



STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
LANSING



JENNIFER M. GRANHOLM  
GOVERNOR

STEVEN E. CHESTER  
DIRECTOR

September 24, 2008

Mr. William D. Sisk, Chairman  
Monroe County Board of Commissioners  
Courthouse, 2nd Floor  
125 East Second Street  
Monroe, Michigan 48161-2197

Dear Mr. Sisk:

The locally-approved amendment to the Monroe County Solid Waste Management Plan (Plan Amendment) received by the Department of Environmental Quality (DEQ) on July 25, 2008, is hereby approved.

The Plan Amendment classifies Stevens Disposal & Recycling Service, Inc., as a Type A Transfer Facility and Processing Plant and adds it to the approved solid waste disposal areas in the Monroe County Solid Waste Management Plan. The DEQ has determined that the Plan Amendment complies with the provisions of Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, and its administrative rules.

The DEQ would like to thank Monroe County for its efforts in addressing its solid waste management issues. If you have any questions, please contact Ms. Rhonda Oyer Zimmerman, Chief, Solid Waste Management Unit, Storage Tank and Solid Waste Section, Waste and Hazardous Materials Division, at 517-373-4750.

Sincerely,

Steven E. Chester  
Director  
517-373-7917

cc: Senator Randy Richardville  
Representative Kathy Angerer  
Representative Kate Ebli  
Ms. Jamie R. Dean, Monroe County Solid Waste Coordinator  
Mr. Jim Sygo, Deputy Director, DEQ  
Ms. JoAnn Merrick, Chief of Staff, DEQ  
Ms. Carol Linteau, Legislative Director, DEQ  
Mr. George W. Bruchmann, DEQ  
Mr. Steven Sliver, DEQ  
Mr. Lee Carter, DEQ  
Ms. Rhonda Oyer Zimmerman, DEQ  
Ms. Christina Miller/Monroe County File, DEQ

*Healthy*  
**MONROE**  
SOLID WASTE PROGRAM

Rebecca A. Head, PhD, DABT  
Jamie R. Dean, B.S., M.S.Ed.

Health Officer/Director  
Solid Waste Coordinator

---

Ms. Christina Miller  
Environmental Quality Analyst  
DEQ – Waste and Hazardous Materials Division  
Constitution Hall, Atrium North  
P.O. Box 30241  
Lansing, MI 48909

July 23, 2008

Re: Monroe County Solid Waste Management Plan Amendment

Dear Ms. Miller:

Please find enclosed locally approved copies of the Monroe County Solid Waste Management Plan – Amendment for Stevens Disposal & Recycling Services, Inc. The appointed planning committee has worked on this amendment since the opening of the Plan in April 2006. Monroe County feels that the changes proposed in this amendment will assist the county in meeting its established solid waste goals and therefore requests your approval.

All municipalities during the local approval process were afforded the opportunity to approve or disapprove the amendment. Enclosed are resolutions from all municipalities with the exception of LaSalle Township, the City of Milan, the Village of Carleton, the Village of Estral Beach and the Village of Maybee, which took no action.

Should you have any questions regarding this amendment do not hesitate to contact this office at (734) 240-7909 or [jamie\\_dean@monroemi.org](mailto:jamie_dean@monroemi.org).

Sincerely Yours,

*Jamie R. Dean*

Jamie R Dean, B.S., M.S.Ed.  
Monroe County Solid Waste Coordinator

Waste & Hazardous  
Materials Division

JUL 25 2008

*Healthy*  
**MONROE**  
SOLID WASTE PROGRAM

**Amendment – *Stevens Disposal & Recycling Service*  
2001 Monroe County Solid Waste Management Plan**

In accordance with Part 115, Solid Waste Management (Part 115), of the Natural Resources and Environmental Protection Act, 1994 PA 451 as amended (NREPA) and rules promulgated thereunder, the Monroe County Solid Waste Management Planning Committee has amended the 2001 Monroe County Solid Waste Management Plan.

This Plan Amendment classifies Stevens Disposal & Recycling Service, Inc. located in Summerfield Township as a Type A Transfer Facility and Processing Plant and adds to the approved solid waste disposal areas in the Monroe County Solid Waste Management Plan.

Add Facility Description Stevens Disposal & Recycling Service, Inc. to Section II and Section III of the 2001 Solid Waste Management Plan.

Add Stevens Disposal & Recycling Services, Inc. as a Type A Transfer Facility to Section III – Selected System, Solid Waste Disposal Areas of the 2001 Solid Waste Management Plan.

Add letter from Stevens Disposal & Recycling Service, Inc. requesting amending the Monroe County Solid Waste Management Plan to Appendix D.

Attached please find the following supporting documents:

- Listing by category of the members of the Monroe County Solid Waste Management Planning Committee.
- Letter from Stevens Disposal & Recycling Service, Inc. requesting amending the Monroe County Solid Waste Management Plan
- Facility Description for Stevens Disposal & Recycling Service, Inc.
- Legal description and Identification of Property
- Letter of support from Summerfield Township
- Proof of publication of the 2007 Public Hearing

- Written comments received at the 2007 Public Hearing
- County Facility Agreement with Stevens Disposal & Recycling Incorporated
- Memo from Designated Planning Agency to Monroe County Board of Commissioners asking for support of amending the Monroe County Solid Waste Management Plan for Stevens Disposal & Recycling Service, Inc.
- Letter from Monroe County Board of Commissioners stating they support amending the Monroe County Solid Waste Management Plan for Stevens Disposal & Recycling Service, Inc.
- Copies of plan amendment resolutions from local units of government.
- *Letter confirming amendment of the Monroe County Solid Waste Management Plan written by the Michigan Department of Environmental Quality (Will be included when received)*

Rev. 7/17/2007  
1/7/2008  
2/25/2008  
5/8/2008  
7/21/2008

FACILITY DESCRIPTIONS

Facility Type: Type A Transfer & Processing Plant  
Facility Name: Steven's Disposal & Recycling Service, Inc.

County: Monroe Location: 16929 Ida West Road, Petersburg  
Summerfield Township

Map identifying location included:  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: Allied Waste

Operating Status (check)	Waste Types Received (check all that apply)
<input checked="" type="checkbox"/> open	<input checked="" type="checkbox"/> residential
<input type="checkbox"/> closed	<input checked="" type="checkbox"/> commercial
<input checked="" type="checkbox"/> licensed	<input checked="" type="checkbox"/> industrial
<input type="checkbox"/> unlicensed	<input checked="" type="checkbox"/> construction & demolition
<input type="checkbox"/> construction permit	<input type="checkbox"/> contaminated soils
<input type="checkbox"/> open, but closure	<input type="checkbox"/> special wastes *
<input type="checkbox"/> pending	<input checked="" type="checkbox"/> other: scrap metals, cardboard recycling

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

Site Size:

Total area of facility property:	<u>56</u>	acres
Total area sited for use:	<u>56</u>	acres
Total area permitted:	<u>56</u>	acres
Operating:	<u>100x120</u>	Transfer Processing Building
Not excavated:	<u>          </u>	acres

Current capacity:	<u>72,000</u>	<u>      </u> tons or <input checked="" type="checkbox"/> cubic yards
Estimated lifetime:	<u>n/a</u>	years
Estimated days open per year:	<u>240</u>	days
Estimated yearly disposal volume:	<u>144,000</u>	<u>      </u> tons or <input checked="" type="checkbox"/> cubic yards

(if applicable)

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

Legal Description and Identification Of Property:

Stevens Disposal & Recycling Services, Inc.  
16929 Ida West Road  
Petersburg, Michigan 48182

Phone Number: 734-856-8451

Contacts: Carl Stevens, President  
Tim Bell, Operations Manager

Legal Description:

Land Situated in the Township of Summerfield, County of Monroe, State of Michigan described as All that part of the West  $\frac{1}{2}$  of the N.W.  $\frac{1}{4}$  of Section 2, T7S. R6E. lying North of Lake Shore and Southern RR (now called New York Central RR) and being more particularly described as Commencing at a point 25.64 feet South of the N.W. Corner of the West  $\frac{1}{2}$  of the N.W.  $\frac{1}{4}$  of Said Section 2, T7S. R6E, thence running South on the West Section Line of said Section 2 35.33  $\frac{1}{2}$  chains, thence East 20.266 chains, thence North 34.84 chains to the South Line of the highway, thence West along the South Line of highway 20.32  $\frac{1}{2}$  chains to the P.O.B., Excepting therefrom parcel describes as Commencing at the N.E. Corner of the W  $\frac{1}{2}$  of the N.W.  $\frac{1}{4}$ , thence West 429 feet thence South 264 feet, thence East 165 feet, thence South 561 feet, thence East 264 feet thence North 825 feet to the P.O.B., Also Excepting therefrom parcel describes as Commencing at a point 264 feet West from the N.E. Corner of the West  $\frac{1}{2}$  of the N.W.  $\frac{1}{4}$  of Said Section 2, thence West 82.5 feet, thence South 264 feet, thence East 82.5 feet, thence North 264 feet to the P.O.B., Also excepting therefrom parcel describes as a part of the West  $\frac{1}{2}$  of the N.W.  $\frac{1}{4}$  of Said Section 2, describes as Commencing at the N.W. Corner of the West  $\frac{1}{2}$  of the N.W.  $\frac{1}{4}$ , thence East 450 feet, thence South 700 feet, thence West 450 feet, thence North 700 feet to the P.O.B.

STEVENS DISPOSAL & RECYCLING SERVICE, INC  
**STEVENS STOP & GO PORTABLE TOILETS**

P.O. BOX 500

TEMPERANCE, MI 48182

Phone: 800-779-0344

Fax: 734-279-2383

Monroe County  
Health Department  
Environmental Health Division  
C/O Jamie Dean  
Monroe County Solid Waste Coordinator  
2353 South Custer Road  
Monroe, Michigan 48161

11/4/05

Subject: Letter Of Intent.

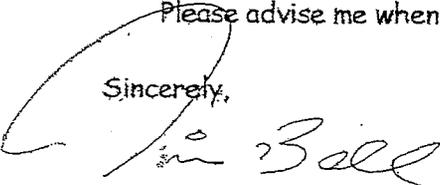
Dear Jamie Dean,

This is a letter of intent to Amend and up grade our Solid Waste Plan for Monroe County. Stevens Disposal & Recycling Service Inc. Located on 16929 Ida West Road in Petersburg Township wishes to up grade our current plan from Transferring & Processing Of Construction And Demolition Waste to A Type A Transfer & Possessing Plant of (Type III ) Solid Waste & (Type II ) Construction And Demolition Waste.

With the recent change of Laws in the State Of Michigan and their laws of prohibited Waste it is imperative that Stevens Disposal "Source Separate " To be in compliance with Part 115 of the Promulgated Rules.

Please advise me when we can get this on the agenda.

Sincerely,



Tim Bell  
Operations Manager  
Stevens Disposal  
& Recycling Service Inc.

RECEIVED

NOV 07 2005

MONROE CO. HEALTH DEPT.  
Environmental Health Div.



JENNIFER M. GRANHOLM  
GOVERNOR

STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
LANSING



STEVEN E. CHESTER  
DIRECTOR

January 16, 2007

Mr. Jerry A. Oley, Chairman  
Monroe County Board of Commissioners  
Courthouse, 2<sup>nd</sup> Floor  
125 East Second Street  
Monroe, Michigan 48161-2197

Dear Mr. Oley:

The locally-approved amendment to the Monroe County Solid Waste Management Plan (Plan Amendment) received by the Department of Environmental Quality (DEQ) on October 13, 2006, is hereby approved.

The Plan Amendment adds two transfer facilities, Gasper Recycling and Action Disposal, to the Monroe County Solid Waste Management Plan. The DEQ has determined that the Plan Amendment complies with the provisions of Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, and its administrative rules.

The DEQ would like to thank Monroe County for its efforts in addressing its solid waste management issues. If you have any questions, please contact Ms. Rhonda Oyer Zimmerman, Chief, Solid Waste Management Unit, Storage Tank and Solid Waste Section, Waste and Hazardous Materials Division, at 517-373-4750.

Sincerely,

  
Steven E. Chester  
Director  
517-373-7917

cc: Senator Randy Richardville  
Representative Kathy Angerer  
Representative Kate Ebli  
Ms. Jamie R. Dean, Monroe County Solid Waste Coordinator  
Mr. Jim Sygo, Deputy Director, DEQ  
Ms. JoAnn Merrick, Senior Executive Assistant to the Director, DEQ  
Ms. Carol Linteau, Legislative Liaison, DEQ  
Mr. George W. Bruchmann, DEQ  
Mr. Steve Sliver, DEQ  
Mr. Lee Carter, DEQ  
Ms. Rhonda Oyer Zimmerman, DEQ  
Ms. Christina Miller, DEQ  
Monroe County File

OCT 13 2006



Monroe County Health Department • Environmental Health Division

## **Solid Waste Coordinator**

2353 South Custer Road • Monroe, Michigan 48161

Telephone: 734.240.7900 • Fax: 734.240.7948 • Toll Free: 1.888.354.5500 ext. 7900

Visit Our Website: [www.co.monroe.mi.us](http://www.co.monroe.mi.us)

Ms. Christina Miller  
Environmental Quality Analyst  
DEQ – Waste and Hazardous Materials Division  
Constitution Hall, Atrium North  
P.O. Box 30241  
Lansing, MI 48909

October 11, 2006

Re: Monroe County Solid Waste Management Plan Amendment

Dear Ms. Miller:

Please find enclosed locally approved copies of the Monroe County Solid Waste Management Plan – Amendment for Gasper Recycling and Action Disposal. The appointed planning committee has worked on this amendment since their appointment in April 2005. Monroe County feels that the inclusion of these two entities in the plan will assist the county in meeting its established solid waste goals.

All municipalities during the local approval process were afforded the opportunity to approve or disapprove the amendment. Enclosed are resolutions from all municipalities with the exception Milan Township, and the Village of Estral Beach, which took no action.

Should you have any questions regarding this amendment do not hesitate to contact this office at (734) 240-7909 or [jamie\\_dean@monroemi.org](mailto:jamie_dean@monroemi.org).

Sincerely Yours,

A handwritten signature in cursive script that reads "Jamie R. Dean".

Jamie R Dean, B.S., M.S.Ed.  
Monroe County Solid Waste Coordinator

## **Amendment - 2006**

### **2001 Monroe County Solid Waste Management Plan**

In accordance with Part 115, Solid Waste Management (Part 115), of the Natural Resources and Environmental Protection Act, 1994 PA 451 as amended (NREPA) and rules promulgated thereunder, the Monroe County Solid Waste Management Planning Committee has amended the 2001 Monroe County Solid Waste Management Plan.

This Plan Amendment adds Gasper Recycling located in London Township (WGS 84 LAT: 042°05'05.6677" N, WGS84 LON: 083° 32'56.2372" W) and Action Disposal located in Bedford Township (WGS84 LAT: 041° 46'44.8064" N, WGS84 LON: 083° 36'27.3517" W) as Type B transfer facilities to the approved solid waste disposal areas in the 2001 Monroe County Solid Waste Management Plan.

Add Facility Descriptions for Gasper Recycling and Action Disposal to Section II and Section III of the 2001 Solid Waste Management Plan.

On page III-8 of the 2001 Solid Waste Management Plan, add Gasper Recycling and Action Disposal as Type B Transfer Facilities.

Add letter from Gasper Recycling requesting inclusion in the Monroe County Solid Waste Management Plan to Appendix D.

Add letter from Action Disposal requesting inclusion in the Monroe County Solid Waste Management Plan to Appendix D.

Attached please find the following supporting documents:

- Letter from Gasper Recycling requesting inclusion in the Monroe County Solid Waste Management Plan
- Letter from Action Disposal requesting inclusion in the Monroe County Solid Waste Management Plan
- Facility Description for Gasper Recycling
- Facility Description for Action Disposal
- Memo from Designated Planning Agency to Monroe County Board of Commissioners asking for adoption of resolution to amend the Monroe County Solid Waste Management Plan.
- Letter from Monroe County Board of Commissioners stating they adopted the Resolution amending the Monroe County Solid Waste Management Plan.

- *Letter confirming amendment of the Monroe County Solid Waste Management Plan written by the Michigan Department of Environmental Quality (Will be included when received)*



P. O. Box 9 • 9292 Oakville Waltz Road • Willis, MI 48191

February 25, 2005

RECEIVED

MAR 01 2005

MONROE CO. HEALTH DEPT.  
Environmental Health Div.

Ms. Jamie Dean  
Monroe County Health Department  
2353 South Custer Road  
Monroe, Michigan 48161

RE: Monroe County Solid Waste Management Plan

Dear Ms. Dean:

The State Of Michigan has asked us to be consistent with Monroe County Waste Management Plan. We need information on the procedure to become consistent with Monroe County Solid Waste. Please forward this information to the address above.

We look forward to working with you!

Sincerely,

A handwritten signature in cursive script, appearing to read "Sherrie L. Gasper".

Sherrie L. Gasper

# ACTION DISPOSAL

P. O. BOX 547  
TEMPERANCE, MI 48182

734-847-7163

October 20, 2004

Ms. Jamie Dean  
Solid Waste Coordinator  
Monroe County Health Department Bldg.  
2353 South Custer Rd.  
Monroe, Mi 48161

Dear Ms. Jamie Dean:

This letter is to inform you that Action Disposal would like to be put on your list as a transfer facility in the Monroe County Solid Waste Management Plan. We would like information on the procedure for our facility to become consistent with the Monroe County Solid Waste Management Plan.

If possible please send us information regarding the procedures, otherwise I will be expecting a call to set up an appointment to meet with you on this matter.

Respectfully,

  
Carl Stevens Jr.  
(Owner)

**RECEIVED**

OCT 22 2004

MONROE CO. HEALTH DEPT.  
Environmental Health Div.

FACILITY DESCRIPTIONS

Facility Type: Type B Transfer Facility\*  
Facility Name: Gasper Recycling

County: Monroe Location: Town: 5S Range: 7E Section(s): 1  
WGS84 LAT: 042° 05'05.6677" N  
WGS84 LON: 083° 32'56.2372" W

Map identifying location included:  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: Carleton Farms and Woodland Meadows

Operating Status (check)	Waste Types Received (check all that apply)
<input checked="" type="checkbox"/> open	<input type="checkbox"/> residential
<input type="checkbox"/> closed	<input type="checkbox"/> commercial
<input type="checkbox"/> licensed	<input type="checkbox"/> industrial
<input checked="" type="checkbox"/> unlicensed	<input checked="" type="checkbox"/> construction & demolition
<input type="checkbox"/> construction permit	<input type="checkbox"/> contaminated soils
<input type="checkbox"/> open, but closure	<input type="checkbox"/> special wastes **
<input type="checkbox"/> pending	<input type="checkbox"/> other:

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

Site Size:

Total area of facility property: 2.16 acres  
Total area sited for use: 2.16 acres  
Total area permitted: \_\_\_\_\_ acres  
Operating: \_\_\_\_\_ acres  
Not excavated: \_\_\_\_\_ acres

Current capacity: \_\_\_\_\_ tons or \_\_\_\_\_ cubic yards  
Estimated lifetime: \_\_\_\_\_ years  
Estimated days open per year: 260 days  
Estimated yearly disposal volume: 1200  tons or \_\_\_\_\_ cubic yards

(if applicable)

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

\* A Type B Solid Waste Transfer Facility is not designed to accept wastes from vehicles with mechanical compaction devices and accepts less than 200 uncompacted cubic yards per day.

FACILITY DESCRIPTIONS

Facility Type: Type B Transfer Facility\*  
Facility Name: Action Disposal

County: Monroe Location: Town: 8S Range: 7E Section(s): 17  
WGS84 LAT: 041° 46'44.8064" N  
WGS84 LON: 083° 36'27.3517" W

Map identifying location included:  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: Browning Ferris Industries

Operating Status (check)	Waste Types Received (check all that apply)
<input checked="" type="checkbox"/> open	<input type="checkbox"/> residential
<input type="checkbox"/> closed	<input type="checkbox"/> commercial
<input type="checkbox"/> licensed	<input type="checkbox"/> industrial
<input checked="" type="checkbox"/> unlicensed	<input checked="" type="checkbox"/> construction & demolition
<input type="checkbox"/> construction permit	<input type="checkbox"/> contaminated soils
<input type="checkbox"/> open, but closure	<input type="checkbox"/> special wastes **
<input type="checkbox"/> pending	<input type="checkbox"/> other:

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

Site Size:

Total area of facility property: 12.43 acres  
Total area sited for use: 1.5 acres  
Total area permitted: \_\_\_\_\_ acres  
Operating: \_\_\_\_\_ acres  
Not excavated: \_\_\_\_\_ acres

Current capacity: \_\_\_\_\_ tons or \_\_\_\_\_ cubic yards  
Estimated lifetime: \_\_\_\_\_ years  
Estimated days open per year: 255 days  
Estimated yearly disposal volume: 7800 tons or x cubic yards

(if applicable)

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

\* A Type B Solid Waste Transfer Facility is not designed to accept wastes from vehicles with mechanical compaction devices and accepts less than 200 uncompacted cubic yards per day.



Monroe County  
**Board of Commissioners**

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Monroe County Courthouse  
125 East Second Street Monroe, Michigan 48161-2197  
Telephone: 734.240.7003 – Fax: 734.240.7266  
Jerry Oley, Chairman – Thomas Mell, Vice-Chairman  
Vickie Koczman, Administrative Assistant/Deputy Clerk

April 12, 2006

Jamie Dean  
Solid Waste Coordinator

Dear Ms. Dean:

At a Regular Meeting of the Monroe County Board of Commissioners held on Tuesday, March 28, 2006, the Board adopted the Resolution Amending The Monroe County Solid Waste Management Plan To Include Gasper Recycling And Action Disposal.

Sincerely,

A handwritten signature in cursive script that reads "Vickie Koczman".

Vickie Koczman, Deputy Clerk  
Monroe County Board of Commissioners

**RECEIVED**

APR 14 2006

MONROE CO. HEALTH DEPT.  
Environmental Health Div.

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INTEROFFICE MEMORANDUM

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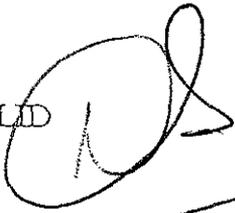
TO: VICKI KOCZMAN

FROM: DANIEL STEFANSKI, CHAIRMAN MONROE COUNTY SOLID  
WASTE MANAGEMENT PLANNING COMMITTEE

SUBJECT: SOLID WASTE MANAGEMENT PLAN AMENDMENT

DATE: 05/05/06

CC: REBECCA HEAD, ROYCE MANIKO, MAUREEN PFUND, JAMIE  
DEAN



The Monroe County Solid Waste Management Planning Committee has found Gasper Recycling of London Township and Action Disposal of Bedford Township to be consistent with the Monroe County Solid Waste Management Plan and recommends approval of the proposed amendment including these facilities in the Plan by the Monroe County Board of Commissioners. Approval of the amendment by the Board is required before the amendment can be presented to the municipalities. Please add the plan amendment to the agenda for the next Monroe County Board of Commissioners meeting scheduled for March 13, 2006. At that meeting members of the Solid Waste Planning Committee and staff will be present to explain the process and answer any questions.

Thank you.

NOV 14 2006

Waste and Hazardous  
Materials Division

**NOTICE OF PUBLIC HEARING  
MONROE COUNTY SOLID WASTE MANAGEMENT PLANNING  
COMMITTEE**

The Monroe County Solid Waste Management Planning Committee, as appointed by the Monroe County Commissioners, will conduct a Public Hearing on December 8, 2005 at 7:00 p.m. at the Monroe County Health Department, 2353 South Custer Road, Monroe. The purpose of this meeting will be to accept public comments on the proposed amendment to the Monroe County Solid Waste Management Plan. The amendment will add two existing Type B Transfer Facilities to the Monroe County Solid Waste Management Plan: Gasper Recycling in London Township and Action Disposal in Bedford Township.

The draft of the Amendment is available for review at the Environmental Health Division of the Monroe County Health Department. Written comments will be accepted until January 31, 2006, all written comments shall be directed to Jamie Dean, Monroe County Solid Waste Coordinator at the address or electronic mail below.

Jamie Dean  
Solid Waste Coordinator  
2353 South Custer Rd.  
Monroe, MI 48161  
[jamie\\_dean@monroemi.org](mailto:jamie_dean@monroemi.org)

Publish November 15, 2005

STATE OF MICHIGAN



JOHN ENGLER, Governor

**DEPARTMENT OF ENVIRONMENTAL QUALITY**

*"Better Service for a Better Environment"*

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

INTERNET: [www.deq.state.mi.us](http://www.deq.state.mi.us)

RUSSELL J. HARDING, Director

June 14, 2001

Mr. Thomas Mell, Chairperson  
Monroe County Board of Commissioners  
125 East Second Street  
Monroe, Michigan 48161

Dear Mr. Mell:

The Department of Environmental Quality (DEQ) received the locally approved update to the Monroe County Solid Waste Management Plan (Plan) on June 23, 2000. Except for the items indicated below, the Plan is approvable. As outlined in the September 21, 2000 letter to Ms. Maureen Pfund, Monroe County Solid Waste Coordinator, from Ms. Lynn Dumroese, DEQ, Waste Management Division, and as confirmed in Ms. Pfund's letter dated April 9, 2001, the DEQ makes the following modifications to the Plan:

On page III-2, Table 1-A authorizes imports from seven counties in Ohio. The Plan cannot regulate waste imports from out-of-state; therefore, reference to the seven counties in Ohio is deleted from Table 1-A.

On page III-3, the last paragraph states, "The Plan may be amended through the normal TRP [Technical Review Panel] and/or Plan amendment process to authorize off-site generation." Monroe County's (County's) intent was to have Type III facilities, which are identified as accepting site generated waste only, go through the Plan amendment process in order to receive authorization to accept off-site generated waste. As written, it appears the "normal TRP" process is an alternate amendment process and the facility may only be subject to the siting process in order to receive this authorization. Waste import authorizations can only be changed through a properly promulgated Plan amendment. Therefore, the term "normal TRP" is deleted from this sentence.

Ms. Dumroese's letter dated September 21, 2000, indicated 80 percent of the maximum total combined points threshold for the siting mechanism is prohibitively high. Further, this threshold does not allow siting of a facility. Therefore, the threshold value should be changed to require no more than 70 percent of the maximum total combined points. As requested in Ms. Pfund's November 29, 2000 letter, the DEQ did reconsider this threshold value and the conclusion remained the same. As transmitted in Ms. Pfund's letter dated April 9, 2001, the County decided

to resolve this issue by eliminating the siting mechanism rather than changing the threshold value. The County has demonstrated 10 years of capacity; therefore, the siting mechanism is not required to be in the Plan and shall be deleted. Further, the modifications outlined in Ms. Dumroese's September 21, 2000 letter that pertain to the siting mechanism are unnecessary because the Plan will no longer contain a siting mechanism.

On page III-83, the last sentence in box number 1 states, "A copy of the ordinance can be found at the end of this section on ordinances." The ordinance is not located at the end of this section, but it is included in Appendix D. In order to alleviate any discrepancies, the correct location should be referenced. This sentence is changed to read, "A copy of the ordinance can be found in Appendix D."

A clarification is needed in order to confirm the County's and municipality's intent when approving the Plan; however, this clarification does not require a modification to the Plan. The maps found after page III-40 in the Siting Review Procedures section indicate potentially suitable and unsuitable areas for solid waste facilities. Although these maps are located in the Siting Review Procedures section, they are there for informational purposes and are not considered to be part of the siting criteria. This clarification makes clear the constraint maps are for informational purposes only and will not be used when evaluating consistency of a proposed disposal facility.

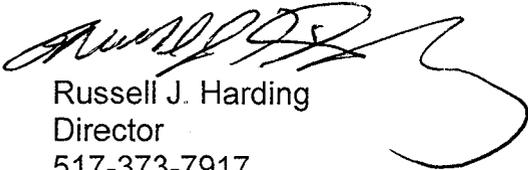
With these modifications, the County's updated Plan is hereby approved, and the County now assumes responsibility for the enforcement and implementation of this Plan. Please ensure that a copy of this letter is included with copies of the approved Plan distributed by the County.

By approving the Plan with modifications, the DEQ has determined that it complies with the provisions of Part 115, 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 DEQ approval of the Plan neither restricts nor expands the County's authority to implement these enforceable mechanisms.

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

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

Sincerely,



Russell J. Harding  
Director  
517-373-7917

cc: Senator Beverly S. Hammerstrom  
Representative Gene DeRossett  
Representative Randy Richardville  
Ms. Maureen Pfund, Monroe County Solid Waste Coordinator  
Mr. Arthur R. Nash Jr., Deputy Director, DEQ  
Mr. Timothy R. Sowton, Legislative Liaison, DEQ  
Mr. Jim Sygo, DEQ  
Ms. Joan Peck, DEQ  
Mr. Jon Russell, DEQ – Jackson  
Ms. Rhonda Oyer Zimmerman, DEQ  
Ms. Lynn Dumroese, DEQ  
Monroe County File



# **Monroe County Solid Waste Management Plan**

**1999 Update**

**Monroe County Health Department/Environmental Health Division  
Monroe County Solid Waste Coordinator  
Monroe County Planning Department & Commission  
Monroe County Board of Commissioners**

**MONROE COUNTY 1999 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.

This Plan is for Monroe County only.

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>
---------------------	---------------------------------	----------------------------

NONE

**DESIGNATED PLANNING AGENCY PREPARING THIS PLAN UPDATE:**

MONROE COUNTY PLANNING/ ENVIRONMENTAL HEALTH DIVISION

**CONTACT PERSON:** Maureen Pfund, Solid Waste Coordinator

**ADDRESS:** Monroe County Health Department, Environmental Health Division

29 Washington Street

Monroe, Michigan 48161-2234

**PHONE:** 734-240-7677 **FAX:** 734-240-7683

(If Applicable)

**E-MAIL:** maureen\_pfund@monroemi.org

**CENTRAL REPOSITORY LOCATION(S):**

Monroe County Planning Commission and Department, 125 E. 2<sup>nd</sup> Street, Monroe, Michigan

Monroe County Health Department, Environmental Health Division, 29 Washington Street, Monroe, Michigan

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# **Executive Summary**

## **Overview of the County**

Monroe County is located in Southeast Michigan. It is bordered on the north by Wayne and Washtenaw Counties; on the east by Lake Erie; on the south by Lucas County, Ohio (including the metropolitan Toledo area); and to the west by Lenawee County. The County covers 562 square miles of which approximately 12 percent is urban or residential and another 12 percent (42,200 acres) is forested. Monroe County has both the largest percentage (approximately 74%) and most land area (over 260,000 acres) in agricultural use of all the counties in the SEMCOG region. It also has approximately 4,400 acres of wetlands throughout the county.

Monroe County's population decreased between 1980 and 1990 by 0.7%, but has increased from 1990 to 1995 by 5.8%. The residential areas are concentrated primarily in the City of Monroe, Frenchtown Charter Township, Bedford Township and Monroe Charter Township.

## **Monroe County's Economic Base**

Monroe County contains a large number of both large and small businesses. There are over 1,700 establishments that employ less than 10 payroll employees, and large gains have been seen in the numbers of small businesses locating in Monroe County. However, the large employers, including Detroit Edison's two electric power generating stations (the Fermi II plant in Frenchtown Charter Township and the Monroe Power Plant in the City of Monroe) and Ford Motor Company's two plants (in Milan and in Monroe), provide thousands of jobs for local residents.

**MANUFACTURING** – Some of the major manufacturing industries located in Monroe County include steel mills, auto part manufacturing, cement and machinery manufacturing.

**RETAIL AND WHOLESALE TRADE** – Several large retail merchandisers such as Meijer and Wal-Mart have opened stores in Monroe County in recent years, and several malls including Frenchtown Square Mall, Horizon Outlet and other smaller strip malls opened in Monroe County during the late 1980's and early 1990's. These came in addition to hundreds of other, smaller retailers, and what was, until that time, the largest retail department store in the County, the Monroe K-Mart store. The period between 1988 and 1993 saw a healthy overall increase in retail establishments (568 to 624) and employees (6,046 to 8,500). General merchandise stores increased in their number of establishments only from 10 to 12 from 1988 to 1993, but the number of employees working at these stores increased significantly from 467 to 1,285. The number of building materials and garden supply stores actually decreased from 35 to 31, but this category added 85 employees (189 to 274). The number of food stores decreased from 80 to 75 and the number of food store employees dropped slightly from 1,069.

**SERVICE INDUSTRIES** – Service industries represent a growing sector in Monroe County. The number of service establishments grew from 616 in 1988 to 699 in 1993, while the number of employees in those businesses grew from 6,089 to 7,713. The biggest gains were in the areas of business services and social services.

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**FINANCE, INSURANCE & REAL ESTATE** – This segment of the economy is primarily concerned with financial transactions and remained relatively stable from 1988 to 1993. The number of establishments included in this category increased from 147 to 181, while the number of employees declined negligibly from 1,091 to 1,080.

**TRANSPORTATION, COMMUNICATION & PUBLIC UTILITIES** – This category taken as a whole did not see significant changes in numbers of employees or establishments from 1988 to 1993.

**AGRICULTURE** – Agriculture is an important sector of Monroe County's economy, with total sales of over \$66 million in 1992. The overall number of farms has declined, and there are fewer farms engaging in crop production and in livestock and livestock product production with each subsequent measurement period.

The following table shows the number of persons employed in each of the sectors forming Monroe County's economic base.

<b>SECTOR</b>	<b>% PERSONS EMPLOYED</b>
Agriculture	0.6%
Mining	0.4%
Construction	4.8%
Manufacturing	27.6%
Transportation	8.8%
Wholesale Trade	3.8%
Retail Trade	26.5%
Finance, Insurance & Real Estate	3.4%
Services	24.0%
Nonclassifiable	0.1%

The above information was taken from the April 1997 document entitled, "Economic Profile, Monroe County, Michigan." This document was prepared and published by the Monroe County Planning Department & Commission.

## **CONCLUSIONS**

This document represents the 1999 five-year update of the Monroe County Solid Waste Management Plan. This Plan continues many of the policies and strategies established under the 1991 Plan update. Most importantly, it continues to promote an integrated waste management program that encourages waste reduction, recycling, composting.

**This plan represents over 11 months of concentrated effort under the leadership of the Monroe County Solid Waste Management Planning Committee, with assistance from County staff, a paid consultant, and the concerned citizens of Monroe County.**

**The Solid Waste Planning Committee was formed in October, 1997 pursuant to Part 115 of the Michigan Natural Resources and Environmental Protection Act, (Act 451 of 1994, as amended). Representing a variety of interests including environmental, government, industry, and the general public, the Committee involved themselves in education, problem assessment, goal formulation, development of alternative plans, and the selection of a plan that meets the requirements of both a five-year and ten-year solid waste management system. The Plan also contains an implementation strategy to assure the Plan's success.**

**Input from the interested public was sought and was provided at all stages of the planning process. In addition to the public comment period held at the end of each Planning Committee meeting, a public hearing was held which solicited public comments on the draft plan. These comments were summarized by staff and considered by the Planning Committee. All meetings were open to the public and the Committee received both written and verbal comments.**

**After the draft Plan received interim approval by the Solid Waste Management Planning Committee, it was released for public comment. Comments were reviewed and considered by the Committee and recommended changes were made. After final approval by the Planning Committee, it was reviewed and approved by the County Board of Commissioners. The Commission then sent the Plan to the local communities for their review and approval. Approval was granted by over two-thirds of the cities, villages, and townships in Monroe County before final approval is granted by the Director of the State of Michigan Department of Environmental Quality.**

**This Plan sets forth policies and strategies which continue to promote appropriate solid waste management strategies in Monroe County. Programs involving waste reduction, recycling, and composting are essential components of the integrated waste management program developed for Monroe County. Also included in the Solid Waste Management Plan are procedures for siting solid waste disposal facilities, the transportation of waste over county boundaries, and the financial mechanisms which will be required to successfully implement the Plan.**

**This Plan, although it is broad in scope and covers diverse issues and problems, was developed with the primary goal of meeting Monroe County's solid waste management needs in a manner which is equally sound environmentally, socially and economically. Although the Plan was designed to achieve this goal, it will take the resolve and cooperation of Monroe County's citizens, businesses, industries and officials to be fully successful.**

## **SELECTED ALTERNATIVES**

**Key points of the Monroe County Solid Waste Management Plan are as follows:**

- X It will be necessary to rely on privately owned landfills as the primary means of solid waste disposal over the next five years.**
- X Over the next five years, a county-wide program to reduce the amount of waste disposed of in landfills will be continued. This program involves the following components:**
  - Site and/or source separation of waste stream components**
  - Recycling programs for newspaper, office paper, plastics, glass, corrugated cardboard, cans, tires, batteries, christmas trees, phone books and household hazardous waste**
  - Composting of leaves and yard waste on a county-wide scale**
- X It is recommended that the County continue to examine the feasibility of a centralized waste processing facility capable of total site separation and processing of municipal waste.**
- X Solid Waste Disposal Facility Constraint Maps are presented which identify areas in the County that are potentially suitable and unsuitable for solid waste disposal facilities.**
- X The Technical Review Panel will continue to review proposals for the development of new disposal facilities or proposed expansions of existing facilities according to a clearly specified siting process.**
- X The position of the Solid Waste Coordinator will continue to be funded. This person is responsible to the County Board of Commissioners and oversees the implementation of the Solid Waste Management Plan and coordinates recycling/composting activities.**
- X Until the County's available capacity falls below the required 66 months, the County Board of Commissioners will trigger the siting mechanism at their discretion.**

# 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.

## INTRODUCTION

The purpose of the Monroe County Solid Waste Management Plan is to provide the County with a workable plan for the disposal of solid waste generated by County residents and businesses in approved solid waste disposal and recovery facilities.

Based upon the requirements of the State of Michigan Natural Resources and Environmental Protection Act (Public Act 451 of 1994), the County Solid Waste Management Plan sets forth goals and objectives to effectively handle and process solid waste generated in the County. The Plan also addresses the present characteristics and problems associated with solid waste disposal.

Existing sites, disposal facilities and methods of refuse collection that presently serve Monroe County are analyzed to ensure their continued ability to meet the County's needs. To anticipate future needs, the Plan forecasts changes in the population and number of households in the County, as well as commercial and industrial growth, recent major developments and existing and expected future land uses. Such analysis includes master plans of local units of government, recent and pending economic development projects, private development proposals and zoning changes.

Solid waste management alternatives relevant to solving the identified problems are then analyzed, including those of waste minimization strategies, volume reduction, sanitary landfilling, waste-to-energy facilities and collection and transfer methods. Each alternative is weighed against basic factors of public health, economics, environmental impacts, siting criteria, energy impact and cost. The alternative(s) found most suitable for the County are further detailed in Appendix A as to feasibility of implementation.

Finally, the Plan examines and evaluates the management and financial capability of public agencies, individuals and private firms to carry out the objectives of effective solid waste handling and disposal.

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:

## **GOALS AND OBJECTIVES**

The goals and objectives of the Monroe County Solid Waste Management Plan are as follows.

**Goal 1: Continue to support the recovery and disposal of solid waste in a manner which promotes public welfare and prevents adverse effects on the public health and environment.**

- Objective 1.1: Enforce all pertinent laws and regulations.
- Objective 1.2: Encourage local municipal entities to establish ordinances that ban open burning as a means of waste disposal.
- Objective 1.3: Promote programs that encourage source reduction.
- Objective 1.4: Continue to provide household hazardous waste collection programs.
- Objective 1.5: To the extent practicable, participate in Michigan's "Wellhead Protection Program", which includes identification of potential sources, including improper waste management which may contaminate water supplies.
- Objective 1.6: Promote waste reduction and recycling programs to the maximum extent practicable to preserve landfill capacity and decrease dependency on landfills.

**Goal 2: Provide for the required five and ten years of capacity as required under Michigan law.**

- Objective 2.1: Establish relationships with other counties to provide adequate access to disposal capacity.
- Objective 2.2: Without jeopardizing Monroe County's ability to meet the five and ten year capacity requirements, the Plan recognizes and upholds agreements concerning long-term capacity reached as part of previous siting processes.
- Objective 2.3: Monroe County reserves the right to refrain from siting any new Type II or Type III landfills as long as the County can demonstrate 66 months of disposal capacity, in accordance with the siting review procedures on, (III-40).
- Objective 2.4: Continue to use the constraint map to designate areas that are suitable and unsuitable for siting solid waste disposal facilities.
- Objective 2.5: Promote responsible siting and operation of non-disposal facilities or areas such as composting facilities, recycling centers and material recovery centers that process source separated materials.
- Objective 2.6: Maintain a Technical Review Panel for the siting of solid waste disposal facilities.
- Objective 2.7: Update standards by which the Technical Review Panel shall operate.

**Goal 3: Promote the optimum utilization of solid waste through resource recovery, including source reduction and source separation.**

- Objective 3.1: Require all solid waste haulers and disposal facilities operating within Monroe County to offer recycling and/or composting services to Monroe County residents and businesses.
- Objective 3.2: Encourage the source or site separation of all wastes generated in or disposed of in Monroe County facilities.
- Objective 3.3: Within the five-year planning period, the amount of waste disposed of in landfills shall be reduced to the maximum extent practicable.
- Objective 3.4: Encourage local municipal entities to promote programs that encourage residents to recycle core items such as tin, aluminum, paper (including newsprint), plastic number 1 and 2 and all colors of glass.
- Objective 3.6: Continue to encourage all businesses and governmental agencies to recycle and/or establish a corporate "Buy Recycled" procurement policy.

**Goal 4: Maintain an administrative and technical framework and the financial means to provide a complete solid waste management program to serve the total needs of the community.**

- Objective 4.1: Maintain and promote the position of a County Solid Waste Coordinator with primary responsibilities to include plan implementation, coordination of recycling and composting activities. The position of Solid Waste Coordinator shall be adequately staffed and shall be provided with proper financial support.
- Objective 4.2: Establish and convene, as needed, an advisory committee to assist in the implementation of the solid waste plan.
- Objective 4.3: Develop and illustrate methods to finance resource recovery by Monroe County and/or private industry.
- Objective 4.4: Develop a mechanism to obtain needed data on waste generation, collection and disposal.
- Objective 4.5: Require municipalities with a population of 20,000 residents, or more, to provide residents with municipally contracted refuse services.



# **Data Base**

# DATA BASE

This section provides identification of sources of waste generation within the county, total quantity of solid waste generated to be disposed and sources of the information. The following figures were used to calculate the amount of Type II waste generated in Monroe County:

<u>Category</u>	<u>Unit Waste Factor</u>
Residential	2.9 lbs/person/day
Commercial	5.75 lbs/employee/day
Industrial	10.6 lbs/employee/day
Transportation Equipment	20.5 lbs/employee/day

[Source: Michigan Energy Materials Recovery Handbook (1978). Reprinted in : A Guidebook for Solid Waste Management Planning. MDNR (1981)].

These unit factors were multiplied by the projected population and employment figures taken from SEMCOG's 1995 Regional Development Forecast for Monroe County. The results, as presented in Figure II-1, show that in 2000, it is estimated that Monroe County will generate a total of 384.7 tons per day (TPD) of Type II waste. It is further estimated that the Type II waste stream will increase from 384.7 TPD in 2000 to 419.4 TPD in 2010, an increase of 8%.

**Figure II-1  
Solid Waste Stream Assessment**

<u>Year</u>	<u>1995</u>	<u>2000</u>	<u>2005</u>	<u>2010</u>
Population*	141,449	146,701	150,732	154,867
Pounds/Person/Day	2.9	2.9	2.9	2.9
Total Residential (T/Day)	205.1	212.7	218.6	224.5
Commercial Employees	25,145	27,471	30,360	33,249
Pounds/Employee/Day	5.75	5.75	5.75	5.75
Total Commercial (T/Day)	72.3	79.0	87.3	95.6
Industrial Employees	13,294	13,566	14,099	14,632
Pounds/Employee/Day	10.6	10.6	10.6	10.6
Total Industrial (T/Day)	70.5	71.9	74.7	77.5
Trans. Equip. Employees	2,024	2,059	2,126	2,126
Pounds/Employee/Day	20.5	20.5	20.5	20.5
Total Transportation Equipment (T/Day)	20.7	21.1	21.8	21.8
Total Type II Waste (T/Day)	368.6	384.7	402.4	419.4
Total Type II Waste (T/Yr.)	134,539	140,415.5	146,876	153,081

- Source: SEMCOG, 2020 Regional Development Forecast

The following Type III solid waste materials generated in Monroe County were reported in the State's 1996-1997 Report of Solid Waste Landfilled in Michigan and reports submitted to Monroe County:

- Matlin Road Landfill – 834 yds.<sup>3</sup>;
- J.R. Whiting Plant/Consumers Energy – 63,169 yds.<sup>3</sup>;
- Standard Environmental Services, Inc., Rockwood Landfill – 15,707 yds.<sup>3</sup>; and
- Detroit Edison Co., Monroe Power Plant Ash Basin – 460,791 yds.<sup>3</sup>.

This results in a total of 540,501 yds.<sup>3</sup> of Type III solid waste generated in Monroe County annually. Of this total volume, approximately 524,000 yds.<sup>3</sup> of fly ash disposed of on site. Only Standard Environmental Services accepts wastes from the general public.

The following six communities have contracted curbside recycling services:

- City of Milan,
- City of Monroe,
- Frenchtown Charter Township,
- Village of South Rockwood,
- Village of Dundee (optional for a fee)
- Village of Carleton.

In addition, drop-off services are provided at nine locations around the County: Dundee, Berlin Charter Township, Frenchtown Charter Township, Monroe Charter Township, Erie/City of Luna Pier, Bedford, Ida, Monroe and Lambertville in Bedford Township.

TOTAL QUANTITY OF TYPE II SOLID WASTE GENERATED:

134,539  Tons Annually

TOTAL QUANTITY OF TYPE III SOLID WASTE GENERATED:

540,501  Cubic Yards Annually

TOTAL QUANTITY OF TYPE II SOLID WASTE NEEDING DISPOSAL:

134,539  Tons Annually

TOTAL QUANTITY OF TYPE III SOLID WASTE NEEDING DISPOSAL:

540,501  Cubic Yards Annually

Because the County's recycling programs are not mandatory, the County assumes for the purposes of this document that all materials generated will need disposal capacity. Monroe County does not anticipate any problems associated with managing the solid waste generated within its borders since the landfills that provide disposal services have significant capacity as demonstrated by the following data sheets. With the continued strong support for and promotion of recycling and composting programs, the County expects to reduce its dependency on landfilling over the next five years.

## **DATA BASE**

The following pages are an 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.

**DATA BASE**

**FACILITY DESCRIPTIONS**

Facility Type: Type II

Facility Name: Arbor Hills Landfill/Browning Ferris Industries

County: Washtenaw Location: Town: 1S Range: 7E Section(s): 13

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: Browning-Ferris Industries

**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:

Non-hazardous solid an semi-solid wastes, no hazardous or liquid wastes.

**Site Size:**

Total area of facility property:	<u>936</u>	acres
Total area sited for use:	<u>356</u>	acres
Total area permitted:	<u>217</u>	acres
Operating:	<u>113</u>	acres
Not excavated:	<u>104</u>	acres
Current capacity:	<u>30,500,000</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds <sup>3</sup> Airspace or 61.5 million
Estimated lifetime:	<u>17.6</u>	years cubic yards of capacity
Estimated days open per year:	<u>265</u>	days
Estimated yearly disposal volume:	<u>3,500,000</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds <sup>3</sup>

(if applicable)

Annual energy production:		
Landfill gas recovery projects:	<u>18</u>	megawatts
Waste-to-energy incinerators:	<u>      </u>	megawatts

**DATA BASE**

**FACILITY DESCRIPTIONS**

Facility Type: Type II

Facility Name: Carleton Farms Landfill

County: Wayne Location: Town: 4S Range: 8E Section(s): 36

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, Inc

**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, sludges

**Site Size:**

Total area of facility property: 662.4 acres  
Total area sited for use: 662.4 acres  
Total area permitted: 388.3 acres  
Operating: 127.3 acres  
Not excavated: 261.0 acres

Current capacity: 59,500,000  tons or  yds<sup>3</sup>  
Estimated lifetime: 35 years  
Estimated days open per year: 312 days  
Estimated yearly disposal volume: 3,000,000  tons or  yds<sup>3</sup>

(if applicable)

Annual energy production:  
Landfill gas recovery projects: 4 megawatts  
Waste-to-energy incinerators: \_\_\_\_\_ megawatts

**DATA BASE**

**FACILITY DESCRIPTIONS**

Facility Type: Type II

Facility Name: Vienna Junction Industrial Park Sanitary Landfill

County: Monroe Location: Town: 9S, 8S Range: 8E Section(s): 5, 6, 31 & 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: Browning-Ferris Industries

Operating Status (check)

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

Waste Types Received (check all that apply)

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

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

Site Size:

Total area of facility property:	<u>246</u>	acres
Total area sited for use:	<u>149</u>	acres
Total area permitted:	<u>56</u>	acres
Operating:	<u>40</u>	acres
Not excavated:	<u>53</u>	acres

Current capacity:	<u>11,400,000</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds <sup>3</sup>
Estimated lifetime:	<u>25</u>	years
Estimated days open per year:	<u>280</u>	days
Estimated yearly disposal volume:	<u>1,000,000</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds <sup>3</sup>

(if applicable)

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

**DATA BASE**

**FACILITY DESCRIPTIONS**

Facility Type: Type II

Facility Name: Woodland Meadows Recycling and Disposal Facility – Van Buren Township

County: Wayne Location: Town: 3S Range: 8E Section(s): 1

Map identifying location included in Attachment Section:  Yes  No

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

Public  Private Owner: Waste Management of Michigan, Inc.

**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:  
Sludges – provided they are at least 30% solids.

**Site Size:**

Total area of facility property:	<u>214</u>	acres
Total area sited for use:	<u>214</u>	acres
Total area permitted:	<u>148</u>	acres
Operating:	<u>70</u>	acres
Not excavated:	<u>78</u>	acres

Current capacity:	<u>26,520,800</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds <sup>3</sup>
Estimated lifetime:	<u>19.8</u>	years
Estimated days open per year:	<u>305</u>	days
Estimated yearly disposal volume:	<u>1,340,200</u>	<input type="checkbox"/> tons or <input type="checkbox"/> yds <sup>3</sup>

(if applicable)

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

**DATA BASE**

**FACILITY DESCRIPTIONS**

Facility Type: Type II

Facility Name: Adrian Landfill, Inc.

County: Lenawee Location: Town: 7.8S Range: 4E Section(s): 6.7

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: Allied Waste, Inc.

**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, sludges per operating policy

**Site Size:**

Total area of facility property:	<u>421</u>	acres
Total area sited for use:	<u>287</u>	acres
Total area permitted:	<u>40</u>	acres
Operating:	<u>19</u>	acres
Not excavated:	<u>20</u>	acres

Current capacity:	<u>2,002,000</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds <sup>3</sup>
Estimated lifetime:	<u>6.8</u>	years
Estimated days open per year:	<u>307</u>	days
Estimated yearly disposal volume:	<u>97,731</u>	<input checked="" type="checkbox"/> tons or <input type="checkbox"/> yds <sup>3</sup>

(if applicable)

Annual energy production:		
Landfill gas recovery projects:	<u>20,148</u>	megawatts
Waste-to-energy incinerators:	<u>      </u>	megawatts

**DATA BASE**

**FACILITY DESCRIPTIONS**

Facility Type: Type II

Facility Name: Sauk Trail Hills Landfill

County: Wayne Location: Town: 2S Range: 8E Section(s): 35

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: Sauk Trail Hills Development, Inc.

**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:

Non hazardous Special Waste is accepted after the completion of a waste characterization profile and necessary analytical testing. An approval number is issued for waste that passes CFR 40 standards.

**Site Size:**

Total area of facility property:	<u>200.7</u>	acres	
Total area sited for use:	<u>160.2</u>	acres	
Total area permitted:	<u>160.2</u>	acres	
Operating:	<u>74.3</u>	acres	
Not excavated:	<u>85.3</u>	acres	
Current capacity:	<u>18,026,265</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds <sup>3</sup>	12/97
Estimated lifetime:	<u>11</u>	years	
Estimated days open per year:	<u>306</u>	days	
Estimated yearly disposal volume:	<u>1,500,000</u>	<input type="checkbox"/> tons or <input type="checkbox"/> yds <sup>3</sup>	

(if applicable)

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

**DATA BASE**

**FACILITY DESCRIPTIONS**

Facility Type: Type III Construction and Demolition

Facility Name: Matlin Road Landfill (Regulated Resource Recovery)

County: Monroe Location: Town: 5N Range: 9E Section(s): 8

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: Regulated Resource Recovery

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: Type III Waste

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

Includes recycling and composting facility

Site Size:

Total area of facility property: 250 acres  
Total area sited for use: 40.4 acres  
Total area permitted: 40.4 acres  
Operating: 17.92 acres  
Not excavated: 22.48 acres

Current capacity: 766,000  tons or  yds<sup>3</sup>  
Estimated lifetime: 23 years  
Estimated days open per year: 312 days  
Estimated yearly disposal volume: 34,000  tons or  yds<sup>3</sup>

(if applicable)

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

**DATA BASE**

**FACILITY DESCRIPTIONS**

Facility Type: Type III

Facility Name: Detroit Edison Fly Ash Fill

County: Monroe Location: Town: 7S Range: 9E Section(s): 16

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: Detroit Edison

**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:

**Coal Ash**

**Site Size:**

Total area of facility property:	<u>410</u>	acres
Total area sited for use:	<u>410</u>	acres
Total area permitted:	<u>410</u>	acres
Operating:	<u>410</u>	acres
Not excavated:	<u>410</u>	acres

Current capacity:	<u>12,000,000</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds <sup>3</sup>
Estimated lifetime:	<u>17-25</u>	years
Estimated days open per year:	<u>365</u>	days
Estimated yearly disposal volume:	<u>400,000-600,000</u>	<input checked="" type="checkbox"/> tons or <input type="checkbox"/> yds <sup>3</sup>

(if applicable)

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

**DATA BASE**

**FACILITY DESCRIPTIONS**

Facility Type: Type III

Facility Name: Consumers Energy - J.R. Whiting Fly Ash Fill

County: Monroe Location: Town: 8S Range: 8E Section(s): 11.14

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: Consumers Energy

Operating Status (check)

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

Waste Types Received (check all that apply)

- residential
- commercial
- industrial (Type III, low hazard)
- construction & demolition
- contaminated soils
- special wastes \*
- other:

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

Site Size:

Total area of facility property:	<u>191</u>	acres
Total area sited for use:	<u>191</u>	acres
Total area permitted:	<u>151</u>	acres
Operating:	<u>151</u>	acres
Not excavated:	<u>40</u>	acres

Current capacity:	<u>1,260,000</u>	<input checked="" type="checkbox"/> tons or <input type="checkbox"/> yds <sup>3</sup>
Estimated lifetime:	<u>18</u>	years
Estimated days open per year:	<u>365</u>	days
Estimated yearly disposal volume:	<u>70,000</u>	<input checked="" type="checkbox"/> tons or <input type="checkbox"/> yds <sup>3</sup>

(if applicable)

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

**DATA BASE**

**FACILITY DESCRIPTIONS**

Facility Type: Type III – Industrial Landfill

Facility Name: Holnam, Inc.

County: Monroe Location: Town: 5S Range: 6E Section(s): 36

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: Holnam, Inc.

**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: low hazard industrial waste

\* Explanation of special wastes, including a specific list and/or conditions:  
Cement Kiln Dust

\*\* Currently in the process of construction permit review with the Michigan Department of Environmental Quality.

**Site Size:**

Total area of facility property:	<u>80</u>	acres
Total area sited for use:	<u>38</u>	acres
Total area permitted:	<u>38</u>	acres
Operating:	<u>35</u>	acres
Not excavated:	<u>325</u>	acres
Current capacity:	<u>1,800,000</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds <sup>3</sup>
Estimated lifetime:	<u>20</u>	years
Estimated days open per year:	<u>360</u>	days
Estimated yearly disposal volume:	<u>72,000</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds <sup>3</sup>

(if applicable)

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

**DATA BASE**

**FACILITY DESCRIPTIONS**

Facility Type: Type III - Construction/Demolition & Industrial Waste Landfill

Facility Name: Allied Waste Services, Rockwood Landfill

County: Monroe Location: Town: 5S Range: 10E Section(s): 34 (East 1/2)

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: Allied Waste 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:  
Non-hazardous industrial waste streams.

**Site Size:**

Total area of facility property: 209.46 acres  
Total area sited for use: 209.46 acres  
Total area permitted: 209.46 acres  
Operating: 10.92 acres  
Not excavated: 140.00 acres

Current capacity: 22,000,000  tons or  yds<sup>3</sup>  
Estimated lifetime: 30-35 years  
Estimated days open per year: 206 days  
Estimated yearly disposal volume: 600,000  tons or  yds<sup>3</sup>

(if applicable)

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

**DATA BASE**

**FACILITY DESCRIPTIONS**

Facility Type: Existing Type III Landfill

Facility Name: Jefferson Smurfit Corporation Industrial Landfill

County: Monroe Location: Town: 6S Range: 8E Section(s): 6

Map identifying location included in Attachment Section:  Yes  No

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

Public  Private Owner: Homrich, Inc.

**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: pulper wastes

\* Explanation of special wastes, including a specific list and/or conditions:  
Non-hazardous industrial waste streams.

**Site Size:**

Total area of facility property:	<u>40</u>	acres
Total area sited for use:	<u>21.42</u>	acres
Total area permitted:	<u>21.42</u>	acres
Operating:	<u>21.42</u>	acres
Not excavated:	<u>-0-</u>	acres

Current capacity:	<u>200,000</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds <sup>3</sup>
Estimated lifetime:	<u>2</u>	years
Estimated days open per year:	<u>N/A</u>	days
Estimated yearly disposal volume:	<u>100,000</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds <sup>3</sup>

(if applicable)

Annual energy production:		
Landfill gas recovery projects:	<u>      </u>	megawatts
Waste-to-energy incinerators:	<u>      </u>	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. There are 16 identified solid waste haulers serving Monroe County.

**Browning Ferris Industries**  
6749 Dixie Highway  
Erie, Michigan 48133  
1-800-234-3429

**Fairway Refuse**  
11360 South Stoney Creek Rd.  
Carleton, Michigan 48117  
734-587-2119

**Allied Waste Industries**  
9450 U.S. Turnpike  
Newport, Michigan 48166  
734-379-4624

**ABC Refuse Inc.**  
565 Smith Rd.  
Temperance, Michigan 48182  
734-847-9625

**We Haul Refuse**  
2939 Geiger Rd.  
Ida, Michigan 48140  
734-269-2767

**Browning Ferris Industries**  
Wayne, Michigan

**City Environmental, Inc.**  
1-800-726-1225  
Romulus, Michigan

**Bins Disposal, Inc.**  
3905 Luna Pier Rd.  
Erie, Michigan 48133  
Contact: Bob Willis  
734-243-5271

**Action Disposal**  
P.O. Box 379  
Temperance, MI 48182  
1-800-459-4624

**Daily Recycling of Michigan  
Container Service**  
200 Matlin Road  
Carleton, Michigan 48117  
Contact: Nick Straub  
734-654-9800

**J & S Sanitation**  
3133 West Temperance Rd.  
Temperance, Michigan 48182  
734-847-0230

**Allied Waste Industries**  
1983 N. Ogden  
Adrian, Michigan  
1-800-589-9139

**Waste Management of Michigan**  
36850 Van Born Rd.  
Southfield, Michigan 48075  
734-729-0700

**Stevens Disposal and Recycling**  
P. O. Box 567  
Temperance, Michigan 48182  
Contact: Jason Schlegel  
734-856-8451

**Suburban Salvage**  
Ida, Michigan  
734-269-6060

**Tony Eby Refuse**  
P. O. Box 226  
Maybee, Michigan 48159  
Contact: Tony Eby  
734-587-3375

**Waste Management of Northwest Ohio**  
6525 Wales Rd.  
Toledo, Ohio  
1-800-458-3849

## **DATA BASE**

### **EVALUATION OF DEFICIENCIES AND PROBLEMS**

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

- Municipalities do not have funds to provide contractual solid waste services to their residents.
- The distance between homes does not make it desirable and cost effective for contractors to bid for services in the rural communities.

Disposal and/or recycling options for the following materials have been inadequate:

- Tires
- Concrete
- White goods with and without freon
- Used or broken computer equipment
- Yard waste
- Sharps

While the County continues to work with municipalities and businesses to resolve these issues, it is likely that they will remain problematic for the foreseeable future.

## 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.

#### DATA BASE

##### DEMOGRAPHICS

	1995	2000	2005	2010	2015
<b>ASH TWP</b>					
Total Population	4,981	5,205	5,393	5,589	5,825
Total Households	1,694	1,784	1,862	1,943	2,035
Persons Per Household	2.94	2.92	2.90	2.88	2.86
Total Employment	2,679	2,899	3,173	3,374	3,447
Manufacturing	685	737	825	864	846
Retail Trade	258	336	443	498	528
Services	773	888	995	1,069	1,119
All Other	963	938	910	943	954
<b>BEDFORD TWP</b>					
Total Population	26,229	28,106	29,680	31,185	32,876
Total Households	9,052	9,906	10,676	11,436	12,252
Persons Per Household	2.89	2.83	2.78	2.72	2.68
Total Employment	5,134	6,318	7,366	8,074	8,506
Manufacturing	899	1,061	1,249	1,347	1,361
Retail Trade	1,477	1,759	2,019	2,191	2,277
Services	1,897	2,468	2,907	3,187	3,393
All Other	861	1,030	1,191	1,349	1,475
<b>BERLIN CHARTER TWP</b>					
Total Population	4,964	5,205	5,394	5,606	5,860
Total Households	1,707	1,810	1,899	1,993	2,099
Persons Per Household	2.91	2.88	2.84	2.81	2.79
Total Employment	1,344	1,628	1,937	2,172	2,336
Manufacturing	7	16	30	37	43
Retail Trade	776	887	1,020	1,130	1,191
Services	327	437	528	568	592
All Other	234	288	359	437	510

**DATABASE  
DEMOGRAPHICS**

	1995	2000	2005	2010	2015
<b>VILLAGE OF CARLETON</b>					
Total Population	2,869	2,874	2,840	2,795	2,763
Total Households	1,045	1,088	1,128	1,169	1,215
Persons Per Household	2.75	2.64	2.52	2.39	2.27
Total Employment	300	333	382	418	440
Manufacturing	35	40	47	51	52
Retail Trade	130	146	164	182	193
Services	60	66	72	75	77
All Other	75	81	99	110	118

**VILLAGE OF  
DUNDEE**

Total Population	2,810	2,916	3,032	3,160	3,305
Total Households	1,159	1,212	1,261	1,313	1,370
Persons Per Household	2.42	2.41	2.40	2.41	2.41
Total Employment	1,431	1,489	1,655	1,750	1,768
Manufacturing	299	303	338	357	342
Retail Trade	533	521	574	573	553
Services	493	544	599	649	685
All Other	106	121	144	171	188

**DUNDEE TWP**

Total Population	2,890	3,070	3,209	3,342	3,480
Total Households	927	977	1,020	1,066	1,117
Persons Per Household	3.12	3.14	3.15	3.14	3.12
Total Employment	782	840	896	925	916
Manufacturing	538	549	551	551	524
Retail Trade	21	22	25	26	25
Services	66	93	117	122	126
All Other	157	176	203	226	241

**ERIE TWP**

Total Population	4,816	5,048	5,261	5,467	5,689
Total Households	1,629	1,718	1,799	1,881	1,970
Persons Per Household	2.96	2.94	2.92	2.91	2.89
Total Employment	1,311	1,465	1,596	1,710	1,780
Manufacturing	16	28	41	48	54
Retail Trade	205	232	263	285	293
Services	818	927	1,031	1,130	1,204
All Other	272	278	261	247	229

**DATA BASE  
DEMOGRAPHICS**

	1995	2000	2005	2010	2015
<b>ESTRAL BEACH VILLAGE</b>					
Total Population	476	485	499	506	513
Total Households	161	162	166	169	173
Persons Per Household	2.96	2.99	3.01	2.99	2.97
Total Employment	26	28	30	32	33
Manufacturing	0	0	0	0	0
Retail Trade	0	0	0	0	0
Services	26	28	30	32	33
All Other	0	0	0	0	0

**EXETER TWP**

Total Population	2,998	3,176	3,318	3,460	3,632
Total Households	932	991	1,043	1,097	1,159
Persons Per Household	3.21	3.20	3.17	3.15	3.13
Total Employment	205	294	391	440	483
Manufacturing	0	2	8	11	15
Retail Trade	57	80	110	125	134
Services	11	60	95	102	107
All Other	137	152	178	202	227

**FRENCHTOWN  
CHARTER TWP.**

Total Population	18,872	19,710	20,366	21,086	21,967
Total Households	6,972	7,525	7,988	8,459	8,980
Persons Per Household	2.67	2.58	2.52	2.46	2.42
Total Employment	11,091	12,357	13,266	13,705	13,792
Manufacturing	536	669	765	813	837
Retail Trade	2,290	2,294	2,440	2,422	2,328
Services	6,619	7,730	8,375	8,834	9,072
All Other	1,646	1,664	1,686	1,636	1,555

**IDA TWP**

Total Population	4,750	4,908	5,017	5,142	5,297
Total Households	1,535	1,631	1,711	1,798	1,894
Persons Per Household	3.09	3.01	2.93	2.86	2.80
Total Employment	790	900	1,026	1,120	1,193
Manufacturing	9	13	18	23	30
Retail Trade	82	82	89	91	92
Services	516	605	693	755	801
All Other	183	200	226	251	270

**DATA BASE  
DEMOGRAPHICS**

	1995	2000	2005	2010	2015
<b>LA SALLE TWP</b>					
Total Population	5,235	5,384	5,481	5,560	5,658
Total Households	1,683	1,776	1,859	1,943	2,038
Persons Per Household	3.11	3.03	2.94	2.86	2.77
Total Employment	340	599	655	693	716
Manufacturing	16	28	34	39	44
Retail Trade	140	144	156	159	158
Services	136	365	391	411	420
All Other	48	62	74	84	94
<b>LONDON TWP</b>					
Total Population	2,950	2,946	2,982	3,011	3,071
Total Households	969	1,005	1,040	1,076	1,116
Persons Per Household	3.04	2.93	2.87	2.80	2.75
Total Employment	157	200	249	271	292
Manufacturing	4	7	10	11	14
Retail Trade	9	10	11	12	13
Services	2	34	62	67	71
All Other	142	149	166	181	194
<b>CITY OF LUNA PIER</b>					
Total Population	1,549	1,571	1,579	1,572	1,555
Total Households	541	556	569	582	596
Persons Per Household	2.86	2.83	2.78	2.70	2.61
Total Employment	287	302	302	284	254
Manufacturing	0	1	2	3	4
Retail Trade	77	85	94	100	102
Services	0	18	30	33	35
All Other	210	198	176	148	113
<b>MAYBEE VILLAGE</b>					
Total Population	496	493	484	475	467
Total Households	156	159	161	163	165
Persons Per Household	3.18	3.10	3.01	2.91	2.83
Total Employment	52	63	73	77	80
Manufacturing	0	0	0	0	0
Retail Trade	17	19	21	23	24
Services	27	35	41	43	44
All Other	8	9	11	11	12

**DATA BASE  
DEMOGRAPHICS**

	1995	2000	2005	2010	2015
<b>MILAN CITY (PART)</b>					
Total Population	1,416	1,706	1,999	2,281	2,637
Total Households	510	604	695	788	891
Persons Per Household	2.78	2.82	2.88	2.89	2.96
Total Employment	2,021	2,093	2,166	2,204	2,140
Manufacturing	1,949	1,980	2,007	2,010	1,910
Retail Trade	8	11	14	17	21
Services	0	7	14	15	16
All Other	64	95	131	162	193

<b>MILAN TWP</b>					
Total Population	1,636	1,628	1,627	1,610	1,586
Total Households	582	579	580	580	581
Persons Per Household	2.81	2.81	2.81	2.78	2.73
Total Employment	179	187	199	198	194
Manufacturing	33	33	34	32	30
Retail Trade	7	7	7	7	7
Services	16	27	35	36	37
All Other	123	120	123	123	120

<b>MONROE CITY</b>					
Total Population	23,516	23,421	23,081	22,831	22,929
Total Households	8,742	8,827	8,885	9,003	9,234
Persons Per Household	2.59	2.56	2.50	2.44	2.39
Total Employment	17,222	17,195	16,696	16,009	15,199
Manufacturing	4,447	4,006	3,488	3,077	2,634
Retail Trade	3,330	3,067	2,946	2,674	2,395
Services	6,415	7,389	7,629	7,682	7,609
All Other	3,030	2,733	2,633	2,576	2,561

<b>MONROE CHARTER TWP.</b>					
Total Population	12,881	13,418	13,908	14,381	14,965
Total Households	4,900	5,242	5,556	5,864	6,208
Persons Per Household	2.59	2.52	2.47	2.42	2.38
Total Employment	7,536	8,561	9,226	9,550	9,634
Manufacturing	738	859	963	1,011	1,031
Retail Trade	1,356	1,416	1,507	1,502	1,447
Services	4,109	4,942	5,347	5,632	5,783
All Other	1,333	1,344	1,409	1,405	1,373

**DATA BASE  
DEMOGRAPHICS**

	1995	2000	2005	2010	2015
<b>PETERSBURG CITY</b>					
Total Population	1,230	1,233	1,224	1,214	1,206
Total Households	433	446	457	469	482
Persons Per Household	2.84	2.76	2.68	2.59	2.50
Total Employment	74	78	83	85	88
Manufacturing	13	14	12	11	12
Retail Trade	25	24	26	26	25
Services	15	16	17	18	19
All Other	21	24	28	30	32

**RAISINVILLE TWP**

Total Population	4,805	4,974	5,045	5,186	5,323
Total Households	1,555	1,652	1,731	1,817	1,911
Persons Per Household	3.09	3.01	2.91	2.85	2.79
Total Employment	651	742	849	917	959
Manufacturing	79	83	89	94	97
Retail Trade	6	9	13	16	20
Services	202	264	323	347	354
All Other	364	386	424	460	488

**SOUTH  
ROCKWOOD  
VILLAGE**

Total Population	1,308	1,376	1,428	1,483	1,551
Total Households	441	470	495	521	551
Persons Per Household	2.97	2.93	2.88	2.85	2.81
Total Employment	199	244	294	325	340
Manufacturing	100	113	131	138	135
Retail Trade	25	32	41	47	52
Services	61	76	89	96	100
All Other	13	23	33	44	53

**SUMMERFIELD  
TWP**

Total Population	3,228	3,290	3,327	3,386	3,476
Total Households	1,073	1,137	1,195	1,256	1,324
Persons Per Household	3.01	2.89	2.78	2.70	2.63
Total Employment	505	578	668	722	769
Manufacturing	10	12	14	16	21
Retail Trade	71	70	78	79	77
Services	258	314	368	399	422
All Other	166	182	208	228	249

**DATA BASE  
DEMOGRAPHICS**

	1995	2000	2005	2010	2015
<b>WHITEFORD TWP</b>					
Total Population	4,544	4,558	4,558	4,539	4,529
Total Households	1,584	1,615	1,651	1,685	1,724
Persons Per Household	2.87	2.82	2.76	2.69	2.63
Total Employment	1,225	1,309	1,396	1,446	1,438
Manufacturing	272	312	360	375	361
Retail Trade	93	102	117	126	129
Services	433	499	554	601	636
All Other	427	396	365	344	312

**MONROE COUNTY**

Total Population	141,449	146,701	150,732	154,867	160,160
Total Households	49,982	52,872	55,427	58,071	61,085
Persons Per Household	2.80	2.75	2.70	2.64	2.60
Total Employment	55,541	60,702	64,574	66,501	66,807
Manufacturing	10,685	10,866	11,016	10,919	10,397
Retail Trade	10,993	11,355	12,178	12,311	12,084
Services	23,280	27,832	30,342	31,903	32,765
All Other	10,583	10,649	11,038	11,368	11,561

Source: SEMCOG, 2020 Regional Development Forecast

**Solid Waste Stream Assessment**

<u>Year</u>	<u>1995</u>	<u>2000</u>	<u>2005</u>	<u>2010</u>
Population*	141,449	146,701	150,732	154,867
Pounds/Person/Day	2.9	2.9	2.9	2.9
Total Residential (T/Day)	205.1	212.7	218.6	224.5
Commercial Employees	25,145	27,471	30,360	33,249
Pounds/Employee/Day	5.75	5.75	5.75	5.75
Total Commercial (T/Day)	72.3	79.0	87.3	95.6
Industrial Employees	13,294	13,566	14,099	14,632
Pounds/Employee/Day	10.6	10.6	10.6	10.6
Total Industrial (T/Day)	70.5	71.9	74.7	77.5
Trans. Equip. Employees	2,024	2,059	2,126	2,126
Pounds/Employee/Day	20.5	20.5	20.5	20.5
Total Trans. Equip. (T/Day)	20.7	21.1	21.8	21.8
Total Type II Waste (T/Day)	368.6	384.7	402.4	419.4
Total Type II Waste (T/Yr.)	134,539	140,415.5	146,876	153,081

Source: SEMCOG 2020 Regional Development Forecast

## 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.

Monroe County land use changes have remained fairly steady. The County anticipates similar rates of change for the next five and ten year periods.

#### MONROE COUNTY LAND USE – 1990 – 1995

	1990		1995		1978 - 1995
	Acres	Percent	Acres	Percent	Percent change
Residential	37531.2	10.7%	41034.5	11.7%	41.9%
Commercial	2056.70	0.6%	2046.4	0.6%	18.6%
Institutional	1661.26	0.5%	1669.4	0.5%	9.6%
Industrial	2121.28	0.6%	2355.9	0.7%	12.6%
Trans., comm., utilities	5261.88	1.5%	5337.8	1.5%	3.2%
Mining	1335.27	0.4%	1526.1	0.4%	2.8%
Recreation/cemeteries	3771.50	1.1%	3830.1	1.1%	11.4%
Agriculture	251028.4	71.4%	246764.6	70.2%	-6.9%
Forested/non-forested	43242.8	12.3%	42254.5	12.0%	0.0%
Wetlands	3610.21	1.0%	4436.9	1.3%	14.2%
Total	351620.6	100.0%	351256.2	100.0%	

Source: SEMCOG, MCPD/MIRIS

## **DATA BASE**

### **SOLID WASTE MANAGEMENT ALTERNATIVES**

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

#### **SYSTEM COMPONENTS**

Solid waste management systems are alternate methods of handling solid waste from the point where it is generated to ultimate disposal. During the preparation of the 1991 Monroe County Solid Waste Plan Update, the County considered each of the systems listed below and their applicability to the County.

- Collection and Transportation
- Transfer Facilities
- Sanitary Landfills
- Volume Reduction
- Education
- Waste Minimization Strategies
- Energy Resource Recovery
- Institutional Arrangements

A ranking system was used to identify the importance of the following factors relevant to each alternative:

- Public health
- Technical feasibility
- Economic feasibility
- Environmental impacts
- Access to land/transportation
- Energy consumption
- Natural resources conservation
- Public acceptability

Details of information included in these analysis can be found in Appendix B. Tables illustrating the evaluation matrices used by the County during the 1991 Update process can be found at the end of Appendix B.

## ALTERNATIVE SOLID WASTE MANAGEMENT SYSTEMS

### Alternative No. 1 STATUS QUO

As the name implies, the County will continue with the current system that has been in operation since the last Solid Waste Management Plan Update. The private sector will provide collection, transportation and disposal services for the County. Recycling and composting operations will be encouraged by the County through the office of the Solid Waste Coordinator, but will remain voluntary for each community. The County will require that some recycling/composting services be made available by the private sector as part of its new facility siting process.

### Alternative No. 2-A BASE LEVEL RECYCLING, COMPOSTING, WASTE REDUCTION AND LANDFILLING

- Monthly residential curbside recycling for the City of Monroe
- County-wide mobile recycling drop-off units
- Commercial corrugated cardboard recovery (50% goal)
- Commercial high-grade paper recovery for the City of Monroe (25% goal)
- Adequate processing capability (residential, haulers, businesses, and industries)
- Compost facilities, geographically dispersed

### Alternative No. 2-B FULL-SCALE RECYCLING, COMPOSTING, WASTE REDUCTION AND LANDFILLING

- Weekly residential curbside recycling for the City of Monroe and the Townships of Bedford, Frenchtown and Monroe
- Fixed-site recycling drop-off depots
- Commercial corrugated cardboard recovery (75% goal)
- Commercial high-grade paper recovery (50% goal)
- Source separation processing facility
- Centralized waste processing facility
- Three regional compost transfer centers
- Weekly curbside pick-up of grass, brush, and leaves in the City of Monroe and the townships of Bedford, Frenchtown and Monroe

### Alternative No. 3 WASTE-TO-ENERGY WITH LANDFILLING

The development of a waste-to-energy facility without a comprehensive waste processing component. System may be publicly and/or privately operated.

### Alternative No. 4 WASTE PROCESSING AND WASTE-TO-ENERGY

The development of a waste-to-energy facility with a comprehensive associated waste processing facility and the full scale recycling/composting programs. System may be publicly and/or privately operated.

## **Alternative No. 5 INTEGRATED SOLID WASTE MANAGEMENT SYSTEM**

**Alternative No. 5 offers an integrated approach to solid waste management that maximizes recycling, composting, waste prevention, volume reduction, waste-to-energy and landfilling. System may be public and/or privately operated.**

### **CONCLUSION**

**After careful reconsideration of these analyses, the County has determined that for the planning period covered by this Plan Update, the status quo option best meets the County's needs as the selected system. Private industry is best suited to provide solid waste management services to the County. The County has not eliminated any solid waste management systems from this Plan.**

**New facilities will be evaluated and sited under the Siting Mechanism included in this Plan. The County will continue to support and promote recycling, composting and waste reduction programs. The County will also continue to support the position of the County's Solid Waste Coordinator.**



# **Selected Solid Waste Management System**

## SELECTED SYSTEM

# 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 A. Following is an overall description of the Selected System:

- Continue to fund the position of Solid Waste Coordinator
- Continue to promote recycling, composting, waste reduction and reuse
- Rely on the private sector to provide collection and transportation services
- Rely on the private sector to own and operate disposal facilities
- Until the available capacity falls below the required 66 months, the Monroe County Board of Commissioners will site new facilities in the County at their discretion by triggering and using the siting mechanism included in this Plan
- The Plan may be amended to include new disposal facilities
- Authorize the import and export of solid waste only between Monroe County and selected counties as listed in this Plan
- The Monroe County Board of Commissioners is responsible for the implementation and enforcement of the Monroe County Solid Waste Management Plan. The County will rely on the Michigan Department of Environmental Quality to enforce Solid Waste Management laws in support of the Monroe County Solid Waste Management Plan.

**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 <sup>1</sup>	AUTHORIZED QUANTITY/ DAILY	AUTHORIZED QUANTITY/ ANNUAL	AUTHORIZED CONDITIONS <sup>2</sup>
<u>Monroe</u>	<u>Washtenaw</u>			<u>Type II (*see next pg.)</u>	<u>  P</u>
<u>Monroe</u>	<u>Wayne</u>			<u>Type II/III (*see next pg.)</u>	<u>  P</u>
<u>Monroe</u>	<u>Lenawee</u>			<u>Type II (*see next pg.)</u>	<u>  P</u>
<u>Monroe</u>	<u>Oakland/Macomb</u>			<u>Type III (**see next pg.)</u>	<u>  P</u>
<u>Monroe</u>	<u>Oakland/Macomb</u>			<u>Type II (**see next pg.)</u>	<u>  C only</u>
<u>Monroe</u>	<u>Lucas, Wood, Ottawa, Erie, Fulton Henry, Sandusky Counties of Ohio</u>			<u>Type II/III (*see next pg.)</u>	<u>  P</u>

If a new solid waste 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. "Contingency" disposal is provided only as the result of the loss of primary disposal.

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

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

## SELECTED SYSTEM

### IMPORT AUTHORIZATIONS

\* No more than an average of 5,000 cubic yards of Type II waste per day (calculated on an annual basis) shall be disposed of in Monroe County from all sources. In the event that more than one disposal facility is sited in Monroe County, this total shall be distributed between all existing facilities, unless an alternative arrangement is agreed upon by the operators of such facilities and the solid waste plan is amended.

\*\* Type III wastes only. No quantity limitations. Type II wastes are authorized for contingency disposal purposes only and are subject to the maximum quantities described above.

No solid waste originating outside of Monroe County shall be disposed of within Monroe County unless the following conditions are met:

- a) The quantity and quality of solid waste entering Monroe County from another county shall meet any special conditions or restrictions placed on the disposal of solid waste from Monroe County within the county of origin, as well as any restrictions placed on the disposal of that county's waste within that county.
- b) The quantity and quality of solid waste originating in Monroe County and exported to another county shall meet any restrictions placed on waste disposed of in Monroe County as well as any restrictions placed on the disposal of waste within the county accepting such waste.
- c) The facility must comply with annual reporting requirements of the Michigan Department of Environmental Quality (MDEQ) and these reports must be available to Monroe County from the MDEQ.

Any solid waste disposal facility operating in Monroe County shall be required to accept any acceptable waste generated in Monroe County for the life of the facility.

Type III facilities which are identified as accepting site generated wastes only shall not accept waste generated off-site without the specific authorization under the Plan. The Plan may be amended through the normal TRP and/or Plan amendment process to authorize off-site generation. For specific identification of these facilities please refer to the facility descriptions in the Selected System Section of the Plan.

## SELECTED SYSTEM

All solid waste disposal facilities operating in Monroe shall be required to submit a monthly report to the Solid Waste Coordinator. The monthly report shall contain the following information.

- a) The total amount of solid waste disposed of during the previous month.
- b) The total amount of solid waste disposed of during the previous month which originated in Monroe County.
- c) The total amount of solid waste disposed of during the previous month which originated outside of Monroe County.
- d) The remaining disposal area available in the facility, in cubic yards.
- e) The expected remaining life of the facility, in months.

The facility operator shall be required to notify the designated Solid Waste Planning Agency when there is less than 66 month's capacity at the facility.

In addition, an annual report must be submitted by January 31 of the next year which contains the following information.

- a) The total amount of solid waste disposed of during the previous year.
- b) The total amount of solid waste disposed of during the previous year which originated in Monroe County.
- c) The total amount of solid waste disposed of during the previous year which originated outside of Monroe County.
- d) The remaining disposal area available in the facility, in cubic yards.
- e) The expected remaining life of the facility, in months.

## **SELECTED SYSTEM**

Any Type III solid waste disposal facility operating in Monroe County which accepts waste generated off-site shall be required to submit an annual waste reduction and recycling plan to the Solid Waste Coordinator (or to the designated Solid Waste Planning Agency in the event that Coordinator's position is vacant.) The content of the Plan shall include the following.

- a) A waste stream assessment describing the types and amounts of waste disposed of in the facility.
- b) A market analysis indicating existing markets for any materials disposed of in the facility.
- c) A description of alternative waste reduction processes which could be used to reduce the total volume of waste disposed of in the facility.
- d) An assessment of the feasibility of implementing recycling and waste reduction practices at the facility.
- e) A schedule for the implementation of recycling and waste reduction practices for those wastes found feasible under "d" above which would have the ability to reduce the total amount of such waste disposed of at the facility by 50% within five years.

Table 1-B

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

IMPORTING COUNTY	EXPORTING COUNTY	FACILITY NAME <sup>3</sup>	AUTHORIZED QUANTITY/ DAILY	AUTHORIZED QUANTITY/ ANNUAL	AUTHORIZED CONDITIONS <sup>4</sup>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

**FUTURE IMPORT VOLUME AUTHORIZATIONS OF SOLID WASTE RESULTING  
FROM THE SITING OF NEW FACILITIES WILL BE DETERMINED AT THE TIME  
OF SITING AND THE PLAN WILL BE AMENDED ACCORDINGLY.**

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

<sup>3</sup> Facilities are only listed if the exporting county is restricted to using specific facilities within the importing county.  
<sup>4</sup> 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 <sup>5</sup>	AUTHORIZED QUANTITY/ DAILY	AUTHORIZED QUANTITY/ ANNUAL	AUTHORIZED CONDITIONS <sup>6</sup>
<u>Monroe</u>	<u>Washtenaw</u>	_____	<u>Unlimited**</u>	<u>Unlimited**</u>	<u>P,C</u>
<u>Monroe</u>	<u>Wayne</u>	_____	<u>Unlimited**</u>	<u>Unlimited**</u>	<u>P,C</u>
<u>Monroe</u>	<u>Lenawee</u>	_____	<u>Unlimited**</u>	<u>Unlimited**</u>	<u>P,C</u>
<u>Monroe</u>	<u>Oakland/Macomb</u>	_____	<u>Type III Unlimited**</u>	<u>Type III Unlimited**</u>	<u>P</u>
<u>Monroe</u>	<u>Oakland/Macomb</u>	_____	<u>Type II Unlimited**</u>	<u>Type II Unlimited**</u>	<u>C</u>

\*\* Quantity limited only by the importing county plan.  
 "Contingency" disposal is provided only as a result of the loss of primary disposal capacity.

<sup>5</sup> Facilities are only listed if the exporting county is restricted to using specific facilities within the importing county.

<sup>6</sup> 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 <sup>7</sup>	AUTHORIZED QUANTITY/ DAILY	AUTHORIZED QUANTITY/ ANNUAL	AUTHORIZED CONDITIONS <sup>8</sup>
<u>Monroe</u>	<u>Washtenaw</u>	_____	<u>Unlimited**</u>	<u>Unlimited**</u>	<u>P,C</u>
<u>Monroe</u>	<u>Wayne</u>	_____	<u>Unlimited**</u>	<u>Unlimited**</u>	<u>P,C</u>
<u>Monroe</u>	<u>Lenawee</u>	_____	<u>Unlimited**</u>	<u>Unlimited**</u>	<u>P,C</u>
<u>Monroe</u>	<u>Oakland/Macomb</u>	_____	<u>Type III Unlimited**</u>	<u>Type III Unlimited**</u>	<u>P</u>
<u>Monroe</u>	<u>Oakland/Macomb</u>	_____	<u>Type II Unlimited**</u>	<u>Type II Unlimited**</u>	<u>C only</u>

\*\* Quantity limited only by the importing county plan. "Contingency" disposal is provided only after the loss of primary disposal.

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

<sup>7</sup> Facilities are only listed if the exporting county is restricted to using specific facilities within the importing county.

<sup>8</sup> Authorization indicated by P = Primary Disposal; C = Contingency Disposal; \* = Other conditions exist and detailed explanation is included in the Attachment Section.

**SOLID WASTE DISPOSAL AREAS**

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

Type II Landfill:

Arbor Hills Landfill  
 Carleton Farms Landfill  
 Vienna Junction Landfill  
 Woodland Meadows Landfill  
 Adrian Landfill  
 Sauk Trail Hills Landfill

Type A Transfer Facility:Type B Transfer Facility:Type III Landfill:

Jefferson Smurfit  
 Matlin Road Landfill  
 Detroit Edison Fly Ash Fill  
 Consumers Energy - J.R. Whiting Fly Ash Fill  
 Holnam  
 Allied Waste Services, Rockwood Landfill

Processing Plant:

Stevens Disposal, Inc.

Incinerator:Waste Piles:Waste-to-Energy Incinerator:Other:

Additional facilities are not 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 Attachments Section D.

SELECT SYSTEM

FACILITY DESCRIPTIONS

Facility Type: Type II
Facility Name: Arbor Hills Landfill

County: Washtenaw Location: Town: 1S Range: 7E Section(s): 13

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: Browning Ferris Industries

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:
Non-hazardous solid and semi-solid wastes, no hazardous or liquid wastes

Site Size:

Total area of facility property: 936 acres
Total area sited for use: 356 acres
Total area permitted: 217 acres
Operating: 113 acres
Not excavated: 104 acres
Current capacity: 30,500,000 [ ] tons or [X] yds^3 airspace or 61.5 million
Estimated lifetime: 17.6 years cubic yards of capacity
Estimated days open per year: 265 days
Estimated yearly disposal volume: 3,500,00 [ ] tons or [X] yds^3

(if applicable)

Annual energy production:
Landfill gas recovery projects: 18 megawatts
Waste-to-energy incinerators: \_\_\_\_\_ megawatts

**SELECT SYSTEM**

**FACILITY DESCRIPTIONS**

Facility Type: Type II  
Facility Name: Carleton Farms Landfill  
County: Wayne Location: Town: 4S Range: 8E Section(s): 36

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, Inc.

**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, sludges

**Site Size:**

Total area of facility property:	<u>662.4</u>	acres
Total area sited for use:	<u>662.4</u>	acres
Total area permitted:	<u>388.3</u>	acres
Operating:	<u>127.3</u>	acres
Not excavated:	<u>261.0</u>	acres
Current capacity:	<u>59,500,000</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds <sup>3</sup>
Estimated lifetime:	<u>35</u>	years
Estimated days open per year:	<u>312</u>	days
Estimated yearly disposal volume:	<u>3,000,000</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds <sup>3</sup>

(if applicable)

Annual energy production:		
Landfill gas recovery projects:	<u>4</u>	megawatts
Waste-to-energy incinerators:	<u>      </u>	megawatts

SELECT SYSTEM

FACILITY DESCRIPTIONS

Facility Type: Type II
Facility Name: Vienna Junction Landfill
County: Monroe Location: Town: 9S, 8S Range: 8E Section(s): 5, 6, 31 & 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: Browning Ferris Industries

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

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

Site Size:

Total area of facility property: 246 acres
Total area sited for use: 149 acres 226.3
Total area permitted: 56 acres 145.2
Operating: 40 acres 46.8
Not excavated: 53 acres 27.4

Current capacity: 11,400,000 [ ] tons or [X] yds^3
Estimated lifetime: 25 years
Estimated days open per year: 280 days
Estimated yearly disposal volume: 1,000,000 [ ] tons or [X] yds^3

(if applicable)

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

**SELECT SYSTEM**

**FACILITY DESCRIPTIONS**

Facility Type: Type II  
Facility Name: Woodland Meadows Recycling and Disposal Facility – Van Buren Township  
County: Wayne Location: Town: 3S Range: 8E Section(s): 1

Map identifying location included in Attachment Section:  Yes  No

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

Public  Private Owner: Waste Management of Michigan, Inc.

Operating Status (check)	Waste Types Received (check all that apply)
<input checked="" type="checkbox"/> open	<input checked="" type="checkbox"/> residential
<input type="checkbox"/> closed	<input checked="" type="checkbox"/> commercial
<input checked="" type="checkbox"/> licensed	<input checked="" type="checkbox"/> industrial
<input type="checkbox"/> unlicensed	<input checked="" type="checkbox"/> construction & demolition
<input checked="" type="checkbox"/> construction permit	<input checked="" type="checkbox"/> contaminated soils
<input type="checkbox"/> open, but closure	<input type="checkbox"/> special wastes *
<input type="checkbox"/> pending	<input type="checkbox"/> other: _

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

Sludges, provided they are at least 30% solids.

**Site Size:**

Total area of facility property:	<u>214</u>	acres
Total area sited for use	<u>214</u>	acres
Total area permitted:	<u>148</u>	acres
Operating:	<u>70</u>	acres
Not excavated:	<u>78</u>	acres
Current capacity:	<u>26,520,800</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds <sup>3</sup>
Estimated lifetime:	<u>19.8</u>	years
Estimated days open per year:	<u>305</u>	days
Estimated yearly disposal volume:	<u>1,340,200</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds <sup>3</sup>

(if applicable)

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

SELECT SYSTEM

FACILITY DESCRIPTIONS

Facility Type: Type II

Facility Name: Adrian Landfill

County: Lenawee Location: Town: 7.8S Range: 4E Section(s): 6.7

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: Allied Inc.

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, sludges per operating policy

Site Size:

Total area of facility property: 421 acres

Total area sited for use 287 acres

Total area permitted: 40 acres

Operating: 19 acres

Not excavated: 20 acres

Current capacity: 200,200  tons or  yds<sup>3</sup>

Estimated lifetime: 6.8 years

Estimated days open per year: 307 days

Estimated yearly disposal volume: 97,731  tons or  yds<sup>3</sup>

(if applicable)

Annual energy production:

Landfill gas recovery projects: 20,148 megawatts

Waste-to-energy incinerators: \_\_\_\_\_ megawatts

**SELECT SYSTEM**

**FACILITY DESCRIPTIONS**

Facility Type: Type II

Facility Name: Sauk Trail Hills Landfill

County: Wayne Location: Town: 2S Range: 8E Section(s): 35

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: Sauk Trail Hills Development, Inc.

**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:

Non-hazardous special waste is accepted after the completion of a waste characterization profile and necessary analytical testing. An approval number is issued for waste that passes CFR 40 standards.

**Site Size:**

Total area of facility property:	<u>200.7</u>	acres	
Total area sited for use:	<u>160.2</u>	acres	
Total area permitted:	<u>160.2</u>	acres	
Operating:	<u>74.3</u>	acres	
Not excavated:	<u>85.3</u>	acres	
Current capacity:	<u>18,026,265</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds <sup>3</sup>	12/97
Estimated lifetime:	<u>11</u>	years	
Estimated days open per year:	<u>306</u>	days	
Estimated yearly disposal volume:	<u>1,500,000</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds <sup>3</sup>	

(if applicable)

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

SELECT SYSTEM

FACILITY DESCRIPTIONS

Facility Type: Type III

Facility Name: Jefferson Smurfit Corporation Industrial Landfill  
1601 E. Elm, City of Monroe

County: Monroe Location: Town: 6S Range: 8E Section(s): 6

Map identifying location included in Attachment Section:  Yes  No

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

Public  Private Owner: Homrich, Inc.

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: pulper wastes

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

Site Size:

Total area of facility property: 40 acres

Total area sited for use: 21.42 acres

Total area permitted: 21.42 acres

Operating: 21.42 acres

Not excavated: 0 acres

Current capacity: 200,000  tons or  yds<sup>3</sup>

Estimated lifetime: 2 years

Estimated days open per year: N/A days

Estimated yearly disposal volume: 100,000  tons or  yds<sup>3</sup>

(if applicable)

Annual energy production:

Landfill gas recovery projects: \_\_\_\_\_ megawatts

Waste-to-energy incinerators: \_\_\_\_\_ megawatts

**SELECT SYSTEM**

**FACILITY DESCRIPTIONS**

Facility Type: Type III

Facility Name: Matlin Road Landfill

County: Monroe Location: Town: 5N Range: 9E Section(s): 8

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: Regulated Resource Recovery, Inc.

**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: Type III waste

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

Includes recycling and composting facility.

**Site Size:**

Total area of facility property:	<u>250</u>	acres
Total area sited for use:	<u>40.4</u>	acres
Total area permitted:	<u>40.0</u>	acres
Operating:	<u>17.92</u>	acres
Not excavated:	<u>22.48</u>	acres
Current capacity:	<u>766,000</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds <sup>3</sup>
Estimated lifetime:	<u>23</u>	years
Estimated days open per year:	<u>312</u>	days
Estimated yearly disposal volume:	<u>34,000</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds <sup>3</sup>

(if applicable)

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

SELECT SYSTEM

FACILITY DESCRIPTIONS

Facility Type: Type III
Facility Name: Detroit Edison Fly Ash Fill
County: Monroe Location: Town: 7S Range: 9E Section(s): 16

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: Detroit Edison

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

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

Coal ash

Site generated waste only

Site Size:

Total area of facility property: 410 acres
Total area sited for use: 410 acres
Total area permitted: 410 acres
Operating: 410 acres
Not excavated: 410 acres

Current capacity: 12,000,000 [ ] tons or [X] yds^3
Estimated lifetime: 17-25 years
Estimated days open per year: 365 days
Estimated yearly disposal volume: 400,000 to 600,000 [X] tons or [ ] yds^3

(if applicable)

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

**SELECT SYSTEM**

**FACILITY DESCRIPTIONS**

Facility Type: Type III

Facility Name: Consumers Energy - J.R. Whiting Fly Ash Fill

County: Monroe Location: Town: 8S Range: 8E Section(s): 11, 14

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: Consumers Energy

**Operating Status (check)**

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

**Waste Types Received (check all that apply)**

- residential
- commercial
- industrial (Type III, low hazard)
- construction & demolition
- contaminated soils
- special wastes \*
- other: \_

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

Site generated waste only.

**Site Size:**

Total area of facility property:	<u>191</u>	acres
Total area sited for use	<u>191</u>	acres
Total area permitted:	<u>151</u>	acres
Operating:	<u>151</u>	acres
Not excavated:	<u>40</u>	acres
Current capacity:	<u>1,260,000</u>	<input checked="" type="checkbox"/> tons or <input type="checkbox"/> yds <sup>3</sup>
Estimated lifetime:	<u>18</u>	years
Estimated days open per year:	<u>365</u>	days
Estimated yearly disposal volume:	<u>70,000</u>	<input checked="" type="checkbox"/> tons or <input type="checkbox"/> yds <sup>3</sup>

(if applicable)

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

**SELECT SYSTEM**

**FACILITY DESCRIPTIONS**

Facility Type:       Type III

Facility Name:       Holnam, Inc.

County: Monroe Location: Town: 5S Range: 6E Section(s): 36

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: Holnam, Inc.

**Operating Status (check)**

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

**Waste Types Received (check all that apply)**

- residential
- commercial
- industrial
- construction & demolition
- contaminated soils
- special wastes \*
- other: low hazard industrial waste

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

Site generated wastes only.

**Site Size:**

Total area of facility property:	<u>80</u>	acres
Total area sited for use:	<u>38</u>	acres
Total area permitted:	<u>38</u>	acres
Operating:	<u>35</u>	acres
Not excavated:	<u>32.5</u>	acres
Current capacity:	<u>1,800,000</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds <sup>3</sup>
Estimated lifetime:	<u>20</u>	years
Estimated days open per year:	<u>360</u>	days
Estimated yearly disposal volume:	<u>72,000</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds <sup>3</sup>

(if applicable)

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

SELECT SYSTEM

FACILITY DESCRIPTIONS

Facility Type: Type III

Facility Name: Allied Waste Services, Rockwood Landfill

County: Monroe Location: Town: 5S Range: 10E Section(s): 34 (east 1/2)

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: Allied Waste Services, Inc.

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:

Non-hazardous industrial waste streams

Site Size:

Total area of facility property:	<u>209.46</u>	acres	
Total area sited for use:	<u>209.46</u>	acres	
Total area permitted:	<u>209.46</u>	acres	
Operating:	<u>10.92</u>	acres	
Not excavated:	<u>140</u>	acres	
Current capacity:	<u>22,000,000</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds <sup>3</sup>	Total
Estimated lifetime:	<u>30-35</u>	years	
Estimated days open per year:	<u>206</u>	days	
Estimated yearly disposal volume:	<u>600,000</u>	<input type="checkbox"/> tons or <input checked="" type="checkbox"/> yds <sup>3</sup>	

(if applicable)

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

## SELECT 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.

Collection services: Collection of solid waste is provided by private haulers. It is planned to encourage municipalities to contract for solid waste and recycling services. Some private collection services offer curbside recycling services by subscription.

The following is the current status of these services in municipalities in Monroe County.

Ash Township – Residents contract individually.

Village of Carleton – Curbside service of refuse only provided by City Environmental.

Bedford Township – Residents contract individually. Recycling weekly through BFI drop – off location.

Berlin Charter Township – Residents contract individually.

Village of Estral Beach – Unknown

Village of south Rockwood – Curbside service for refuse contracted City Environmental; Recycling of core materials 2 times per month; grass pick up by the village DPW Monday only; brush chipped by DPW at Village Hall; bulky waste dump days are provided 4 times a year by Standard Environmental Landfill (now known as Allied Waste Services, Rockwood Landfill).

Dundee Township – Residents contract individually. Bulky waste provided once per year. Recycling twice per month through BFI drop-off locations.

Village of Dundee – Curbside services for refuse is contracted; recycling is offered as an option – residents pay an additional fee per month; no yard waste service; bulky waste collection provided one per year by Township.

Erie Township – Residents contract individually. BFI provides yard waste drop-off at the landfill; bulky waste clean-up twice per year, recycling is provided by drop-off location.

City of Luna Pier – Curbside service is contracted; recycling provided by BFI drop-off location. Bulky waste clean-up with Erie Township.

Exeter Township – Residents contract individually. Bulky waste clean-up provided once a year.

Village of Maybee – Residents contract individually. Bulky waste with Township clean-up day.

Frenchtown Charter Township – Services contracted with City Environmental includes recycling of core materials; yard waste services; bulky waste collection.

Ida Township – Residents contract individually. Bulky waste clean-up once per year.

LaSalle Township - Residents contract individually. Bulky waste clean-up once per year.

London Township – Residents contract individually.

Milan Township – Residents contract individually. Bulky waste clean-up once per year.

Monroe Charter Township – Residents contract individually. Brush is chipped by Township.

Raisinville Township – Residents contract individually. Bulky waste clean-up once per year.

**SELECT SYSTEM**

**Summerfield Township** - Residents contract Individually. Bulky waste clean-up once per year.

**City of Petersburg** - Residents contract individually.

**Whiteford Township** - Residents contract individually.

**City of Monroe** - Services contracted with City Environmental include yard waste, recycling and bulky waste collection. 3 bag limit.

**City of Milan** - Unknown

**SOLID WASTE HAULERS**

There are 16 identified solid waste haulers serving Monroe County.

**Browning Ferris Industries**  
6749 Dixie Highway  
Erie, Michigan 48133  
1-800-234-3429

**Fairway Refuse**  
11360 South Stoney Creek Rd.  
Carleton, Michigan 48117  
734-587-2119

**Allied Waste Industries**  
9450 U.S. Turnpike  
Newport, Michigan 48166  
734-379-4624

**ABC Refuse Inc.**  
565 Smith Rd.  
Temperance, Michigan 48182  
734-847-9625

**We Haul Refuse**  
2939 Geiger Rd.  
Ida, Michigan 48140  
734-269-2767

**Browning Ferris Industries**  
Wayne, Michigan

**City Environmental, Inc.**  
1-800-726-1225  
Romulus, Michigan

**Bins Disposal, Inc.**  
3905 Luna Pier Rd.  
Erie, Michigan 48133  
Contact: Bob Willis  
1-800-939-5271

**Action Disposal**  
P.O. Box 379  
Temperance, MI 48182  
1-800-459-4624

**Daily Recycling of Michigan  
Container Service**  
200 Matlin Road  
Carleton, Michigan 48117  
Contact: Nick Straub  
734-654-9800

**J & S Sanitation**  
3133 West Temperance Rd.  
Temperance, Michigan 48182  
734-847-0230

**Allied Waste Industries**  
1983 N. Ogden  
Adrian, Michigan  
1-800-589-9139

**Waste Management of Michigan**  
36850 Van Born Rd.  
Southfield, Michigan 48075  
734-729-0700

**Stevens Disposal and Recycling**  
P. O. Box 567  
Temperance, Michigan 48182  
Contact: Jason Schlegel  
734-856-8451

**Suburban Salvage**  
Ida, Michigan  
734-269-6060

**Tony Eby Refuse**  
P. O. Box 226  
Maybee, Michigan 48159  
Contact: Tony Eby  
734-587-3375

**Waste Management of Northwest Ohio**  
6525 Wales Rd.  
Toledo, Ohio  
1-800-458-3849

**SELECT SYSTEM**

**RESOURCE CONSERVATION EFFORTS:**

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

Effort Description	Est. Diversion Tons/Yr		
	Current	5th yr	10th yr
Educational programs in schools regarding reuse and reduction of packaging	*		
Composting programs.	*		
Encourage buying in bulk.	*		
Encourage the use of computer technology.	*		
Support the non-profit resale stores.	*		

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

\* Since these types of efforts are encouraging behavior changes, reasonable estimates regarding diversion would be difficult to determine.

SELECT 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 <sup>3</sup> /Yr		
	<u>Current</u>	<u>5th yr</u>	<u>10th yr</u>
Landfill compaction	*		
Incineration	*		

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

\* Data not available.

**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.

The following items are recycled through various programs in Monroe County.

Plastics: HDPE & PET services	Glass	Standard Disposal offers waste oil drop off
Metals	Phone Books	to Berlin Township residents only
Cardboard	Magazines	
Paper masonry	Plastic Bags	Small quantity residential concrete &

These items are recycled through the following methods: voluntary curbside collection programs, BFI Recycle NOW Program, City of Monroe Metropolitan Waste Water Treatment Plant Drop Off Center, County hosted programs.

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

**Composting Programs within Monroe County – Existing**

Currently the County is providing yard waste collection at locations throughout the County for all residents. The locations are centrally located in Ash, Bedford, and Monroe Townships.

- 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:

Household hazardous waste collection days are conducted annually in numerous communities around the County. In addition, all 19 Monroe Bank & Trust locations within the County provide household batter collection services.

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

RECYCLING AND COMPOSTING

The following is a brief analysis of the recycling and composting programs selected for the County in this Plan. Additional information on operation of recycling and composting programs is included in Appendix A. The analysis covers various factors within the County and the impacts of these factors on recycling and composting. Following the written analysis the tables on pages III-28, 29, & 30 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-32, 33, & 34 list the recycling, composting, and source separation of hazardous materials programs that are proposed in the future for the County. It is not this Plan update's intent to prohibit additional programs or expansions of current programs to be implemented beyond those listed.

The County supports and will work to achieve the recycling, composting and waste reduction goals identified in the State's Solid Waste Policy. To support this effort, the County established the office of the Solid Waste Coordinator. This person provides assistance to other local units of government, residents, schools, businesses and industries. The County Solid Waste Plan facility siting process includes a section evaluating the proposal's compatibility with the County's recycling and composting goals – the more aggressive the proposal is in providing services, the higher point value awarded the proposal.

TABLE III-1

**RECYCLING:**

<u>Program Name</u>	<u>Service Area</u> <sup>1</sup>	<u>Public or Private</u>	<u>Collection Point</u> <sup>3</sup>	<u>Collection Frequency</u> <sup>4</sup>	<u>Materials Collected</u> <sup>5</sup>	<u>Program Management Development</u>	<u>Responsibilities Operation</u>	<u>Responsibilities Evaluation</u>
1.) BFI Recycle NOW Wkly in Frenchtown & Monroe Charter Townships; Monthly in Dundee, Erie/Luna Pier, Bedford & Ida; Saturdays in Dundee Monroe & Lambertville – Newspapers only.	(See next line)	Private	d	w/m	ABEF	1.5	5	1.5
2.) Phone Book Collection	Monroe County	Pub/Pri	d	Wi	D	1	1.5	1.5
3.) Metro Waste Water Plant The workers of the Metro Waste Water Treatment Plant tend to the trailer daily.	Monroe County	Pub/Pri	d	d	BCDGF	0	0	0
4.) Monroe County Fair Environmental interest groups, Monroe County 4-H	Monroe County Fairgrounds	Pub/Pri	o	d	AFC	1.4	4	1.4
5.) Standard Environmental	Berlin Township	Private	o	d	ABCO	5	5	5
6.) Voluntary Curbside Collection Programs (Contracted)	Milan, Monroe, Frenchtown Charter Twnshp., S.Rockwood, Carlton, Dundee	Private	c	w	EF,Other	3.5	5	3.5
7.) Stevens Disposal	Monroe County	Private	d	d	F	5	5	5
8.) Stevens Disposal	Summerfield Township	Private	d	d	ABCEF	5	5	5

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

<sup>1</sup> 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.

<sup>2</sup> Identified by 1 = Designated Planning Agency; 2 = County Board of Commissioners; 3 = Department of Public Works; 4 = Environmental Group (Identified on page 35); 5 = Private Owner/Operator; 6 = Other (Identified on page 35).

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

<sup>4</sup> 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.

<sup>5</sup> 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 36.

TABLE III-2

**COMPOSTING:**

<u>Program Name</u>	<u>Service Area</u> <sup>6</sup>	<u>Public or Private</u>	<u>Collection Point</u> <sup>8</sup>	<u>Collection Frequency</u> <sup>9</sup>	<u>Materials Collected</u> <sup>10</sup>	<u>Program Development</u>	<u>Management Responsibilities</u>	<u>Evaluation</u> <sup>7</sup>
							<u>Operation</u>	
1.) City of Monroe	City of Monroe	Private	c	W	GL	3.5	5	5.3
2.) City of Milan	City of Milan	Pri/Pub	c	W	GL	3.5	5	5.3
3.) Frenchtown Charter Township	Frenchtown Charter Township	Private	c	W	GL	3.5	5	
4.) Village S. Rockwood	Village S. Rockwood	Public	c	W	GL	3	3	
5.) Village of Carleton	Village of Carleton	Public	c	Sp,Sm	BRUSH	3	3	
6.) Master Composter	Monroe County	Public			GLFP	6	6	
7.) Let the Chips Fall Where They May	Monroe	Public	o		G	1	1	
8.) Yard Waste Collection	Monroe County	Private	d	Sp,F	GLF	3.5	5	
9.) BFI	Monroe County	Private	d	d	GL	5	5	5
10.) Christmas Tree Collection	Monroe County	Public	d	Wi		1	5	1

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

<sup>6</sup> 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.

<sup>7</sup> Identified by 1 = Designated Planning Agency; 2 = County Board of Commissioners; 3 = Department of Public Works; 4 = Environmental Group (Identified on page 35); 5 = Private Owner/Operator; 6 = Other (Identified on page 35).

<sup>8</sup> Identified by c = curbside; d = drop-off; o = onsite; and if other, explained.

<sup>9</sup> 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.

<sup>10</sup> 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 36.

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 <sup>11</sup>	Public or Private	Collection Point <sup>13</sup>	Collection Frequency <sup>14</sup>	Materials Collected <sup>15</sup>	Program Management Responsibilities <sup>12</sup>		
						Development	Operation	Evaluation
1.) Household Battery	Monroe County	Pub/Pri	d	d	B2	1,5	1	1
2.) Household Hazardous Waste	Monroe County	Pub/Pri	d	d	ALL	1,5	5	1,5
3.) Clean Sweep	Monroe County	Pub/Pri	d	d	PS	1,5	1,5	1,5

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

<sup>11</sup> 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.

<sup>12</sup> Identified by 1 = Designated Planning Agency; 2 = County Board of Commissioners; 3 = Department of Public Works; 4 = Environmental Group (Identified on page 35); 5 = Private Owner/Operator; 6 = Other (Identified on page 35).

<sup>13</sup> Identified by c = curbside; d = drop-off; o = onsite; and if other, explained.

<sup>14</sup> 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.

<sup>15</sup> 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.

**RECYCLING STATIONS**

City of Monroe – The City operates a location for residents to drop off the following items: green, brown, amber, and clear glass; newspaper; cardboard; magazines; paper board; office paper; and scrap metal.

Browning Ferris Industries runs a Recycle Now Program with Monroe County.

Eagle Recycling Brokers & Transporters  
Commercial and Industrial  
Paper, Pallets, Plastic, Glass  
4777 Sycamore, Monroe 48162  
734-289-2547

Edelstein & Son, Inc  
1320 Langrange St.  
Toledo, Ohio  
1-800-788-2191

Daily Recycling of Michigan  
200 Matlin Road  
Carleton, Michigan  
734-654-9800

Standard Environmental Services, Inc.  
9450 U.S. Turnpike  
Newport, Michigan 48166  
734-379-4624

**COMPOSTING FACILITIES**

Regulated Resource Recovery  
200 Matlin Road  
Ash Township  
734-654-9800  
Contact: Nick Straub

Jacks Lawn Service  
5550 West Dunbar Rd.  
City of Monroe  
734-243-3382  
Contact: Jack Sturn

City of Sylvania (Ohio)  
Yankee Rd. Composting  
419-885-8992  
Contact: Bob Slack

Browning Ferris Industries  
Arbor Hills Facility  
10599 W. Five Mile Rd.  
Northville, Michigan 48167  
248-349-3215

**HAZARDOUS WASTE PROGRAMS WITHIN MONROE COUNTY**

Household battery collection program. - The County is currently accepting household generated batteries from all County residents. Available at 21 Monroe Bank & Trust locations throughout the County.

Monroe County sponsors 2 household hazardous waste collection days per year.

Motor oil and antifreeze can be recycled locally at auto supply an repair facilities.

TABLE III-4

**PROPOSED RECYCLING:**

<u>Program Name</u> (if known)	<u>Service Area</u> <sup>16</sup>	<u>Public or Private</u>	<u>Collection Point</u> <sup>18</sup>	<u>Collection Frequency</u> <sup>19</sup>	<u>Materials Collected</u> <sup>20</sup>	<u>Program Management Responsibilities</u> <sup>17</sup>		
						<u>Development</u>	<u>Operation</u>	<u>Evaluation</u>
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____

NOTE: INFORMATION NOT AVAILABLE AT THIS TIME HOWEVER, THE COUNTY SUPPORTS THE DEVELOPMENT OF RESPONSIBLE, WELL-RUN FACILITIES THAT COMPLY WITH STATE AND LOCAL REGULATIONS, INCLUDING ZONING

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

<sup>16</sup> 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.

<sup>17</sup> Identified by 1 = Designated Planning Agency; 2 = County Board of Commissioners; 3 = Department of Public Works; 4 = Environmental Group (Identified on page 35); 5 = Private Owner/Operator; 6 = Other (Identified on page 35).

<sup>18</sup> Identified by c = curbside; d = drop-off; o = onsite; and if other, explained.

<sup>19</sup> 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.

<sup>20</sup> 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 36.



TABLE III-6

PROPOSED SOURCE SEPARATION OF POTENTIALLY HAZARDOUS MATERIALS:

<u>Program Name</u> (if known)	<u>Service Area</u> <sup>26</sup>	<u>Public or Private</u>	<u>Collection Point</u> <sup>28</sup>	<u>Collection Frequency</u> <sup>29</sup>	<u>Materials Collected</u> <sup>30</sup>	<u>Program Management Responsibilities</u> <sup>27</sup>		
						<u>Development</u>	<u>Operation</u>	<u>Evaluation</u>
Household Hazardous Waste	Monroe County	Pub/Pri	d	w	ALL	1	1	1
Clean Sweep	State of Michigan	Pub/Pri	d	w	PS	1	1	1

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

<sup>26</sup> 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.

<sup>27</sup> Identified by 1 = Designated Planning Agency; 2 = County Board of Commissioners; 3 = Department of Public Works; 4 = Environmental Group (Identified on page 35); 5 = Private Owner/Operator; 6 = Other (Identified on page 35).

<sup>28</sup> Identified by c = curbside; d = drop-off; o = onsite; and if other, explained.

<sup>29</sup> 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.

<sup>30</sup> Identified by the materials collected by listing of the letter located by that material type. AR = Aerosol Cans; A = Automotive Products except Used Oil, Oil Filters & Antifreeze; AN = Antifreeze; B1 = Lead Acid Batteries; B2 = Household Batteries; C = Cleaners and Polishers; H = Hobby and Art Supplies; OF = Used Oil Filters; P = Paints and Solvents; PS = Pesticides and Herbicides; PH = Personal and Health Care Products; U = Used Oil; OT = Other Materials and identified.

## SELECTED SYSTEM

### IDENTIFICATION OF RESOURCE RECOVERY MANAGEMENT ENTITIES:

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

#### Environmental Groups:

#### Other:

Individual communities will continue to be responsible for the programs they contract for or operate. Monroe County and the City of Monroe and their offices or divisions will continue to provide existing services through the office of the Solid Waste Coordinator.

**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.

<u>Collected Material:</u>	<u>Projected Annual Tons Diverted:</u>			<u>Collected Material:</u>	<u>Projected Annual Tons Diverted:</u>		
	Current	5th Yr	10th Yr		Current	5th Yr	10th Yr
A. TOTAL PLASTICS:	* _____	** _____	*** _____	G. GRASS AND LEAVES:	_____	_____	_____
B. NEWSPAPER:	* _____	** _____	*** _____	H. TOTAL WOOD WASTE:	<u>Unknown</u>	_____	_____
C. CORRUGATED CONTAINERS:	* _____	** _____	*** _____	I. CONSTRUCTION AND DEMOLITION:	<u>Unknown</u>	_____	_____
D. TOTAL OTHER PAPER:	* _____	** _____	*** _____	J. FOOD AND FOOD PROCESSING:	_____	_____	_____
E. TOTAL GLASS:	* _____	** _____	*** _____	K. TIRES:	_____	_____	_____
F. OTHER MATERIALS:				L. TOTAL METALS:	<u>Unknown</u>	** _____	** _____

**TOTAL = 1456 TONS / YEAR.** The totals are based on an average of 7 lbs. per week, per household, using an estimated participation rate of 40%.

\*Data for each separate material is unavailable therefore the totals are combined. This is material collected exclusively from curbside collection programs from communities listed on pages III-22 and III-23.

\*\*/\*\* Diversion rates would be expected to increase with the population and the availability of municipal contracts that offer curbside recycling.

**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.

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

**NOTE:**

Monroe County does not operate collection services, all programs are placed out for bids to private industry. It would be the responsibility of industry to procure the markets. Monroe County does stipulate that the materials are recycled. For a complete look at markets in and out of state, refer to [www.deq.state.mi.us/ead/recycle](http://www.deq.state.mi.us/ead/recycle).

**SELECTED SYSTEM**

**Projected Diversion Rates Tires**

Collected Materials - the following are from a County sponsored tires collections and the DEQ sponsored grant program.

Collected Materials	Projected		
	Annual Tons Diverted	5 <sup>th</sup> year	10 <sup>th</sup> year
A. Tires - Monroe County Program	*	**	***
B. DEQ sponsored Grant Program	*	**	***

Total of tires collected = 40,141

\* Monroe County has sponsored several tire collections; 10,141 tires were collected during these county sponsored events.

A Monroe County resident has also participated in the DEQ sponsored grant program; 30,000 tires were taken from this site.

\*\*/\*\* Monroe County is currently working on a program to collect tires in conjunction with Holnam, Inc. Therefore, an increase in this column would be anticipated.

**Projected Diversion Rates - BFI Recycle NOW program**

Collected Materials the following are estimates from the BFI Recycle NOW program

Collected Materials	Projected Annual Tons Diverted	5 <sup>th</sup> year	10 <sup>th</sup> year
A. Total Plastics	*	**	***
B. Newspapers	*	**	***
C. Total Glass	*	**	***
D. Total Metals	*	**	***

**TOTAL = 689.76 tons**

\* Data for each separate material is unavailable therefore the totals are combined. This is material collected exclusively from the BFI Recycle NOW program.

\*\* / \*\*\* Diversion rates would be expected to increase, the rate of this increase is unknown.

**Information is provided by the BFI Recycle Revenue Reports**

**Projected Diversion Rates - Grass & Leaves**

Grass & Leaves TOTAL = 640 tons

\* Monroe County has sponsored a yard waste drop off program in the following Townships: Monroe Charter Township and Bedford Township. This program is open to all county residents. The projected annual tons diverted are from this program only. Please note the numbers given are only estimates.

Monroe County and the Monroe County MSU Extension Service encourages backyard composting through the Master Composter classes and providing residents with printed materials detailing how to compost. The County has also sponsored a program selling the "Earth Machine" with 125 units being sold.

\*\*/\*\* Diversion would be expected to increase with more municipalities including yard waste collection with their solid waste contracts and the increase awareness of back yard composting.

**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 that 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.

<u>Program Topic</u> <sup>1</sup>	<u>Delivery Medium</u> <sup>2</sup>	<u>Targeted Audience</u> <sup>3</sup>	<u>Program Provider</u> <sup>4</sup>
1: <u>Recycle Now</u>	f	p	<u>Solid Waste Coordinator</u>
1: <u>BFI Mobeus</u>	w,f,e	s	<u>BFI</u>
1: <u>Bottles to Benches</u>	o,f	p	<u>Solid Waste Coordinator</u>
1,2,3	t, bus ads	p	<u>Solid Waste Coordinator</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

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

<sup>2</sup> 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.

<sup>3</sup> 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.

<sup>4</sup> 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

## SITING REVIEW PROCEDURES

### MONROE COUNTY SOLID WASTE FACILITY PRIMARY AND SECONDARY CONSTRAINT MAPS

In addition to the siting criteria that follow, the Solid Waste Facility Constraint Maps, presented on the following pages, graphically illustrate the more suitable areas for development of solid waste management facilities. Shaded areas represent locations less suitable for development of solid waste management facilities.

The original constraint maps prepared as part of this Solid Waste Management Plan Update are available for review through the Solid Waste Coordinator or the County Planning Department.

These maps indicate areas potentially suitable and unsuitable for solid waste facilities and are intended as a guide for developers. The final determining factors for siting of solid waste management facilities will be the criteria and procedures that follow.

NOTE: P.A. 451 PART 115 AS AMENDED, RULE 324.11537a STATES IN PART ...*If the county is able to demonstrate to the department that it has as least 66 months of available capacity, that county may refuse to utilize its siting mechanism until the county is no longer able to demonstrate 66 months of capacity or until the county amends its plan in accordance with this part to provide for the annual certification process described in section 11538...*

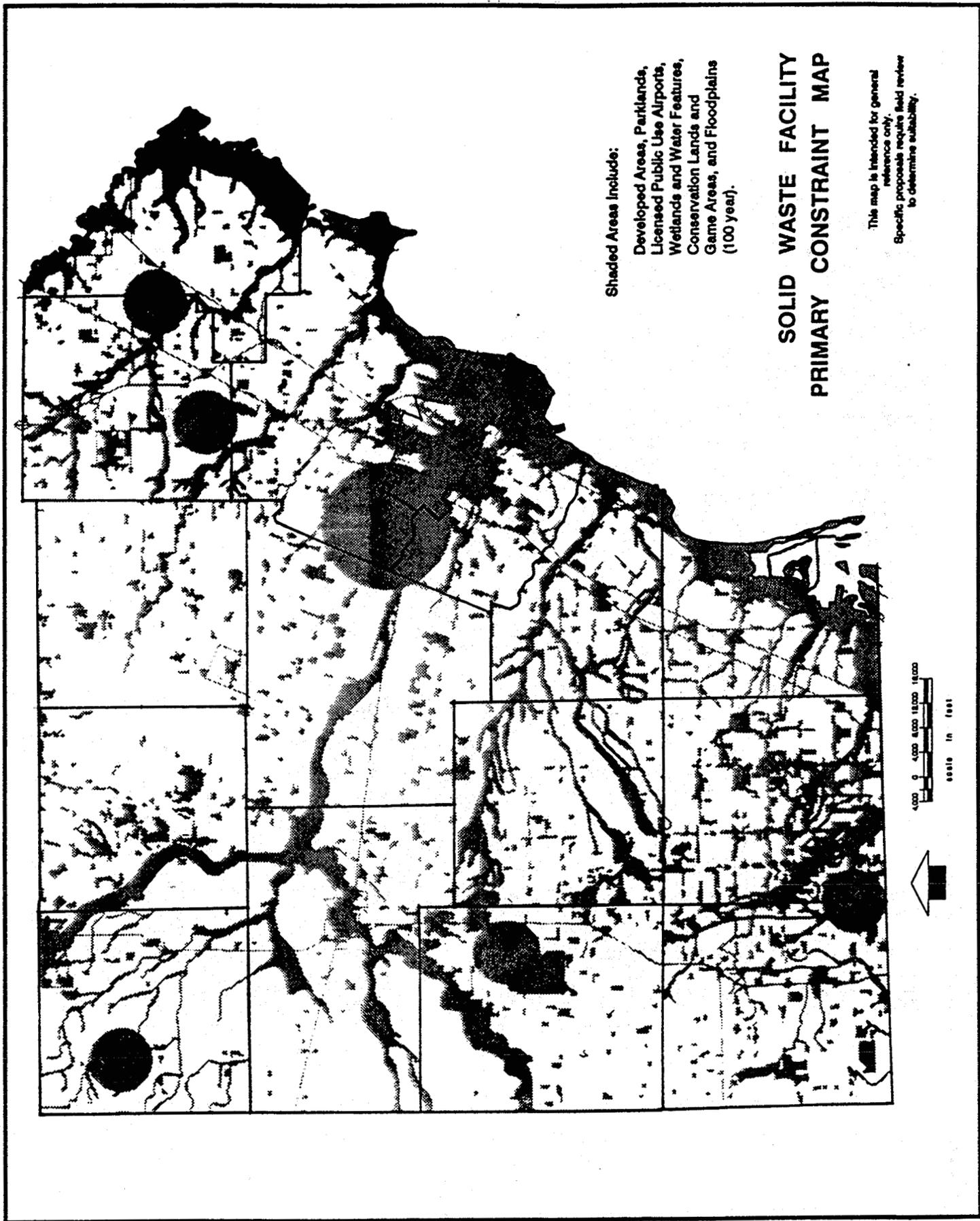
THE MONROE COUNTY BOARD OF COMMISSIONERS WILL TRIGGER THE SITING MECHANISM AT THEIR DISCRETION, OR AT THE REQUEST OF THE HOST COMMUNITY.

MONROE COUNTY EXISTING SOLID WASTE DISPOSAL CAPACITY PROVIDED BY VIENNA JUNCTION LANDFILL EXCEEDS THE MINIMUM CAPACITY REQUIRED UNDER MICHIGAN LAW, THEREFORE, THE COUNTY IS NOT OBLIGATED TO SITE ADDITIONAL SOLID WASTE DISPOSAL FACILITIES OR EXPANSIONS.

THE COUNTY MAY USE THE SITING MECHANISM AND PROCESS INCLUDED IN THIS SOLID WASTE MANAGEMENT PLAN OR THEY MAY PROCEED TO AMEND THE PLAN TO ADD ADDITIONAL CAPACITY.

IF THE COUNTY'S CAPACITY APPROACHES THE REQUIRED MINIMUM, THE COUNTY MAY AMEND ITS PLAN TO INCLUDE A SITING MECHANISM THAT MEET STATUTORY REQUIREMENTS IF IT IS DETERMINED THAT THE SITING MECHANISM CONTAINED IN THIS PLAN IS DEFICIENT. OR, THE COUNTY MAY AMEND ITS PLAN TO INCLUDE SUFFICIENT CAPACITY TO MEET STATUTORY REQUIREMENTS.

Monroe County Solid Waste Facility  
Primary Constraint Map

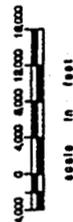


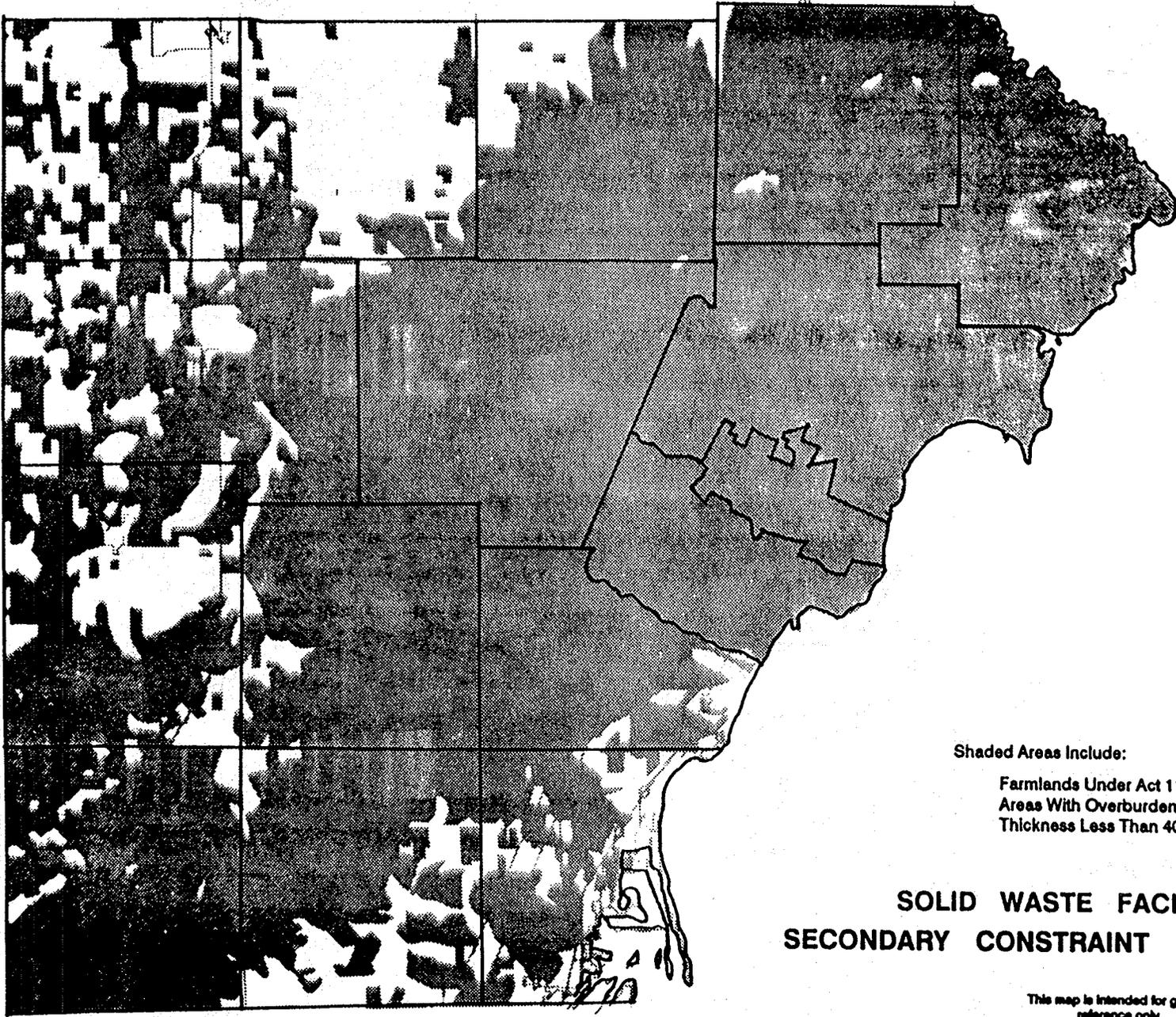
Shaded Areas Include:

- Developed Areas, Parklands,
- Licensed Public Use Airports,
- Wetlands and Water Features,
- Conservation Lands and
- Game Areas, and Floodplains
- (100 year).

**SOLID WASTE FACILITY  
PRIMARY CONSTRAINT MAP**

This map is intended for general  
reference only.  
Specific proposals require field review  
to determine suitability.



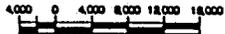


Shaded Areas Include:

Farmlands Under Act 116 and  
Areas With Overburden  
Thickness Less Than 40 Feet

### SOLID WASTE FACILITY SECONDARY CONSTRAINT MAP

This map is intended for general  
reference only.  
Specific proposals require field review  
to determine suitability.



Scale in feet

## SELECTED SYSTEM

### AUTHORIZED DISPOSAL AREA TYPES

All solid waste disposal area types may be considered under the siting processes included in 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.

Monroe County has established solid waste disposal facility siting criteria and a siting process designed to identify proposals and areas suitable for facility development. In this way, environmental impacts and community disruptions can be minimized.

### APPLICATION REVIEW PROCESS

A Technical Review Panel (TRP) shall be appointed to review all proposals to site solid waste disposal facilities within Monroe County. The TRP shall determine if a proposed solid waste disposal facility complies with the criteria and siting process of the Solid Waste Management Plan. In addition, the TRP will provide assistance and guidance to the applicant in obtaining community agreements or other considerations for the proposed solid waste disposal facility. An applicant's responsibility to meet the minimum requirements, however, result in agreements, which ex-

*Spring Mech  
was deleted*

all proposals to site solid waste disposal facilities within Monroe County. The TRP shall determine if a proposed solid waste disposal facility complies with the criteria and siting process of the Solid Waste Management Plan. In addition, the TRP will provide assistance and guidance to the applicant in obtaining community agreements or other considerations for the proposed solid waste disposal facility. An applicant's responsibility to meet the minimum requirements, however, result in agreements, which ex-

### Designation Of The Technical Review Panel

The TRP will be appointed on an as-needed basis. The Board of Commissioners shall appoint the chief elected official. In addition, the Solid Waste Coordinator shall serve as staff to the TRP. The TRP shall elect its own chairman. The Panel shall consist of seven members with the following representation:

- one member from the County Board of Commissioners whose district shall include the host community in which the facility is proposed;
- the chief elected official (or designee) from the same level of government, but not from the host community;
- the Director of the County Planning Department (or designee);
- the Environmental Health Division Chief Sanitarian (or designee);
- the Manager of the County Road Commission (or designee);
- the County Drain Commissioner (or designee); and
- a representative of the SE Michigan Council of Governments (SEMCOG).

It is preferred that the representative from SEMCOG be the member who most recently sat on the Monroe County Solid Waste Planning Committee. In the event that this person is not available, the Director of SEMCOG shall appoint a representative.

## SELECTED SYSTEM

### Application Submittal

- STEP 1:** All potential facility siting applications shall be submitted to the office of the Monroe County Solid Waste Coordinator. The applicant shall submit 12 copies of the application and the appropriate non-refundable fee of \$2500. The fee shall be a cashier's check made out to the County of Monroe. Applications will not be accepted without the accompanying fee.
- STEP 2:** The Monroe County Solid Waste Coordinator shall have 7 calendar days to determine if the application is administratively complete. If the application is administratively incomplete, the Solid Waste Coordinator shall notify the applicant of deficiencies. If the Monroe County Solid Waste Coordinator fails to make a determination within the 7 calendar days, the application shall be considered administratively complete.
- STEP 3:** Once the application is determined to be administratively complete, the County Solid Waste Coordinator shall have 7 calendar days to notify public officials of the municipality where the potential facility is to be located that an application for a proposed disposal facility has been received.
- STEP 4:** Within 21 calendar days of a determination of administrative completeness, the Monroe County Board of Commissioners shall appoint the chief elected official.
- STEP 5:** Copies of the administratively complete proposal shall be distributed as follows: seven copies to the TRP, one copy to the host community, one copy to the Solid Waste Coordinator, one copy to the County Planning Department, one copy to the County Board of Commissioners, and one copy to the County Environmental Health Division. The Solid Waste Coordinator shall be responsible for distributing all copies of the application within 7 calendar days of the Commission's appointment of the chief elected official and to the Technical Review Panel (TRP).

## SELECTED SYSTEM

- STEP 6:** Within 35 calendar days of the Commission's appointment of the chief elected official and the TRP, the TRP is responsible for holding a public hearing at which time public comments will be received. The TRP, the affected and adjacent communities, and the applicant may meet to discuss the proposal. As a result of that meeting, the applicant may then submit a revised proposal, if necessary, to the TRP. Revised proposals must be submitted within 14 calendar days.
- STEP 7:** The TRP shall make a determination of consistency/inconsistency within 21 calendar days of receipt of an administratively complete application. If the TRP fails to make a determination of consistency or inconsistency within the 21 calendar days of receipt of an administratively complete application, then the application shall be determined to be consistent with the Plan and shall be forwarded to the Monroe County Board of Commissioners. TRP evaluations shall be limited to the criteria contained in this Plan.
- STEP 8:** The TRP shall forward its determination to the Designated Planning Agency (the Monroe County Board of Commissioners) within 7 calendar days of making a decision.
- STEP 9:** If the proposal is found by the TRP to be consistent with the Monroe County Solid Waste Management Plan, the Monroe County Board of Commissioners shall provide the official recommendation of consistency to the applicant and the Michigan Department of Environmental Quality. The recommendation shall be forwarded to the Michigan Department of Environmental Quality within 28 calendar days of receipt of a determination from the TRP.

If the proposal is found to be inconsistent with the Monroe County Solid Waste Management Plan, a statement shall be sent to the applicant by the TRP with an explanation of the ruling. If at the end of the TRP review process, the TRP fails to make a determination of consistency or inconsistency based upon the criteria included in this Plan, the application shall be determined to be consistent with the Plan and the applicant may submit a construction permit application to the MDEQ with an explanation of the failure of the local review process.

### Extension

The goal is to provide a siting process that is as efficient as possible. However, it is recognized that circumstances may exist whereby mutually agreed upon extensions may be beneficial. If mutually agreed upon by both the County and the applicant, a one-time extension of not more than 28 days may be granted at any time during the process. If, upon receipt of notice in writing from either party that the extension is no longer acceptable, the process will immediately resume at the point where the extension was granted. No penalties will be imposed for any extensions that have already occurred. Under no circumstances shall the process take longer than a maximum of 168 days. If the County's determination of consistency is not completed within the 168 days, the applicant may apply directly to the Michigan Department of Environmental Quality for a final determination of consistency by the Director of the Department.

## SELECTED SYSTEM

### Evaluation Process And Criteria

The Solid Waste Coordinator shall convene the TRP when a proposal is deemed to be administratively complete. The evaluation process for new solid waste disposal facilities will begin with a review of the materials submitted to the TRP. The evaluation process includes a Decision Matrix, an established analysis technique, which has been adapted for use in solid waste facility siting. In this analysis technique, criteria reflecting important considerations in siting solid waste facilities are identified. Specific criteria are included for the evaluation of proposed municipal solid waste landfills (Type II and Type III), incinerators, solid waste processing facilities, material recovery facilities, transfer stations and captive industrial facilities used only by the company proposing the facility for disposal of wastes generated as a by-product of their normal operations.

The methodology involves the evaluation of specific criteria as related to the proposed site to determine an assigned point value for each of the criterion. The Plan contains a description of each criterion to give the TRP a set of reference points to use in its evaluation. The TRP is to use the reference points listed for each criterion as a guide and assign appropriate point values relative to these guides. Determinations shall be based on the information submitted with the siting application using the criteria defined in the Plan.

Each proposed disposal site will be evaluated to determine its ability to satisfy all the criteria within its appropriate category. A site, which satisfies a particular criterion to the maximum extent, will receive the maximum point value for the criterion under consideration. This process will continue until a proposed site has been evaluated for all listed criteria in the category. The final values for all criteria in the category will be summarized to obtain a final total value of the proposed site being evaluated. A site will be judged as satisfying the objective of, and being in compliance with, the Monroe County Solid Waste Plan if the average total combined points is a minimum of eighty (80) percent of the maximum total combined points possible.

Any proposed site receiving a point value of zero (0) for any of the listed criteria will be considered to be inconsistent with the Plan. The assignment of a point value of zero (0) to any one or more of the criteria will not relieve the TRP from evaluating the proposed site against all the criteria in the category. This is done so that the applicant is aware of the strengths and weaknesses of the application.

A facility will not receive a construction permit or license unless it is in compliance with the Monroe County Solid Waste Management Plan. The Director of the Department of Environmental Quality makes the final determination of consistency.

SELECTED SYSTEM

**APPLICATION REVIEW FLOW CHART**

STEP 1: 12 copies of an application are submitted to office of the Monroe County Solid Waste Coordinator.	<b>*MAXIMUM CUMULATIVE TIME</b>
STEP 2: The Solid Waste Coordinator has 7 days to determine if the application is administratively complete.	7 days
STEP 3: Within 7 days of a determination of completeness, the Solid Waste Coordinator notifies host municipality of receipt of an administratively complete application.	14 days
STEP 4: Within 21 days of a determination of completeness, the TRP is appointed.	35 days
STEP 5: Within 7 days of TRP appointment, copies of the application are distributed.	42 days
STEP 6: Within 35 days of application distribution, the TRP will hold a public hearing, meet with applicant and the host community. The applicant has 14 days to submit a revised proposal, if necessary.	91 days
STEP 7: Within 21 days of completion of Step 6, the TRP will determine consistency or inconsistency.	112 days
STEP 8: Within 7 days TRP forwards determination to Monroe County Board of Commissioners.	119 days
STEP 9: Within 28 days the Board of Commissioners will Forward the determination to the applicant and to the Michigan Department of Environmental Quality.	147 days

**SELECTED SYSTEM**

**APPLICATION FOR REVIEW AND EVALUATION  
OF PROPOSED SOLID WASTE DISPOSAL FACILITIES  
INFORMATION REQUIRED FOR AN APPLICATION TO BE  
ADMINISTRATIVELY COMPLETE**

To ensure that the TRP has sufficient information to adequately complete the evaluation process, and to prevent a site from being found inconsistent for lack of data, minimum data submission requirements are established. An administratively complete application must include, at a minimum, the following information. Additional information may be provided at the discretion of the applicant to assist in identification of any unique features of the proposal or the site.

**APPLICATION FOR TYPE II, OR TYPE III  
SOLID WASTE LANDFILL**

1. Name, address and telephone number for:

- |   |                |
|---|----------------|
| A. Applicant  | YES ___ NO ___ |
| B. Property owner of the site (if different)                      | YES ___ NO ___ |
| C. Designated project contact                                     | YES ___ NO ___ |
| D. Legal description of all parcels included in the proposed site | YES ___ NO ___ |

2. A detailed site plan or plans (scale of 1:200) indicating the size and orientation of the site including:

- |   |                |
|---|----------------|
| - Proposed boundaries of solid waste processing and disposal areas;   | YES ___ NO ___ |
| - Proposed individual cells with an estimate of volumetric air space capacities and when individual cells would be developed during a 10 year period; | YES ___ NO ___ |
| - On site roads;  | YES ___ NO ___ |
| - On site structures;   | YES ___ NO ___ |
| - Parking areas for employees;  | YES ___ NO ___ |
| - Staging areas for trucks waiting to use the facility;   | YES ___ NO ___ |
| - Means of limiting access, including fencing, gates, natural barriers or other methods.  | YES ___ NO ___ |

**SELECTED SYSTEM**

3. Conceptual engineering plans for the construction of the facility. YES \_\_\_ NO \_\_\_
4. Site plan should also include information regarding proposed berm locations, fences and/or dikes and all landscaping to be constructed or placed on the site. YES \_\_\_ NO \_\_\_
5. Topographical data (based on USGS data) with contour intervals which clearly delineate surface conditions as existing and as proposed for the site. YES \_\_\_ NO \_\_\_
6. General site location map(s) identifying:
- Access roads; YES \_\_\_ NO \_\_\_
  - Proposed access point(s) to the facility; YES \_\_\_ NO \_\_\_
  - One hundred year flood plains (as identified on FEMA flood plain maps and as defined in the Part 115 Administrative Rules) within the boundaries of the site; YES \_\_\_ NO \_\_\_
  - Lands regulated under the Farmland and Open Space Preservation Act, Part 361 of NREPA, as amended, that are within the boundaries of the site; YES \_\_\_ NO \_\_\_
  - Location of surface water on and within 1/2 mile of the site; YES \_\_\_ NO \_\_\_
  - All wetlands (regulated and non-regulated) within the boundaries of the site; YES \_\_\_ NO \_\_\_
  - Location of any public use airports licensed by the Bureau of Aeronautics Michigan Department of Transportation that are within ten thousand (10,000) feet of the proposed active fill areas; YES \_\_\_ NO \_\_\_
  - Location of drains on the site; YES \_\_\_ NO \_\_\_
  - Location of public and private water wells within one mile of the proposed active fill areas and show established/approved wellhead protection areas; YES \_\_\_ NO \_\_\_
  - Residences, commercial establishments, industries, institutions including schools, churches, hospitals, and historic or archaeological sites within one mile of the proposed active fill areas. YES \_\_\_ NO \_\_\_

**SELECTED SYSTEM**

7. Description of preferred haul routes within five miles of the site, and an estimate of the number and type of vehicles per day. YES \_\_\_ NO \_\_\_
8. Proposed operating schedules (days and hours). YES \_\_\_ NO \_\_\_
9. Estimated operating life and annual and daily fill rate of the proposed facility for the disposal of solid waste. Include an estimate of the percentages of solid waste inflow to the facility from out-of-county and in-county sources. YES \_\_\_ NO \_\_\_
10. Potential for future site expansion and identification of any additional operations to be conducted on the site. The future proposed site expansions and identification of any proposed additional operations identified under this item shall not be considered part of this proposal. Expansions and additional future operations will require a new application and review by the TRP. YES \_\_\_ NO \_\_\_
11. A geologic cross section representation of the existing conditions of the entire proposed site. Include information about major topographic features such as drainage divides, lakes and streams. Descriptive information may be supplemented through the use of drawings or maps. Site hydrogeologic characteristics must be addressed, including soil boring data from the 4 corners and center of the site, indicating soil characteristics and groundwater conditions for the site. Provide information on depth to groundwater. Discuss potential impacts of the proposed facility on these features. YES \_\_\_ NO \_\_\_
12. A preliminary description of the plan for post closure reuse of the site.
- No site will be considered unless a proposed final use plan for the facility is submitted with the application. A discussion of the economic and engineering feasibility of the final use plan shall be included. This is for informational purposes only. YES \_\_\_ NO \_\_\_
13. Current zoning at the site and for adjacent land uses. YES \_\_\_ NO \_\_\_

**SELECTED SYSTEM**

14. If the owner of the property is different than the proposed developer, the developer must provide documentation in the form of a land contract, purchase agreement, or other binding legal instrument which substantiates the developer's ability to proceed with development and operation of the site. YES \_\_\_ NO \_\_\_
15. A description of historic uses of the property within the last fifty (50) years. Identification of any previous disposal sites within the property boundaries and/or any known contamination which may be present within the boundaries of the site. YES \_\_\_ NO \_\_\_
16. Measures to control drifting or airborne transmission of dust, particles, or debris beyond the property lines. YES \_\_\_ NO \_\_\_
17. Mitigation plans to minimize potential impacts to local property owners and the local community. YES \_\_\_ NO \_\_\_
18. Measures to control carrying or tracking of mud, dirt, clay, etc. onto any public right-of-way. YES \_\_\_ NO \_\_\_
19. A description of recycling and/or composting activities. YES \_\_\_ NO \_\_\_
20. A signed statement by the owner/operator of the proposed facility agreeing to submit to the Solid Waste Coordinator monthly reports which include the following information:
- A. Name, location, and permit number of the facility;
  - B. Name, address, and telephone number of the facility owner;
  - C. Name, address, and telephone number of the facility operator;
  - D. Total quantity of waste received at the facility during the past month in tons or cubic gate yards;
  - E. Total quantity of waste received at the facility during the past month originating from out-county sources in tons or cubic gate yards; and
  - F. An estimate of remaining capacity for continued waste disposal. The method for calculating this capacity must be included in the monthly report.
- YES \_\_\_ NO \_\_\_
21. A signed statement by the owner/operator of a proposed facility agreeing to participate in the establishment of a local facility operations committee. The committee will act as a liaison between the facility operators and the residents and officials of Monroe County. Members of this committee will have access to the facility, during normal hours of operation, so long as their presence does not impede the operation of the facility. YES \_\_\_ NO \_\_\_

SELECTED SYSTEM

**Table III-8: TYPE II AND TYPE III LANDFILL SITE EVALUATION CRITERIA AND NUMERICAL VALUE**

<u>Criteria</u>	<u>Numerical Value</u>
20-Year County Solid Waste Disposal Needs	40
Compatibility with Recycling/Composting Policy (Type II facility)	35
Compatibility with Recycling/Composting Policy (Type III facility)	20
Area Saturation	30
Haul Routes	36
Residential Development	32
Agricultural Land	28
Local Mitigation	20
Adjacent Land Use	20
Design Impacts	10
Final Use Plans	6
Isolation	4

**Scoring**

A proposed Type II or Type III sanitary landfill will be evaluated to determine its ability to satisfy all of the criteria presented in Table III-1. Other proposed solid waste disposal facilities will be evaluated using the criteria shown in Table III-2 and Table III-3. Each criterion evaluated for a proposed facility will be given a weight factor by each TRP member to indicate how well a proposed facility satisfies the particular criterion. Specific weight factors are identified in tables under each of the criterion. The assigned weight for a criterion will then be multiplied by the numerical value. An example of this evaluation process is presented below:

<u>Criteria</u>	<u>Numerical Value</u>		<u>Weight</u>		<u>Total Points</u>
Area Saturation	30	X	7	=	210

## SELECTED SYSTEM

The final multiplied total points for all criteria will be summarized by each TRP member to obtain the total combined points. The total combined points determined by the individual TRP members will be averaged together after eliminating the highest and lowest total combined points score.

A proposed facility will be determined as consistent with the Monroe County Solid Waste Management Plan if the averaged total combined points are a minimum of eighty (80) percent of the maximum total combined points possible.

### Review Criteria and Weighting Factors

#### **20-Year County Solid Waste Disposal Needs**

The TRP will consider Monroe County's 20-year solid waste disposal needs as the most important criterion when evaluating a proposed landfill site. The Panel will consider the amount of waste projected or required from within and/or outside Monroe County to operate a proposed landfill in a financially sound manner. The criterion is designed to consider how well the proposed facility addresses Monroe County's needs. Proposed facilities will also be reviewed to determine the extent and magnitude of regional use. For example, if the facility is proposed as a regional facility and long-term use by Monroe County is shortened, then the facility will not score as highly.

The weight factor assigned to a landfill proposal will represent the anticipated life of the facility. A facility sized to accommodate Monroe County waste for 20 years or more will be given a weight of 10. For every two years less than 20 years, a point will be subtracted from the maximum possible weight of 10. For example, a facility sized to accommodate the County's waste for 12 years will be given a weight factor of 6.

DEDICATED CAPACITY FOR MONROE COUNTY	WEIGHT FACTOR
19-20 or more years of disposal capacity	10
18-19 years of disposal capacity	9
16-17 years of disposal capacity	8
14-15 years of disposal capacity	7
12-13 years of disposal capacity	6
10-11 years of disposal capacity	5
8-9 years of disposal capacity	4
6-7 years of disposal capacity	3
4-5 years of disposal capacity	2
3 or fewer years of disposal capacity	1

If Monroe County has greater than 66 months of available capacity, the Monroe County Board of Commissioners is not obligated to initiate the siting process in this Plan.

**SELECTED SYSTEM**

**Compatibility with Recycling/Composting Policy**

At a minimum, any new or expanded disposal facility must provide a drop-off center within the host community for yard waste and/or recyclable materials. A proposal which does not meet this minimum standard may be denied approval without further evaluation.

<b>COMPATIBILITY WITH RECYCLING AND COMPOSTING GOALS – TYPE II FACILITY</b>	<b>WEIGHT FACTOR</b>
Offers Weekly Curbside Pick-up for all Residential Customers in Monroe County for All Seven Core Items and Yard Waste, Provides Commercial and Industrial Recycling Services	10
Offers Monthly Curbside Pick-up for all Residential Customers in Monroe County for All Seven Core Items (No Composting)	9
Offers Weekly Curbside Pick-up for Yard Waste	8
Proposal Includes a Mixed Waste Material Recovery Facility	7
Offers Fixed-site Recycling Drop-off Depots For All Seven Core Items	6
Offers County-wide Mobile Recycling Drop-off Units for All Seven Core Items	5
Offers Drop-off Yard Waste Composting	6
Provides Commercial, Industrial and/or Institutional Recycling Services Only	3
Provides Limited Recycling Services (less than The Seven Core Items)	2
Provides Only Commercial Corrugated Cardboard Recycling Services	1

Core items include: glass, plastic, tin, aluminum, cardboard, mixed office paper, and newspaper.

<b>COMPATIBILITY WITH RECYCLING AND COMPOSTING GOALS – TYPE III FACILITY</b>	<b>WEIGHT FACTOR</b>
Proposal Includes a Mixed Waste Material Recovery Facility	10
Offers Fixed-site Recycling Drop-off Depots For All Seven Core Items	9
Offers County-wide Mobile Recycling Drop-off Units for All Seven Core Items	6
Offers Drop-off Yard Waste Composting	6
Provides Commercial, Industrial and/or Institutional Recycling Services Only	3
Provides Limited Recycling Services (less than The Seven Core Items)	2
Provides Only Commercial Corrugated Cardboard Recycling Services	1

**Area Saturation**

This criterion is included to reduce the likelihood that one geographic area shall be the host of numerous municipal solid waste landfills. This ensures that one specific geographic area does not bear the burden of solid waste disposal for the entire County. Geographic area will be defined by distance from the proposed new facility site or expansion of an existing disposal facility with point value assignments determined as follows.

**SELECTED SYSTEM**

<b>AREA SATURATION</b>	<b>WEIGHT FACTOR</b>
A Facility Not Located Within 5 Miles of an Existing Solid Waste Disposal Facility or One That Has Been Closed Within the Last 10 Years	10
A Facility Not Located Within 3 Miles of an Existing Solid Waste Disposal Facility or One That Has Been Closed Within the Last 10 Years But is Within 5 Miles of 1 Waste Disposal Facility Presently Operating or Closed Within the Last 10 Years	7
A Facility Not Located Within 3 Miles of an Existing Solid Waste Disposal Facility or One That Has Been Closed Within the Last 10 Years But is Within 5 Miles of 2 or More Waste Disposal Facility Presently Operating or Closed Within the Last 10 Years	4
A Facility Located Within 3 Miles of an Existing Solid Waste Disposal Facility or One That Has Been Closed Within the Last 10 Years	1

The local elected official of the proposed host community may make a recommendation to override the above weight factors in favor of a higher score. For example, if an expansion is proposed for an existing facility and the host community is supportive of the expansion, a weight factor of 10 can be assigned. A formal request in writing from the local elected official of the host community shall be submitted to the TRP before they reach their decision on consistency or inconsistency with the Monroe County Solid Waste Management Plan.

**SELECTED SYSTEM**

**Haul Routes**

The specified haul routes and volumes of truck traffic transporting solid waste will be evaluated. Proposed sites that specify haul routes which avoid traversing highly developed residential and commercial areas will be weighted highly. Proposed sites that specify haul routes which traverse or impact upon residential or commercial areas shall receive lower weights. The schedule below will be used to evaluate haul routes.

<b>HAUL ROUTES WEIGHT FACTOR ALLOCATION TABLE</b>			
	<b>All Weather Road</b>	<b>*Non All Weather Road Bond/Upgrade</b>	<b>Non All Weather Road 2 or 4 Lanes</b>
<b>Assigned Points for Roadway Type</b>	10	8	6
<b>More Than 50 Residences/Mile</b>	7	5	3
<b>More Than 25 Residences/Mile</b>	8	6	4
<b>More Than 12 Residences/Mile</b>	9	7	5
<b>More Than 10 Commercial Structures/Mile</b>	7	5	3
<b>Between 6 &amp; 10 Commercial Structures/Mile</b>	8	6	4
<b>Between 1 &amp; 5 Commercial Structures/Mile <sup>(1)</sup></b>	9	7	5
<b>Schools <sup>(2)</sup></b>	4	2	1
<b>Human Care Institutions <sup>(2)(3)</sup></b>	6	3	2

**NOTES**

(1) Businesses selling retail products or services to the general public.  
 (2) Points deducted for each occurrence.  
 (3) An institution which has beds for more than 6 patients.

Haul routes which are to be evaluated would be those roads which are not a County primary or higher highway classification. Haul routes evaluated would be either all roads with access to the site from the point at which the truck traffic leaves a County primary or a higher classification. Point determinations are based on averaging the residences and commercial structures. Residences and commercial structures owned by the developer will not be counted in the determination of points. Haul routes which are County primary or higher highway classification shall receive a point value of 10.

\* The developer must provide a signed statement agreeing to provide a bond or to upgrade the non-all weather road to all-weather condition, according to the Monroe County Road Commission Specifications.

**SELECTED SYSTEM**

**Residential Development**

In the evaluation process, the degree of residential development adjacent to a proposed facility will be considered. Sanitary landfills in Monroe County should be located in areas which minimize the negative impact on residential development.

<b>NUMBER OF RESIDENCES WITHIN 1/2 MILE OF THE PERIMETER OF THE ACTIVE FILL AREA</b>	<b>WEIGHT FACTOR</b>
= < 50	10
51-100	8
101-150	6
151-200	4
201-300	2
300+	0

**Agricultural Land**

This criterion responds to the concern that an increasing amount of farmland is being diverted to other uses which restrict or eliminate its future utilization as active farmland. A proposed sanitary landfill site which will not be located on prime and/or actively producing farmland should receive a 10. A factor of 8 should be assigned to a proposed landfill sited on currently non-active, prime farmland or active, not prime farmland and a 5 should be assigned to landfills proposed on actively producing prime farmlands.

<b>STATUS OF AGRICULTURAL LAND</b>	<b>WEIGHT FACTOR</b>
Not Prime and/or Actively Producing	10
Currently Non-Active, Prime Farmland	8
Active, Non-Prime Farmland	8
Actively Producing Prime Farmland	5

For the purposes of this document, "actively producing farmlands" are lands that are currently producing crops; "active farmlands" are lands that are capable of production with minor preparation or those lands that have been in production within the last five years; and "prime farmlands" are those lands designated as such by the State of Michigan, the Soil Conservation Service or other recognized authority or organization.

## SELECTED SYSTEM

### Adjacent Land Use

It is desirable that a proposed facility be compatible with adjacent land uses. Proposed facilities which are deemed to be compatible with surrounding land uses will be given a higher weight factor. Proposed facilities which have the potential for minor conflict with surrounding land uses will be given a moderate weight factor. Facilities which are deemed to be incompatible with all surrounding land uses will be given a weight of less than 5. Land uses and zoning districts which are deemed compatible with solid waste facilities generally include industrial, agricultural and open space. Less compatible land uses and zoning districts generally include residential, commercial and institutional.

ADJACENT LAND USE	WEIGHTING FACTOR by Community Type		
	Rural*	Suburban*	Urban*
Agricultural	10	-	-
Industrial	8	8	6
Commercial	6	6	4
Residential	6	4	2

- \* Rural:  $\leq 1$  person/acre,
- \* Suburban:  $> 1$  person/acre but  $< 6$  people/acre,
- \* Urban:  $> 6$  people/acre.

In the case of a parcel having more than one adjacent land use, the predominant land use of the site will be used to evaluate the site. The predominant land use value of all parcels on all four general sides of the site will be added and averaged to determine the land use value for a side (e.g., if a side of a facility in a rural setting has both agriculture and residential use, the values of 10 and 6 will be added and averaged to arrive at the value). All sides will then be added to determine the actual value of the adjacent land use system.

NOTE: Landfills cannot be located in established and approved wellhead protection program areas.

**SELECTED SYSTEM**

**Design Impacts**

The design of proposed landfills can greatly impact the environment and acceptability by concerned citizens. Design impacts include site screening to reduce negative impact on adjacent and surrounding properties.

Design Condition	DESIGN IMPACT			
	10	8	6	4
Screening	Natural screening, no vegetative planting necessary	Vegetative Screen Meeting The Definition Below	Provision of 8' Berm With a 4' Fence on Top of Berm	No Natural or Planted Screening, no berming

Landscaping, composed of shrubbery and trees, should be provided and maintained to beautify the view of the landfill. The landscaping should be of sufficient maturity and density to serve as an effective site barrier. The following is suggested: planting of evergreen trees not more than 12 feet apart, or shrubbery not more than 5 feet apart, in staggered rows parallel to the boundaries of the property. Evergreen trees should be at least 4 feet in height at the time of planting and should grow to not less than 10 feet in height. The applicant must agree to replace any trees or shrubs which die in accordance with the standards described above during the next growing season.

**Final Use Plans**

The final use of a sanitary landfill is an important consideration during the site evaluation process. For example, will the facility be used for park or open space? How will it be final graded and landscaped? Appropriate final uses for solid waste facilities include uses such as open space, recreation, wildlife areas, composting facilities, and certain industrial uses, provided that concerns related to groundwater contamination, surface drainage, leachate collection, gas collection, and similar concerns related to the long term viability of the facility are addressed.

FINAL USE PLAN	WEIGHT FACTOR
Active Recreation Area (picnic areas, baseball fields, tennis courts, or other similar active sports areas) – with maximum development (requires agreement with host community)	10
A mix of active and passive recreation areas	8
Passive recreation areas only – hiking trails, wildlife habitat areas, picnic areas	6
Undeveloped open space	4
Appropriate industrial uses, community composting Facility or other such non-recreational uses	5

## SELECTED SYSTEM

### Isolation

Location of new solid waste landfills should be in areas which allow reasonable buffer zones between active fill areas and other active operation areas (e.g., collection ponds, processing areas, etc.) and adjacent property boundaries.

- Proposed sites which plan to maintain a 100 foot minimum separation distance between the active work areas and adjacent property lines will receive a weight factor of 2.
- Proposed sites which plan to maintain a 100 - 200 foot minimum separation distance between the active work areas and adjacent property lines will receive a weight factor of 4.
- Proposed sites which plan to maintain more than a 200 foot minimum separation distance between the active work areas and adjacent property lines and which have up to another 100 feet between the active work areas and occupied residential dwellings\* will receive a weight factor of 6.
- Proposed sites which plan to maintain more than 200 foot minimum separation distance between the active work areas and adjacent property lines and which have up to another 200 feet between the active work areas and occupied residential dwellings\* will receive a weight factor of 8.
- Proposed sites which plan to maintain more than 200 foot minimum separation distance between the active work areas and adjacent property lines and which have more than another 200 feet between the active work areas and occupied residential dwellings\* will receive a weight factor of 10.

\* Residential dwellings owned and occupied by the developer will not be used in the evaluation.

## SELECTED SYSTEM

### **Bonus Points - Local Mitigation**

Applicants are not required to address any of the items listed below in this bonus point section. However, applicants of proposed solid waste facilities can receive additional points by meeting any or all of the items listed below. A minimum score of 70 percent of the maximum total possible points is required to take advantage of any of the bonus point items.

- Facilities which show additional sensitivity to adjoining land uses by buffering their impacts with greater isolation distances (isolation numerical value = 4), attractive landscaping or berming (design impact numerical value = 10) may receive an additional weight factor of 2 points.
- Applicants which enter into a host community agreement with either the County or the local community to provide improvements to the community infrastructure, such as upgraded roads, sewer, and water improvements, which are necessary as a result of facility development, will receive an additional weight factor of 5 points (local mitigation numerical value = 10 points).
- Applicants which enter into a host community agreement with the County or the local community to provide improvements to public services, such as police and fire, which are necessary as a result of facility development will receive up to an additional weight factor of 5 points. Agreements which provide annual support (e.g., annual grants to support services, a percentage of the gate, etc.) may receive an additional weight factor of 5 points. One-time grants may receive an additional weight factor of 2 points. (Local mitigation numerical value = 10 points)
- Applicants who provide guaranteed property value protection for homes within 1 mile of the facility for demonstrable loss of value due to proximity to the facility may receive up to an additional 5 points. (Local mitigation numerical value = 10 points)
- Applicants who provide guaranteed replacement of loss of water supply suffered as a direct result of facility development may receive up to an additional weight factor of 5 points. (Local mitigation numerical value = 10 points)
- Applicants who provide free disposal for the local community may receive up to an additional weight factor of 2 points. (Local mitigation numerical value = 10 points)
- Applicants who provide free recycling and/or composting services to the local community may receive up to an additional weight factor of 2 points. (Local mitigation numerical value = 10 points)

## **SELECTED SYSTEM**

- **Upon receipt of a written notice by another Monroe County agency (e.g., Road Commission, Public Works, etc.) that an agreement has been reached between the applicant and the agency that provides benefits to the County, then the applicant may receive an additional weight factor of 2 points. (Local mitigation numerical value = 5 points)**

SELECTED SYSTEM

**APPLICATION FOR REVIEW AND EVALUATION  
OF AN INCINERATOR, A PROPOSED MATERIAL RECOVERY  
FACILITY (MRF), A SOLID WASTE PROCESSING FACILITY,  
OR A SOLID WASTE TRANSFER FACILITY**

1. Name, address and telephone number for:

- A. Applicant YES \_\_\_ NO \_\_\_
- C. Property owner of the site (if different) YES \_\_\_ NO \_\_\_
- C. Designated project contact YES \_\_\_ NO \_\_\_
- D. Legal description of all parcels included in the proposed site YES \_\_\_ NO \_\_\_

2. A detailed site plan or plans (scale of 1:200) indicating the size and orientation of the site including:

- Proposed boundaries of solid waste processing areas; YES \_\_\_ NO \_\_\_
- On site roads; YES \_\_\_ NO \_\_\_
- On site structures; YES \_\_\_ NO \_\_\_
- Parking areas for employees; YES \_\_\_ NO \_\_\_
- Staging areas for trucks waiting to use the facility; YES \_\_\_ NO \_\_\_
- Means of limiting access, including fencing, gates, natural barriers or other methods. YES \_\_\_ NO \_\_\_

3. Conceptual engineering plans for the construction of the facility.

- Description of leachate collection systems and how the building(s) will be designed to ensure that the system works properly. YES \_\_\_ NO \_\_\_
- Description of fire prevention systems and procedures. YES \_\_\_ NO \_\_\_

4. Site plan, including information regarding proposed berm locations, fences and/or dikes and all landscaping to be constructed or placed on the site.

YES \_\_\_ NO \_\_\_

**SELECTED SYSTEM**

5. Topographical data (based on USGS data) with contour intervals which clearly delineate surface conditions as existing and as proposed for the site. YES \_\_\_ NO \_\_\_
6. General site location map(s) identifying:
- Access roads; YES \_\_\_ NO \_\_\_
  - Proposed access point(s) to the facility; YES \_\_\_ NO \_\_\_
  - One hundred year flood plains (as identified on DNR flood plain maps and as defined in the Part 115 Administrative Rules) within the boundaries of the site; YES \_\_\_ NO \_\_\_
  - Lands regulated under the Farmland and Open Space Preservation Act, 1974 Public Act 116, as amended, that are within the boundaries of the site; YES \_\_\_ NO \_\_\_
  - Location of surface water on and within 1/2 mile of the site; YES \_\_\_ NO \_\_\_
  - All wetlands (regulated and non-regulated) within the boundaries of the site; YES \_\_\_ NO \_\_\_
  - Location of drains on the site; YES \_\_\_ NO \_\_\_
  - Location of public and private water wells within one mile of the proposed active fill areas and show established/approved wellhead protection areas; YES \_\_\_ NO \_\_\_
  - Residences, commercial establishments, industries, institutions including schools, churches, hospitals, and historic or archaeological sites within one mile of the proposed active fill areas. YES \_\_\_ NO \_\_\_
7. Description of preferred haul routes over which solid waste transport vehicles will travel within five miles of the site, and an estimate of the number and type of vehicles per day. YES \_\_\_ NO \_\_\_
8. Proposed operating schedules (days and hours). YES \_\_\_ NO \_\_\_
9. Estimated percentages of solid waste inflow to the facility from out-of-county and in-county sources. YES \_\_\_ NO \_\_\_

**SELECTED SYSTEM**

10. Potential for future site expansion and identification of any additional operations to be conducted on the site. The future proposed site expansions and identification of any proposed additional operations identified under this item shall not be considered part of this proposal. Expansions and additional future operations will require a new application and review by the TRP. YES \_\_\_ NO \_\_\_
11. A general description of the soil characteristics and the hydrogeological conditions at the proposed site. YES \_\_\_ NO \_\_\_
12. Indicate current zoning at the site and for adjacent land uses. YES \_\_\_ NO \_\_\_
13. If the owner of the property is different than the proposed developer, the developer must provide documentation in the form of a land contract, purchase agreement, or other binding legal instrument which substantiates the developer's ability to proceed with development and operation of the site. YES \_\_\_ NO \_\_\_
14. A description of historic uses of the property within the last fifty (50) years. Identification of any previous disposal sites within the property boundaries and/or any known contamination which may be present within the boundaries of the site. YES \_\_\_ NO \_\_\_
15. Measures to control drifting or airborne transmission of dust, particles, or debris beyond the property lines. YES \_\_\_ NO \_\_\_
16. Measures to control carrying or tracking of mud, dirt, clay, etc. onto any public right-of-way. YES \_\_\_ NO \_\_\_
17. A description of recycling/composting activities. YES \_\_\_ NO \_\_\_
18. A signed statement by the owner/operator of the proposed facility agreeing to submit to the Solid Waste Coordinator a monthly report which includes the following information:
- A. Name, location, and permit number of the facility;
  - B. Name, address, and telephone number of the facility owner;
  - C. Name, address, and telephone number of the facility operator;
  - D. Total quantity of waste received at the facility during the past three months in tons or cubic gate yards; and
  - E. Total quantity of waste received at the facility during the past month originating from out-of-county sources in tons or cubic gate yards. YES \_\_\_ NO \_\_\_

SELECTED SYSTEM

**Table III-9: PROPOSED MATERIAL RECOVERY FACILITY (MRF),  
TRANSFER STATION, SOLID WASTE PROCESSING FACILITY,  
OR INCINERATOR CRITERIA AND NUMERICAL VALUES**

<u>CRITERIA</u>	<u>NUMERICAL VALUE</u>
Compatibility with Recycling/Composting Policy	35
Residential Development	32
Haul Routes	25
Area Saturation	20
Adjacent Land Uses	20
Agricultural Land	18
Design Impact	10

**Review Criteria and Weighting Factors**

**Compatibility with Recycling/Composting Policy**

Material Recovery and Solid Waste Processing Facilities can provide a significant opportunity to promote the recycling and composting goals of Monroe County.

<b>NUMBER OF CORE ITEMS RECOVERED</b>	<b>WEIGHT FACTOR</b>
7	10
6	8
5	6
4	4
3	2
<3	0

Material recovery or processing facilities which also offer on-site residential composting operations in accordance with the minimum design standards listed below will receive a weight factor of 10. The composting facility must be designed with the following minimum specifications.

- Sufficient clay or other barrier to protect groundwater and prevent other environmental impacts.
- Appropriate grading to ensure proper runoff.
- A leachate collection system.

### SELECTED SYSTEM

- Demonstration of adequate resources, knowledge and equipment to properly operate the facility.
- Operations plan which details how materials will be handled and processed.
- A marketing plan.
- Identification of the proposed service area.
- Estimate of the amount of material that can be effectively processed at the site.
- Odor control plan.
- List of yard waste materials to be accepted at the facility (e.g., grass, brush, limbs and other larger materials that need chipping, etc.).
- Site design plans which show areas for receiving, processing and stockpiling of composted or chipped materials.

### Residential Development

In the evaluation process, the degree of residential development adjacent to a proposed facility will be considered. Processing facilities and MRFs in Monroe County should be located in areas which minimize the negative impact on residential development.

<b>NUMBER OF RESIDENCES WITHIN 1/2 MILE OF THE FACILITY</b>	<b>WEIGHT FACTOR</b>
= < 50	10
51-100	8
101-150	6
151-200	4
201-300	2
300+	0

## SELECTED SYSTEM

### Residential Isolation

Proposed sites which plan to maintain at least a 500 foot minimum separation distances between the facility and the nearest residential dwellings will receive a weighting factor of 10. Sites which plan to maintain 400 feet minimum separation distances between the facility and the nearest residential dwellings will receive a weighting factor of 8. Sites which plan to maintain a minimum of 300 feet of separation between the facility and the nearest residential dwellings will receive a weighting factor of 6. Sites which propose to maintain at least 200 feet of separation between the facility and the nearest residential dwellings will receive a weighting factor of 2. Sites which are located within 200 feet of the nearest residential dwellings will receive a weighting factor of 0. These standards do not apply to residences owned by the applicant. In rural areas, facilities may be assigned higher weighting factors if the applicant can produce documentation that homeowners within the different zones do not object to the location of the facility. For example, a processing facility is located in a rural area within the County. There are 6 homes within the 500 foot zone around the facility. If the applicant can produce letters, signed statements, or the verbal comments of the homeowners during the public comment period demonstrating that they do not object to the location of the facility, then the criterion can receive a weighting factor of 10.

### Haul Routes

The specified haul routes and volumes of truck traffic transporting solid waste will be evaluated. Proposed sites that specify haul routes which avoid traversing highly developed residential and commercial areas will be weighted highly. Proposed sites that specify haul routes which traverse or impact upon residential or commercial areas shall receive lower weights. The schedule below will be used to evaluate haul routes.

<b>HAUL ROUTES WEIGHT FACTOR ALLOCATION TABLE</b>			
	<b>All Weather Road</b>	<b>*Non All Weather Road Bond/Upgrade</b>	<b>Non All Weather Road 2 or 4 Lanes</b>
<b>Assigned Points for Roadway Type</b>	<b>10</b>	<b>8</b>	<b>6</b>
<b>More Than 50 Residences/Mile</b>	<b>7</b>	<b>5</b>	<b>3</b>
<b>More Than 25 Residences/Mile</b>	<b>8</b>	<b>6</b>	<b>4</b>
<b>More Than 12 Residences/Mile</b>	<b>9</b>	<b>7</b>	<b>5</b>
<b>More Than 10 Commercial Structures/Mile</b>	<b>7</b>	<b>5</b>	<b>3</b>
<b>Between 6 &amp; 10 Commercial Structures/Mile</b>	<b>8</b>	<b>6</b>	<b>4</b>
<b>Between 1 &amp; 5 Commercial Structures/Mile <sup>(1)</sup></b>	<b>9</b>	<b>7</b>	<b>5</b>
<b>Schools <sup>(2)</sup></b>	<b>4</b>	<b>2</b>	<b>1</b>
<b>Human Care Institutions <sup>(2)(3)</sup></b>	<b>6</b>	<b>3</b>	<b>2</b>

## SELECTED SYSTEM

### NOTES

- (1) Businesses selling retail products or services to the general public.
- (2) Points deducted for each occurrence.
- (3) An institution which has beds for more than 6 patients.

Haul routes which are to be evaluated would be those roads which are not a County primary or higher highway classification. Haul routes evaluated would be either all roads with access to the site from the point at which the truck traffic leaves a County primary or a higher classification. Point determinations are based on averaging the residences and commercial structures. Residences and commercial structures owned by the developer will not be counted in the determination of points. Haul routes which are County primary or higher highway classification shall receive a point value of 10.

\* The developer must provide a signed statement agreeing to provide a bond or to upgrade the non-all weather road to all-weather condition, according to the Monroe County Road Commission Specifications.

### Area Saturation

This criterion is included to reduce the likelihood that one geographic area shall be the host of numerous solid waste facilities. This ensures that one specific geographic area does not bear the burden of solid waste operations for the entire County. Geographic area will be defined by distance from the proposed new facility site or expansion of an existing disposal facility with point value assignments determined as follows.

**Note:** Solid waste landfill operations that propose to expand their on-site services by adding a material recovery facility or other processing facility shall be exempt from this criterion. This exemption for area saturation also applies if the owner/operator of the municipal solid waste landfill purchases additional property to expand for these purposes. However, the facility will be evaluated using all other criteria listed in this section.

<b>AREA SATURATION</b>	<b>WEIGHT FACTOR</b>
A Facility Not Located Within 5 Miles of an Existing Solid Waste Disposal Facility or One That Has Been Closed Within the Last 10 Yrs.	10
A Facility Not Located Within 3 Miles of an Existing Solid Waste Disposal Facility or One That Has Been Closed Within the Last 10 Years But is Within 5 Miles of 1 Waste Disposal Facility Presently Operating or Closed Within the Last 10 Years	7
A Facility Not Located Within 3 Miles of an Existing Solid Waste Disposal Facility or One That Has Been Closed Within the Last 10 Years But is Within 5 Miles of 2 or More Waste Disposal Facility Presently Operating or Closed Within the Last 10 Years	4
A Facility Located Within 3 Miles of an Existing Solid Waste Disposal Facility or One That Has Been Closed Within the Last 10 Years	1

## SELECTED SYSTEM

The local elected official of the proposed host community may make a recommendation to override the above weight factors in favor of a higher score. For example, if a material recovery facility is to be located within 3 miles of an existing landfill (not on the same site) and the host community is supportive of the facility, a weight factor of 10 can be assigned. A formal request in writing from the local elected official of the host community shall be submitted to the TRP before they reach their decision on consistency or inconsistency with the Monroe County Solid Waste Management Plan.

## Adjacent Land Uses

It is desirable that a proposed facility be compatible with adjacent land uses. Proposed facilities which are deemed to be compatible with surrounding land uses will be given a higher weight factor. Proposed facilities which have the potential for minor conflict with surrounding land uses will be given a moderate weight factor. Facilities which are deemed to be incompatible with all surrounding land uses will be given a weight of less than 5. Land uses and zoning districts which are deemed compatible with solid waste facilities generally include industrial, agricultural and open space. Less compatible land uses and zoning districts generally include residential, commercial and institutional.

ADJACENT LAND USE	WEIGHTING FACTOR by Community Type		
	Rural*	Suburban*	Urban*
Agricultural/Open Space	10	-	-
Industrial	10	8	6
Commercial	6	4	2
Residential	6	4	2

- \* Rural:  $\leq 1$  person/acre,
- \* Suburban:  $> 1$  person/acre but  $< 6$  people/acre,
- \* Urban:  $> 6$  people/acre.

In the case of a parcel having more than one adjacent land use, the predominant land use of the site will be used to evaluate the site. The predominant land use value of all parcels on all four general sides of the site will be added and averaged to determine the land use value for a side (e.g., if a side of a facility in a rural setting has both agriculture and residential use, the values of 10 and 6 will be added and averaged to arrive at the value). All sides will then be added to determine the actual value of the adjacent land use system. Facilities may not be located in established and approved wellhead protection areas.

**SELECTED SYSTEM**

**Agricultural Land**

This criterion responds to the concern that an increasing amount of farmland is being diverted to other uses which restrict or eliminate its future utilization as active farmland. A proposed material recovery or processing facility which will not be located on prime and/or actively producing farmland should receive the highest weighting factor as reflected in the following table.

<b>STATUS OF AGRICULTURAL LAND</b>	<b>WEIGHT FACTOR</b>
Not Prime and/or Actively Producing	10
Currently Non-Active, Prime Farmland	8
Active, Non-Prime Farmland	8
Actively Producing Prime Farmland	5

For the purposes of this document, "actively producing farmlands" are lands that are currently producing crops; "active farmlands" are lands that are capable of production with minor preparation or those lands that have been in production within the last five years; and "prime farmlands" are those lands designated as such by the State of Michigan, the Soil Conservation Service or other recognized authority or organization.

**Design Impacts**

Proposed material recovery or processing facilities should provide adequate screening to minimize visual and other impacts to adjoining properties.

<b>DESIGN IMPACT</b>				
<b>Design Condition</b>	<b>10</b>	<b>8</b>	<b>6</b>	<b>4</b>
<b>Screening</b>	Natural screening, no vegetative planting necessary	Vegetative Screen Meeting The Definition Below	Provision of 8' Berm With a 4' Fence on Top of Berm	No Natural or Planted Screening, no berming

Landscaping, composed of shrubbery and trees, should be provided and maintained to beautify the view of the facility. The landscaping should be of sufficient maturity and density to serve as an effective site barrier. The following is suggested: planting of evergreen trees not more than 12 feet apart, or shrubbery not more than 5 feet apart, in staggered rows parallel to the boundaries of the property. Evergreen trees should be at least 4 feet in height at the time of planting and should grow to not less than 10 feet in height. The applicant must agree to replace any trees or shrubs which die in accordance with the standards described above during the next growing season.

## SELECTED SYSTEM

### **Bonus Points - Local Mitigation**

Applicants are not required to address any of the items listed below in this bonus point section. However, applicants of proposed solid waste facilities can receive additional points by meeting any or all of the items listed below. A minimum score of 70 percent of the maximum total possible points is required to take advantage of any of the bonus point items.

- Facilities which show additional sensitivity to adjoining land uses by buffering their impacts with greater isolation distances (isolation numerical value = 4), attractive landscaping or berming (design impact numerical value = 10) may receive an additional weight factor of 2 points.
- Applicants which enter into a host community agreement with either the County or the local community to provide improvements to the community infrastructure, such as upgraded roads, sewer, and water improvements, which are necessary as a result of facility development, will receive an additional weight factor of 5 points (local mitigation numerical value = 10 points).
- Applicants which enter into a host community agreement with the County or the local community to provide improvements to public services, such as police and fire, which are necessary as a result of facility development will receive up to an additional weight factor of 5 points. Agreements which provide annual support (e.g., annual grants to support services, a percentage of the gate, etc.) may receive an additional weight factor of 5 points. One-time grants may receive an additional weight factor of 2 points. (Local mitigation numerical value = 10 points)
- Applicants who provide guaranteed property value protection for homes within 1 mile of the facility for demonstrable loss of value due to proximity to the facility may receive up to an additional 5 points. (Local mitigation numerical value = 10 points)
- Applicants who provide guaranteed replacement of loss of water supply suffered as a direct result of facility development may receive up to an additional weight factor of 5 points. (Local mitigation numerical value = 10 points)
- Applicants who provide free disposal for the local community may receive up to an additional weight factor of 2 points. (Local mitigation numerical value = 10 points)
- Applicants who provide free recycling and/or composting services to the local community may receive up to an additional weight factor of 2 points. (Local mitigation numerical value = 10 points)

**SELECTED SYSTEM**

- **Upon receipt of a written notice by another Monroe County agency (e.g., Road Commission, Public Works, etc.) that an agreement has been reached between the applicant and the agency that provides benefits to the County, then the applicant may receive an additional weight factor of 2 points. (Local mitigation numerical value = 5 points)**

SELECTED SYSTEM

**REVIEW AND EVALUATION FOR A PROPOSED  
CAPTIVE, INDUSTRIAL LANDFILL**

**INFORMATION REQUIRED FOR AN APPLICATION TO BE  
ADMINISTRATIVELY COMPLETE**

To ensure that the TRP has sufficient information to adequately complete the evaluation process, and to prevent a site from being found inconsistent for lack of data, minimum data submission requirements are established. An administratively complete application must include, at a minimum, the following information. Additional information may be provided at the discretion of the applicant to assist in identification of any unique features of the proposal or the site.

1. Name, address and telephone number for:

- |   |                |
|---|----------------|
| A. Applicant  | YES ___ NO ___ |
| D. Property owner of the site (if different)                      | YES ___ NO ___ |
| C. Designated project contact                                     | YES ___ NO ___ |
| D. Legal description of all parcels included in the proposed site | YES ___ NO ___ |

2. A detailed site plan or plans (scale of 1:200) indicating the size and orientation of the site including:

- |  |                |
|--|----------------|
| - Proposed boundaries of solid waste processing areas;                                   | YES ___ NO ___ |
| - On site roads;   | YES ___ NO ___ |
| - On site structures;  | YES ___ NO ___ |
| - Parking areas for employees;   | YES ___ NO ___ |
| - Staging areas for trucks waiting to use the facility;                                  | YES ___ NO ___ |
| - Means of limiting access, including fencing, gates, natural barriers or other methods. | YES ___ NO ___ |

3. Conceptual engineering plans for the construction of the facility. YES \_\_\_ NO \_\_\_

SELECTED SYSTEM

4. Site plan should also include information regarding proposed berm locations, fences and/or dikes and all landscaping to be constructed or placed on the site. YES \_\_\_ NO \_\_\_
5. Topographical data (based on USGS data) with contour intervals which clearly delineate surface conditions as existing and as proposed for the site. YES \_\_\_ NO \_\_\_
6. General site location map(s) identifying:
- Access roads; YES \_\_\_ NO \_\_\_
  - Proposed access point(s) to the facility; YES \_\_\_ NO \_\_\_
  - One hundred year flood plains (as identified on DNR flood plain maps and as defined in the Part 115 Administrative Rules) within the boundaries of the site; YES \_\_\_ NO \_\_\_
  - Lands regulated under the Farmland and Open Space Preservation Act, 1974 Public Act 116, as amended, that are within the boundaries of the site; YES \_\_\_ NO \_\_\_
  - Location of surface water on and within ½ mile of the site; YES \_\_\_ NO \_\_\_
  - All wetlands (regulated and non-regulated) within the boundaries of the site; YES \_\_\_ NO \_\_\_
  - Location of drains on the site; YES \_\_\_ NO \_\_\_
  - Location of public and private water wells within one mile of the proposed active fill areas and location of established/approved wellhead protection areas; YES \_\_\_ NO \_\_\_
  - Residences, commercial establishments, industries, institutions including schools, churches, hospitals, and historic or archaeological sites within one mile of the proposed active fill areas. YES \_\_\_ NO \_\_\_
7. If materials from another facility owned by the applicant will be shipped to this location, include a description of preferred haul routes over which solid waste transport vehicles will travel within five miles of the site, and an estimate of the number and type of vehicles per day. YES \_\_\_ NO \_\_\_
8. Proposed operating schedules (days and hours). YES \_\_\_ NO \_\_\_

SELECTED SYSTEM

9. Potential for future site expansion and identification of any additional operations to be conducted on the site. The future proposed site expansions and identification of any proposed additional operations identified under this item shall not be considered part of this proposal. Expansions and additional future operations will require a new application and review by the TRP. YES \_\_\_ NO \_\_\_
10. A general description of the soil characteristics and the hydrogeological conditions at the proposed site. YES \_\_\_ NO \_\_\_
11. Current zoning at the site and for adjacent land uses. YES \_\_\_ NO \_\_\_
12. If the owner of the property is different than the proposed developer, the developer must provide documentation in the form of a land contract, purchase agreement, or other binding legal instrument which substantiates the developer's ability to proceed with development and operation of the site. YES \_\_\_ NO \_\_\_
13. A description of historic uses of the property within the last fifty (50) years Identification of any previous disposal sites within the property boundaries and/or any known contamination which may be present within the boundaries of the site. YES \_\_\_ NO \_\_\_
14. Measures to control drifting or airborne transmission of dust, particles, or debris beyond the property lines. YES \_\_\_ NO \_\_\_
15. Measures to control carrying or tracking of mud, dirt, clay, etc. onto any public right-of-way. YES \_\_\_ NO \_\_\_
16. A description of any recycling or composting programs, as appropriate to the operation of the facility and/or company. YES \_\_\_ NO \_\_\_
17. A signed statement by the owner/operator of the proposed facility provides agreeing to submit to the Solid Waste Coordinator a monthly report which includes the following information:  
A. Name, location, and permit number of the facility;  
B. Name, address, and telephone number of the facility owner;  
C. Name, address, and telephone number of the facility operator;  
D. Total quantity of waste received at the facility during the past three months in tons or cubic gate yards; and  
E. Total quantity of waste received at the facility during the past month originating from out-of-county sources in tons or cubic gate yards. YES \_\_\_ NO \_\_\_

SELECTED SYSTEM

**Table III-10: CAPTIVE INDUSTRIAL LANDFILL SITE EVALUATION CRITERIA AND NUMERICAL VALUE**

<u>Criteria</u>	<u>Numerical Value</u>
20-Year County Solid Waste Disposal Needs	40
Haul Routes	36
Residential Development	32
Agricultural Land	28
Adjacent Land Use	20
Design Impacts	10
Isolation	4

**Review Criteria and Weighting Factors**

**20-Year County Solid Waste Disposal Needs**

The TRP will consider the impact of the proposed captive industrial landfill on Monroe County's 20-year solid waste disposal needs. The Panel will consider the amount of waste projected for the operation of the company that will not be sent to a municipal solid waste landfill.

The weight factor assigned to a landfill proposal will represent the anticipated life of the facility. A facility sized to accommodate the company's waste disposal needs for 20 years or more will be given a weight of 10. For every two years less than 20 years, a point will be subtracted from the maximum possible weight of 10. For example, a facility sized to accommodate the company's waste for 12 years will be given a weight factor of 6.

DEDICATED CAPACITY FOR A CAPTIVE INDUSTRIAL LANDFILL	WEIGHT FACTOR
19-20 or more years of disposal capacity	10
18-19 years of disposal capacity	9
16-17 years of disposal capacity	8
14-15 years of disposal capacity	7
12-13 years of disposal capacity	6
10-11 years of disposal capacity	5
8-9 years of disposal capacity	4
6-7 years of disposal capacity	3
4-5 years of disposal capacity	2
3 or fewer years of disposal capacity	1

SELECTED SYSTEM

**Haul Routes**

If materials from other facilities owned by the same company will be transported and disposed of at the proposed site, the specified haul routes and volumes of truck traffic transporting solid waste will be evaluated. Proposed sites that specify haul routes which avoid traversing highly developed residential and commercial areas will be weighted highly. Proposed sites that specify haul routes which traverse or impact upon residential or commercial areas shall receive lower weights. The schedule below will be used to evaluate haul routes.

<b>HAUL ROUTES WEIGHT FACTOR ALLOCATION TABLE</b>			
	<b>All Weather Road</b>	<b>*Non All Weather Road Bond/Upgrade</b>	<b>Non All Weather Road 2 or 4 Lanes</b>
<b>Assigned Points for Roadway Type</b>	10	8	6
<b>More Than 50 Residences/Mile</b>	7	5	3
<b>More Than 25 Residences/Mile</b>	8	6	4
<b>More Than 12 Residences/Mile</b>	9	7	5
<b>More Than 10 Commercial Structures/Mile</b>	7	5	3
<b>Between 6 &amp; 10 Commercial Structures/Mile</b>	8	6	4
<b>Between 1 &amp; 5 Commercial Structures/Mile <sup>(1)</sup></b>	9	7	5
<b>Schools <sup>(2)</sup></b>	4	2	1
<b>Human Care Institutions <sup>(2)(3)</sup></b>	6	3	2

**NOTES**

(1) Businesses selling retail products or services to the general public.  
 (2) Points deducted for each occurrence.  
 (3) An institution which has beds for more than 6 patients.

Haul routes, which are to be evaluated, would be those roads that are not a County primary or higher highway classification. Haul routes evaluated would be either all roads with access to the site from the point at which the truck traffic leaves a County primary or a higher classification. Point determinations are based on averaging the residences and commercial structures. Residences and commercial structures owned by the developer will not be counted in the determination of points. Haul routes which are County primary or higher highway classification shall receive a point value of 10.

\* The developer must provide a signed statement agreeing to provide a bond or to upgrade the non-all weather road to all-weather condition, according to the Monroe County Road Commission Specifications.

**SELECTED SYSTEM**

**Residential Development**

In the evaluation process, the degree of residential development adjacent to a proposed facility will be considered. Sanitary landfills in Monroe County should be located in areas which minimize the negative impact on residential development.

<b>NUMBER OF RESIDENCES WITHIN 1/2 MILE OF THE PERIMETER OF THE ACTIVE FILL AREA</b>	<b>WEIGHT FACTOR</b>
= < 50	10
51-100	8
101-150	6
151-200	4
201-300	2
300+	0

**Agricultural Land**

This criterion responds to the concern that an increasing amount of farmland is being diverted to other uses which restrict or eliminate its future utilization as active farmland. A proposed material recovery or processing facility which will not be located on prime and/or actively producing farmland should receive the highest weighting factor as reflected in the following table.

<b>STATUS OF AGRICULTURAL LAND</b>	<b>WEIGHT FACTOR</b>
Not Prime and/or Actively Producing	10
Currently Non-Active, Prime Farmland	8
Active, Non-Prime Farmland	8
Actively Producing Prime Farmland	5

For the purposes of this document, "actively producing farmlands" are lands that are currently producing crops; "active farmlands" are lands that are capable of production with minor preparation or those lands that have been in production within the last five years; and "prime farmlands" are those lands designated as such by the State of Michigan, the Soil Conservation Service or other recognized authority or organization.

## SELECTED SYSTEM

### Adjacent Land Use

It is desirable that a proposed facility be compatible with adjacent land uses. This criterion will be used only if additional property is needed to accommodate the proposed captive industrial landfill. If the landfill is located on existing property that is zoned industrial, this criterion will not be used to evaluate the proposal.

Proposed facilities which are deemed to be compatible with surrounding land uses will be given a higher weight factor. Proposed facilities which have the potential for minor conflict with surrounding land uses will be given a moderate weight factor. Facilities which are deemed to be incompatible with all surrounding land uses will be given a weight of less than 5. Land uses and zoning districts which are deemed compatible with solid waste facilities generally include industrial, agricultural and open space. Less compatible land uses and zoning districts generally include residential, commercial and institutional.

ADJACENT LAND USE	WEIGHTING FACTOR by Community Type		
	Rural*	Suburban*	Urban*
Agricultural	10	-	-
Industrial	8	8	8
Commercial	6	5	4
Residential	6	4	2

- \* Rural:  $\leq 1$  person/acre,
- \* Suburban:  $> 1$  person/acre but  $< 6$  people/acre,
- \* Urban:  $> 6$  people/acre.

In the case of a parcel having more than one adjacent land use, the predominant land use of the site will be used to evaluate the site. The predominant land use value of all parcels on all four general sides of the site will be added and averaged to determine the land use value for a side (e.g., if a side of a facility in a rural setting has both agriculture and residential use, the values of 10 and 6 will be added and averaged to arrive at the value). All sides will then be added to determine the actual value of the adjacent land use system.

### Design Impacts

The design of proposed landfills can greatly impact the environment and acceptability by concerned citizens. Design impacts include site screening to reduce negative impact on adjacent and surrounding properties.

SELECTED SYSTEM

Design Condition	DESIGN IMPACT			
	10	8	6	4
Screening	Natural screening, no vegetative planting necessary	Vegetative Screen Meeting The Definition Below	Provision of 8' Berm With a 4' Fence on Top of Berm	No Natural or Planted Screening, no berming

Landscaping, composed of shrubbery and trees, should be provided and maintained to beautify the view of the landfill. The landscaping should be of sufficient maturity and density to serve as an effective site barrier. The following is suggested: planting of evergreen trees not more than 12 feet apart, or shrubbery not more than 5 feet apart, in staggered rows parallel to the boundaries of the property. Evergreen trees should be at least 4 feet in height at the time of planting and should grow to not less than 10 feet in height. The applicant must agree to replace any trees or shrubs which die in accordance with the standards described above during the next growing season.

**Isolation**

Location of new solid waste landfills should be in areas which allow reasonable buffer zones between active fill areas and other active operation areas (e.g., collection ponds, processing areas, etc.) and adjacent property boundaries.

- Proposed sites which plan to maintain a 100 foot minimum separation distance between the active work areas and adjacent property lines will receive a weight factor of 2.
- Proposed sites which plan to maintain a 100 - 200 foot minimum separation distance between the active work areas and adjacent property lines will receive a weight factor of 4.
- Proposed sites which plan to maintain more than a 200 foot minimum separation distance between the active work areas and adjacent property lines and which have up to another 100 feet between the active work areas and occupied residential dwellings\* will receive a weight factor of 6.
- Proposed sites which plan to maintain more than 200 foot minimum separation distance between the active work areas and adjacent property lines and which have up to another 200 feet between the active work areas and occupied residential dwellings\* will receive a weight factor of 8.
- Proposed sites which plan to maintain more than 200 foot minimum separation distance between the active work areas and adjacent property lines and which have more than another 200 feet between the active work areas and occupied residential dwellings\* will receive a weight factor of 10.

\* Residential dwellings owned and occupied by the developer will not be used in the evaluation.

## **SELECTED SYSTEM**

### **Bonus Points - Local Mitigation**

Applicants are not required to address any of the items listed below in this bonus point section. However, applicants of proposed solid waste facilities can receive additional points by meeting any or all of the items listed below. A minimum score of 70 percent of the maximum total possible points is required to take advantage of any of the bonus point items.

- Facilities which show additional sensitivity to adjoining land uses by buffering their impacts with greater isolation distances (isolation numerical value = 4), attractive landscaping or berming (design impact numerical value = 10) may receive an additional weight factor of 2 points.
- Applicants which enter into a host community agreement with either the County or the local community to provide improvements to the community infrastructure, such as upgraded roads, sewer, and water improvements, which are necessary as a result of facility development, will receive an additional weight factor of 5 points (local mitigation numerical value = 10 points).
- Applicants which enter into a host community agreement with the County or the local community to provide improvements to public services, such as police and fire, which are necessary as a result of facility development will receive up to an additional weight factor of 5 points. Agreements which provide annual support (e.g., annual grants to support services, a percentage of the gate, etc.) may receive an additional weight factor of 5 points. One-time grants may receive an additional weight factor of 2 points. (Local mitigation numerical value = 10 points)
- Applicants who provide guaranteed property value protection for homes within 1 mile of the facility for demonstrable loss of value due to proximity to the facility may receive up to an additional 5 points. (Local mitigation numerical value = 10 points).
- Upon receipt of a written notice by another Monroe County agency (e.g., Road Commission, Public Works, etc.) that an agreement has been reached between the applicant and the agency that provides benefits to the County, then the applicant may receive an additional weight factor of 2 points. (Local mitigation numerical value = 5 points.)
- Applicants who provide guaranteed replacement of loss of water supply suffered as a direct result of facility development may receive up to an additional weight factor of 5 points. (Local mitigation numerical value = 10 points).

## **SELECTED SYSTEM**

### **SOLID WASTE MANAGEMENT COMPONENTS<sup>1</sup>**

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.

The Monroe County Board of Commissioners has the overall responsibility for solid waste planning, implementation and enforcement. These responsibilities are executed through the Monroe County Health Department, Environmental Health Division and the Monroe County Planning Department. Specific activities are conducted through the Office of the Solid Waste Coordinator. The County supports solid waste planning and management activities through the collection of a facility fee which is described in the Fee Ordinance found at the end of the section on ordinances. Enforcement of the Plan will be in cooperation with the Michigan Department of Environmental Quality which has the ultimate responsibility for enforcing the environmental laws of the State.

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<sup>1</sup> 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: Office of the Solid Waste Coordinator**

Source or Waste Reduction -  
Product Reuse -  
Reduced Material Volume -  
Increased Product Lifetime -  
Decreased Consumption -

**Resource Recovery Programs: Office of the Solid Waste Coordinator**

Composting -  
Recycling -  
Energy Production -

**Volume Reduction Techniques: Office of the Solid Waste Coordinator**

**Collection Processes: Private Sector**

**Transportation: Private Sector**

**Disposal Areas: Private Sector**

Processing Plants -  
Incineration -  
Transfer Stations -  
Sanitary Landfills -

**Ultimate Disposal Area Uses: Private Sector**

**Local Responsibility for Plan Update Monitoring & Enforcement: Board of Commissioners**

**Educational and Informational Programs: Office of the Solid Waste Coordinator**

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.

**Monroe County Solid Waste Disposal Facility Fee Ordinance:** Enables the County to collect a fee for waste disposed of at landfills in Monroe County. The ordinance also establishes the use of fees collected and requires regular reporting by facilities on the amounts of waste disposed of at the facility. A copy of the ordinance can be found at the end of this section on ordinances.

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.

## **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: