEQ
County File

Village of L'Anse
101 N. Main Street
L'Anse, Mi. 49946
906-524-6116
906-524-6146 fax

February 27, 2001

Mr. Stan Idziak
Michigan Department of Environmental Quality
Waste Management Division
P.O. Box 30241
Lansing, Mi. 48909-7741

RE: Baraga County Solid Waste Plan Update

Dear Mr. Idziak:

The Village of L'Anse is located in Baraga County and it is our understanding that the Baraga County Solid Waste Plan is being updated at this time. The Village of L'Anse would like to request that the Wood Island Landfill located in Wetmore, Michigan be added as a primary disposal site in the plan.

The Village currently has its solid waste brought to the K & W Landfill in Greenland and this is our only option at this time. With the addition of the Wood Island Landfill we feel it would give us additional options and keep the disposal cost competitive.

This matter was discussed at the Village Council Meeting held on February 26th and the council authorized this request.

Please contact me if you have any questions or comments.

Sincerely,

Roy A. Kemppainen

Roy A. Kemppainen, Manager

WOOD ISLAND
Sanitary Landfill

Corporate Office
P.O. Box 2002
Kingsford, MI 49802
906-774-9006

Landfill Office
M-28 East, P.O. Box 165
Wetmore, MI 49894
906-387-2646

Mr. Stan Idziak
Michigan Dept. of Environmental Quality
Waste Management Division
P.O. Box 30241
Lansing, MI. 48909-7741

Date: January 15, 2001

Re: Baraga County Solid Waste Plan Update

Dear Mr. Idziak;

Great American Environmental Services Inc. is requesting that our Wood Island Landfill located in Wetmore Michigan be added to the Baraga plan as a primary disposal site.

Presently, residents and industries in Baraga County have very limited disposal options.

Please contact me if you need any additional information.

Respectfully,

Jim McCabe
General Manager

"Committed To Our Upper Peninsula Environment"

WOOD ISLAND
Sanitary Landfill

Corporate Office
P.O. Box 2002
Kingsford, MI 49802
906-774-9006

Landfill Office
M-28 East, P.O. Box 165
Wetmore, MI 49894
906-387-2646

June 15, 1998

Ms. Melinda Keillor
Department of Environmental Quality
Waste Management Division-SWPS
P.O. Box 30241
Lansing, Michigan 48909-7741

Dear Melinda:

I hope the everything is going well on the county solid waste plans that you are working on.

This letter is to request that the Wood Island Landfill in Wetmore, Michigan be included in the Baraga County Solid Waste Plan as a primary disposal site for Baraga County.

Should you have any questions, please feel free to give me a call.

Sincerely,

Terrance J. Barnes

Terrance J. Barnes
Vice President

RECEIVED
JUN 23 1998
Waste Management
Division

"Committed To Our Upper Peninsula Environment"

CUPPAD
REGIONAL COMMISSION

2415 14th Avenue South Escanaba, Michigan 49829-1197
(906) 786-9234 FAX (906) 786-4442

CENTRAL UPPER PENINSULA
PLANNING AND DEVELOPMENT
REGIONAL COMMISSION

EXECUTIVE COMMITTEE & COUNTY REPRESENTED

Chairperson	L Benson Menominee
Vice-Chairperson	G Corkin, Marquette
Secretary	W Rabenberg Dickinson
Treasurer	T. Aho Alger
Director	T Vitito Delta
Director	B Herioux Delta
Director	E Hoholik Schoolcraft
Director	P Groleau, Menominee
Executive Director	David C Gillis

RECEIVED

April 26, 1999

APR 3 0 1999

Waste Management

TO: Counties Affected by the Menominee County Solid Waste Plan

FROM: Peter Van Steen, Senior Planner

SUBJECT: Public Review and Comment of Draft Menominee County Solid Waste Plan

The Menominee County Solid Waste Management Planning Committee has recently prepared the update to the Menominee County Solid Waste Plan The Plan identifies the selected solid waste management system for Menominee County, controls import and export of waste between counties and identifies who is responsible for solid waste activities

The preferred alternative is the continued landfilling of wastes at sites located within and outside of the county The Plan allows for the expansion of the Great Lakes Pulp Company Type III landfill, Waste Management's Michigan Environ's landfill as being consistent with the Plan Construction and expansions of the HMSH, Inc. Type III landfill is also consistent with the Plan. Criteria have been established for the siting of new landfills

Solid waste importation is authorized from Alger, Baraga, Chippewa, Gogebic, Houghton, Iron, Keweenaw, Luce, Mackinac, Ontonagon, and Schoolcraft Counties. Solid waste from Menominee County is authorized to be exported to Alger, Baraga, Chippewa, Gogebic, Houghton, Iron, Keweenaw, Luce, Mackinac, Ontonagon, and Schoolcraft Counties for primary disposal.

A copy of the Plan is available upon request from the CUPPAD Regional Commission For this notification, we have supplied you with a copy of the Executive Summary and the listing of counties for import/export provisions A copy of the Plan is available upon request from the CUPPAD Regional Commission. The Solid Waste Planning Committee has established a 90-day review period from April 26, 199 until July 26, 1999 to accept comments from the public A Public Hearing on the Plan will be held on July 26, 1999 to provide the public the opportunity to address the Planning Committee. The Public Hearing will be held at the Menominee Area Chamber of Commerce building, Menominee, beginning at 7:00 p.m.

Immediately following the Public Hearing on July 26, 1999 the Committee will review the comments received and make any modifications to the Plan as necessary. The Committee will then take action on approving the Plan and recommend its adoption by the Menominee County Board of Commissioners. After adoption by the County Board, local governments will be asked to formally approve the Plan. Once 67% of the local governments approve the Plan, it will be submitted to the Department of Environmental Quality for state approval.

Comments you may have on the Plan will be accepted units July 26, 1999. Written comments directed to the Planning Committee in care of CUPPAD, 2415 14th Avenue South, Escanaba, MI 49829 will be presented at the Public Hearing.

pvs:bbs

Enclosure

PLANNING COMMITTEE APPOINTMENT PROCEDURE

The Plan was written by the DEQ under Section 11533(6) of Part 115 Therefore, the appointment of a planning committee was not required

APPENDIX D

PLAN IMPLEMENTATION STRATEGY

The following paragraph 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 BOC shall be responsible for the implementation and enforcement of the Plan. The BOC may designate an agency or committee to provide oversight to ensure initiation of the public education program, the operation of recycling and composting programs, the review of the administrative completeness of siting applications, and the consistency of solid waste siting proposals, but the ultimate decision making rests with the BOC

The BOC may take such actions as needed to provide funding for the implementation and enforcement of the Plan including, but not limited to, applying for federal, state, and foundation grants, or using other funding sources that may be available, such as the levy of fees, surcharges, or a special millage. The BOC is also responsible for any legislative actions that may be necessary to accomplish the goals of the Plan that do not conflict with federal or state statutes

RESOLUTIONS

The following are resolutions from the County BOC approving municipality's request to be included in an adjacent County's Plan

N/A

LISTED CAPACITY

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

Baraga County Clerk

Register of Deeds
16 North 3rd Street
L'Anse, Michigan 49946-1085
(906) 524-6183

Board of Commissioners
Gale Eilola District 1
Michael Koskinen District 2
Daune Smith District 3
Roland Sweeney District 4
Gerald Johnson District 5

Wendy J. Goodreau Clerk/Register
Darliene M. Smith Deputy
Kathryn Edwards Deputy
Denise Larson Deputy

November 8, 2001

Ms Christina Miller
Michigan Department of Environmental Quality
P.O. Box 30473
Lansing, MI 48909-7973

Dear Ms Miller:

At a regular meeting of the Baraga County Board of Commissioners held on November 5, 2001 it was moved by Commissioner Koskinen, supported by Commissioner Eilola and declared carried to approve the Solid Waste Management Plan submitted by the DEQ The vote was unanimous. The Board understands their responsibility in this matter If you have any questions regarding this matter please do not hesitate to contact me

Sincerely,

Wendy J Goodreau
County Clerk

WASTE MANAGEMENT

706 Chippewa Square
Suite 202
Marquette, MI 49855
(906) 228-4000
(906) 228-4051 Fax

August 28, 2000

Mr. Matt Staron
Environmental Quality Analyst
Waste Management Division
Michigan Department of Environmental Quality
P.O. Box 30241
Lansing, MI 48909

RE: K&W Landfill
Capacity Certification

Dear Mr. Staron:

This letter serves to certify that the K&W Landfill has sufficient disposal capacity based on current volumes to accept all the waste generated in Baraga Counties for a minimum 10 year period.

Please contact me if you have any questions.

Sincerely,

Robert Pliska, P.E.
Regional Engineer

WOOD ISLAND
Sanitary Landfill

Corporate Office
P.O. Box 2002
Kingsford, MI 49802
906-774-9006

Landfill Office
M-28 East, P.O. Box 165
Wetmore, MI 49894
906-387-2646

Ms. Christina Miller
MDEQ Waste Management Division
P.O. Box 30241
Lansing, MI. 48909-7741

Date: April 25, 2001

Re: Acceptance of Baraga County Solid Waste at Wood Island Landfill

Dear Ms. Miller;

Wood Island Landfill, located in Alger County, will allow any type II waste from Baraga County to be disposed of at the landfill.

Please include Wood Island as a primary disposal site in the Baraga County Solid Waste Plan.

Additionally, if there is not a transfer station siting criteria in the Baraga County plan please include one.

We appreciate your assistance in this matter. Please call me if you have any questions.

Respectfully,

Jim McCabe
General Manager

WASTE MANAGEMENT DIVISION
APR 27 2001
RECEIVED

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CUPPAD
REGIONAL COMMISSION

2415 14th Avenue South Escanaba Michigan 49829-1197
(906) 786-9234 FAX (906) 786-4442

CENTRAL UPPER PENINSULA PLANNING AND DEVELOPMENT REGIONAL COMMISSION

EXECUTIVE COMMITTEE & COUNTY REPRESENTED

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Vice-Chairperson	G Anderson Marquette
Secretary	G Corkin Marquette
Treasurer	T Aho Alger
Director	Ernest Hoholik, Schoolcraft
Director	R Good, Delta
Director	M Minnerick Dickinson
Director	P Groleau, Menominee
Past-Chairperson	D Olson Dickinson
Executive Director	David C Gillis

June 1, 1998

Mr. Kim Stoker
Western UP Planning and
Development Region
PO Box 365
Houghton, MI 49931

Dear Mr. Stoker:

The County of Delta, as are most counties in the state, is in the process of updating its County Solid Waste Plan. As part of the process, consideration is being given to waste import and export provisions. As you know, for the inter-county flow of waste to take place, both the importing and exporting counties must include each other in their respective plans.

At this time, the Delta County Solid Waste Plan will authorize the **exportation** of up to 100% of waste from Delta County to the following counties: Alger, Baraga, Chippewa, Dickinson, Gogebic, Houghton, Iron, Keweenaw, Luce, Mackinac, Marquette, Menominee, Ontonagon and Schoolcraft Counties for primary disposal. The exportation of wastes to an out-of-county solid waste facility is authorized provided it meets the following conditions:

- Wastes exported to other counties for disposal shall be permitted when there is a discontinuance of landfill operations, or the solid waste first is processed or handled at a transfer station owned and operated by the Delta Landfill Authority, or the Delta Solid Waste Management Authority is unable to take the waste for disposal at the Delta Landfill.

- Wastes generated by Mead Paper Publishing Division to an out-of-county solid waste facility would not need the approval of the Delta Solid Waste Management Authority.

- The exportation of wastes to other counties is subject to provisions as contained in the importing county's solid waste plan.

- The County Plan does not require formal reciprocal or other agreements between landfills or local units of government for the exportation of waste.

The Delta County Solid Waste Plan will authorize the **importation** of up to 100% of waste from Alger, Baraga, Chippewa, Dickinson, Gogebic, Houghton, Iron, Keweenaw, Luce, Mackinac, Marquette, Menominee, Ontonagon and Schoolcraft Counties for primary disposal. Out-of-county wastes for disposal

at the Delta Solid Waste Management Authority landfill is authorized provided it meets the following conditions:

- The Delta Solid Waste Management Authority, as owner of the landfill facility, must agree to accept the out-of-county wastes and is responsible for establishing the waste disposal fees.

- A maximum of 24,000 tons a year of out-of-county waste shall be imported into Delta County for disposal at the Delta Landfill.

- The importation of wastes from other counties is subject to provisions as contained in the exporting county's solid waste plan.

- The County Plan does not require formal reciprocal or other agreements between landfills or local units of government for the importation of waste.

- The Delta Solid Waste Management Authority retains the option of contracting with outside agencies for acceptance of waste when it is in the best financial interest of the Authority, and offers no risk to the health, safety and welfare of the citizens of the Delta County, and further that the best financial interests of the Delta Solid Waste Management Authority be defined as that airspace is sold at a rate higher than the rates for Delta County residents and such sale does not preclude routine or emergency waste disposal by any County resident or agency.

On behalf of the Delta Solid Waste Planning Committee, we request the inclusion of Delta County as an "exporting county" for primary disposal in your plan update. As you may be aware, Delta County has a publicly owned and managed landfill with a life capacity of about 28 years. There are no plans to cease landfill operations, but the county wishes to maintain viable landfill options. Even if your county does not have a landfill at present, perhaps some day a landfill, transfer station or waste processing facility may be constructed that could be utilized by Delta County.

As you proceed through the update process, you may wish to include Delta County as a possible disposal site, subject to the provisions contained above.

Should you have any questions or comments, feel free to contact me.

Sincerely,

Peter Van Steen

Peter Van Steen
Senior Planner

pvs:bbs

cc: Melinda Keillor
Tom Vitito

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SEP 1 0 1998
Waste Management Division

CUPPAD
REGIONAL COMMISSION

2415 14th Avenue South Escanaba Michigan 49829-1197
(906) 786-9234 FAX (906) 786-4442

CENTRAL UPPER PENINSULA
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Director	Ernest Hoholik Schoolcraft
Director	R Good, Delta
Director	M Minnerick Dickinson
Director	P Groleau, Menominee
Past-Chairperson	D Olson Dickinson
Executive Director	David C Gillis

September 3, 1998

Ms. Melinda Keillor
Baraga Co. Solid Waste Plng. Committee
P.O. Box 30241
Lansing, MI 48909

Dear Melinda:

The Menominee County Solid Waste Planning Committee is in the process of updating its county solid waste plan. As you know, in order for waste to be imported into or exported from a county in Michigan, it must be authorized in both the importing and exporting county.

The Committee has agreed that the following language will be included in the county solid waste plan:

> The Menominee County Solid Waste Plan will authorize the **exportation** of up to 100% of waste from Menominee County to the following counties: Alger, Baraga, Chippewa, Delta, Dickinson, Gogebic, Houghton, Iron, Keweenaw, Luce, Mackinac, Marquette, Ontonagon and Schoolcraft Counties for primary disposal.
>
> The Menominee County Solid Waste Plan will authorize the **importation** of up to 100% of waste from Alger, Baraga, Chippewa, Delta, Dickinson, Gogebic, Houghton, Iron, Keweenaw, Luce, Mackinac, Marquette, Ontonagon and Schoolcraft Counties for primary disposal. Acceptance of out-of-county waste is subject to the following conditions:
>
> - For counties that have any existing Type II landfill, the exporting county's solid waste plan must authorize the importation of Menominee County waste for disposal.
>
> - For counties that presently do not have a Type II landfill, the exporting county must authorize the importation of Menominee County wastes for disposal and 2) that County Solid Waste Plan must provide for a siting criteria for a Type II landfill within the county.

- The landfill facility has the right to agree to accept or reject the out-of-county wastes and is responsible for establishing the waste disposal fees.

As you continue to proceed through the solid waste plan update process, the Menominee County Solid Waste Planning Committee requests that if Menominee County is listed as a waste disposal option in your County Solid Waste Plan, that the reciprocity of waste from both counties be identified. The Committee wants to make sure that there is a reciprocal flow of wastes from counties that may possibly use or are using Menominee County as a waste disposal option.

Should you have any concerns or comments, please feel free to contact me.

Sincerely,

Peter Van Steen

Peter Van Steen
Senior Planner

pvs:bbs

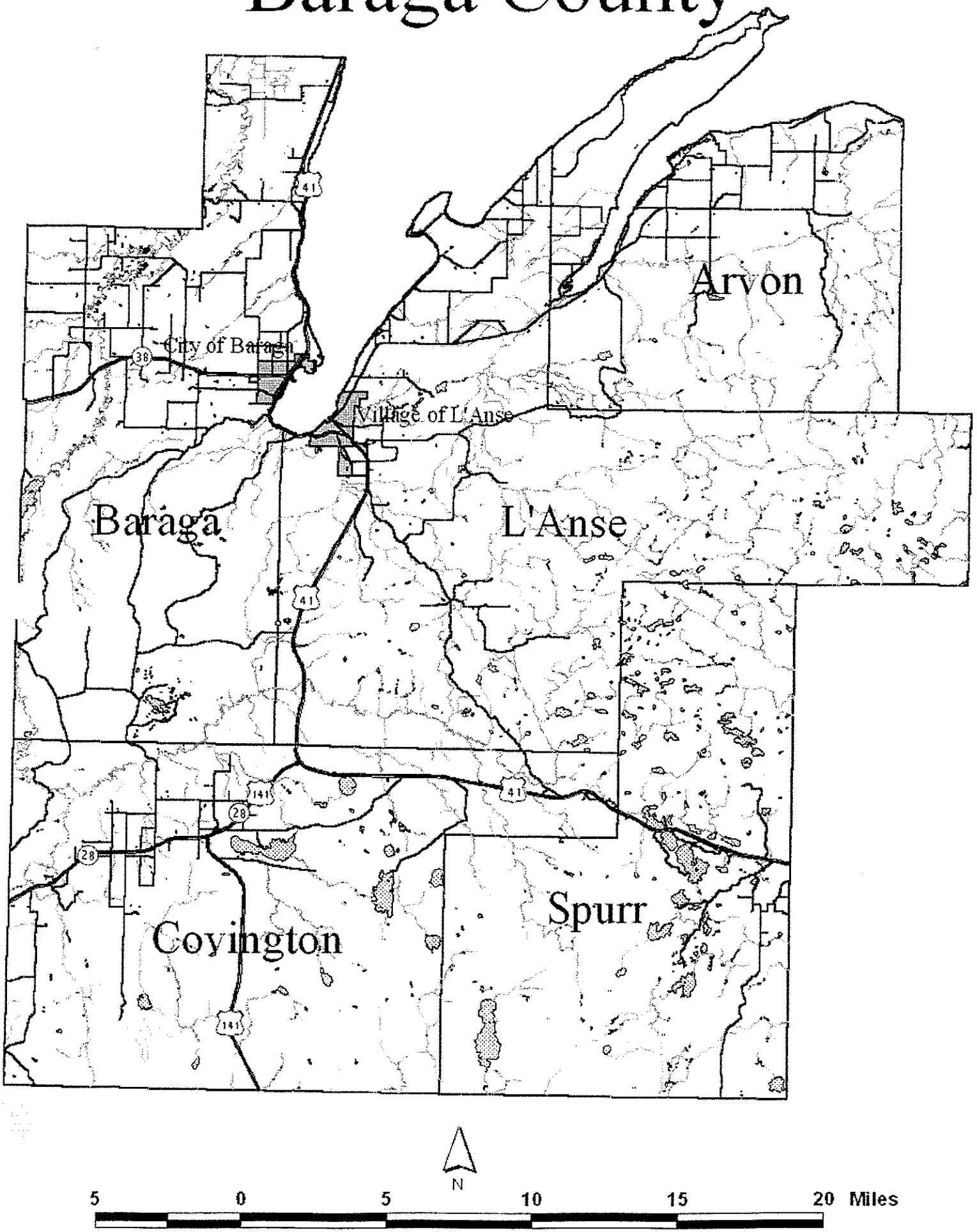
cc: Nancy Douglas

ATTACHMENTS

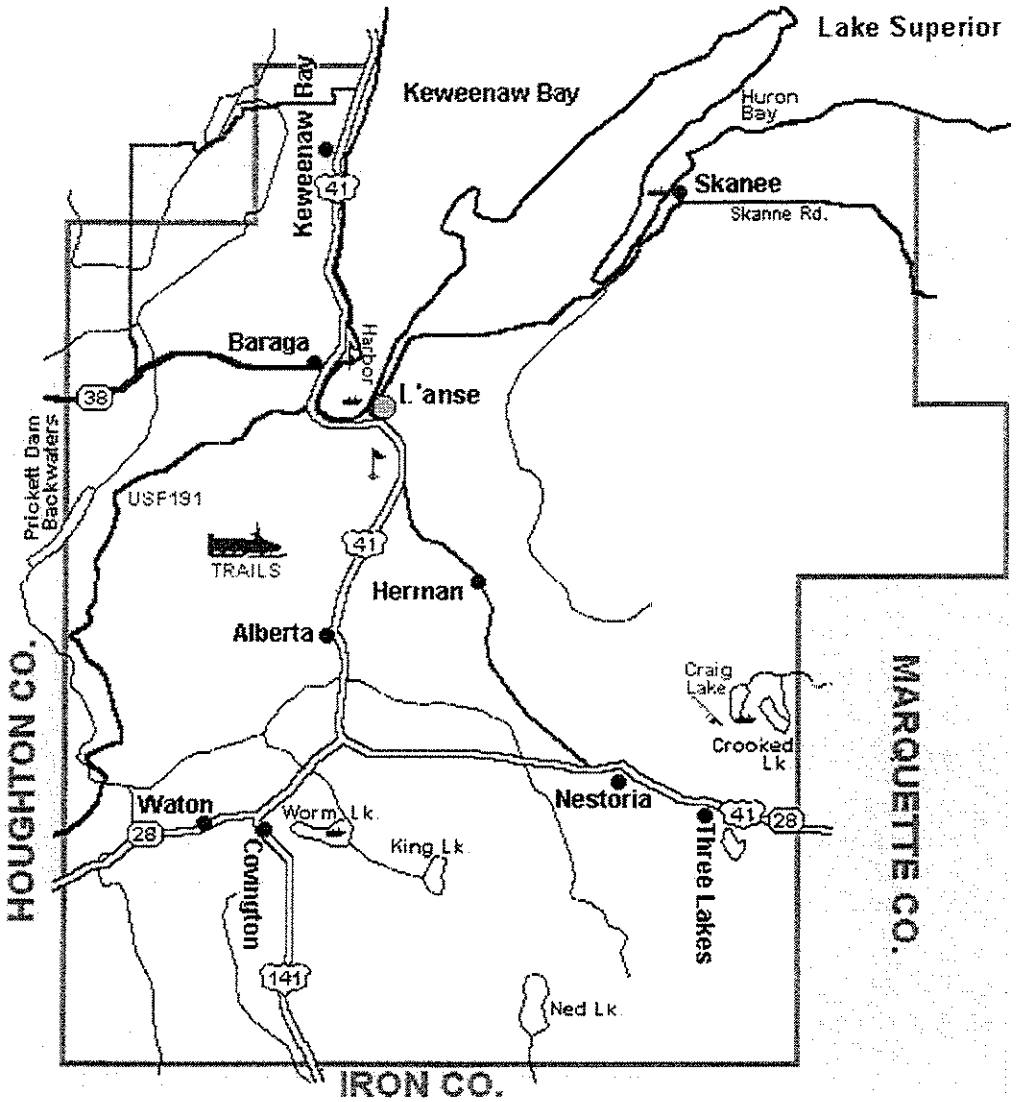
Maps

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

Baraga County



Map of Baraga County, Michigan



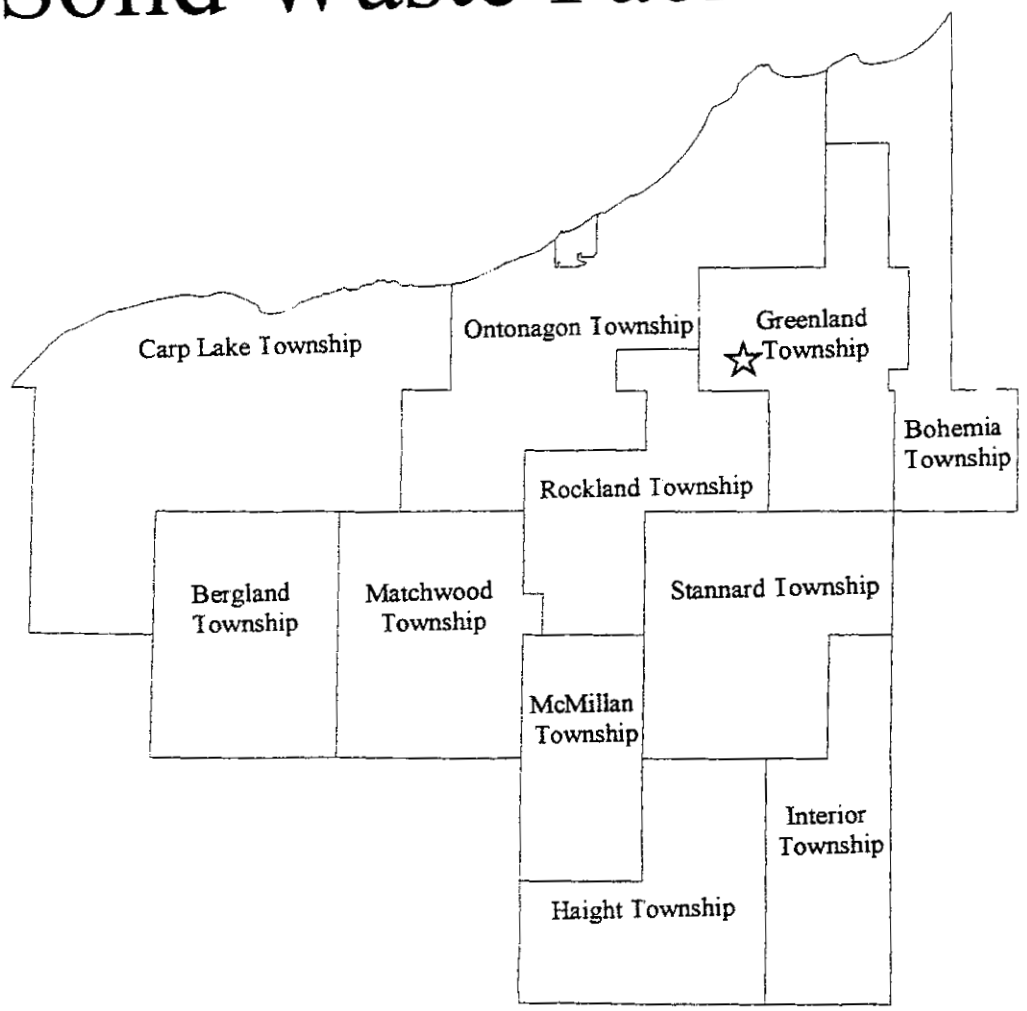
Back to the Top.

Back to the Baraga County Main Page.

This site is continually being updated, if you have any comments or suggestions, please take a minute to write webmaster@infomi.com.

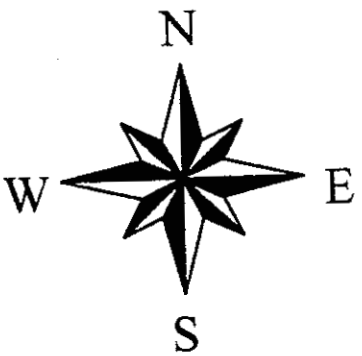
Back to InfoMI.com Main Page.

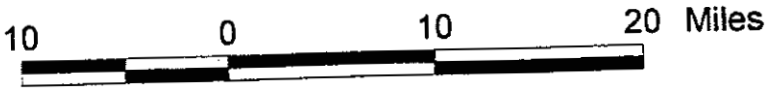
Ontonagon County Solid Waste Facilities



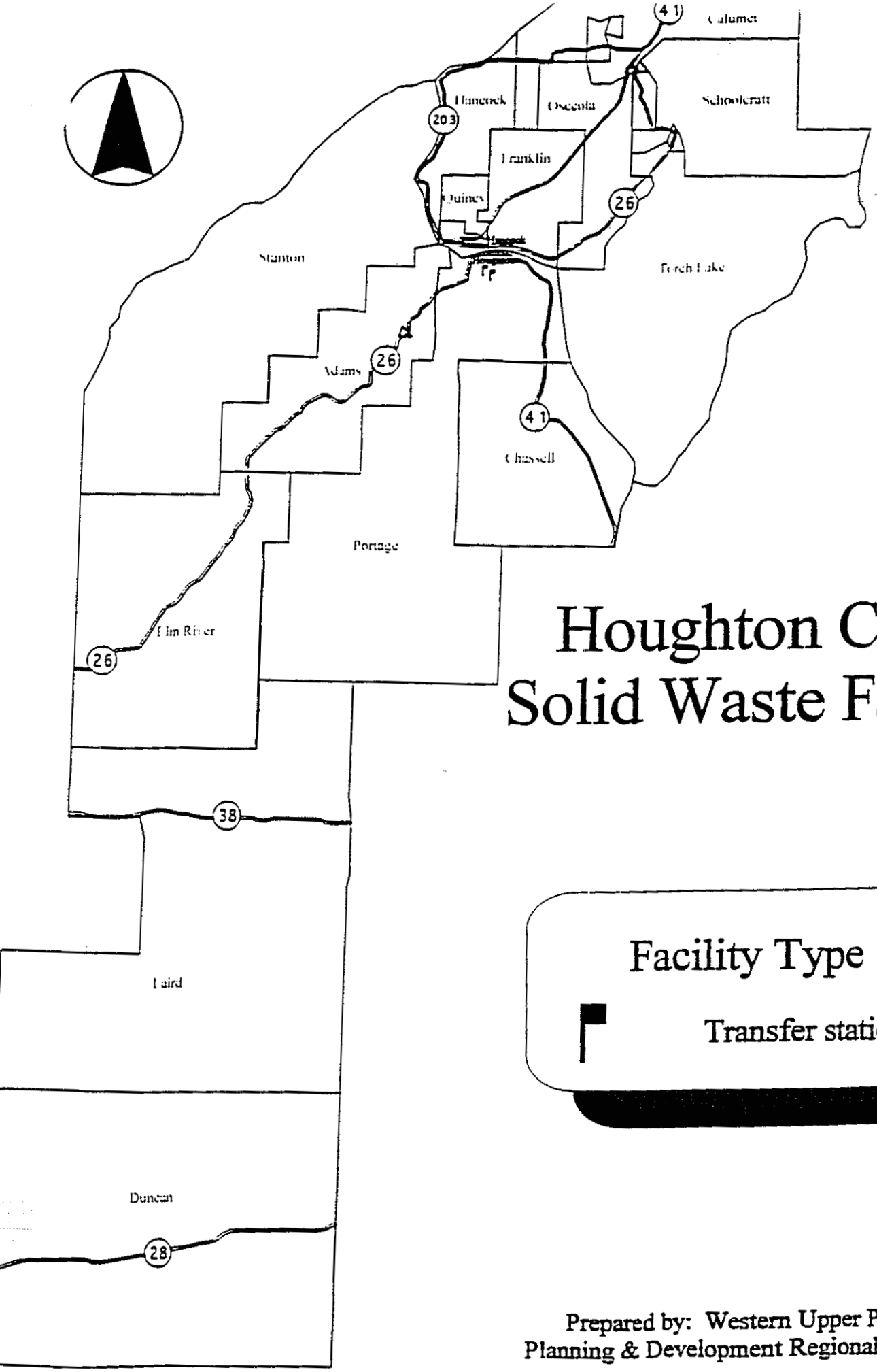
Facility Type

Type II Landfill ☆





Source: Western Upper Peninsula Planning and Development Region

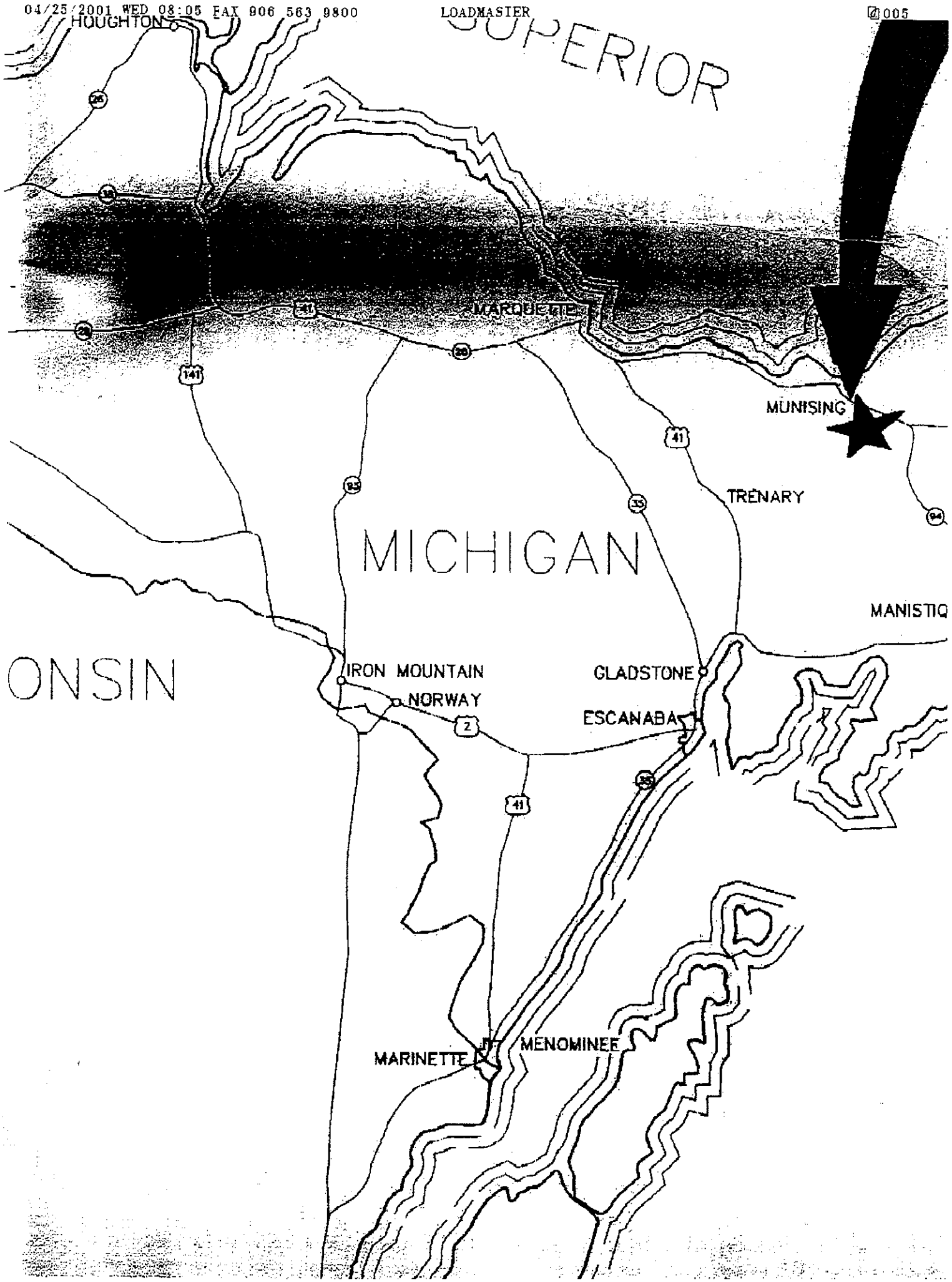


Houghton County Solid Waste Facilities

Facility Type

Transfer stations

Prepared by: Western Upper Peninsula Planning & Development Regional Commission


HOUGHTON
SUPERIOR
MARQUETTE
MUNISING
TRENARY
MICHIGAN
MANISTIQ
ONSIN
IRON MOUNTAIN
NORWAY
GLADSTONE
ESCANABA
MARINETTE
MENOMINEE

ATTACHMENTS

Inter-County Agreements

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

None.

ATTACHMENTS

Special Conditions

Special conditions affecting import or export of solid waste

None.