



JOHN ENGLER
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
LANSING



RUSSELL J. HARDING
DIRECTOR

May 14, 2002

Mr. Tim Hagley, Chairperson
Arenac County Board of Commissioners
P.O. Box 747
Standish, Michigan 48658

Dear Mr. Hagley:

The Department of Environmental Quality (DEQ) received the locally approved update to the Arenac County Solid Waste Management Plan (Plan) on March 28, 2002.

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

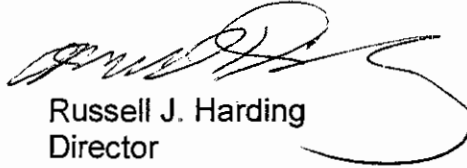
By approving the Plan, the DEQ has determined that it complies with the provisions of Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, and the Part 115 administrative rules concerning the required content of solid waste management plans.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

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

Mr. Tim Hagley
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May 14, 2002

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

Sincerely,

A handwritten signature in black ink, appearing to read "Russell J. Harding", with a large, sweeping flourish extending to the right.

Russell J. Harding
Director
517-373-7917

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

Arenac County Solid Waste Management Plan Update

*Revised Draft
November 1999*

Approved by the
Arenac County Solid Waste Management Planning Committee

Approved by the
Arenac County Board of Commissioners

Approved by
Arenac County's Municipalities

Submitted to the
Michigan Department of Environmental Quality
For Final Approval

Prepared by the
Arenac County Solid Waste Management Planning Committee

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

1997 PLAN UPDATE COVER PAGE

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

DATE SUBMITTED TO THE DEQ:

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

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

<u>Municipality</u>	<u>Original Planning County</u>	<u>New Planning County</u>
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DESIGNATED PLANNING AGENCY PREPARING THIS PLAN UPDATE:

East Central Michigan Planning & Development Regional Commission (ECMPDR)

CONTACT PERSON: Sue Fortune, Executive Director

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Saginaw MI 48602

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(If Applicable)

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(If Applicable)

CENTRAL REPOSITORY LOCATION(S): (1) ECMPDR, 3535 State Street, Saginaw, Michigan, 48602 (2) Arenac County Board Office, Arenac County Building, 120 N. Grove, Standish, Michigan 48658.

Arenac County Solid Waste Management Plan Update

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EXECUTIVE SUMMARY

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

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

Township or Municipality Name	Population	% Land Use			% of Economic Base*			
		Rural	Urban	Ag	For	Ind	Com	Other
<u>Adams Twp</u>	<u>450</u>	<u>98%</u>	<u>2%</u>	<u>29.7%</u>	<u>11.8%</u>	<u>0.6%</u>	<u>2.5%</u>	<u>55.4%</u>
<u>Arenac Twp</u>	<u>1,021</u>	<u>98%</u>	<u>2%</u>	<u>33.2%</u>	<u>0</u>	<u>0.6%</u>	<u>2.1%</u>	<u>64.1%</u>
<u>Au Gres Twp</u>	<u>1,140</u>	<u>97%</u>	<u>3%</u>	<u>7.9%</u>	<u>0</u>	<u>0.6%</u>	<u>1.9%</u>	<u>89.6%</u>
<u>Clayton Twp</u>	<u>980</u>	<u>99%</u>	<u>1%</u>	<u>28.0%</u>	<u>0</u>	<u>3.0%</u>	<u>1.4%</u>	<u>67.6%</u>
<u>Deep River Twp</u>	<u>1,677</u>	<u>96%</u>	<u>4%</u>	<u>10.6%</u>	<u>0</u>	<u>0.2%</u>	<u>6.6%</u>	<u>82.6%</u>
<u>Lincoln Twp</u>	<u>1,030</u>	<u>93%</u>	<u>7%</u>	<u>34.6%</u>	<u>0</u>	<u>0</u>	<u>12.5%</u>	<u>52.9%</u>
<u>Mason Twp</u>	<u>826</u>	<u>99%</u>	<u>1%</u>	<u>27.8%</u>	<u>0</u>	<u>0.4%</u>	<u>2.6%</u>	<u>69.2%</u>
<u>Moffatt Twp</u>	<u>841</u>	<u>92%</u>	<u>8%</u>	<u>5.2%</u>	<u>0</u>	<u>0.2%</u>	<u>1.7%</u>	<u>92.9%</u>
<u>Sims Twp</u>	<u>965</u>	<u>90%</u>	<u>10%</u>	<u>2.4%</u>	<u>0</u>	<u>0.03%</u>	<u>3.1%</u>	<u>94.5%</u>
<u>Standish Twp</u>	<u>2,100</u>	<u>96%</u>	<u>4%</u>	<u>19.8%</u>	<u>0</u>	<u>0.08%</u>	<u>4.1%</u>	<u>76.0%</u>
<u>Turner Twp</u>	<u>433</u>	<u>99%</u>	<u>1%</u>	<u>51.9%</u>	<u>0</u>	<u>0.4%</u>	<u>2.1%</u>	<u>54.4%</u>
<u>Whitney Twp</u>	<u>1,106</u>	<u>96%</u>	<u>4%</u>	<u>11.4%</u>	<u>0</u>	<u>0.6%</u>	<u>3.7%</u>	<u>84.3%</u>
<u>Au Gres City</u>	<u>918</u>	<u>2%</u>	<u>98%</u>	<u>0.5%</u>	<u>0</u>	<u>3.0%</u>	<u>22.2%</u>	<u>74.3%</u>
<u>Sterling Village</u>	<u>548</u>	<u>2%</u>	<u>98%</u>	Included with Deep River Twp.				
<u>Twining Village</u>	<u>180</u>	<u>2%</u>	<u>98%</u>	Included with Mason & Turner Twps.				
<u>Omer City</u>	<u>410</u>	<u>2%</u>	<u>98%</u>	<u>1.0%</u>	<u>0</u>	<u>0.6%</u>	<u>6.9%</u>	<u>91.5%</u>
<u>Standish City</u>	<u>1,473</u>	<u>2%</u>	<u>98%</u>	<u>0</u>	<u>0</u>	<u>10.7%</u>	<u>38.4%</u>	<u>50.9%</u>
<u>Turner Village</u>	<u>170</u>	<u>2%</u>	<u>98%</u>					
<u>ARENAC COUNTY</u>	<u>16,268</u>	<u>96%</u>	<u>4%</u>	<u>14.1%</u>	<u>0</u>	<u>1.3%</u>	<u>7.6%</u>	<u>77%</u>

Total Population 16,268

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

EXECUTIVE SUMMARY

CONCLUSIONS

Arenac County's current solid waste management system is functioning well, and it provides an effective means for managing the solid waste that is generated in the county. Solid waste collection and transportation services are mainly provided by the private sector and are available to all residents, businesses, and industries in the county. Solid waste that is generated in Arenac County is presently transported to the Waters Landfill in Crawford County for final disposal. This plan also authorizes the disposal of solid waste from Arenac County at landfills in Bay County (Whitefeather Landfill) and in Clare County (Northern Oaks Recycling & Disposal Facility). These landfills have sufficient capacity to provide for Arenac County's solid waste disposal needs for the next 10 years and beyond.

The separation and collection of recyclable materials occurs through several mechanisms. Recycling drop-off sites are provided for residents in Moffatt, Sims and Whitney Townships, and in the City of AuGres. Moffatt is presently evaluating its recycling program to determine if it should be continued. Curbside recycling services are available through the private sector and are furnished on an individual basis.

Composting in Arenac County occurs as home composting due to the rural nature of the area. Composting drop-off sites are available to residents in the City of AuGres, Whitney Township, and at Clean Futures (a private facility). Curbside collection of yard waste is also available through the private solid waste industry, and can be furnished on an individual (house by house) basis.

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

SELECTED ALTERNATIVES

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

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

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

3. Recycling. Under the selected alternative, all local governments are encouraged to provide recycling opportunities for their residents, either through arrangements for drop-off sites or the provision of curbside collection for recyclables. Presently, no local governments provide curbside recycling for their residents through municipal contracts with the private waste industry or other entities. However, curbside recycling services are available on an individual (house by house) basis. This type of curbside arrangement presently exists in Sims and Whitney Townships. Recycling services are expected to continue to be mainly provided by private enterprise. However, this does not preclude other entities -- such as environmental organizations, private non-profit groups, and others -- from becoming involved in recycling activities. The plan encourages the involvement of such groups in materials recovery efforts.

4. Composting. Collection of yard wastes from residents for composting will continue to be offered by the private sector. Currently, no communities have curbside collection of yard wastes on a community-wide basis. However, the private sector offers curbside service on an individual basis. "Backyard" composting by residents will also continue to be encouraged. The City of Au Gres, Whitney Township, and Clean Futures operate composting drop-off sites, and the plan encourages the continuation of these programs. Municipalities are encouraged to provide composting opportunities for their residents as needs dictate, either through curbside collection of yard wastes or through local drop-off sites. Again, it is expected that composting services will continue to be furnished by the private sector. The plan, however, does not intend to limit the ability of any local government unit to establish a composting site and program.

5. Separation of Household Hazardous Wastes. There is presently no formal hazardous waste collection program in place. The high costs associated with such programs generally preclude the County from directly providing this type of service. However, the County should work in partnership with the private solid waste industry to explore ways to provide opportunities for separation and collection of household hazardous wastes from residents. The Northern Oaks Landfill in Clare County conducts an annual Household Hazardous Waste Collection Day on a voluntary basis. Because Arenac County is part of the authorized service area for the Northern Oaks facility, county residents will be eligible to participate in this program.

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

7. Public Information and Education. Educational efforts should be conducted under the selected system. Educational programs could be conducted by the proposed Solid Waste Management Advisory Board, possibly with the assistance of other County agencies, such as MSU Extension. The private solid waste industry also conducts informational programs for local schools and others. The County should investigate ways to coordinate and enhance these efforts.

INTRODUCTION

GOALS AND OBJECTIVES

To comply with Part 115 and its requirements, each Plan must be directed toward goals and objectives based on the purposes stated in Part 115, Sections 11538.(1)(a), 11541.(4) and the State Solid Waste Policy adopted pursuant to this Section, and Administrative Rules 711(b)(i) and (ii). At a minimum, the goals must reflect two major purposes of Solid Waste Management Plans:

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

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

Goal 1: Develop an efficient, environmentally sound, and cost-effective solid waste management system that is capable of meeting the County's diverse needs for the next 10 years.

Objective 1a: Assign within the County the responsibilities for carrying out the various actions required for implementing the adopted Solid Waste Management Plan.

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

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

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

Goal 3: 3. Encourage continued participation by the private sector in all solid waste management activities.

Objective 3a: Arrange for adequate landfill space to meet the County's solid waste disposal needs.

Objective 3b: Encourage the expanded use of private/non-profit organizations for operating and coordinating formal efforts in recycling and resource recovery.

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

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

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

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

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

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

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

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

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

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

DATA BASE

Identification of sources of waste generation within the county, total quantity of solid waste generated to be disposed, and sources of the information. (Attach additional pages as necessary)

Solid waste generation estimates for Arenac County were obtained from the most recent DEQ "Report of Solid Waste Landfilled in Michigan" for the period of October 1, 1997 through September 30, 1998 and from the records kept by the private solid waste industry. The report on volumes landfilled showed that 22,594 cubic yards of solid waste generated in Arenac County were disposed of at licensed Type II landfills. No Type III solid waste disposal was reported. The main facility presently used for disposal is the Whitefeather Landfill in Bay County. A very small quantity of solid waste was also disposed of in Shiawassee County at the Venice Park Landfill (20 cubic yards) during the reporting period that ended September 30, 1998

Recyclable materials are separated from the Arenac County solid waste stream, collected, and marketed. Recently, approximately 542 cubic yards of recyclable material were collected in the county. Recycling makes use of material that would have otherwise been placed in landfills. Also, a presently unknown quantity of yard wastes and other acceptable organic materials are collected and composted. This represents additional material that was diverted from landfills

The current solid waste collection and disposal system appears to be working well, and no major problems are anticipated. There are no special wastes generated in the county that create any unique problems for collection, transportation, or disposal. Landfill capacity in the region is adequate and provides Arenac County with more than ten years of capacity.

TOTAL QUANTITY OF SOLID WASTE GENERATED:

23,136 Tons or Cubic Yards in one year (identify unit of time)

TOTAL QUANTITY OF SOLID WASTE NEEDING DISPOSAL:

22,594 Tons or Cubic Yards in one year (identify unit of time)

DATA BASE

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

The following is a listing of the solid waste disposal areas that Arenac County will utilize to meet its disposal needs for the planning period. All of these facilities are located in surrounding counties. Detailed descriptions of these disposal areas are included on the following pages.

Type II Landfills (County Location):

Whitefeather Landfill (Bay County)

Northern Oaks Recycling & Disposal Facility (Clare County)

Waters Landfill (Crawford County)

DATA BASE

FACILITY DESCRIPTIONS

Facility Type: Type II Landfill

Facility Name: Whitefeather Landfill

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

Map identifying location included in Attachment Section: Yes No

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

Public Private Owner: Republic Services

Operating Status (check)

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

Waste Types Received (check all that apply)

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

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

Site Size:

Total area of facility property:	106	acres
Total area sited for use:	56.5	acres
Total area permitted:	56.5	acres
Operating:	24.5	acres
Not excavated:	32	acres
Current capacity:	4,175,153	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds ³
Estimated lifetime:	18.8	years
Estimated days open per year:	260	days
Estimated yearly disposal volume:	380,000	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds ³

(if applicable)

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

FACILITY DESCRIPTIONS

Facility Type: Type II Landfill

Facility Name: Northern Oaks Recycling & Disposal Facility

County: Clare Location: Town: 19N Range: 4W Section(s): 32

Map identifying location included in Attachment Section: Yes No

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

Public Private Owner: Waste Management

Operating Status (check)

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

Waste Types Received (check all that apply)

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

* Explanation of special wastes, including a specific list and/or conditions:
WWTP filter cake, sludge

Site Size:

Total area of facility property:	320	acres
Total area sited for use:	76	acres
Total area permitted:	76	acres
Operating:	19	acres
Not excavated:	57	acres
Current capacity:	8,755,100	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds ³
Estimated lifetime:	43	years
Estimated days open per year:	260	days
Estimated yearly disposal volume:	409,000	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds ³

(if applicable)

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

FACILITY DESCRIPTIONS

Facility Type: Type II Landfill

Facility Name: Waters Landfill

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

Map identifying location included in Attachment Section: Yes No

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

Public Private Owner: Waste Management

Operating Status (check)

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

Waste Types Received (check all that apply)

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

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

Site Size:

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

(if applicable)

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

DATA BASE

SOLID WASTE COLLECTION SERVICES AND TRANSPORTATION INFRASTRUCTURE

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

The collection and transportation of solid waste that is generated at residences, businesses, and industries in Arenac County is accomplished almost exclusively by the private solid waste industry.

Private solid waste collection firms that operated in Arenac County until recently included Waste Management and City Environmental Services. Due to the recent merger between USA Waste and Waste Management, City Environmental has now become part of the new Waste Management.

Also, prior to this merger in the waste industry, City Environmental transported solid waste to the Whitefeather Landfill in Bay County for disposal. Since the merger, the new Waste Management no longer takes waste to Whitefeather, but instead transports it to the Waters Landfill in Crawford County. The Waters Landfill is also owned by Waste Management.

In most communities, solid waste collection services are provided under municipal contracts with private firms. Recycling drop-off sites are available in Moffatt, Sims and Whitney Townships, and in the City of Au Gres. At the time this plan update was in preparation, Moffatt Township was evaluating its recycling program to decide whether to continue the service. Corrugated paper is collected from businesses throughout the County.

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

**Solid Waste Collection Services Information
Arenac County**

Community	1 Service Provider	2 Service Type		3 Payment Method	4 Additional Services	5 Transfer Station		6 Landfill
		Curbside	Drop-off Site			Type A	Type B	
Townships								
Adams	WM				RB			Waters
Arenac	WM	X		I	RB			Waters
Au Gres	WM	X		S	RB, RD			Waters
Clayton	WM				RB			Waters
Deep River	WM				RB			Waters
Lincoln	WM	X		S	RB			Waters
Mason	WM				RB			Waters
Moffatt	WM				RB, RD			Waters
Sims	WM CFR	X	X	S, I	RB, RD, RC		X	Waters
Standish	WM				RB			Waters
Turner	WM	X		S	RB			Waters
Whitney Villages	WM CFR	X	X	S, I	RB, RD, RC CS		X	Waters
Villages								
Sterling	WM	X		I	RB			Waters
Turner	WM	X		S	RB			Waters
Twining	WM	X		S	RB			Waters
Cities								
Au Gres	WM	X		S	RB, RD, CS			Waters
Omer	WM	X		S	RB			Waters
Standish	WM	X		S	RB			Waters

**Solid Waste Collection & Transportation Services
Key to Information in the Table**

The following numbers refer to the numbered blocks on the form:

1. **Service Provider.** This entry identifies the firms or other organizations that provide solid waste collection services in the community:

WM	Waste Management
CFR	Clean Futures Recycling

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

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

I	Individuals billed directly for service
G	Services are paid for from the local government's General Fund
S	A special fee is levied for trash collection, such as a special assessment

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

RC	Curbside collection of separated recyclable materials from residences is provided.
RB	Collection of specified recyclable materials from businesses is provided
RD	Separated recyclable materials may be dropped off at a designated site in the community.
YW	Separate collection of yard waste is provided to residences
CS	A site where residents may drop off yard waste for composting is provided in the community.

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

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

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

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

DATA BASE

EVALUATION OF DEFICIENCIES AND PROBLEMS

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

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

1. Markets for recyclable materials need to be strengthened and expanded. This should be addressed at the state and federal levels. It is beyond local control.
2. Stockpiles of scrap tires are a problem -- additional disposal options are needed.
3. Alternatives for disposal of fish-cleaning wastes should be explored, such as composting them instead of placing them in landfills.
4. Most solid waste generated in the County previously went to Whitefeather in Bay County and is now being hauled to Waters. One or more additional landfill sites should be identified in the plan to provide flexibility and contingency disposal options.
5. There is presently no program within the county to remove potentially hazardous materials from the solid waste stream.

DATA BASE

DEMOGRAPHICS

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

From 1990 to 1997, Arenac County's population is estimated to have grown by slightly over 10%. This represents an annual growth rate of about 1.44%. If this trend continues, the county population will reach 17,846 by 2003 and 19,131 by 2008.

Population estimates for the municipalities within the county are available through 1996. Population growth within the local government units during 1990 through 1996 ranged from 5.4% to 15.4%. During this period, the five fastest growing communities in term of population were Sims Township (up 15.4%), Au Gres Township (13.2%), Whitney Township (12.7%), Arenac Township (10.9%), and Lincoln Township (10.4%).

The county population centers are the Standish City/Standish Township/Lincoln Township area, the Au Gres City/Au Gres Township area, and the Sterling Village/Deep River Township area. Together, these communities make up over half of the total county population. These areas also represent the centers for manufacturing, retail trade, and services within the county. Consequently, these communities are also the county's centers of solid waste generation. These areas are expected to remain the centers of both population and solid waste generation for the five-year and ten-year planning periods.

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

Arenac County
Current Annual Solid Waste Generation & Disposal

Disposal Facility	Type II Solid Waste	Type III Solid Waste
Whitefeather (Bay)	22,574 cubic yards	0
Venice Park (Shiawassee)	20 cubic yards	0
Total	22,594 cubic yards	0

Source: "Report of Solid Waste Landfilled in Michigan October 1, 1997 -- September 30, 1998," Michigan Department of Environmental Quality, Waste Management Division, February 4, 1999.

Note: Since the merger of Waste Management & USA Waste, Waste Management is no longer transporting waste to the Whitefeather site.

Arenac County Population Trends

1990 Census	1996 Estimate	1997 Estimate	% Change 1990 - 1997	Average Change Per Year
14,906	16,292	16,411	10.1%	1.44%

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

Arenac County
Population and Solid Waste Generation Projections

	1998	2003	2008
County Population	16,647	17,846	19,131
Annual Solid Waste Generation	22,594 cubic yards	24,221 cubic yards	25,965 cubic yards

DATA BASE

LAND DEVELOPMENT

The following describes current and projected land development patterns, as related to the Selected Solid Waste Management System, for the next five and ten year periods.

Arenac County is a rural, forested area comprising a portion of the Lake Huron and Saginaw Bay shoreline. The county is part of Michigan's northern recreational area, and includes seasonal home and resort development along the shoreline areas. Approximately one-half of the county's land area consists of forests and wetlands. State Forest lands, the Rifle and Au Gres Rivers, and Lake Huron contribute to the recreational and tourism economy of the area.

I-75 traverses the western portion of the county diagonally, and US-23 provides north-south access along the eastern side of the county and the Lake Huron shoreline. M-65 provides north-south access in the middle of the county. M-61 crosses the county from Bay County on the west to the City of Standish where it terminates at US-23.

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

➤ Woodlands	44%
➤ Agriculture & Open Land	47%
➤ Water Bodies & Wetlands	5%
➤ Urban areas	4%

As previously described, the county population centers are the Standish City/Standish Township/Lincoln Township area, the Au Gres City/Au Gres Township area, and the Sterling Village/Deep River Township area. Together, these communities make up over half of the total county population. These areas also represent the centers for manufacturing, retail trade, and services within the county. Consequently, these communities are also the county's centers of solid waste generation. These areas are expected to remain the centers of both population and solid waste generation for the five-year and ten-year planning periods.

DATA BASE

SOLID WASTE MANAGEMENT ALTERNATIVES (attach additional pages as necessary)

The following briefly describes all solid waste management systems considered by the County and how each alternative will meet the needs of the County. The manner of evaluation and ranking of each alternative is also described. Details regarding the Selected Alternatives are located in the following section. Details regarding each non-selected alternative are located in Appendix B.

The following alternative systems were discussed and evaluated by the County Solid Waste Management Planning Committee (SWMPC):

Alternative A: Retain the Current Management System

Alternative A represents the "status quo" alternative and is always an option. This assumes the continuation of the current management system (i.e., continued use of the out-of-county landfills) without any major changes. Recycling and composting would be continued as they are currently practiced, without any major expansion efforts.

Advantages:

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

Disadvantages:

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

Alternative B: Existing Landfills with Enhanced Recycling & Composting.

Under this option, use of the present landfills outside the county for disposal would be continued. However, attention would focus on the expansion of recycling and composting opportunities within the county.

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

Advantages:

- Increased levels of materials recovery (recycling & composting)
- Greater public involvement & awareness
- Conservation of landfill space

- Low capital costs —minimal facility requirements

Disadvantages:

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

Alternative C: Regional Solid Waste Management System.

This alternative calls for the creation of a regional solid waste management system in cooperation with several surrounding counties. From an institutional standpoint, this option calls for the creation of a formal solid waste management authority or similar entity.

Under this option, the use of the existing, privately-owned landfills within this group of counties would continue. Due to current disposal capacity, this alternative does not call for the development of a new regional landfill. However, the creation of an authority would give the counties greater ability to control the solid waste stream and to direct it to certain facilities, if necessary.

Advantages:

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

Disadvantages:

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

Alternative D: Countywide Solid Waste Authority

A fourth alternative would involve the formation of a countywide solid waste management authority or similar body. Such an authority might assume responsibility for contracting with the private sector for solid waste collection services on behalf of all the municipalities. To expand the concept, an authority could also take on the responsibility for actually providing solid waste collection and other services, such as collection and marketing of recyclable materials on a countywide basis.

Other components of this alternative would be similar to Alternative B, with an emphasis on enhanced materials recovery activities.

Advantages:

- May be able to obtain better price for services through competitive bidding
- May achieve expanded recycling on countywide basis

- Greater coordination & cooperation on solid waste activities

Disadvantages:

- Technical & financial resources required to establish & operate an authority.
- High capital & operating costs if authority goes into the solid waste business.
- May be opposition to perceived competition with the private sector.

Evaluation of Alternative Solid Waste Management Plans

The alternatives were evaluated according to the following factors, as specified in Act 451:

Technical feasibility. Can the alternative be implemented using available technology, or will the needed technology become available in the near future?

Economic feasibility. How much will it cost to implement the alternative? Is the cost greater than the financial capabilities of public and private entities? How will facility development, operation, and maintenance costs be provided?

Access to Land and Transportation Routes. Does the alternative require the acquisition of land? Would facilities be efficiently located? Will the existing transportation system be adequate, or will road improvements be required?

Energy Consumption/Production. Is the alternative energy-efficient for transportation and operation requirements? Would energy be produced in conjunction with any processing or disposal operations? Would any revenue be generated by energy production?

Environmental Impacts. What environmental impacts would result from implementation of the alternative? Would implementation create long-term impacts associated with operation and maintenance of solid waste facilities?

Public Health Effects. Would the alternative create, continue, or mitigate public health hazards associated with improper handling or disposal of solid waste?

Public Acceptability. Is the alternative likely to be accepted by county residents? Will it be politically acceptable to local governments? Will the alternative comply with all applicable laws, especially Act 451?

Evaluation Method

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

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

results may be found in the appendix

THE SELECTED SOLID WASTE MANAGEMENT SYSTEM

The Selected Solid Waste Management System (Selected System) is a comprehensive approach to managing the County's solid waste and recoverable materials. The Selected System addresses the generation, transfer and disposal of the County's solid waste. It aims to reduce the amount of solid waste sent for final disposal by volume reduction techniques and by various resource conservation and resource recovery programs. It also addresses collection processes and transportation needs that provide the most cost effective, efficient service. Proposed disposal areas locations and capacity to accept solid waste are identified as well as program management, funding, and enforcement roles for local agencies. Detailed information on recycling programs, evaluation, and coordination of the Selected System is included in Appendix B. Following is an overall description of the Selected System:

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

1. **Collection and Transportation of Solid Waste.** The existing collection and transportation system will remain in place. Solid waste collection services will continue to be provided to all county residents, businesses, and industries. These services will continue to mainly be provided by private enterprise through a free market system that utilizes both municipal contracts and individual arrangements with solid waste haulers. However, it is not this plan's intent to preclude involvement by municipalities from providing solid waste collection services to citizens within their respective jurisdictions. The plan also encourages local units of government to continue to arrange for solid waste services through municipal contracts, although such arrangements are certainly not mandated.
2. **Disposal of Solid Waste.** Licensed Type II landfills in Clare, Bay, and Crawford Counties will continue to meet Arenac County's solid waste disposal needs for the planning period.
3. **Recycling.** Under the selected alternative, all local governments are encouraged to provide recycling opportunities for their residents, either through arrangements for drop-off sites or the provision of curbside collection for recyclables. Presently, no local governments provide curbside recycling for their residents through municipal contracts with the private waste industry or other entities. However, curbside recycling services are available on an individual (house by house) basis. This type of curbside arrangement presently exists in

SELECTED SYSTEM

Sims and Whitney Townships. Recycling services are expected to continue to be mainly provided by private enterprise. However, this does not preclude other entities -- such as environmental organizations, private non-profit groups, and others -- from becoming involved in recycling activities. The plan encourages the involvement of such groups in materials recovery efforts.

4. Composting. Collection of yard wastes from residents for composting will continue to be offered by the private sector. Currently, no communities have curbside collection of yard wastes on a community-wide basis. However, the private sector offers curbside service on an individual basis. "Backyard" composting by residents will also continue to be encouraged. The City of Au Gres, Whitney Township, and the private sector operate composting drop-off sites, and the plan encourages the continuation of these programs. Municipalities are encouraged to provide composting opportunities for their residents as needs dictate, either through curbside collection of yard wastes or through local drop-off sites. Again, it is expected that composting services will continue to be furnished by the private sector. The plan, however, does not intend to limit the ability of any local government unit to establish a composting site and program.

5. Separation of Household Hazardous Wastes. There is presently no formal hazardous waste collection program in place. The high costs associated with such programs generally preclude the County from directly providing this type of service. However, the County should work in partnership with the private solid waste industry to explore ways to provide opportunities for separation and collection of household hazardous wastes from residents. The Northern Oaks Landfill in Clare County conducts an annual Household Hazardous Waste Collection Day on a voluntary basis. Because Arenac County is part of the authorized service area for the Northern Oaks facility, county residents will be eligible to participate in this program.

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

7. Public Information and Education. Educational efforts should be conducted under the selected system, such as the programs that are available through MSU Extension. The private solid waste industry also conducts informational programs for local schools and others. The County should investigate ways to coordinate and enhance these efforts.

SELECTED SYSTEM

IMPORT AUTHORIZATION

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

Table 1-A

CURRENT IMPORT VOLUME AUTHORIZATION OF SOLID WASTE

IMPORTING COUNTY	EXPORTING COUNTY	FACILITY NAME ¹	AUTHORIZED QUANTITY/DAILY	AUTHORIZED QUANTITY/ANNUAL	AUTHORIZED CONDITIONS ²
Arenac	None	None	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

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

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

SELECTED SYSTEM

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

Table 1-B

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

IMPORTING COUNTY	EXPORTING COUNTY	FACILITY NAME ¹	AUTHORIZED QUANTITY/ DAILY	AUTHORIZED QUANTITY/ ANNUAL	AUTHORIZED CONDITIONS ²
Arenac	None	None Planned	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

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

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

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

SELECTED SYSTEM

EXPORT AUTHORIZATION

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

Table 2-A

CURRENT EXPORT VOLUME AUTHORIZATION OF SOLID WASTE

EXPORTING COUNTY	IMPORTING COUNTY	FACILITY NAME ¹	AUTHORIZED QUANTITY/DAILY	AUTHORIZED QUANTITY/ANNUAL	AUTHORIZED CONDITIONS ²
Arenac	Clare		_____	_____	P*
Arenac	Bay		_____	_____	P
Arenac	Crawford		_____	_____	P
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

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

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

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

SELECTED SYSTEM

If a new solid waste disposal area is constructed and operates in the future in another County, then disposal of solid waste generated by the EXPORTING COUNTY is authorized up to the AUTHORIZED QUANTITY according to the AUTHORIZED CONDITIONS in Table 2-B if authorized for import in the approved Solid Waste Management Plan of the receiving County.

Table 2-B

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

EXPORTING COUNTY	IMPORTING COUNTY	FACILITY NAME ¹	AUTHORIZED QUANTITY/ DAILY	AUTHORIZED QUANTITY/ ANNUAL	AUTHORIZED CONDITIONS ²
Arenac	None identified	None planned	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

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

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

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

SELECTED SYSTEM

SELECTED SYSTEM

SOLID WASTE DISPOSAL AREAS

The following identifies the names of existing disposal areas which will be utilized to provide the required capacity and management needs for the solid waste generated within the County for the next five years and, if possible, the next ten years. Pages III-7 through III-9 contain descriptions of the solid waste disposal facilities which are located within the County and the disposal facilities located outside of the County which will be utilized by the County for the planning period. Additional facilities within the County with applicable permits and licenses may be utilized as they are sited by this Plan, or amended into this Plan, and become available for disposal. If this Plan update is amended to identify additional facilities in other counties outside the County, those facilities may only be used if such import is authorized in the receiving County's Plan. Facilities outside of Michigan may also be used if legally available for such use.

Type II Landfill:

Type A Transfer Facility:

Northern Oaks (Clare County)

None

Whitefeather (Bay County)

Waters (Crawford County)

Type B Transfer Facility:

Sims Township
Whitney Township

Type III Landfill:

None

Processing Plant:

None

Incinerator:

None

Waste Piles:

None

Waste-to-Energy Incinerator:

None

Other:

Additional facilities are listed on an attached page. Letters from or agreements with the listed disposal areas owners/operators stating their facility capacity and willingness to accept the County's solid waste are in the AttachmentsSection.

SELECTED SYSTEM

FACILITY DESCRIPTIONS

Facility Type: Type II Landfill
Facility Name: Northern Oaks Recycling & Disposal Facility
County: Clare Location: Town:19N_Range:4W_Section(s):32

Map identifying location included in Attachment Section: [X] Yes [] No

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

[] Public [X] Private Owner: Waste Management

Operating Status (check)

- [X] open
[] closed
[X] licensed
[] unlicensed
[] construction permit
[] open, but closure
[] pending

Waste Types Received (check all that apply)

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

* Explanation of special wastes, including a specific list and/or conditions:
WWTP filter cake, sludge

Site Size:

Total area of facility property: 320 acres
Total area sited for use: 76 acres
Total area permitted: 76 acres
Operating: 19 acres
Not excavated: 57 acres

Current capacity: 8,755,100 [] tons or [X] yds^3
Estimated lifetime: 43 years
Estimated days open per year: 260 days
Estimated yearly disposal volume: 409,000 [] tons or [X] yds^3

(if applicable)

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

SELECTED SYSTEM

FACILITY DESCRIPTIONS

Facility Type: Type II Landfill

Facility Name: Whitefeather Development Company

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

Map identifying location included in Attachment Section: Yes No

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

Public Private Owner: Republic Services

Operating Status (check)

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

Waste Types Received (check all that apply)

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

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

Asbestos

Site Size:

Total area of facility property: 752 acres
 Total area sited for use: 106 acres
 Total area permitted: 56.5 acres
 Operating: 24.5 acres
 Not excavated: 32.0 acres

Current capacity: 4,175,153 tons or yds³
 Estimated lifetime: 18.8 years
 Estimated days open per year: 260 days
 Estimated yearly disposal volume: 380,000 tons or yds³

(if applicable)

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

SELECTED SYSTEM

FACILITY DESCRIPTIONS

Facility Type: Type II Landfill
Facility Name: Waters Landfill

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

Map identifying location included in Attachment Section: Yes No

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

Public Private Owner: Waste Management

Operating Status (check)

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

Waste Types Received (check all that apply)

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

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

Site Size:

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

(if applicable)

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

SELECTED SYSTEM

SOLID WASTE COLLECTION SERVICES AND TRANSPORTATION:

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

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

SELECTED SYSTEM

RESOURCE CONSERVATION EFFORTS:

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

Effort Description	Est. Diversion Tons/Yr		
	Current	5th yr	10th yr
Waste reduction education efforts aimed at residents, businesses, & industries	0	3%	6%

SELECTED SYSTEM

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

SELECTED SYSTEM

WASTE REDUCTION, RECYCLING, & COMPOSTING PROGRAMS:

Volume Reduction Techniques

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

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

SELECTED SYSTEM

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

SELECTED SYSTEM

Overview of Resource Recovery Programs:

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

- Recycling 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:

Refer to the discussion on page III-15

SELECTED SYSTEM

- Composting programs within the County are feasible. Details of existing and planned programs are included on the following pages.
- Composting programs for the County have been evaluated and it has been determined that it is not feasible to conduct any programs because of the following:

Refer to the discussion on page III-15

- Programs for source separation of potentially hazardous materials are feasible and details are included on the following pages.
- Separation of potentially hazardous materials from the County's waste stream has been evaluated and it has been determined that it is not feasible to conduct any separation programs because of the following:

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

SELECTED SYSTEM

RECYCLING AND COMPOSTING

The following is a brief analysis of the recycling and composting programs selected for the County in this Plan. Additional information on operation of recycling and composting programs is included in Appendix A. The analysis covers various factors within the County and the impacts of these factors on recycling and composting. Following the written analysis the tables on pages III-16, 17, & 18 list the existing recycling, composting, and source separation of hazardous materials programs that are currently active in the County and which will be continued as part of this Plan. The second group of three tables on pages III-19, 20, & 21 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.

There is presently no formal, countywide recycling program in Arenac County. Recycling collection services are available to all municipalities through the private sector. Recycling drop-off sites are established in Moffatt, Sims and Whitney Townships, and in the City of AuGres.

This is also a privately owned and operated recycling organization known as Clean Futures Recycling. This company operates a facility located on Turner Road about a mile west of the Singing Bridge on US-23. Clean Futures also furnishes curbside collection of recyclables and yard waste on an individual basis. A private firm that accepts and recycles scrap tires is also located in the County.

Composting in Arenac County largely occurs as home composting due to the rural nature of the area. Composting drop-off sites are available to residents in Sims and Whitney Townships, and in the City of AuGres. Some collection of brush and leaves takes place in the cities and villages within the County through municipal Departments of Public Works. However, no formal composting programs are in place in the incorporated communities.

SELECTED SYSTEM

TABLE III-1

RECYCLING:

Program Name	Service Area ¹	Public or Private	Collection Point ³	Collection Frequency ⁴	Materials Collected ⁵	Program Development	Management Operation	Responsibilities Evaluation ²
Clean Futures Recycling	Arenac County	Private	d	w	ABCDEF	5	5	5
Moffatt Twp. Recycling	Moffatt Twp	Public	d	3 days/wk	ABCDEG	Twp	5	Twp
Sims Twp. Recycling	Sims Twp.	Public	d	3 days/wk	ABCDEE	Twp	5	Twp
Whitney Twp. Recycling	Whitney Twp.	Public	d	3 days/wk	ABCDEF	Twp	5	Twp
AuGres Recycling	AuGres City	Public	d	b, Sp — Fa	ABCDEF	City	5	City
AuGres Twp Recycling	AuGres Twp	Public	d	b, Sp — Fa	ABCDEF	Twp	5	Twp

¹ Identified by where the program will be offered. If throughout the planning area, then listed by planning area; if only in specific counties, then listed by county; if only in

specific municipalities, then listed by its name and respective county.

² Identified by 1 = Designated Planning Agency; 2 = County Board of Commissioners; 3 = Department of Public Works; 4 = Environmental Group (Identified on

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

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

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

⁵ Identified by the materials collected by listing of the letter located by that material type. A = Plastics; B = Newspaper; C = Corrugated Containers; D = Other Paper;

E = Glass; F = Metals; P = Pallets; J = Construction/Demolition; K = Tires; L1, L2 etc. = as identified on page 28.

SELECTED SYSTEM

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

SELECTED SYSTEM

TABLE III-2

COMPOSTING

Program Name	Service Area ¹	Public or Private	Collection Point ³	Collection Frequency ⁴	Materials Collected ⁵	Program Management Responsibilities ²		
						Development	Operation	Evaluation
Sims/Whitney Composting site	Sims & Whitney Twps. <u>Twp</u>	Public	d	d	G L	<u>Twp</u>	<u>Twp</u>	
AuGres Composting site	AuGres City	Public	d	2	G L W	City	<u>City</u>	City
Clean Futures Recycling	Arenac County	Private	d	w	G L	5	5	5

¹ Identified by where the program will be offered. If throughout the planning area, then listed by planning area; if only in specific counties, then listed by county; if only in

specific municipalities, then listed by its name and respective county.

² Identified by 1 = Designated Planning Agency; 2 = County Board of Commissioners; 3 = Department of Public Works; 4 = Environmental Group (Identified on

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

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

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

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

TABLE III-3

SOURCE SEPARATION OF POTENTIALLY HAZARDOUS MATERIALS:

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

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

¹ Identified by where the program will be offered. If throughout the planning area, then listed by planning area; if only in specific counties, then listed by county; if only in

specific municipalities, then listed by its name and respective county.

² Identified by 1 = Designated Planning Agency; 2 = County Board of Commissioners; 3 = Department of Public Works; 4 = Environmental Group (Identified on

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

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

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

⁵ Identified by the materials collected by listing of the letter located by that material type. AR = Aerosol Cans; A = Automotive Products except Used Oil, Oil Filters &

Antifreeze; AN = Antifreeze; B1 = Lead Acid Batteries; B2 = Household Batteries; C = Cleaners and Polishers; H = Hobby and Art Supplies; OF = Used Oil

Filters; P = Paints and Solvents; PS = Pesticides and Herbicides; PH = Personal and Health Care Products; U = Used Oil; OT = Other Materials and identified.

SELECTED SYSTEM

TABLE III-4

PROPOSED RECYCLING

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

¹ Identified by where the program will be offered. If throughout the planning area, then listed by planning area; if only in specific counties, then listed by county; if only in

specific municipalities, then listed by its name and respective county.

² Identified by 1 = Designated Planning Agency; 2 = County Board of Commissioners; 3 = Department of Public Works; 4 = Environmental Group (Identified on

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

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

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

⁵ Identified by the materials collected by listing of the letter located by that material type. A = Plastics; B = Newspaper; C = Corrugated Containers; D = Other Paper;

E = Glass; F = Metals; P = Pallets; J = Construction/Demolition; K = Tires; L1, L2 etc. = as identified on page 28.

SELECTED SYSTEM

TABLE III-5

PROPOSED COMPOSTING

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

¹ Identified by where the program will be offered. If throughout the planning area, then listed by planning area; if only in specific counties, then listed by county; if only in

specific municipalities, then listed by its name and respective county.

² Identified by 1 = Designated Planning Agency; 2 = County Board of Commissioners; 3 = Department of Public Works; 4 = Environmental Group (Identified on

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

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

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

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

SELECTED SYSTEM

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

SELECTED SYSTEM

TABLE III-6

PROPOSED SOURCE SEPARATION OF POTENTIALLY HAZARDOUS MATERIALS:

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

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

¹ Identified by where the program will be offered. If throughout the planning area, then listed by planning area; if only in specific counties, then listed by county; if only in

specific municipalities, then listed by its name and respective county.

² Identified by 1 = Designated Planning Agency; 2 = County Board of Commissioners; 3 = Department of Public Works; 4 = Environmental Group (Identified on

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

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

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

⁵ Identified by the materials collected by listing of the letter located by that material type. AR = Aerosol Cans; A = Automotive Products except Used Oil, Oil Filters &

Antifreeze; AN = Antifreeze; B1 = Lead Acid Batteries; B2 = Household Batteries; C = Cleaners and Polishers; H = Hobby and Art Supplies; OF = Used Oil

Filters; P = Paints and Solvents; PS = Pesticides and Herbicides; PH = Personal and Health Care Products; U = Used Oil; OT = Other Materials and identified.

SELECTED SYSTEM

SELECTED SYSTEM

IDENTIFICATION OF RESOURCE RECOVERY MANAGEMENT ENTITIES:

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

Environmental Groups:

None identified with management responsibilities.

Other:

The County Solid Waste Management Advisory Board will be responsible for educational & promotional activities for resource recovery (recycling & composting) programs. The private solid waste management industry and the municipalities within the county for furnishing recycling & composting options to county residents, businesses, and industries.

SELECTED SYSTEM

PROJECTED DIVERSION RATES:

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

Collected Material: Annual Tons Diverted:	Projected Annual Tons Diverted:			Collected Material:	Projected	
	Current Yr	5th Yr	10th Yr		Current	5th
A. TOTAL PLASTICS: AND LEAVES:	_____	_____	_____			G. GRASS
B. NEWSPAPER: WOOD WASTE:	_____	_____	_____			H. TOTAL
C. CORRUGATED CONTAINERS: DEMOLITION:	_____	_____	_____	I. CONSTRUCTION AND		
D. TOTAL OTHER PAPER:	_____	_____	_____	J. FOOD AND FOOD PROCESSING:		
E. TOTAL GLASS:	_____	_____	_____			K. TIRES:
F. OTHER MATERIALS:				L. TOTAL METALS:		
F1. Mixed plastics, paper, metal & glass	181	200	220			
F3 _____	_____	_____	_____			
F2 _____	_____	_____	_____			F4 _____

MARKET AVAILABILITY FOR COLLECTED MATERIALS:

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

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

Existing Management Capabilities

A. Ongoing Planning, Coordination, and Plan Implementation

Countywide solid waste management planning and coordination is an ongoing process. Act 451 requires that the Solid Waste Plan is updated every five years and that plan implementation must be ensured through the assignment of management responsibilities.

The East Central Michigan Planning and Development Regional Commission (ECMPDR) has been assigned the responsibility of overseeing the plan update. ECMPDR, as the designated solid waste management planning agency, has coordinated the plan update process with the Solid Waste Management Planning Committee.

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

B. Collection and Transportation of Solid Waste

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

C. Construction, Operation, and Maintenance of Solid Waste Facilities

With the exception of Type B transfer facilities, the construction and operation of solid waste facilities in compliance with Act 451 is a costly undertaking that cannot typically be accomplished by a single rural municipality. Rural municipalities, such as townships, have the financial capabilities to develop Type B transfer facilities. However, the operation and maintenance of these facilities is most typically performed by the private solid waste industry.

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

D. Financial Capabilities

The municipalities and residents of Arenac County have the capability to finance the collection and transportation of solid waste by entering into contracts with private haulers. Arenac County is the only public agency with the capability to construct and operate a solid waste disposal facility, such as a sanitary landfill. The construction of a disposal facility is a costly undertaking that cannot typically be financed by an individual rural municipality.

SELECTED SYSTEM

E. Regulation and Enforcement

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

Recommended Management System

The updated plan recommends the establishment of a single advisory body at the county level to oversee plan implementation, in coordination with the County Board of Commissioners. This body would address various tasks and make recommendations within the areas specified in the plan. The advisory body will represent the same groups as specified for planning committees in Act 451. However, to distinguish the role of the advisory board from that of the planning committee, the body will be called the Arenac County Solid Waste Management Advisory Board (SWMAB). The Advisory Board should be appointed by the County Board of Commissioners within three months after DEQ approval of this plan update.

The Advisory Board may require staff assistance to carry out its duties, and the county may assign staff for this purpose. Alternatively, the county may contract with the regional solid waste planning agency (the current DPA) or other qualified personnel to assist the SWMAB as needed.

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

SELECTED SYSTEM

SELECTED SYSTEM

EDUCATIONAL AND INFORMATIONAL PROGRAMS:

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

Program Topic ¹	Delivery Medium ²	Targeted Audience ³	Program Provider ⁴
1 2 3 4	f	p	SW Advisory Board, EX
-----	-----	-----	-----
-----	-----	-----	-----
-----	-----	-----	-----
-----	-----	-----	-----
-----	-----	-----	-----
-----	-----	-----	-----

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

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

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

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

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

SELECTED SYSTEM

TIMETABLE FOR SELECTED SYSTEM IMPLEMENTATION

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

TABLE III-7

Management Components	Timeline
Resource Conservation & Waste Reduction	Ongoing
Collection & transportation	Ongoing
Recycling	Ongoing
Composting	Ongoing
Landfilling	Ongoing
Recycling Education	Initiate in 2000; ongoing thereafter.

SELECTED SYSTEM

SITING REVIEW PROCEDURES

AUTHORIZED DISPOSAL AREA TYPES

The following solid waste disposal area types may not be sited by this Plan. Any proposal to construct a facility listed herein shall be deemed inconsistent with this Plan. No disposal facilities may be sited under this plan.

SITING CRITERIA AND PROCESS

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

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

**SELECTED SYSTEM
SOLID WASTE MANAGEMENT COMPONENTS¹**

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

SEE THE ATTACHED PAGES

¹ Components or subcomponents may be added to this table.

SELECTED SYSTEM

IDENTIFICATION OF RESPONSIBLE PARTIES

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

Resource Conservation:

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

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

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

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

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

Resource Recovery Programs:

Composting – Private solid waste industry, municipalities, residents.

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

Energy Production – Not included in plan

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

SELECTED SYSTEM

Collection Processes: Private solid waste industry & municipalities.

Transportation: Private solid waste industry.

Disposal Areas:

Processing Plants – Private industry

Incineration – Private industry

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

Sanitary Landfills – Private solid waste industry.

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

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

Educational and Informational Programs: SWMAB, Recycling Committee, MSU Extension

SELECTED SYSTEM

Documentation of acceptance of responsibilities is contained in Appendix D.

LOCAL ORDINANCES AND REGULATIONS AFFECTING SOLID WASTE DISPOSAL

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

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

2

This Plan

recognizes and incorporates as enforceable the following specific provisions based on existing zoning ordinances:

A Geographic area/Unit of government:

Type of disposal area affected:

Ordinance or other legal basis:

Requirement/restriction:

B Geographic area/Unit of government:

Type of disposal area affected:

Ordinance or other legal basis:

Requirement/restriction:

C. Geographic area/Unit of government:

Type of disposal area affected:

Ordinance or other legal basis:

Requirement/restriction:

D. Geographic area/Unit of government:

Type of disposal area affected:

Ordinance or other legal basis:

Requirement/restriction:

E. Geographic area/Unit of government:

Type of disposal area affected:

Ordinance or other legal basis:

Requirement/restriction:

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

Additional listings are on attached pages.

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

CAPACITY CERTIFICATIONS

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

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

CAPACITY CALCULATIONS

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

<u>Facility</u>	<u>Capacity (cubic yards)</u>
Northern Oaks (Clare County)	8,755,100
Whitefeather (Bay County)	4,175,153
Waters (Crawford County)	5,700,000
TOTAL	18,630,253

Over the next ten years (2000 – 2009), Arenac County is projected to generate a total volume of 250,000 cubic yards of solid waste. This figure is based on current disposal volumes and projected county growth. The figure has not been adjusted for any additional diversion that may occur due to increases in materials recovery volumes. For final disposal volumes, a compaction ratio of 2:1 has been assumed. On this basis, Arenac County will require 125,000 cubic yards of landfill capacity for the next 10 years. This represents less than one percent of the total capacity shown above.

Based on the listed capacity available at the three landfills shown above, Arenac County has access to sufficient disposal capacity for over 140 years.

APPENDIX

ADDITIONAL INFORMATION

REGARDING THE

SELECTED

SYSTEM

Arenac County Solid Waste Management Plan Update

EVALUATION OF RECYCLING

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

An overview of current recycling programs in Arenac County has been presented in the "Overview of Resource Recovery Programs" section in the main body of the plan document on page III-16.

There is presently no formal, countywide recycling program in Arenac County. Recycling collection services are available to all municipalities through the private sector. Recycling drop-off sites are established in Moffatt, Sims and Whitney Townships, and in the City of AuGres.

This is also a privately owned and operated recycling organization known as Clean Futures Recycling. This company operates a facility located on Turner Road about a mile west of the Singing Bridge on US-23. Clean Futures also furnishes curbside collection of recyclable materials and yard waste on an individual basis. A private firm that accepts and recycles scrap tires is also located in the County.

Composting in Arenac County largely occurs as home composting due to the rural nature of the area. Composting drop-off sites are available to residents in Sims and Whitney Townships, and in the City of AuGres. Some collection of brush and leaves takes place in the cities and villages within the County through municipal Departments of Public Works. However, no formal composting programs are in place in the incorporated communities.

Negative factors that affect the current recycling programs are the volatility of the markets for recyclable materials, and the present low market prices. However, these factors are beyond the County's control.

DETAILED FEATURES OF RECYCLING AND COMPOSTING PROGRAMS:

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

A detailed waste stream assessment has never been conducted for Arenac County. The quantities of various materials that are available for recovery have been estimated based on the solid waste components identified for similar rural areas and current solid waste generation estimates for the County. The following estimates are based on total annual solid waste generation of about 7,532 tons.

<u>Material</u> <u>(Tons)</u>	<u>% of Waste Stream</u>	<u>Annual Quantity</u>
Paper (all types)	15%	1,130
Plastics	9%	678
Glass	5%	377
Ferrous metals	7%	527
Aluminum	0.8%	60
Yard waste	4%	301

The following briefly describes the processes used or to be used to select the equipment and locations of the recycling and composting programs included in the Selected System. Difficulties encountered during past selection processes are also summarized along with how those problems were addressed:

Equipment Selection

Existing Programs:

RECYCLING: Equipment is currently selected by private the solid waste industry as its needs dictate. No major problems have been encountered in the selection of this equipment. Clean Futures Recycling has indicated that it needs conveyors, a chipper, and a small loader for its operation. **COMPOSTING:** Current equipment selection is addressed by the private solid waste industry in providing yard waste collection services in various communities.

Municipalities that provide some form of yard waste collection generally utilize normal public works equipment such as portable chippers for brush. No specific problems with equipment selection have been reported and no major new equipment needs have been identified.

Proposed Programs:

No new programs or equipment needs have been identified.

Site Availability & Selection

Existing Programs:

RECYCLING: Programs will continue to operate at their existing sites. No specific site needs have been identified. However, any municipality that wishes to establish a recycling drop-off site for use by residents is encouraged to do so.

COMPOSTING: No specific site needs have been identified. The private solid waste industry that collects yard waste has made adequate arrangements for composting areas, usually adjacent to the existing landfill sites. Municipalities that collect yard waste & brush generally utilize vacant publicly-owned sites for placement of material.

Proposed Programs:

No new programs or siting needs have been identified

Composting Operating Parameters:

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

Not applicable to Arenac County: there are no commercial composting facilities in the County.

Existing Programs:

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

Proposed Programs:

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

COORDINATION EFFORTS:

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

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

1. The municipalities within Arenac County may enter into agreements (i.e., contracts) with other entities, both public and private, for solid waste management services, including the collection and transportation of solid waste, recyclable materials, and yard waste.
2. The Arenac County Board of Commissioners may negotiate written inter-county agreements with specified counties for acceptance of solid waste generated in Arenac County for disposal at landfills located in other counties.
3. This updated plan calls for the creation of a Solid Waste Management Advisory Board (SWMAB) to oversee and generally coordinate the implementation of the plan. As such, the SWMAB will work in cooperation with County government, local government units, the private solid waste industry, businesses, industries, institutions, and the general public to facilitate the various actions required to carry out the updated Solid Waste Management Plan.

COSTS & FUNDING:

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

System Component¹	Estimated Costs	Potential Funding Sources
Resource Conservation Efforts	Unknown	Voluntary efforts by private enterprise: businesses, industries & institutions
Resource Recovery Programs	Unknown	Private industry, municipalities, customer fees
Volume Reduction Techniques	Unknown	Private enterprise
Collection Processes	Unknown	Private enterprise & customer fees
Transportation	Unknown	Private enterprise & customer fees
Disposal Areas	Unknown	Private enterprise & customer fees
Future Disposal Area Uses	Unknown	Private enterprise & host counties
Management Arrangements	Unknown – minor cost	Arenac County Board of Commissioners
Educational & Informational Programs	\$1,000/year	Arenac County Board of Commissioners

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

EVALUATION SUMMARY OF THE SELECTED SYSTEM:

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

The selected system is technically and economically feasible. All of the major components, including collection, transportation, disposal, recycling, and composting are proven technologies that are currently in place and have been accepted by the public. The selected plan is essentially a continuation of the current management system.

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

PUBLIC HEALTH

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

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

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

ECONOMICS

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

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

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

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

ENVIRONMENTAL CONDITIONS

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

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

SITING CONSIDERATIONS

The selected system will have minimal impacts on siting because no new facilities are proposed. Landfills are extremely difficult to site because of public opposition and the need to identify an environmentally sound location that will meet all Act 451 requirements. Arenac County has access to sufficient capacity for the next 10 years and beyond. There is no need to site a new landfill or any other disposal facilities.

EXISTING DISPOSAL AREAS

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

ENERGY CONSUMPTION AND PRODUCTION

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

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

Sanitary landfills represent a loss of energy resources due to the burial of materials that could be otherwise recovered and utilized. However, methane gas can be recovered from landfills which is then used as an energy source. No methane recovery currently takes place at the landfills identified in this plan.

ADVANTAGES AND DISADVANTAGES OF THE SELECTED SYSTEM:

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

ADVANTAGES:

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

DISADVANTAGES:

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

Appendix B

NON-SELECTED SYSTEMS

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

ALTERNATIVE B: ENHANCED MATERIALS RECOVERY

Under this option, use of the present landfill as the primary means of disposal would continue. However, attention would focus on the expansion of recycling and composting opportunities within the County.

ALTERNATIVE C: REGIONAL SOLID WASTE MANAGEMENT SYSTEM

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

ALTERNATIVE D: COUNTYWIDE SOLID WASTE AUTHORITY

This alternative would involve the formation of a countywide solid waste management authority or similar entity.

Alternative B

SYSTEM COMPONENTS:

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

RESOURCE CONSERVATION EFFORTS:

Voluntary measures by consumers, businesses, and industries.

VOLUME REDUCTION TECHNIQUES:

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

PUBLIC PARTICIPATION

RESOURCE RECOVERY PROGRAMS:

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

COLLECTION PROCESSES:

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

TRANSPORTATION:

Transportation mainly by private solid waste industry.

DISPOSAL AREAS:

Landfills located outside of Arenac County.

INSTITUTIONAL ARRANGEMENTS:

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

EDUCATIONAL AND INFORMATIONAL PROGRAMS:

Countywide education programs conducted by County, MSU Extension, or other entity.

CAPITAL, OPERATIONAL, AND MAINTENANCE COSTS:

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

EVALUATION SUMMARY OF NON-SELECTED SYSTEM:

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

The technical and economic feasibility of implementing this alternative (enhanced materials

PUBLIC PARTICIPATION

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

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

PUBLIC PARTICIPATION

ADVANTAGES AND DISADVANTAGES OF THE NON-SELECTED SYSTEM:

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

Alternative B

ADVANTAGES:

1. Increased levels of materials recovery
2. Greater conservation of landfill space through diversion.
3. Low capital costs due to minimal facility requirements

DISADVANTAGES:

1. Higher operating costs for expanded collection & transportation of recyclable materials
2. Municipalities would need to accept expanded responsibilities for contracting for solid waste services.
3. Municipalities & residents would need to accept higher costs for expanded recycling collection, either curbside or through establishment of additional drop-off sites.

PUBLIC PARTICIPATION
Alternatives C & D

SYSTEM COMPONENTS:

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

RESOURCE CONSERVATION EFFORTS:

Voluntary measures by consumers, businesses, and industries.

VOLUME REDUCTION TECHNIQUES:

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

RESOURCE RECOVERY PROGRAMS:

1. Potential development of regional or Countywide MRF and composting facility.
2. Regional or Countywide marketing of recyclable materials and compost

COLLECTION PROCESSES:

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

TRANSPORTATION:

Transportation mainly by private solid waste industry.

DISPOSAL AREAS:

Landfills located in other counties

INSTITUTIONAL ARRANGEMENTS:

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

PUBLIC PARTICIPATION

EDUCATIONAL AND INFORMATIONAL PROGRAMS:

Programs carried out by multi-county or Countywide authority

CAPITAL, OPERATIONAL, AND MAINTENANCE COSTS:

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

EVALUATION SUMMARY OF NON-SELECTED SYSTEM:

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

ALTERNATIVES C & D

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

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

PUBLIC PARTICIPATION

4 Energy would also be consumed under this alternative to collect and transport solid waste, recyclable materials, and yard waste. However, there would presumably be greater energy savings through a greater level of materials recovery. Depending on the locations of materials recovery and processing facilities, there may be greater fuel consumption to transport materials than under the selected system.

Alternatives C & D were not selected for the following major reasons:

1. A major problem associated with the alternative is the complexity of creating a regional or countywide solid waste authority. In particular, there does not presently appear to be any strong support for this concept. Local governments are likely to perceive the creation of a solid waste authority as a loss of home rule authority. Also, the formation of an authority would likely be perceived as creating another level of government ("bureaucracy") and would meet with public opposition. The private solid waste industry would probably also oppose the formation of an authority as excessively restrictive or unfairly competitive. Without strong support by elected officials, the public, and private industry, a proposed solid waste authority would not succeed.

2. There are simply too many technical, economic, and political uncertainties to make a regional system feasible at this time. However, the concept does hold potential, and it should be re-evaluated in the future as the solid waste management systems in the region continue to evolve.

ADVANTAGES AND DISADVANTAGES OF THE NON-SELECTED SYSTEM:

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

ADVANTAGES:

1. Regional collection & marketing of recyclable materials
2. Regional purchasing of recycled products.
3. Potential cost savings through regional or countywide contracts for solid waste services.

DISADVANTAGES:

1. Political barriers to establishing multi-county or countywide authority.
2. Higher costs for regional or countywide processing facilities.
3. Opposition to siting any new solid waste facilities.

PUBLIC PARTICIPATION

PUBLIC PARTICIPATION AND APPROVAL

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

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

1. Time for public comment was reserved on the agenda for each meeting of the Planning Committee.
2. Notices of each Planning Committee meeting were distributed to all municipalities in the County in advance of each meeting.
3. A general notice was published as required that announced the general availability of the draft plan when it was released for public review for a three-month period.
4. The draft plan was distributed to all municipalities in the County and adjacent counties for review.
5. A general notice announcing the public hearing on the draft plan was published at least 30 days prior to the hearing.
6. A public hearing was held on the draft plan to provide all interested persons an opportunity to voice questions or concerns regarding the updated plan.

PUBLIC PARTICIPATION

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

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

December 11, 1998
January 15, 1999
February 19, 1999
March 19, 1999
May 21, 1999
June 18, 1999
August 10, 1999 (Public Hearing)
November 5, 1999

PLAN APPROVALS:

The updated County Solid Waste Management Plan was approved by the County Solid Waste Management Planning Committee on November 5, 1999.

The updated Solid Waste Management Plan was approved by the Arenac County Board of Commissioners on November 23, 1999.

The updated Solid Waste Management Plan was submitted to the municipalities within Arenac County in January, 2000.

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

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

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

PUBLIC PARTICIPATION

PLANNING COMMITTEE APPOINTMENT PROCEDURE:

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

PUBLIC PARTICIPATION

PLANNING COMMITTEE

Committee member names and the company, group, or governmental entity represented from throughout the County are listed below

Four representatives of the solid waste management industry:

1. Merle Harmon, Waste Management
2. Wayne Follenius, Waste Management
3. Richard Leszcz, Waste Management
4. Teresa Ziegler, Waste Management

One representative from an industrial waste generator:

1. Bob Worthington, Globe Fire & Sprinkler Corporation, Standish

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

1. Joan Ribnicky, Moffatt Township Recycling Coordinator
2. Marie Piotrowski, Clean Futures Recycling

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

1. Alvin Humpert, County Board of Commissioners

One representative from township government:

1. Gerald Willett, AuGres Township

One representative from city government:

1. Pat Killingbeck, City Manager, City of AuGres (City Council designee)

One representative from the regional solid waste planning agency:

1. Sharon Dubay, East Central Michigan Planning & Development Regional Commissioner and County Board of Commissioners

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

1. Horatio Davis, AuGres Township resident
2. Mike Pavelka, Lincoln Township resident
3. Donald Prueter, Sims Township resident

Notice of Public Meeting

**Arenac County Solid Waste Management
Planning Committee**

Date: Friday, May 21, 1999

Time: 10:00 a.m.

Place:

Arenac County Building
County Board of Commissioners Meeting Room
120 North Grove Street
Standish, Michigan 48658

Agenda

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

SOLID WASTE COMMITTEE MEETING
MINUTES 5-21-99

Present

Al Humpert
Don Prueter
Sharon DuBay
Doug Bell
Marie Piotrowski
Joan Ribnicky
Pat Killingbeck
Teresa Ziegler
Rich Leszez

Absent

Meryl Harmon
John Koin
Wayne Follenius
Heratio Davis
Gerald Willett
Mike Pavelka

Guests

Ken Kernstock

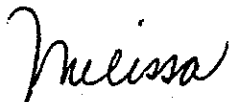
This meeting was called to order at 10 a.m.

1. Moved by Al Humpert, supported by Teresa Ziegler and carried to approve the minutes from the March 19, 1999 meeting.
2. Ken Kernstock brought a lot of information in regarding a recycling program that the County had a few years ago. The Board of Commissioners rejected the grant to continue the program and he thought that the information might be useful to the Solid Waste Committee.
3. The Committee went through the draft and listed several changes and additions that needed to made. Doug will get these ready for the next meeting.
4. The Committee decided that they would meet at Northern Oaks Facility in Harrison for the next meeting on June 18, 1999. There the Committee will set the date for the Public Hearing and go over any other business that needs to be discussed.

For all who are attending the meeting on June 18, we are meeting at the Courthouse at 10:00 to car pool to Harrison (with the exception of those who live in or near Harrison). Please contact Melissa if you can not make it or your going to be late.

ADJOURNED 10:50

Respectfully Submitted,



Melissa Wolfgang
Secretary

cc: file

Notice of Public Meeting

**Arenac County Solid Waste Management
Planning Committee**

Date: Friday, June 18, 1999

Time: 11:00 a.m

Place:

Northern Oaks Recycling and Disposal Facility
513 North County Farm Road
Harrison, Michigan 48625

Agenda

1. CALL TO ORDER
 2. APPROVAL OF MINUTES
 3. APPROVAL OF AGENDA
 4. COMMUNICATIONS
 5. COMMITTEE REVIEW OF DRAFT SOLID WASTE PLAN UPDATE
 6. CONSIDER RELEASE OF DRAFT PLAN FOR PUBLIC REVIEW
 - A. Establish 3-month review period
 - B. Schedule public hearing
 - C. Approve release & distribution of draft plan by DPA
 7. PUBLIC COMMENT
 8. SET DATE OF NEXT MEETING (If necessary)
 9. ADJOURN TO TOUR OF NORTHERN OAKS FACILITY
- **NOTE:** This meeting will be held at the Northern Oaks Recycling & Disposal Facility in Harrison. The meeting will start at 11 a.m. to allow for travel time by committee members who are carpooling from the Arenac County Building in Standish.

ARENAC COUNTY SOLID WASTE MANAGEMENT

PLANNING COMMITTEE MEETING MINUTES

Friday, June 18, 1999 11:00 a.m.

Present

Sharon DuBay
Al Humpert
Rich Leszez
Teresa Ziegler
Marie Piotrowski
Gerald Willet
Doug Bell

Absent

Meryl Harmon
John Koin
Wayne Follenius
Heratio Davis
Mike Pavelka
Pat Killingbeck
Don Prueter
Joan Ribnicky

This meeting was called to order at 11:20 a.m.

1. Moved by Rich Leszez, seconded by Marie Piotrowski and carried to approve the minutes from the May 21, 1999 meeting minutes.
2. Moved by Teresa Ziegler, seconded by Marie Piotrowski and carried to approve the agenda as presented.
3. Communications: Surrounding counties such as Gladwin County has received back favorable review comments from DEQ.
4. Review of Draft: Committee pointed out a few more additions and corrections that need to be made to the draft plan. Doug said that he could have the changes made as soon as possible.
5. Release of Draft plan for public review:
 - A. Moved by Al Humpert, seconded by Marie Piotrowski and carried to have the 3 month review period run from 6-30-99 to 9-30-99.
 - B. Moved by Rich Leszez, seconded by Al Humpert and carried to set the Public Hearing date for 8-10-99 at 1:00 p.m. which is also an Arenac County Board of Commissioners regularly scheduled meeting date.
 - C. Moved by Gerald Willett, seconded by Rich Leszez and carried to approve the release and distribution of the draft plan with minor changes.

ARENAC COUNTY SOLID WASTE MANAGEMENT

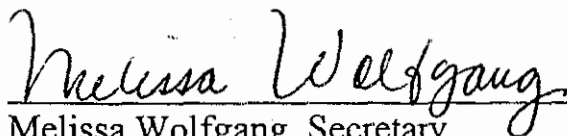
PLANNING COMMITTEE MEETING MINUTES

Friday, June 18, 1999 11:00 a.m.

6. Doug mentioned to the committee that there are no formal public education programs in the County right now. He suggested that they could be offered through the Michigan State Extension office. Rich Leszez offered to do classes for elementary children in 5th and 6th grades to educate the kids on waste reduction, composting, and recycling. Northern Oaks will be listed in the Arenac County Plan as a means of educational support.

7. With all business being completed, Moved by Gerald Willett, seconded by Teresa Ziegler and carried to ADJOURN at 12:00.

Respectfully submitted,



Melissa Wolfgang, Secretary

cc: file

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

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

The proposed Solid Waste Management Plan will be available for public review and comment through the close of business on September 30, 1999. The draft plan is available for inspection at the Arenac County Board of Commissioners Office, Arenac County Building, 120 North Grove Street, Standish, MI 48658 during regular business hours. The plan is also available for inspection at the East Central Michigan Planning and Development Regional Commission, the designated solid waste planning agency for Arenac County, at the address given below. The draft plan is also being sent to each township, village, and city in Arenac County.

Written comments on the draft plan should be sent to the East Central Michigan Planning and Development Regional Commission, 3535 State Street, Saginaw, MI 48602; telephone 517-797-0800; fax 517-797-0896.

Please also note that a public hearing has tentatively been scheduled on August 10, 1999 during the regular County Board of Commissioners meeting to receive written and verbal comments on the draft plan. A separate notice of the public hearing will be published and circulated at a later date.

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

Notice to be published once on June 30, 1999

Memorandum

June 30, 1999

TO: All Townships, Villages, and Cities in Arenac County

FROM: Doug Bell, ECOMPDR, and the
Arenac County Solid Waste Management Planning Committee

RE: Draft Arenac County Solid Waste Management Plan Update

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

The proposed Solid Waste Management Plan is available for public review and comment through the close of business on **September 13, 1999**.

Written comments on the draft plan should be sent to the East Central Michigan Planning and Development Regional Commission, 3535 State Street, Saginaw, MI 48602; telephone 517-797-0800; fax 517-797-0896. Please submit your comments by mail or fax so that they are received no later than **September 13, 1999**.

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

Please also note that a public hearing has been tentatively scheduled for **August 18, 1999** to receive written and verbal comments on the draft plan. A separate notice confirming the time and place of the public hearing will be published and distributed to each municipality at a later date.

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

Enclosure

xc: Solid Waste Management Planning Committee

Notice of Public Hearing
Arenac County Solid Waste Management Plan Update

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

Date: Tuesday, August 10, 1999

Time: 1:00 p.m.

Place: County Board of Commissioners Meeting Room
Arenac County Building
120 North Grove Street
Standish, Michigan 48658

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

The proposed Solid Waste Management Plan Update is available for public review and comment through the close of business on September 30, 1999. The draft plan is available for inspection at the Arenac County Board of Commissioners Office at the Arenac County Building in Standish during regular business hours. The plan is also available for inspection at the East Central Michigan Planning and Development Regional Commission, the designated solid waste planning agency for Arenac County, at the address given below. The draft plan has also been sent to each township, village, and city in Arenac County.

Written comments on the draft plan should be sent by mail or fax to the East Central Michigan Planning and Development Regional Commission, 3535 State Street, Saginaw, MI 48602; telephone 517-797-0800; fax 517-797-0896.

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

Notice of Public Meeting

**Arenac County Solid Waste Management
Planning Committee**

Date: Tuesday, August 10, 1999

Time: 1:00 p m.

Place:

Arenac County Building
County Board of Commissioners Meeting Room
120 North Grove Street
Standish, Michigan 48658

Agenda

1. CALL TO ORDER
2. APPROVAL OF MINUTES
3. APPROVAL OF AGENDA
4. PUBLIC HEARING ON THE DRAFT COUNTY SOLID WASTE MANAGEMENT PLAN UPDATE
 - A. Overview of Solid Waste Plan Update (Doug Bell, ECMPDR)
 - B. Open Public Hearing
 - C. Review written comments received (if any)
 - D. Accept comments from those in attendance
 - E. Close Public Hearing
5. SET DATE OF NEXT MEETING
6. ADJOURNMENT

➤ **Note: This meeting of the Solid Waste Planning Committee will be held during the regular meeting of the Arenac County Board of Commissioners.**

SOLID WASTE COMMITTEE MEETING
MINUTES 8-10-99

Present

Al Humpert
Don Prueter
Sharon DuBay
Doug Bell
Marie Piotrowski
Gerald Willett
Rich Leszez

Absent

Meryl Harmon
John Koin
Wayne Follenius
Heratio Davis
Joan Ribnick
Mike Pavelka
Pat Killingbeck
Teresa Ziegler

This meeting and Public Hearing was called to order at 1:00 p.m. at a regularly scheduled meeting of the Arenac County Board of Commissioners.

1. Moved by Al Humpert, seconded by Marie Piotrowski and carried to approve the minutes from the June 18, 1999 meeting.
2. Moved by Gerald Willett, seconded by Rich Leszez and carried to adopt the agenda as presented.

OPEN PUBLIC HEARING No Public comments were made regarding the Arenac County Solid Waste Plan.

Doug Bell proceeded to inform the Board of the procedures of putting together a solid waste plan for the County.

The County had 4 options for the new plan:

- a. Keep current plan in place;
- b. Keep current plan, enhance efforts to compost and recycle;
- c. Pursue Regional Waste Mgt. merge with other counties;
- d. County wide Solid Waste Authority done in county with municipalities.

The Arenac County Solid Waste Committee decided to keep the current plan (option a.) with the addition of some new disposal sites listed in the plan. Presently the county's waste was being taken to the Whitefeather site in Bay County. The plan now lists the Northern Oaks Facility in Clare County and the Waters site in Crawford County in addition to the Whitefeather facility.

The plan also encourages recycling efforts being made in the county and backyard composting. It encourages the County to get involved in Public Information and Educational programs for the people of this county regarding recycling and composting.

SOLID WASTE COMMITTEE MEETING
MINUTES 8-10-99

Dennis Stawowy questioned whether Arenac County had to have reciprocal agreements with Clare and Crawford counties in order to have our waste disposed in their county? Rich Leszez responded that Arenac County will probably receive a reciprocal agreement from Bay, Clare and Crawford Counties.

Next meeting is scheduled for October 15, 1999 at 10:00 a.m.

ADJOURNED 1:20 p.m. Motion by Rich Leszez, seconded by Don Prueter and carried to adjourn.

Respectfully submitted,



Melissa Wolfgang
Recording Secretary

Notice of Public Meeting

**Arenac County Solid Waste Management
Planning Committee**

Date: Friday, October 15, 1999

Time: 10:00 a.m.

Place:

Arenac County Building
County Board of Commissioners Meeting Room
120 North Grove Street
Standish, Michigan 48658

*CANCELLED
DUE TO
LACK OF QUORUM
No Action taken*

Agenda

1. CALL TO ORDER
2. APPROVAL OF MINUTES
3. APPROVAL OF AGENDA
4. COMMUNICATIONS (If any)
5. REVIEW COMMENTS RECEIVED ON THE DRAFT SOLID WASTE PLAN UPDATE
 - a. DEQ comments (Enclosed)
 - b. Michigan Waste Industry Association comments (Enclosed)
6. CONSIDER APPROVAL OF THE SOLID WASTE PLAN UPDATE WITH CHANGES AS SPECIFIED BY THE COMMITTEE
7. PUBLIC COMMENT
8. SET DATE OF NEXT MEETING (If needed)
9. ADJOURNMENT

Notice of Public Meeting

**Arenac County Solid Waste Management
Planning Committee**

Date: Friday, November 5, 1999

Time: 11:00 a.m.

Place:

Arenac County Building
County Board of Commissioners Meeting Room
120 North Grove Street
Standish, Michigan 48658

Agenda

1. CALL TO ORDER
2. APPROVAL OF MINUTES
3. APPROVAL OF AGENDA
4. COMMUNICATIONS (If any)
5. REVIEW COMMENTS RECEIVED ON THE DRAFT SOLID WASTE PLAN UPDATE
 - a. Proposed responses to comments from DEQ and MWIA (Enclosed)
6. CONSIDER APPROVAL OF THE SOLID WASTE PLAN UPDATE WITH CHANGES AS SPECIFIED BY THE COMMITTEE
7. PUBLIC COMMENT
8. SET DATE OF NEXT MEETING (If needed)
9. ADJOURNMENT

Arenac County Solid Waste Management Planning Committee
Friday, November 5, 1999
Board of Commissioners Meeting Room
Arenac County Courthouse
120 North Grove Street
Standish MI 48658

1. **Call to Order.** The meeting was called to order at 11:00 a.m. Members present: Humpert, Prueter, DuBay, Piotrowski, Koin, Pavelka, Willett, Ribnicki, Leszcz. Others present: Bell.
2. **Approval of Minutes.** Motion by Humpert, support by Piotrowski to approve the August 10, 1999 minutes. Ayes: All. Motion carried.
3. **Approval of Agenda.** Motion by Pavelka, support by Ribnicki to approve the agenda. Ayes: All. Motion carried.
4. **Review Comments on Draft Plan.** Copies of the comments on the draft plan submitted by DEQ and the generic comments from MWIA had previously been mailed to committee members. Doug Bell briefly reviewed the comments and proposed changes in the plan to address the DEQ comments.
5. **Approval of Solid Waste Plan Update.** Motion by Leszcz, support by Prueter to approve the plan update with the changes and corrections noted, and to submit the plan to the County Board for approval. Ayes: All. Opposed: None. Motion Carried.
6. **Other Business.** Chair DuBay reported that the next County Board meeting would be held on November 9th and November 23rd. It was the consensus of those present to submit the revised plan to the County Board by November 23rd.
7. **Adjournment.** Motion by Leszcz, support by Willett to adjourn the meeting. Ayes: All. Opposed: None. Motion carried. The meeting was adjourned at 11:25 a.m.

Respectfully submitted,

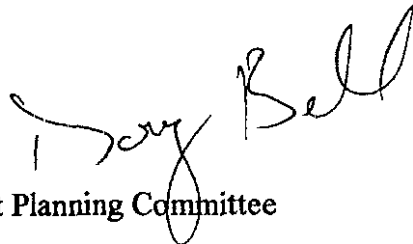
Sharon DuBay, Chair



Douglas A. Bell, Recording Secretary

Memo

November 18, 1999

TO: Arenac County Board of Commissioners 
FROM: Doug Bell, ECOMPDR
Arenac County Solid Waste Management Planning Committee
RE: Arenac County Solid Waste Management Plan Update

A copy of the Arenac County Solid Waste Plan Update is enclosed for your review and approval.

The draft plan was approved by the Solid Waste Planning Committee on November 5, 1999. The committee's approval included several minor changes and corrections in the draft document that were made primarily in response to comments from the Michigan Department of Environmental Quality. These changes have been incorporated in the enclosed copy of the plan.

The Planning Committee recommends that the Board of Commissioners approve the Solid Waste Plan Update. However, if the Board has any objections to the plan, it may refer the plan back to the committee for further study.

Once the County Board approves the plan, it will be submitted to all townships, villages, and cities in Arenac County for approval. Sixty-seven percent of the local units must approve the plan for it to be considered locally approved.

Please contact me at 517-386-6491 or Sue Fortune at 517-797-0800 if you have any questions.

Enclosure

303

Standish, Michigan, November 23, 1999

At a regularly scheduled session of the Board of Commissioners for the County of Arenac held at the Courthouse in the City of Standish on Tuesday, November 23, 1999 at 9:00 o'clock a.m.

Chairperson Stawowy presided and opened the meeting with the Pledge of Allegiance to the Flag.

Five Commissioners being present as follows: DuBay, Zygiel, Sproula, Humpert and Stawowy.

Moved by Commissioner Zygiel, supported by Commissioner DuBay and carried to adopt the Agenda as amended.

Moved by Commissioner Humpert, supported by Commissioner DuBay and carried to approve the minutes of October 26, 1999 as presented by the Clerk.

Moved by Commissioner Humpert, supported by Commissioner Zygiel and carried to approve the minutes of November 9, 1999 as presented by the Clerk.

Communications were read and discussed.

Moved by Commissioner Humpert, supported by Commissioner Zygiel and carried to approve the transfer of funds as requested by Ken Kernstock as follows:

Transfer from Acct. #277-000-001 \$2871.00 into 101-258-705-000 to cover wages for Melissa Prohaska from 1/01/99 through 12/31/99.

Transfer from Acct. #101-257-704 into 101-258-704 the amount of \$725.00 to cover wages for Melissa Prohaska to cover for Pat Burmeister.

Moved by Commissioner Zygiel, supported by Commissioner Sproule and carried to re-appoint Ricky R. Rockwell to the Iosco-Arenac District Library Board.

Moved by Commissioner Humpert, supported by Commissioner DuBay and carried to adopt Budget Adjustment 99-5 as follows:

BUDGET ADJUSTMENT 99-5

INCREASE REVENUES:

101-000-429-000	Delinquent Personal Taxes	2,200.00
101-000-481-000	Building Permits	3,100.00
101-000-541-000	FOC Incentive	9,600.00
101-000-543-000	Marine Safety	1,344.35
101-000-544-000	State Aid Cashflow Assistance	2,900.00
101-000-550-000	Probate Judges Supplement	2,100.00
101-000-601-000	Clerks Costs	5,000.00
101-000-602-000	District Court Costs	20,000.00
101-000-605-000	ACL Screening	5,800.00
101-000-609-000	Probate Court Services	5,300.00
101-000-611-000	Sheriffs Services	1,200.00
101-000-656-000	Dist. Court Fines & Forfeitures	2,600.00
101-000-687-000	Telephone Reimbursement	2,000.00
101-000-688-000	Wages/Fringe Reimbursement	84,000.00
101-000-688-010	Miscellaneous Reimbursement	7,300.00
		<u>154,444.35</u>

DECREASE REVENUES:

101-000-692-000

Ambulance Millage

154,444.35

Bob Klenk appeared to discuss required classes scheduled.

Moved by Commissioner DuBay, supported by Commissioner Humpert and carried to authorize Bob Klenk and Emory Ames attendance at a Damage Assessment class on December 7, 1999 in Lansing.

Moved by Commissioner Humpert, supported by Commissioner DuBay and carried to authorize training for Dispatchers in new drunk driving laws, to be held in Grayling.

Diane Morley appeared to discuss conversion by Forwards to Pacific Pride gas credit card on December 14 and 15, 1999, with billing to come from Forwards.

Moved by Commissioner DuBay, supported by Commissioner Sproule and carried to authorize a contract with Forwards for Pacific Pride car lock fuel cards.

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Jennifer Huebel appeared to discuss computer for District Court Probation Officer.

Moved by Commissioner Zygiel, supported by Commissioner DuBay and carried to authorize purchase of computer for District Court in an amount not to exceed \$1300.00.

Dave Munson appeared to discuss a problem with the Arenac County Sheriff's Department.

Moved by Commissioner Zygiel, supported by Commissioner DuBay and carried to change the Traffic Car Budget (306) to the Universal Hiring Grant and credit \$13,000.00 to this budget, and establish a Revenue account and transfer the balance of the Traffic budget (306) into 304, Road Patrol.

Moved by Commissioner Humpert, supported by Commissioner Zygiel and carried by roll call to adopt the following resolution in opposition to the plan to privatize Mental Health Management. Roll Call: Yeas: DuBay, Humpert, Sproule, Stawowy, Zygiel. Five (5). Nays: None (0).

RESOLUTION OPPOSING DCH PLAN TO PRIVATIZE
MENTAL HEALTH MANAGEMENT

WHEREAS, the Michigan Constitution (Article VIII; Section 8) requires the State to provide care and treatment for the State's vulnerable population; and

WHEREAS, the Michigan Mental Health Code provides for the establishment of a Department of Mental Health in order to fulfill the State's constitutional obligation, and further provides for said department to "shift primary responsibility for the direct delivery of public mental health services from the State to a community mental health services program whenever the community mental health services program has demonstrated a willingness and capacity to provide an adequate and appropriate system of mental health services for the citizens of that service area" (MCL 330.1116); and

WHEREAS, the Mental Health Code furthermore directs the State to financially support community mental health service programs (MCL 330.1212); and

WHEREAS, the Mental Health Code further empowers county boards of commissioners to establish procedures and policies to govern such programming (MCL 330.1204) and to otherwise "provide a comprehensive array of mental health services appropriate to conditions of individuals who are located within its geographic service area" (MCL 330.1206); and

WHEREAS, the Mental Health Code furthermore directs for the establishment of community mental health services boards to be appointed by boards of commissioners, which boards shall be composed of, among other members, primary consumers or family members, with residency requirement (MCL 330.1212-1226); and

WHEREAS, said Mental Health Code furthermore directs for community mental health services programs to, among other matters, provide for recipient rights services, mental health advocacy (MCL 330.1206); and

WHEREAS, the State, through the Michigan Department of Community Mental Health, has published a plan (PLAN) which provides for the State to discontinue funding and reliance upon community mental health services boards in order to achieve financial benefits resulting from "competitively bidding" such management function to the private sector; and

WHEREAS, said Plan for "privatization" is in obvious conflict with existing law and may be characterized as an abdication of the State's obligation to provide management of this governmental function; and

WHEREAS, the Department's Plan is incomplete, containing no provision for avoiding failures

which have occurred elsewhere and furthermore makes no provision for reimbursing counties and their community mental health services agencies for cost incurred in connection with the development of such programs; and

WHEREAS, this Board is persuaded that public governance, rather than privatization, is fundamentally necessary for the sound management of mental health; and

WHEREAS, this Board is persuaded that counties and their full management boards are best equipped to provide such governance by reason of knowledge and experience of what is needed at a community and client based level and

WHEREAS, this Board is furthermore persuaded that the DCH plan is not consistent with providing of appropriate levels of care, choice and treatment to client populations; and

305

WHEREAS, this Board is furthermore persuaded that the State's desire to effect cost savings can and should be accomplished through less drastic means than by the elimination of the existing mental health system;

NOW THEREFORE BE IT RESOLVED that the undersigned Board, by and through its Chairperson, hereby goes on record as opposing the department's plan for privatization of mental health management and for elimination of State reliance on community mental health services for governmental management;

BE IT FURTHER RESOLVED that copies of this resolution be distributed to all State department State and Federal legislative representatives, Michigan Attorney General, and other distributees as may be deemed appropriate be respective Administrator/Controller for County of Director of Community Mental Health Services.

Moved by Commissioner Zygiel, supported by Commissioner DuBay and carried by roll call to adopt the resolution for the first alternative to Mental Health plan. Roll call: Yeas: DuBay, Humpert, Sproule, Stawowy, Zygiel. Five (5). Nays: None (0).

RESOLUTION

WHEREAS, the State of Michigan's Department of Community Health has released a document entitled "Competition for Management of Publicly-Funded Specialty Services" plan which attempts to outline the various options or new directions for Michigan's Public Behavioral Healthcare system; and

WHEREAS, this plan will drastically affect the more than 1.1 million citizens enrolled in the Medicaid program as well as the 315,000 other individuals with severe and persistent mental illnesses, developmental disabilities and substance abuse disorders who currently receive services and supports organized and delivered through forty-nine (49) Community Mental Health Boards and fifteen (15) Coordinating Agencies throughout the State; and

WHEREAS, the Department of Community Health, in conjunction with the Federal Health Care Financing Administration, is preparing to "bid out" through an open and competitive bid process; and that we want to ensure that the consumer and their families' interests will be most important consideration; and

WHEREAS, the Community Mental Health and Substance Abuse Coordinating Agency Boards want the opportunity to compete on a level playing field with other potential bidders in his process which includes maintaining the values of local accountability, preservation of the local safety net for persons with severe and persistent disorders, and reinvestment of savings into local communities should be the cornerstone for the new system; and

WHEREAS, the State's plan identified several different models for competition that can be utilized to achieve these objectives including alternate #2 entitled County Right of "First Opportunity" which would assist in maintaining the county-based public and quasi agencies that currently exist in providing these same services for the past twenty-five (25) years; and

WHEREAS, the Arenac County Behavioral Health Alliance remains dedicated to regional solutions relative to consolidated administrative services and managed care and see no direct conflict between accelerated regional activity and the right of first opportunity philosophies; and

WHEREAS, THE ARENAC County Community Mental Health Boards and Substance Abuse Coordinating Agencies represented through an Alliance strongly encourages that County Boards of Commissioners support this desired alternative.

NOW THEREFORE BE IT RESOLVED that the Arenac County Board of Commissioners formally adopt this resolution in support of the County's right of first opportunity alternative and encourages other counties throughout this great State of Michigan to do the same and

BE IT FURTHER RESOLVED that copies of this resolution be sent to MAC to be placed on the next Association General Membership meeting for action, the Governor's Office, the Department of Community Health, the Michigan Association of CMH Boards, the Michigan Association of Substance Abuse Coordinating Agencies, area Legislators, and the other 82 Michigan Counties for their consideration and support.

Moved by Commissioner Humpert, supported by Commissioner Zygiel and carried to authorize computer purchase in the amount of \$23,160.78 in place of prior approvals of \$20,000 and \$437.86.

* Moved by Commissioner Humpert, supported by Commissioner Zygiel and carried to approve the update of the Solid Waste Plan for Arenac County.

306

Moved by Commissioner DuBay, supported by Commissioner Zygiel and carried by roll call to adopt the resolution for the Interlocal Agreement for Region 7B. Roll call: Yeas: DuBay, Humpert, Sproule, Stawowy, Zygiel. Five (5): Nays: None (0).

RESOLUTION TO AMEND THE INTERLOCAL AGREEMENT
OF THE REGION 7B EMPLOYMENT AND TRAINING CONSORTIUM

WHEREAS, pursuant to the Michigan Constitution of 1963, Article VII, Section 28 and 1967 PA 8, as amended, being MCL 124.531, et seq., the Region 7B Employment and Training Consortium was established through an intergovernmental transfer of functions and responsibilities agreement and subsequently reestablished through an urban cooperation agreement pursuant to 1967 PA 7 as amended, being MCL 124.501 et seq, and the Michigan Constitution of 1963 Article VII, Section 28, approved and entered into by the mutual agreement of the duly elected legislative bodies of the Counties of Arenac, Clare, Gladwin, Iosco, Ogemaw and Roscommon, Michigan in 1983; and

WHEREAS, the Counties wish to amend the current Interlocal Agreement to provide Employment and Training programs to reflect changes in the laws, rules, regulations and funding sources under which the Region 7B Employment and Training Consortium operates and to provide for the establishment of the Region 7B Consortium Workforce Investment/Development Board; and

WHEREAS, Chapter 16 of the current Interlocal Agreement provides that amendments thereto must be amended by two thirds (2/3) vote of the participating counties.

BE IT RESOLVED, that the Board Chairperson is authorized to sign the attached Revised Agreement and Charter.

BE IT FURTHER RESOLVED that a copy of this Resolution, and the attached Revised Agreement and Charter, shall be filed with the County Clerk's Office and the Michigan Secretary of State's Office.

BE IT FURTHER RESOLVED, that a copy of this Resolution and the attached Revised Agreement and Charter shall be sent to the Michigan Governor's Office pursuant to the Urban Cooperation Act 1967 PA 7.

Moved by Commissioner Humpert supported by Commissioner DuBay and carried to authorize payment of Claims and Accounts as presented by the Clerk.

At 11:30 a.m. the Board adjourned for lunch.

At 1:00 the Board reconvened with all five Commissioners being present.

Moved by Commissioner Humpert, supported by Commissioner Zygiel and carried to purchase a 1994 Mercury Marquis at a cost of \$8956.00 from Miscisins, the money to be borrowed from the Tax Revolving Fund.

Mary Lou Raker and Janet Lomason appeared to discuss the FNP Program.

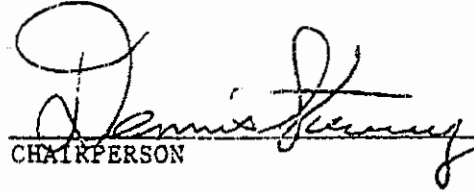
Moved by Commissioner Zygiel that if any employee is covered by County paid Health Insurance they do not receive in lieu of, whereas it is the County's choice as to how they are covered. Supported by Commissioner Sproule and carried.

Moved by Commissioner DuBay, supported by Commissioner Zygiel and carried to authorize the Treasurer to sign the insurance contract with MMRMA.

Moved by Commissioner DuBay, supported by Commissioner Humpert and carried to authorize the Treasurer to pay the payment for the Heating and Air Conditioning from 101-941-969-000, the Contingency Fund.

Moved by Commissioner Sproule to deny compensation as requested by the Register of Deeds and to authorize the Chairperson to draft a letter thanking the person for their help. Supported by Commissioner Zygiel and carried.

Moved by Commissioner Humpert to adjourn at 2:45 o'clock p.m. until the next regularly scheduled meeting on Tuesday, December 14, 1999 at 9:00 o'clock a.m.


CHAIRPERSON


COUNTY CLERK

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

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

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

WHEREAS, The Township of Adams
(Township/City/Village) *(Name of Local Unit)*

has reviewed the updated Solid Waste Plan and its recommendations;

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

municipality hereby Approves
(Approves/Disapproves)

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

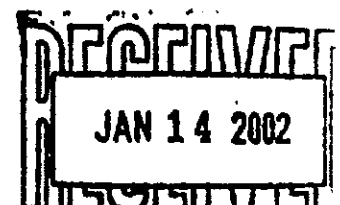
Resolution declared adopted at a regular meeting of the Board
(Board/Council/Commission)
of Adams Township held on January 10, 2002.
(Name of Local Unit) *(Date)*

Hubert F. [Signature]

Chief Elected Official

Judith Coe

Clerk



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

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

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

WHEREAS, The Twp. of Aubrey
(Township/City/Village) (Name of Local Unit)

has reviewed the updated Solid Waste Plan and its recommendations;

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

municipality hereby Approves
(Approves/Disapproves)

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

Resolution declared adopted at a regular meeting of the Aubrey Twp Board
(Board/Council/Commission)
of Aubrey Twp. held on Wed, Dec. 20, 2000.
(Name of Local Unit) (Date)

[Signature]

Chief Elected Official

[Signature]

Clerk

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

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

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

WHEREAS, The Township of Deep River
(Township/City/Village) (Name of Local Unit)

has reviewed the updated Solid Waste Plan and its recommendations;

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

municipality hereby Approves
(Approves/Disapproves)

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

Resolution declared adopted at a regular meeting of the Board
(Board/Council/Commission)
of Deep River Twp held on NOV. 14TH, 2000.
(Name of Local Unit) (Date)

Fred Mosciski

Chief Elected Official

Marilynn Melette

Clerk

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

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

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

WHEREAS, The TOWNSHIP of LUCAS
(Township/City/Village) (Name of Local Unit)

has reviewed the updated Solid Waste Plan and its recommendations;

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

municipality hereby APPROVES
(Approves/Disapproves)

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

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

of LUCAS TOWNSHIP held on DECEMBER 14, 2000
(Name of Local Unit) (Date)

David Aertberg
Chief Elected Official

Carol Jensen
Clerk

Sample

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

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

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

WHEREAS, The Township of Madon
(Township/City/Village) (Name of Local Unit)

has reviewed the updated Solid Waste Plan and its recommendations;

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

municipality hereby Approves
(Approve/Disapprove)

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

Resolution declared adopted at a regular meeting of the Board
(Board/Council/Commission)
of Madon Township held on January 2, 2002
(Name of Local Unit) (Date)

Fred Heideman
Chief Elected Official

Karen J. Janish
Clerk

Attn: Sue Fortune
→ 989/797-0096

FEB 19 2002

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

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

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

WHEREAS, The Township of Sims
(Township/City/Village) (Name of Local Unit)

has reviewed the updated Solid Waste Plan and its recommendations;

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

municipality hereby Approves
(Approves/Disapproves)

the Arenac County Solid Waste Management Plan Update in accordance with Act 45i, as amended

Resolution declared adopted at a regular meeting of the Township
(Board/Council/Commission)
of Sims held on February 18, 2002
(Name of Local Unit) (Date)

[Signature]
Clerk

(Minutes Attached)

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

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

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

WHEREAS, The City of AuGres
(Township/City/Village) (Name of Local Unit)


has reviewed the updated Solid Waste Plan and its recommendations;

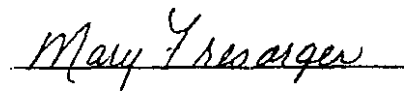
NOW, THEREFORE, BE IT RESOLVED that the AuGres City Council of this
(Board/Council/Commission)

municipality hereby APPROVES
(Approves/Disapproves)

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

Resolution declared adopted at a regular meeting of the City Council
(Board/Council/Commission)
of the City of AuGres held on 11-2-, 2000.
(Name of Local Unit) (Date)


LaVern Dittenber
Chief Elected Official


Clerk Mary Fresorger

Comm 5
EC 00 m

MAR - 1 2002

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

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

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

WHEREAS, The City of Omer
(Township/City/Village) *(Name of Local Unit)*

has reviewed the updated Solid Waste Management Plan and its recommendations;

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

municipality hereby Approves
(Approves/Disapproves)

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

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

of City of Omer held on February 25th, 2002.
(Name of Local Unit) *(Date)*

Robert Dewald
Robert Dewald, Mayor
Chief Elected Official

Susan Hegenauer
Susan Hegenauer
Clerk

August 14, 2001

TURNER TOWNSHIP
ARENAC COUNTY, MICHIGAN

Resolution Number 01-09

RESOLUTION ON THE ARENAC COUNTY SOLID WASTE MANAGEMENT PLAN

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

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

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

NOW THEREFORE, be it resolved that the Turner Township Board of Trustees does hereby approve/disapprove the Arenac County Solid Waste Management Plan Update in accordance with Act 451, as amended.

BE IT FUTHER RESOLVED that all resolutions in conflict herewith are hereby repealed

The foregoing resolution offered by Clerk Hollenbeck and supported by Trustee Wegner.

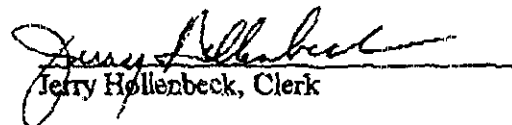
Upon roll call vote, the following voted "aye" Judy Hollenbeck, John Wegner, William Kiernicki and Jerry Hollenbeck, "nay" none.

The Supervisor declared the resolution adopted.


Jerry Hollenbeck, Clerk


Herbert Keeley, Supervisor

I, Jerry Hollenbeck, the duly elected Clerk of Turner Township, hereby certify that the foregoing resolution was adopted by the township board of said township at the regular meeting of said board held on August 13, 2001, at which meeting a quorum was present by a roll call vote of said members as hereinbefore set forth; that said resolution was ordered to take immediate effect.


Jerry Hollenbeck, Clerk

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

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

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

WHEREAS, The Township of Whitney
(Township/City/Village) (Name of Local Unit)

has reviewed the updated Solid Waste Plan and its recommendations;

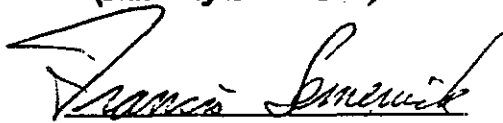
NOW, THEREFORE, BE IT RESOLVED that the Board of this
(Board/Council/Commission)

municipality hereby Approves
(Approves/Disapproves)

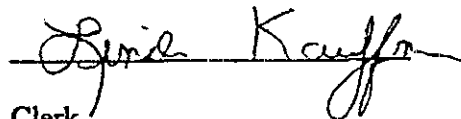
the Arenac County Solid Waste Management Plan Update in accordance with Act 451, as amended.

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

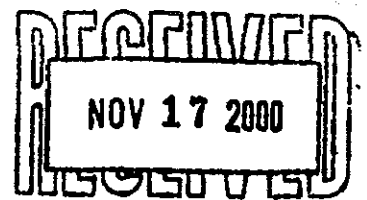
of Whitney Township held on 11-13, 2000.
(Name of Local Unit) (Date)



Chief Elected Official



Clerk



CITY OF STANDISH
ARENAC COUNTY
RESOLUTION #00-12

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

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

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

WHEREAS, The City of Standish
(Township/City/Village) *(Name of Local Unit)*

has reviewed the updated Solid Waste Plan and its recommendations;

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

municipality hereby approves
(Approves/Disapproves)

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

Resolution declared adopted at a regular meeting of the Standish City Council
(Board/Council/Commission)

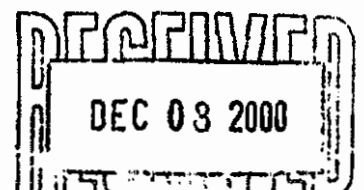
of the City of Standish held on November 20, 2000.
(Name of Local Unit) *(Date)*

Jack D. Howard

Chief Elected Official

Dorothy M. Kulis

Dorothy
Clerk



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

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

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

WHEREAS, The VILLAGE of STERLING
(Township/City/Village) *(Name of Local Unit)*

has reviewed the updated Solid Waste Plan and its recommendations;

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

municipality hereby APPROVES
(Approves/Disapproves)

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

Resolution declared adopted at a regular meeting of the COUNCIL
(Board/Council/Commission)
of VILLAGE OF STERLING held on Nov 14, 2000.
(Name of Local Unit) *(Date)*

Robert Maday
Chief Elected Official

Harriet Seawell
Clerk

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

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

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

WHEREAS, The Village of Turner
(Township/City/Village) (Name of Local Unit)

has reviewed the updated Solid Waste Plan and its recommendations;

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

municipality hereby Approves
(Approves/Disapproves)

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

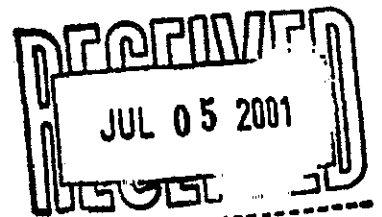
Resolution declared adopted at a regular meeting of the Village Council
(Board/Council/Commission)
of Turner held on 7-2, 2001.
(Name of Local Unit) (Date)

Charles DeRener

Chief Elected Official

Yolanda M. Natch

Clerk



ATTACHMENTS

APPENDIX D

Plan Implementation Strategy

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

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

Lead Responsibilities: County Board of Commissioners

Timeline: Early 2000; within 3 months after DEQ approval of plan update.

ACTION #2: Develop and distribute materials recovery education materials.

Lead Responsibilities: SWMAB with private industry recycling organizations.

Timeline: Initiate in early to mid-2000; ongoing thereafter.

ACTION #3: Promote municipal & home composting operations

Lead Responsibilities: SWMAB

Timeline: Ongoing

ACTION #4: Promote recycling efforts on a countywide basis.

Lead Responsibilities: SWMAB with private industry recycling organizations

Timeline: Initiate mid-2000; ongoing thereafter.

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

Lead Responsibilities: SWMAB, private solid waste industry.

Timeline: Initiate investigations & discussions in Fall 2000.

ATTACHMENTS

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

Lead Responsibilities: SWMAB, County Board of Commissioners.

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

ATTACHMENTS

Resolutions

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

None

ATTACHMENTS

Listed Capacity

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

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



NORTHERN OAKS RECYCLING AND DISPOSAL FACILITY
A WASTE MANAGEMENT COMPANY

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

September 27, 2000

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

Dear Mr. Bell:

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

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

Respectfully,


Richard Leszcz
Manager



WASTE MANAGEMENT

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

October 9, 2000

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

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

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

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

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

Sincerely,

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

Debora Johnston
Site Engineer

Cc: Crawford County
Maple Forest Township



36850 Van Born Rd
P.O. Box 88
Wayne, MI 48184
734-841-3555
734-729-8890 Fax

November 30, 2000

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

RE: Acceptance for Disposal & Assurance of Landfill Capacity

Dear Mr. Bell,

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

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

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

Respectfully,

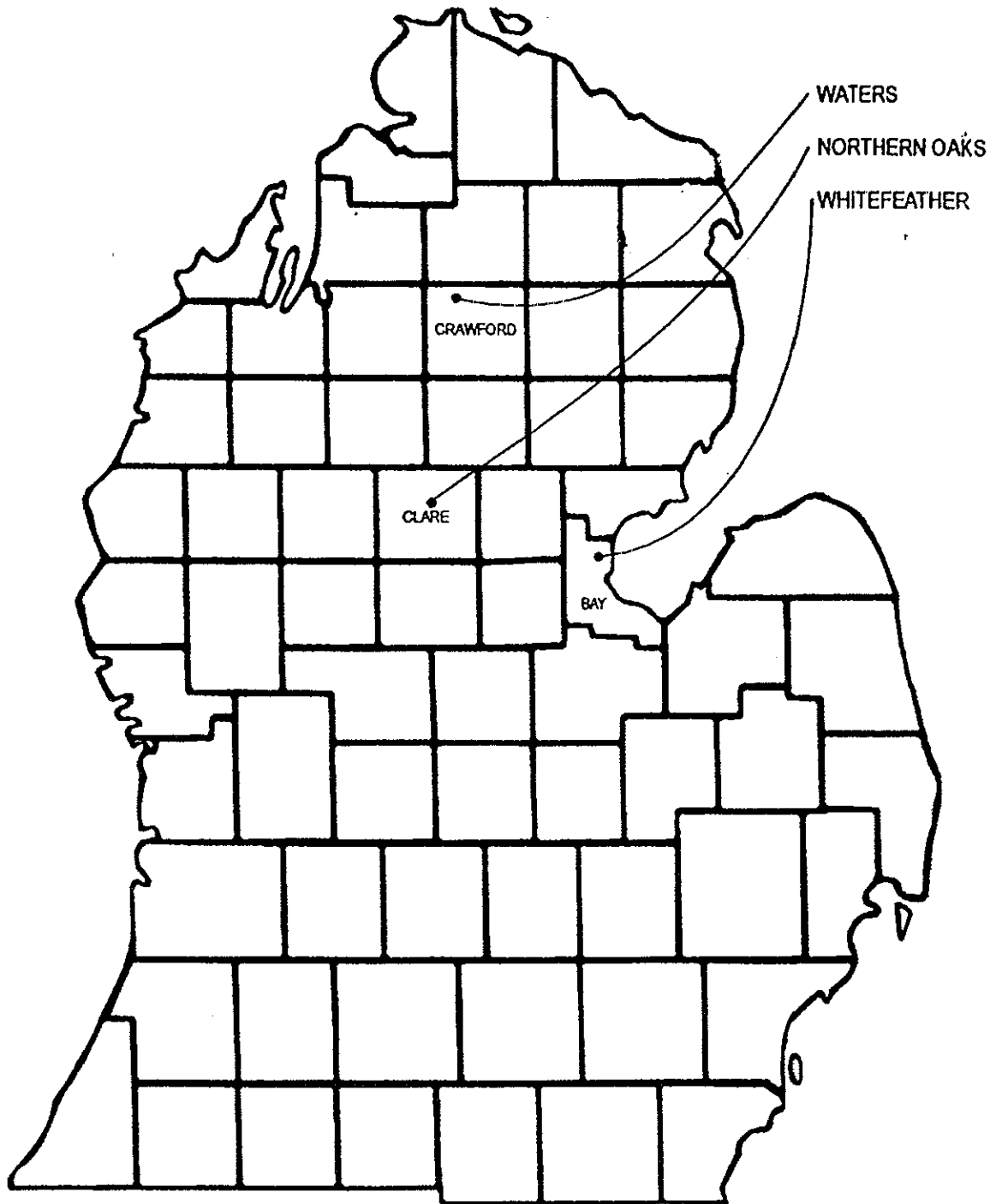
Stephanie Glysson
Director of Governmental Affairs

Cc: Matt Neely, Republic Waste

ATTACHMENTS

Maps

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



Landfill Locations

ATTACHMENTS

Inter-County Agreements

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

ATTACHMENTS

Special Conditions

Special conditions affecting import or export of solid waste

Clare County requires a written inter-county agreement for acceptance of solid waste generated in Arenac County for disposal at the Northern Oaks Recycling & Disposal Facility. A copy of the agreement will be attached when it is executed.