



JOHN ENGLER  
GOVERNOR

STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
LANSING



RUSSELL J. HARDING  
DIRECTOR

December 10, 2002

Mr. Gerald W. Cole, Chairman  
Shiawassee County Board of Commissioners  
201 North Shiawassee Street  
Corunna, Michigan 48817

Dear Mr. Cole:

The Department of Environmental Quality (DEQ) received the locally approved update to the Shiawassee County Solid Waste Management Plan (Plan) on May 15, 2002. Except for the items indicated below, the Plan is approvable. As outlined in the August 30, 2002 letter to you from Ms. Lynn Dumroese, DEQ, Waste and Hazardous Materials Division (WHMD), and as confirmed in your letter dated October 21, 2002, the DEQ makes the following modifications to the Plan:

On [page III-21](#), the second paragraph in Section II discusses the appointments for the Solid Waste Review Committee (SWRC). No default mechanism has been established if the appointments have not been made within the specified time frames. We understand that Shiawassee County (County) intended to have the County Planning Commission (CPC) review the proposal if the SWRC is not staffed. Therefore, the following sentence is added to the second paragraph in Section II: "If the appointments for the SWRC have not been made within the established time frames, the proposal shall be forwarded to the CPC for a determination of consistency."

On [page III-21](#), the third paragraph in Section III states: "The CPC staff shall determine if the proposal is administratively complete within 15 calendar days after receipt of the proposal." However, on page III-22, the fifth paragraph states: "The review period for a proposal begins on the day the proposal is determined to be administratively complete by SWRC staff, or at the end of 15 calendar days after receipt of proposal if the SWRC staff fails to act as specified above." The County intended for the SWRC to be responsible for determining whether the application is administratively complete; therefore, the reference to the CPC in Section III on page III-21 is changed to indicate the SWRC shall determine if the proposal is administratively complete. If the SWRC has not been appointed, then the CPC shall make the determination.

On [page III-29](#), criterion number 12 requires the developer to provide a traffic safety study for all access roads to the facility. Additionally, the question associated with criterion number 12 asks: "Are any and all hazardous conditions identified in the study resolved to the satisfaction of the agency responsible for the road or roads?" The phrase "to the satisfaction of the agency responsible for the road or roads" does not

clearly define the requirements for a traffic safety study and involves discretionary decision-making authority. Section 11538(3) of Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), requires that a siting mechanism not be subject to discretionary acts by the local planning entity and that the procedure will guarantee a decision. Submittal of the traffic safety study, which identifies hazardous conditions, is sufficient, and we understand that the County does not intend on evaluating the hazardous conditions. In order to make this criterion objective and measurable, the following sentence shall be added to criterion number 12: "Submittal of the traffic safety study satisfies the criterion." Additionally, the question associated with criterion number 12 is changed to ask: "Has the traffic safety study been submitted?" This comment also applies to criterion number 6 on page III-32.

On [page III-30](#), the question associated with criterion number 16 asks: "Does the proposal contain the documentation specified above?" The criterion does not include whether or not documentation was provided; therefore, the question should be modified to reflect the requirement of the criterion. The Plan does not specifically state that the determination of consistency is based on how many answers are yes or no but if the proposal meets the requirement of the specific criterion. In order to alleviate any discrepancy regarding what is required to meet the criterion, the question associated with criterion number 16 is changed to ask: "Is the facility located on property zoned as agricultural or industrial?"

On [page III-31](#), criterion number 22 requires the developer to provide an Emergency Response Plan that has been approved by the fire department having jurisdiction. The requirements for the approval of an Emergency Response Plan are not clearly stated; therefore, this criterion could involve discretionary decision-making authority. In order to make this criterion objective and measurable, the requirement should only be that the developer must submit the Emergency Response Plan that is approved by the fire department having jurisdiction. Therefore, the following sentence shall be added to criterion number 22: "Submittal of the approved Emergency Response Plan satisfies the criterion." Additionally, the question associated with criterion number 22 is changed to ask: "Has the approved Emergency Response Plan been submitted?" This comment also applies to [criterion number 15 on page III-33](#).

On [page III-31](#), [criterion number 23](#) states that the site plan review is advisory to the decision on plan compliance. Since the site plan review is only for advisory purposes and it is not clear how the County intends on evaluating the results of the review, criterion number 23 is deleted from the siting criteria. This comment also applies to [criterion number 16 on page III-33](#).

On [page III-32](#), the question associated with criterion number 3 asks: "Is specific documentation included?" The criterion does not include whether or not documentation was provided. In order to alleviate any discrepancy regarding what is required to meet the criterion, the question associated with criterion number 3 is changed to ask: "Is the

active work area located within 500 feet of any existing public park, recreation area, or school grounds?"

On [page III-32, criterion number 5](#) requires that the developer provide written abatement plans for the control of noise, vibration, odor, and litter, and the question associated with this criterion asks: "Are the satisfactory plans included?" The term "satisfactory" is discretionary, and it is not clear how the County intends on evaluating the information contained in the abatement plans. In order to make this criterion objective and measurable, the requirement shall be that the developer must submit a signed statement agreeing to provide for the control of noise, vibration, odor, and litter. Additionally, the question associated with criterion number 5 is changed to ask: "Is the signed statement included?"

On [page III-32, criterion number 8](#) requires that the site provide "adequate staging and parking areas." The term "adequate" is not defined, and it is difficult to determine whether the design of the site provides "adequate staging and parking" prior to a facility being constructed. In order to make this criterion objective and measurable, the requirement for this criterion shall be that the developer must submit a signed statement agreeing to provide staging and parking for trucks, employees, and visitors such that access roads remain free of waiting vehicles. The corresponding question is changed to ask: "Is the signed statement included?"

On [page III-32, the question corresponding to criterion number 11 asks](#): "Is specific documentation included?" Once again, the criterion does not appear to be whether or not documentation was provided; therefore, the question is modified to ask: "Is the facility located on lands enrolled under Part 361 [Farmland and Open Space Preservation of the NREPA]?"

[On page III-36](#), the second sentence in item number 2 states: "In addition, any part of the operation of licensed facility that is not regulated by Part 115 is under the jurisdiction of county or local land use regulations." This sentence is confusing because if a facility is licensed, then the operations of the facility are regulated by Part 115. In order to alleviate any confusion, this sentence is deleted from item number 2.

[On page III-36](#), the last subject of local regulations states: "Pollution prevention regulations which regulate materials in quantities that are less than those covered by State Law or that regulate types [of] hazardous materials which are not covered [by] State laws." Section 11538(8) of Part 115 preempts enforcement of all local regulation of the disposal area location, development, and operation except to the degree approved by the DEQ as part of the Plan. A clarification is needed because the scope and applicability of the local authority intended to be enforced is unclear. Therefore, the following sentence shall be added to this local area of regulation: "These pollution prevention regulations only apply at the point of waste generation and prior to transport to a disposal area."

Mr. Gerald W. Cole  
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December 10, 2002

Another clarification is needed on [page III-36](#) regarding the phrase listed at the bottom of the Local Ordinances and Regulations Affecting Solid Waste Disposal that states: "The County of Shiawassee and all cities, villages, and townships." This clarification is needed because it appears the Plan authorizes the adoption and enforcement of all local regulations. The County intended to authorize these units of government to adopt and enforce local areas of regulation for the subjects that are listed on page III-36. Therefore, the following language shall replace this phrase: "The county of Shiawassee and all cities, villages, and townships can adopt and enforce local ordinances that relate to the subjects listed above."

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

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

The Plan may also contain other provisions that are neither required nor expressly authorized for inclusion in a solid waste management plan. 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 the County. If you have any questions, please contact Ms. Rhonda Oyer Zimmerman, Chief, Solid Waste Management Unit, Storage Tank and Solid Waste Section, WHMD, at 517-373-4750.

Sincerely,



Russell J. Harding  
Director  
517-373-7917

Mr. Gerald W. Cole

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December 10, 2002

cc: Senator Valde Garcia  
Representative Larry Julian  
Mr. Dennis C. Dunnigan, Shiawassee County Community Development  
Mr. Arthur R. Nash Jr., Deputy Director, DEQ  
Mr. Thomas M. Hickson, Legislative Liaison, DEQ  
Mr. George W. Bruchmann, DEQ  
Mr. Dennis A. Armbruster, DEQ  
Mr. Lonnie Lee, DEQ  
Mr. Steve Blayer, DEQ  
Ms. Rhonda Oyer Zimmerman, DEQ  
Ms. Lynn Dumroese, DEQ  
Shiawassee County File

**SHIAWASSEE COUNTY BOARD OF COMMISSIONERS  
SURBECK BUILDING • 201 N. SHIAWASSEE ST.  
CORUNNA, MICHIGAN 48817**

**Telephone: (989) 743-2233  
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District 4

**HENRIETTA SPARKES**  
District 7

October 21, 2002

Ms. Lynn Dumroese  
Solid Waste Unit  
Waste Management Division  
Department of Environmental Quality  
P.O. Box 30473  
Lansing, MI 48909-7973

OCT 23 2002

Waste & Hazardous  
Materials Division

Dear Ms. Dumroese:

In response to your letter date August 30, 2002, the Shiawassee County Board of Commissioners at their regular meeting on September 12, 2002, authorized the acceptance of the changes to the Shiawassee County Solid Waste Management Plan as outline in your letter. The County of Shiawassee accepts the proposed changes and request that the Director of the Department of Environmental Quality approve the Plan with the administrative modifications as detailed in your letter of August 30, 2002.

We look forward to the approval of the Shiawassee County Solid Waste Management Plan.

Sincerely,



Gerald W. Cole  
Chairman, Board of County Commissioners  
County of Shiawassee, Michigan





## Shiawassee County Community Development

3rd Floor Surbeck Building, 201 N. Shiawassee St., Corunna, MI 48817-1437

Telephone: (517)743-2396 or (517)743-2226 FAX: (517)743-5453

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May 14, 2002

Ms. Lynn Dumroese  
Solid Waste Management Unit  
Waste Management Division  
Department of Environmental Quality  
P.O. Box 30241  
Lansing, Michigan 48909-7741

Dear Ms. Dumroese

Enclosed is a resolution of support for the Shiawassee County Solid Waste Management Plan. From the City of Corunna. This makes 19; and should allow you to continue to process the previously submitted Plan.

Please contact me by telephone at 989-743-2229 if there are any problem with the information submitted.

Sincerely,

Dennis C. Dunnigan  
Planning Director

| RESOLUTION OF APPROVAL THE SWMPC 2002          | Action                      | On File | Count |
|--|-----------------------------|---------|-------|
| Antrim 2 nd Thursday                           | Approved                    | Recd    | 1     |
| Bennington 1st Monday (denied)                 | Denied                      | Recd    |       |
| Burns 1 <sup>st</sup> Monday                   | Unknown                     |         |       |
| Caledonia 1s t & 3rd Mondays                   | Approved                    | Recd    | 2     |
| Fairfield 1st Thurs                            | Approved                    | Recd    | 3     |
| Hazelton 2nd Monday                            | Approved                    | Recd    | 4     |
| Middlebury 2nd Thursday                        | Approved                    | Recd    | 5     |
| New Haven 1 <sup>st</sup> Monday               | Approved                    | Recd    | 6     |
| Owosso Charter Township 2 <sup>nd</sup> Monday | Approved                    | Recd    | 7     |
| Perry Township 1 <sup>st</sup> Wednesday       | Approved                    | Recd    | 8     |
| Rush 2 <sup>nd</sup> Thursday                  | Approved                    | Recd    | 9     |
| Scoita Township                                | Approved                    | Recd    | 10    |
| Shiawassee Township 1st Monday                 | Approved                    | Recd    | 11    |
| Venice Township 1st Monday                     | Approved                    | Recd    | 12    |
| Vernon Township 2 <sup>nd</sup> Monday         | Approved                    | Recd    | 13    |
| Woodhull 1st Wednesday                         | Approved                    | Recd    | 14    |
| Corunna 1st and 3rd Monday                     | None                        |         |       |
| Durand 1st and 3rd Monday                      | Approved                    | Recd    | 15    |
| City of Laingsburg                             | Approved                    | Recd    | 16    |
| Owosso 1st and 3rd Monday                      | Approved                    | Recd    | 17    |
| Perry 1st and 3rd Monday                       | Approved                    | Recd    | 18    |
| Bancroft 2 nd Wednesday                        | Unknown                     |         |       |
| Byron 1st Monday                               | Denied                      | Recd    |       |
| Lennon 2 <sup>nd</sup> Monday                  | Mailed 2 <sup>nd</sup> Copy |         |       |
| Morrice 2 <sup>nd</sup> Wednesday              | Unknown                     |         |       |
| New Lothrop                                    | Unknown                     |         |       |
| Village of Vernon                              | Approved                    | Recd    | 19    |



# Shiawassee County Community Development

3rd Floor Surbeck Building, 201 N. Shiawassee St., Corunna, MI 48817-1437

Telephone: (517)743-2396 or (517)743-2226 FAX: (517)743-5453

WASTE MANAGEMENT DIVISION

May 2, 2002

MAY 03 2002

Ms. Lynn Dumroese, Solid Waste Management Unit  
Waste Management Division  
Department of Environmental Quality  
P.O. Box 30241  
Lansing, Michigan 48909-7741

Dear Ms. Dumroese

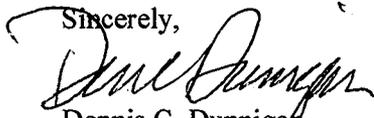
The enclosed Shiawassee County Solid Waste Management Plan is submitted for the approval of The Director of the Department of Environmental Quality. Please note that there are a total of 27 cities, villages, and townships within the County. Enclosed are 19 Resolutions of Approval and 2 motions to deny. The Act requires 2/3's or 18 approvals.

Also enclosed per your instructions are the following:

1. the SWMP on a disk;
2. a copy of SWMPC minutes releasing the plan for 90 day public review;
3. a copy of the Notice of the Public Hearing;
4. a copy of SWMPC minutes of December 20, 2001 showing approval of the plan;
5. a copy of SWMPC minutes of January 24, 2001 approving the plan again after it was return for further consideration by the Board of Commissioners;
6. a copy of the Board of Commissioners Minutes approving the Plan; and
7. copies of the Action of the municipalities approving or disapproving the plan.

Please contact me by phone at 989-743-2229 if there are any problem with the information submitted.

Sincerely,

  
Dennis C. Dunnigan  
Planning Director

**Shiawassee County Solid Waste Management Planning Committee  
Chairman, Don Platt**

The Solid Waste Management Committee met on July 12, 2001 at 7:00 p.m. in the Board of Commissioners Room 201 N. Shiawassee St. Corunna, MI. Present were members: Don Platt, Dennis Braid, Ellen Link, Ric Crawford, Carla Wysko, Chuck Cassie, Norma Lee, Jodi Keck, Tim Doyle, and Terry McLeod

Absent were, Phil Hathaway, and Karroll Knapp.

Also present were Dennis Dunnigan, Planning Director, and Steve Esling of WMI

Mr. Hathaway moved, supported by Mr. Keck to approve the agenda. Motion carried.

Chairman Platt asked for public comments; none were offered.

Mr. Hathaway moved, supported by Mr. Keck to approve the minutes of the June 14, 2001. Motion carried.

~~Chairman Platt gave the floor to Mr. Dunnigan, who explained the changes made in the plan and the need to approved the plan for the purpose of the 90 day review period. Several addition changes were made as a result of the discussion of the Siting Criteria and the and the Import-Export tables.~~

Mr. Crawford moved, supported by Mr. Braid to approved the release of the draft plan for the 90 day review period ad to establish the public hearing date of October 11,2001.

Chairman Platt asked for public comments; none were offered.

Chairman Platt declared the meeting adjourned at 9:40 p.m.

# The Argus-Press Company

Post Office Box 399 • 201 E. Exchange Street  
Owosso, Michigan 48867  
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Richard E. Campbell, Chairman  
Thomas E. Campbell, President & Publisher

## AFFIDAVIT OF PUBLICATION

In the matter of the Notice of Public Hearing on Shiawassee County Solid Waste Management Plan - October 11, 2001

STATE OF MICHIGAN )  
County of Shiawassee ) ss Thomas E. Campbell

Being first duly sworn, says that he is the Publisher of THE ARGUS-PRESS, a newspaper published in the English language for the dissemination of local or transmitted news and intelligence of a general character and legal news, which is a duly qualified newspaper and that annexed hereto is a copy of a certain order taken from said newspaper, in which the order was published once, and that the only insertion of said Notice was on the 7th day of September, A. D., 2001.

### NOTICE OF PUBLIC HEARING

In accordance with Section 11535 of Part 115 of the Natural Resources and Environmental Protection Act 451 of 1994, as amended; Notice is hereby given of Public Hearing on the Shiawassee County Solid Waste Management Plan. Copies of the Plan are available for public inspection at the Shiawassee County Community Development Department, Planning Division, 201 N. Shiawassee Street, Corunna, Michigan. Phone 989.743.2229. A copy of the plan is available for inspection or copying at cost by interested persons. The Hearing will be held on:

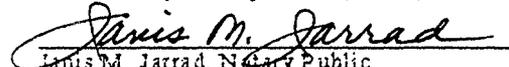
Date: October 11, 2001  
Time: 7:00 p.m.  
Place: Board of Commissioner's Room  
Surbeck Building, First Floor  
210 N. Shiawassee Street, Corunna, Michigan

For further information call Dennis Dunnigan at 989.743.2229  
Publish: September 7, 2001

SIGNED:



Subscribed and sworn to before me  
this 7th day of September, A. D., 2001.

  
Janis M. Jarrad, Notary Public  
Shiawassee County, Michigan  
My Commission expires January 13, 2003

**Shiawassee County Solid Waste Management Planning Committee  
Meeting of December 20, 2001  
Chairman, Don Platt**

The Solid Waste Management Committee met on December 20, 2001 at 7:00 p.m. in the Board of Commissioners Room 201 N. Shiawassee St. Corunna, MI. Present were members: Don Platt, Dennis Braid, Ric Crawford, Chuck Cassie, Norma Lee, Tim Doyle, and Terry McLeod  
Absent were Phil Hathaway, Ellen Link, Jodi Keck, and Karroll Knapp.  
Also present were Dennis Dunnigan, Planning Director, and Steve Esling of WMI

Mr. Crawford moved, supported by Mr. Braid to approve the agenda as revised to include review of the letter from Phil Hathaway concerning Mother Earth Recycling Center. Motion carried.

Chairman Platt asked for public comments; none were offered.

Chairman Platt gave the floor to Mr. Dunnigan, who review the changes made to the Plan based upon the review of the Michigan Department of Environmental Quality MDEQ and the comments made at the public hearing.

Mr. Dunnigan explained numerous minor changes in the plan, which were recommended by MDEQ staff. Each changed was pointed out to the committee. The MDEQ's major concerns were in the areas of measuring the total quantity of waste needing disposal, the details of the siting criteria for new facilities, and the authorization for other ordinances.

Mr. Crawford moved, supported by Mr. Braid to approve the plan as revised and forward it to the Board of Commissioners. Motion carried.

Chairman Plat asked for comments on the letter from Phil Hathaway concerning the Mother Earth Recycling Center in Owosso. The facility needs to relocate to another low cost site in order to remain viable. Several comments were made including the possibility of grants and possible re-organization of the facility as a volunteer-based program similar to the City of Laingsburg. It was generally agreed to respond by letter to Mr. Hathaway with a summary of the Committee's comments and suggestions.

Mr. Crawford moved, supported by Mr. Braid to adjourn at 9:20 p.m. Motion carried.

**Shiawassee County Solid Waste Management Planning Committee  
Meeting of January 24, 2002  
Chairman, Don Platt**

The Shiawassee County Solid Waste Management Planning Committee met on January 24, 2002 at 6:30 p.m. Present were Don Platt, Joe DeCaire, Bill Kluechmeister, Dennis Braid, Ric Crawford, Chuck Cassie, Norma Lee, Phil Hathaway, Terry McLeod, and Terry Link. Absent were Tim Doyle and Karroll Knapp. Also present were Dennis Dunnigan, Steve Esling, and Don McLeod.

Mr. Hathaway moved, supported by Mr. Braid to approve the agenda. Motion carried.

Chairman Platt asked for public comments; none were offered. Mr Crawford to approved the Minutes of December 20, 2001. Motion carried

Chairman Platt gave the floor to Mr. Dunnigan, who indicated that the Board of Commissioners has returned the draft Plan to the Committee with a list of six concerns Mr. Braid, Mr. Crawford and Mr. Dunnigan prepared draft response for the Committee to work from this evening.

Each concern was discussed in detail and a response was generally agreed upon by the Committee. The draft response was use as an outline, however numerous changes were made. Most of the concerns where re-stated in a manner which allowed the response to follow in a logical manner.

After discussing each concerning detail, reviewing the responsibility of the Committee, and the limitations place upon the planning process by the Department of Environmental Quality. The Committee generally agreed upon the wording of the response.

Mr. Crawford moved, supported by Mr. Braid to approve the response to the Board of Commissioners. Mr. Braid and Mr. Crawford will try to be present along with Mr. Platt and Mr. Dunnigan at the next Meeting of the Board of Commissioner's Economic and Physical Development Committee.

Mr. Hathaway suggested that a letter from the Committee to Mother Earth Recycling Center be drafted thanking them for the information and indicating that the plan calls for public information on available recycling to be placed in the local papers.

It was general agreed to send each member of the Committee a copy of the Plan as approved by the Board of Commissioners and hold the next meeting when needed in accordance to the Plan.

Mr. Crawford moved, supported by Mr. Braid to adjourn at 9:30 p.m. Motion carried.

Excerpt from the minutes of the

**Shiawassee County Solid Waste Management Planning Committee  
Don Platt, Chairman**

The Shiawassee County Solid Waste Management Planning Committee met on January 24, 2002 at 6:30 p.m. Present were Don Platt, Joe DeCaire, Bill Kuechmeister, Dennis Braid, Ric Crawford, Chuck Cassie, Norma Lee, Phil Hathaway, Terry McLeod, and Terry Link. Absent were Tim Doyle and Karroll Knapp. Also present were Dennis Dunnigan, Steve Esling, and Don McLeod. (New members are underlined)

The following are responses to the concerns of the Board of Commissioners about the draft Solid Waste Management Plan (June 2001) as approved by the Committee.

The Board of Commissioners listed concerns are numbered 1-6 in bold text followed by the Committees response in normal text.

**1. Separation of Cities, Counties and Townships**

It was suggested that the plan be modified to regulate the importing of solid waste from cities within counties. This can not be done because it is beyond the authority granted to counties by the law and rules governing Solid Waste Management Plans. These rules indicate that counties are the authorized body to control the flow of solid waste between counties. However, there is no authorization for any additional control over the flow of solid waste. Without additional authorization in state law, a county may not control the flow of waste from specific cities or townships. The legal authorization for regulating the flow of solid waste between counties is listed below.

Part 115 of the Natural Resources and Environmental Protection Act 1994 PA 451 Section. 11538j (6)

"In order for a disposal area to serve the disposal needs of another county, state, or country, the service, including the disposal of municipal solid waste incinerator ash, must be explicitly authorized in the approved solid waste management plan of the receiving county. With regard to Intercounty service within Michigan, the service must also be explicitly authorized in the exporting county's solid waste management plan."

R 229.4711 Plan Format and Content (e) (iii) (C)

"A site for a solid waste disposal area that is located in one county, but serves another county, shall be identified in both county solid waste management plans."

**2. Import Tax (Does the plan provide for additional taxes or fees)**

The existing agreement between the Board of Commissioners and Waste Management of Michigan (WMM) appears to precluded the County from initiating any additional fees or taxes on Solid Waste which is destined for disposal at Venice Park Recycling and

Disposal Facility. Since this agreement runs until 2014, with no provision for early termination, the Solid Waste Management Committee cannot see how calling for additional fees in this planning cycle would be appropriate. (See paragraph five for additional information)

### **3 How expansion takes place**

The proposed plan treats landfill expansion and new landfill facilities in the same manner, by requiring a determination of plan consistency in either case. Expansion is a technical term, which refers to vertical enlargement of an existing facility. The enlargement of a landfill's footprint (horizontal enlargement of the site) is not considered expansion. Horizontal enlargement is considered a new facility. The proposed plan treats both situations in the same manner. By requiring either type of enlargement to be reviewed under the siting criteria contained in the Plan. Pages III-20 indicates that:

"Any facilities requiring a construction permit under Act 451, Part 115 and proposed to be located in Shiawassee County shall undergo a review."

Page III-28 of the Plan reinforces Page III-20 by explaining that new sites and the expansion of existing sites are handled the same.

- "1. All proposed new sites and expansions of existing sites must meet Act 451, Part 115 requirements for vertical isolation to groundwater. The developer shall submit a signed statement which states that the design of the facility will meet Act 451, Part 115 requirements for vertical isolation to groundwater.
2. All proposed new sites and expansion of existing sites must control drainage of storm water from the disposal area of the site."

### **4. Siting mechanism to affect future capacity**

There are two mechanisms in place to insure future landfill capacity. Both the Plan and the Agreement are designed to insure that Shiawassee County residents will have a sufficient share of the capacity of the landfill. The Committee can find no evidence that Venice Park has operated in excess of the capacity limitation in the Agreement. The Committee is aware that the landfill ran very low on licensed space during the process of building a new landfill cell. During that time, some waste that was generated in Shiawassee County was hauled to another landfill. The contract specifies that Shiawassee County's waste will be handled at another facility, at no additional expense if Venice Park Recycling and Disposal Facility is not available.

### **5. Ordinance**

Should Shiawassee County have a Solid Waste Ordinance? The Committee believes that the creation of an ordinance to either underlie or replace the existing agreement with WMM concerning Venice Park is a violation of paragraphs 8.2 and 8.4 of existing agreement as stated below. We are aware that Clinton County has adopted an ordinance,

which underlies their agreement (Memo of Understanding) with the Granger Landfills. The Clinton County Ordinance is only effective if the Memo of Understanding is terminated. Shiawassee County's agreement with WMM runs until 2014 without a provision for early termination by either party. The committee can see no reason to consider an Ordinance until the Agreement either is near the end of its term or is terminated in a court of law.

Furthermore, the Solid Waste Management Committee lacks the authority to incorporate an ordinance into the plan. The authority to create an ordinance lies with the Board of Commissioners and is not precluded by any wording in the plan.

Paragraph 8.2 In the event WMM is required to pay additional fees, assessments or surcharges (excluding real estate taxes) to the County as a result of new or amended federal or state legislation and/or regulations and/or agreements between regional governmental entities, the parties shall negotiate in good faith appropriate adjustments, it being the intention of the parties that the level of financial benefits contained herein be maintained.

Paragraph 8.4 The Host Community Payments set forth in Paragraph 8.1 above, shall not be impacted by any real estate taxes or assessments; provided however, County shall not impose any new, or materially increase any existing property taxes or other taxes directed towards landfills in general or the Facility specifically, unless explicitly authorized by state or feral law

*Underlining added*

The proposed Solid Waste Management Plan is written in response to Rule 11538 (8) and Section 710 (3) of Part 115 of the Natural Resources and Environmental Protection Act, which prohibit local ordinances and regulations pertaining to solid waste disposal unless those regulation' s are explicitly authorized in a Solid Waste Management Plan that has been approved by the Director of the Department of Environmental Quality.

Page III-36 follows

Excerpt from the proposed SWMP

## **LOCAL ORDINANCES AND REGULATIONS AFFECTING SOLID WASTE DISPOSAL**

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

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

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

Facilities, which lie outside of the physical area of Part 115 control or license, that are accessory to the operation of a licensed facility are subject to county or local land use regulations. In addition, any part of the operation of licensed facility that is not regulated by Part 115 is under the jurisdiction of county or local land use regulations.

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.

### Subjects:

- Yard waste hauling and containers
- Waste Collection
- Waste Transportation
- Recycling
- Composting
- The regulation of the accumulation and storage of material defined a "junk" in a local ordinances, except when storage of material is determined to be an illegal landfill.
- Burning of Yard Waste
- Illegal Dumping
- Requiring Demolition Permits to specified the site of disposal of C&D Waste
- Regulation of the location and screening of commercial waste containers
- Pollution prevention regulations which regulate materials in quantities that are less than those covered by State Law or that regulate types hazardous materials which are not covered State laws

### Units of Government:

The County of Shiawassee and all cities, villages and townships

**6. Cost of providing room for hazardous waste.**

Will the County bear the cost of Hazardous Waste disposed of at the Landfill? No. Hazardous waste cannot be brought to the land fill site because it is not licensed as a Type 1, Hazardous Waste Landfill. In addition, Section 7.1 of the agreement between the County of Shiawassee and WMM states that:

"No hazardous waste as defined in applicable state and federal law, may be disposed of at the facility, and WMM shall appropriately screen all solid waste to insure that hazardous waste is not disposed of at the Facility "

Inert liquid waste, which is brought to the processing plant located at the landfill, is not hazardous waste. To the extent, that unregulated small quantities of hazardous material are part of household waste, the plan calls for the creation of a Household Hazardous Waste (HHW) collection program. We understand that the program has received grant funding and will begin in the spring of 2002.

In summary, the Committee believes that the question and concerns of the Board of Commissioners are important. In some cases, the concerns have been addresses in the plan and in other cases the concerns are outside of the scope and authority of the Plan.

---

Don Platt, Chairman

---

date

*Corrected copy*

At a regular meeting of the Shiawassee County Board of Commissioners held on February 14, 2002 at 4:00 p.m. in the Commission Chambers, Surbeck Building, Corunna, Michigan:

The meeting was called to order by Chairman Cole.

Prayer was offered by Comm. Capitan.

Pledge of Allegiance was given.

Roll Call found Comms. Buginsky, Capitan, Sparkes, Van Pelt, Weaver and Cole present. Comm. Fuja was absent.

It was moved by Comm. Van Pelt, seconded by Comm. Capitan to approve the minutes of the January 24, 2002 regular meeting of the Shiawassee County Board of Commissioners and the January 29, 2002 Special meeting of the Shiawassee County Board of Commissioners as presented by the Office of the County Clerk. Motion carried.

It was moved by Comm. Sparkes, seconded by Comm. Capitan to approve of bills audited at the February 12, 2002 Committee of the Whole meeting and also at the February 14, 2002 regular meeting and to authorize the County Clerk to issue warrants for same. Motion carried with the following roll call vote of 6 Yeas and No Nays. Yeas Comms. Buginsky, Capitan, Sparkes, Van Pelt, Weaver and Cole.

It was moved by Comm. Van Pelt, seconded by Comm. Capitan to approve of the minutes of the February 12, 2002 Committee of the Whole meeting as presented. Motion carried.  
The following Proclamation was presented.

#### PROCLAMATION

Of the Board of Commissioners of Shiawassee County, Michigan

WHEREAS, the American Red Cross is dedicated to saving lives, easing suffering, and restoring hope at home and around the world; and

WHEREAS, operating on a current budget of \$3 billion, the Red Cross annually mobilizes relief to the victims of more than 67,000 disasters nationwide, and has been the primary supplier of lifesaving blood and blood products in the United States for more than 50 years; and

WHEREAS, in 2000, the Red Cross also trained almost 12 million people in vital lifesaving skills, provided direct health services, provided direct health services to nearly 2.6 million, and delivered more than 21 million locally relevant community services; and

WHEREAS, the organization also assisted international disaster and conflict victims in close to 40 locations around the globe, and its emergency communication center processed 1.2 million calls in support of U. S. military families.

NOW, THEREFORE, THE BOARD OF COMMISSIONERS OF SHIAWASSEE COUNTY, MICHIGAN, DOES HEREBY PROCLAIM March as Red Cross Month in Shiawassee County, Michigan.

It was moved by Comm. Sparkes, seconded by Comm. Capitan to approve the Proclamation recognizing March as Red Cross month in Shiawassee County. Motion carried with the following roll call vote of 6 Yeas and No Nays. Yeas Comms. Buginsky, Capitan, Sparkes, Van Pelt, Weaver and Cole.

It was moved by Comm. Sparkes, seconded by Comm. Capitan to grant approval for the Owosso/Corunna Area Chamber of Commerce to apply on behalf of the County for a \$62,500 Link Michigan planning grant from the Michigan Economic Development Corporation. Motion carried with the following roll call vote of 6 Yeas and No Nays. Yeas Comms. Buginsky, Capitan, Sparkes, Van Pelt, Weaver and Cole.

It was moved by Comm. Sparkes, seconded by Comm. Weaver to grant approval for the Owosso/Corunna Area Chamber of Commerce to apply on behalf of the County for a \$26,000 Economic Development Planning Grant from the Michigan Economic Development Corporation. Motion carried with the following roll call vote of 6 Yeas and No Nays. Yeas Comms. Buginsky, Capitan, Sparkes, Van Pelt, Weaver and Cole.

It was moved by Comm. Sparkes, seconded by Comm. Weaver to approve the purchase of a server from EDS, three PCS from Dell and a 24-port switch from CDW-G at a total cost of \$9,356.75 for the Prosecutor's office out of his Fees Account 281-000-700.000. Motion carried with the following roll call vote of 6 Yeas and No Nays. Yeas Comms. Buginsky, Capitan, Sparkes, Van Pelt, Weaver and Cole.

It was moved by Comm. Sparkes, seconded by Comm. Weaver to authorize the Sheriff to begin collecting a \$5.00 fee for notarization of gun permit applications, effective March 1, 2002. Motion carried with the following roll call vote of 6 Yeas and No Nays. Yeas Comms. Buginsky, Capitan, Sparkes, Van Pelt, Weaver and Cole.

The amended 2002 Remonumentation budget was presented:

|                               |                 |
|-------------------------------|-----------------|
| REVENUES (101)                |                 |
| 400.579 Remonumentation Grant | \$66,077        |
| EXPENDITURES (101-245)        |                 |
| 703.000 Per Diem              | \$ 2,400        |
| 705.000 Supervisor's Salary   | \$ 6,218        |
| 715.000 FICA                  | \$ 476          |
| 718.000 Retirement            | \$ 518          |
| 727.000 Supplies              | \$13,865        |
| 804.000 Contracts             | <u>\$53,600</u> |
| <b>Total</b>                  | <b>\$77,077</b> |

It was moved by Comm. Sparkes, seconded by Comm. Weaver to amend the 2002 Remonumentation Budget in the amount of \$77,077.00. Motion carried with the following roll call vote of 6 Yeas and No Nays. Yeas Comms. Buginsky, Capitan, Sparkes, Van Pelt, Weaver and Cole.

It was moved by Comm. Sparkes, seconded by Comm. Weaver to approve the Remonumentation Contracts with Rowe Inc., Landmark Surveying and Powell Land Surveying. Motion carried with the following roll call vote of 6 Yeas and No Nays. Yeas Comms. Buginsky, Capitan, Sparkes, Van Pelt, Weaver and Cole.

It was moved by Comm. Sparkes, seconded by Comm. Weaver to authorize the purchase of an Ethernet switch from CDW-G at an estimated cost of \$680 and a Lexmark Laser Printer from GovStreet USA at a cost of \$970, for the Building Inspection Department, both to be paid from Building Inspection Capital Outlay Account 249-371-970.000. Motion carried with the following roll call vote of 6 Yeas and No Nays. Yeas Comms. Buginsky, Capitan, Sparkes, Van Pelt, Weaver and Cole.

It was moved by Comm. Sparkes, seconded by Comm. Van Pelt to withdraw the work change orders for the Non-secure Juvenile Detention Facility and Work Release Center because they are not ready at this time. Motion carried.

It was moved by Comm. Sparkes, seconded by Comm. Weaver to authorize the Board Chairman to send out a letter to the legislature asking them to assure that local governments are exempt from telecommunications fees for right of ways and poles. Motion carried.

It was moved by Comm. Sparkes, seconded by Comm. Van Pelt to approve the minutes of the February 11, 2002 County Finance Committee meeting. Motion carried.

It was moved by Comm. Sparkes, seconded by Comm. Buginsky to approve an Application for Farmland PA 116 Agreement, tax roll 78-015-14-100-003, 78-015-01-200-003-1 and 78-015-12-200-001 by Cole Farms for property located in Antrim Township. Motion carried with the following roll call vote of 5 Yeas and 1 abstention. Yeas Comms. Buginsky, Capitan, Sparkes, Van Pelt and Weaver. Comm. Cole abstained.

The following Resolution was presented:

**RESOLUTION 02-02-01**

**A RESOLUTION OF THE BOARD OF COMMISSIONERS  
AUTHORIZING VILLAGE OF LENNON TO CONTINUE  
COOPERATIVE AGREEMENT WITH GENESEE COUNTY**

**FOR COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM**

WHEREAS, the Village of Lennon, Michigan, wishes to be a participating local government in the Urban County Community Development Block Grant Entitlement Program of Genesee County, Michigan, under Title I of the Housing and Community Development Act of 1974, as amended; and

WHEREAS, the Village of Lennon is physically divided between Shiawassee County, Michigan, and Genesee County, Michigan; and

WHEREAS, said Housing and Community Development Act permits a local government which is physically divided between two county governments to include its entire population and geographic area within one county for the purposes of

participating in said County's Community Development Program under Title I of said Housing and Community Development Act; and  
WHEREAS, the Village of Lennon wishes to include its entire population and geographic area in the Genesee County Community Development Program; and  
WHEREAS, Shiawassee County is being requested to approve a cooperative Agreement between the Village of Lennon and Genesee County which would permit the Village of Lennon to include the entire village in its participation in the Genesee County Community Development Program; and  
WHEREAS, said full participation by the Village of Lennon would promote the improvement of housing and neighborhood conditions in said village,  
NOW THEREFORE BE IT RESOLVED, that the Shiawassee County Board of Commissioners approves of the participation of the Shiawassee County portion of the Village of Lennon in the Genesee County Community Development Program and authorizes the Cooperative Agreement between Genesee County and the Village of Lennon which provides for participation of the Village of Lennon in the Genesee County Community Development Program.

It was moved by Comm. Sparkes, seconded by Comm. Buginsky to approve Resolution 02-02-01, authorizing the Village of Lennon to participate in a Cooperative Agreement with Genesee County for a Community Development Block Grant for years 2001-2003. Motion carried with the following roll call vote of 6 Yeas and No Nays. Yeas Comms. Buginsky, Capitan, Sparkes, Van Pelt, Weaver and Cole.

It was moved by Comm. Sparkes, seconded by Comm. Buginsky to approve a Discharge of Mortgage on property located at 4401 Grand River, Bancroft, Michigan. Motion carried.

It was moved by Comm. Sparkes, seconded by Comm. Capitan to approve the Solid Waste Plan dated June, 2001 as revised per public hearing and approved at the Solid Waste Management Planning Committee of December 20, 2001 and to place on file in the County Clerk's Office. Motion carried with the following roll call vote of 4 Yeas and 2 Nays. Yeas Comms. Capitan, Sparkes, Van Pelt and Cole. Nays Comms. Buginsky and Weaver.

It was moved by Comm. Sparkes, seconded by Comm. Van Pelt to authorize Don Platt to work on a plan for on-site seminars for the Planning Commission and Zoning Board of Appeals and bring back to Committee of the Whole. Motion carried.

It was moved by Comm. Sparkes, seconded by Comm. Capitan to refer the Fisher Complaint to the Prosecutor and on to Johnson, Rosati firm if Prosecutor desires. Motion carried.

It was moved by Comm. Sparkes, seconded by Comm. Weaver to approve sending the Travis Smith gravel hauling complaint to the Prosecutor for action. Motion carried.

It was moved by Comm. Sparkes, seconded by Comm. Buginsky to authorize the Rural Land Preservation committee to seek additional Grant funding. Motion carried.

It was moved by Comm. Sparkes, seconded by Comm. Capitan to decline the DNR's offer to return the Shiatown Dam to County ownership, per recommendation from Parks Board. Motion carried.

It was moved by Comm. Sparkes, seconded by Comm. Buginsky to approve the February 7, 2002 Economic & Physical Development minutes as presented. Motion carried.

Darrell Coffey, Antrim Township, Tom Foster, New Haven Township and Tom Dwyer County Treasurer spoke regarding the Collection of School Taxes.

Ric Crawford, Caledonia Township, spoke regarding Solid Waste Plan.

Janet Washburn, City of Corunna, spoke regarding funding to Corunna Parks and Recreation.

Joe DeCaire, Caledonia Township, spoke regarding funding to Corunna Parks and Recreation and the Solid Waste Plan.

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

**RESOLUTION 05-06-02-01  
OF THE CITY OF CORUNNA,  
COUNTY OF SHIAWASSEE, MICHIGAN  
TO ADOPT A PLAN FOR THE DEVELOPMENT OF THE COUNTY**

At the regular meeting of City Council on May 6, 2002, a motion was made by Councilperson Mehig and seconded by Councilperson Runyan to adopt the following resolution:

**WHEREAS:** Part 115 of Act 451 of 1994, as amended; indicates that it is the responsibility of the Shiawassee County Board of Commissioner's to create a Solid Waste Management Plan; and,

**WHEREAS:** The County Solid Waste Management Plan enables the County to

1. control the siting of new or enlargement of existing landfills, transfer stations and solid waste processing plants;
2. limit the import of solid waste from other Michigan Counties and export of solid waste from Shiawassee County;
3. insure that facilities are available to handle the non-hazardous solid waste generated in Shiawassee County for the next ten years;
4. develop programs to handle household hazardous waste and to educate the public about pollution prevention and recycling opportunities; and

**WHEREAS:** The scope and content of Solid Waste Management Plans is both required and limited by Section 11539 of said Act 451; and,

**WHEREAS:** The Shiawassee County Solid Waste Planning Committee has prepared the Plan in the required format for approval by the Director of the Michigan Department of Environmental Quality; and,

**WHEREAS:** The Plan has been subjected to a 90 day public comment period leading to a public hearing on October 11, 2001; and,

**WHEREAS:** The Plan was adopted by the County Board of Commissioners on February 14, 2002; and,

**WHEREAS:** Section 11536 of Part 115 of Act 451 of 1994 requires that, before the plan may take effect, it be approved by not less than 67% (or 18) of the cities, villages and townships within the County.

**THEREFORE BE IT RESOLVED,** that the City of Corunna approves the Shiawassee County Solid Waste Management Plan: June 2001 as adopted by the County Board of Commissioners.

**BE IT FURTHER RESOLVED,** that the City Clerk is asked to mail a copy of this resolution to the Shiawassee County Planning Department at 201 N. Shiawassee St., Corunna, MI 48817.

Voting Aye: Johnson, Sanderson, Mehig, Runyan, Jessen.

Voting Nay: None.

Absent: None.

**MOTION CARRIED**

  
\_\_\_\_\_  
Yvonne F. Long, City Clerk

**RESOLUTION  
OF THE TOWNSHIP OF SCIOTA,  
COUNTY OF SHIAWASSEE, MICHIGAN  
TO ADOPT A PLAN FOR THE DEVELOPMENT OF THE COUNTY**

At the regular meeting of Board of Trustees on May 23, 02 a motion was made by Lynne McGarry and seconded by Norma Lee to adopt the following resolution

**WHEREAS:** Part 115 of Act 451 of 1994, as amended, indicates that it is responsibility of the Shiawassee County Board of Commissioner's to create a Solid Waste Management Plan, and,

**WHEREAS:** The County Solid Waste Management Plan enables the County to

1. control the siting of new or enlargement of existing landfills, transfer stations and solid waste processing plants,
2. limit the import of solid waste from other Michigan Counties and export of solid waste from Shiawassee County,
3. insure that facilities are available to handle the non-hazardous solid waste generated in Shiawassee County for the next ten years,
4. develop programs to handle household hazardous waste and to educate the public about pollution prevention and recycling opportunities, and,

**WHEREAS:** The scope and content of Solid Waste Management Plans is both required and limited by Section 11539 of said Act 451, and,

**WHEREAS:** The Shiawassee County Solid Waste Planning Committee has prepared the Plan in the required format for approval by the Director of the Michigan Department of Environmental Quality, and,

**WHEREAS:** The Plan has been subjected to a 90 day public comment period leading to a public hearing on Oct 11, 2001, and,

**WHEREAS:** The Plan was adopted by the County Board of Commissioners on February 14, 2002, and,

**WHEREAS:** Section 11536 of Part 115 of Act 451 of 1994 requires that, before the plan may take effect, it be approved by not less than 67% (or 18) of the cities, villages and townships within the County.

**THEREFORE BE IT RESOLVED:** that the Township of Sciota approves the Shiawassee County Solid Waste Management Plan June 2001 as adopted by the County Board of Commissioners

**BE IT FURTHER RESOLVED,** that the Township Clerk is asked to mail a copy of this resolution to the Shiawassee County Planning Department at 201 N. Shiawassee St, Corunna, MI 48817

Voting Aye: Shelly Matthews, Judy Johnstone, Lynne McGarry  
 Voting Nay: Norma Lee, Gayd Koerber  
 Absent: \_\_\_\_\_

**MOTION CARRIED**  
Judith Johnstone  
 Judith Johnstone, Clerk  
Shelly Matthews  
Norma Lee

**RESOLUTION  
OF THE TOWNSHIP OF WOODHULL,  
COUNTY OF SHIAWASSEE, MICHIGAN  
TO ADOPT A PLAN FOR THE DEVELOPMENT OF THE COUNTY**

At the regular meeting of Board of Trustees on April 8, 2002, a motion was made by Jim Brehm and seconded by PAM SLEE to adopt the following resolution.

**WHEREAS:** Part 115 of Act 451 of 1994, as amended; indicates that it is responsibility of the Shiawassee County Board of Commissioner's to create a Solid Waste Management Plan; and,

**WHEREAS:** The County Solid Waste Management Plan enables the County to

1. control the siting of new or enlargement of existing landfills, transfer stations and solid waste processing plants;
2. limit the import of solid waste from other Michigan Counties and export of solid waste from Shiawassee County;
3. insure that facilities are available to handle the non-hazardous solid waste generated in Shiawassee County for the next ten years;
4. develop programs to handle household hazardous waste and to educate the public about pollution prevention and recycling opportunities; and,

**WHEREAS:** The scope and content of Solid Waste Management Plans is both required and limited by Section 11539 of said Act 451; and,

**WHEREAS:** The Shiawassee County Solid Waste Planning Committee has prepared the Plan in the required format for approval by the Director of the Michigan Department of Environmental Quality; and,

**WHEREAS:** The Plan has been subjected to a 90 day public comment period leading to a public hearing on Oct 11, 2001; and,

**WHEREAS:** The Plan was adopted by the County Board of Commissioners on February 14, 2002; and,

**WHEREAS:** Section 11536 of Part 115 of Act 451 of 1994 requires that, before the plan may take effect, it be approved by not less than 67% (or 18) of the cities, villages and townships within the County.

**THEREFORE BE IT RESOLVED:** that the Township of Woodhull approves the Shiawassee County Solid Waste Management Plan: June 2001 as adopted by the County Board of Commissioners.

**BE IT FURTHER RESOLVED,** that the Township Clerk is asked to mail a copy of this resolution to the Shiawassee County Planning Department at 201 N. Shiawassee St, Corunna, MI 48817

Voting Aye: 5

Voting Nay: NONE

Absent: NONE

**MOTION CARRIED**

*Carol Maize Clerk*  
Carol Maize, Clerk

**RESOLUTION  
OF THE TOWNSHIP OF RUSH,  
COUNTY OF SHIAWASSEE, MICHIGAN  
TO ADOPT A PLAN FOR THE DEVELOPMENT OF THE COUNTY**

At the regular meeting of Board of Trustees on March 14, 2002, a motion was made by B. Bohac and seconded by D. Gloschke to adopt the following resolution.

**WHEREAS:** Part 115 of Act 451 of 1994, as amended, indicates that it is responsibility of the Shiawassee County Board of Commissioner's to create a Solid Waste Management Plan; and,

**WHEREAS:** The County Solid Waste Management Plan enables the County to

1. control the siting of new or enlargement of existing landfills, transfer stations and solid waste processing plants;
2. limit the import of solid waste from other Michigan Counties and export of solid waste from Shiawassee County;
3. insure that facilities are available to handle the non-hazardous solid waste generated in Shiawassee County for the next ten years,
4. develop programs to handle household hazardous waste and to educate the public about pollution prevention and recycling opportunities; and,

**WHEREAS:** The scope and content of Solid Waste Management Plans is both required and limited by Section 11539 of said Act 451; and,

**WHEREAS:** The Shiawassee County Solid Waste Planning Committee has prepared the Plan in the required format for approval by the Director of the Michigan Department of Environmental Quality; and,

**WHEREAS:** The Plan has been subjected to a 90 day public comment period leading to a public hearing on Oct 11, 2001; and,

**WHEREAS:** The Plan was adopted by the County Board of Commissioners on February 14, 2002; and,

**WHEREAS:** Section 11536 of Part 115 of Act 451 of 1994 requires that, before the plan may take effect, it be approved by not less than 67% (or 18) of the cities, villages and townships within the County.

**THEREFORE BE IT RESOLVED:** that the Township of Rush approves the Shiawassee County Solid Waste Management Plan: June 2001 as adopted by the County Board of Commissioners.

**BE IT FURTHER RESOLVED,** that the Township Clerk is asked to mail a copy of this resolution to the Shiawassee County Planning Department at 201 N. Shiawassee St, Corunna, MI 48817

Voting Aye: \_\_\_\_\_

Voting Nay: C. J. Numond, Charles Wascher, Rosalie Bohac, Debbie Gloschke

Absent: Rodney Spittler

MOTION CARRIED

Debbie Gloschke - Clerk  
Debbie Goschke, Clerk

**SHIAWASSEE COUNTY SOLID WASTE MANAGEMENT PLAN**

Motion by Councilperson Petersen to adopt the following resolution of support for the Shiawassee County Solid Waste Management Plan:

RESOLUTION OF THE CITY OF OWOSSO, COUNTY OF SHIAWASSEE, MICHIGAN TO ADOPT THE SHIAWASSEE COUNTY WASTE MANAGEMENT PLAN

- WHEREAS, Part 115 of Act 451 of 1994, as amended, indicates that it is the responsibility of the Shiawassee County Board of Commissioner's to create a Solid Waste Management Plan; and
- WHEREAS, The County Solid Waste Management Plan enables the County to:
- 1) control the siting of new or enlargement of existing landfills, transfer stations and solid waste processing plants;
  - 2) limit the import of solid waste from other Michigan Counties and export of solid waste from Shiawassee County;
  - 3) insure that facilities are available to handle the non-hazardous solid waste generated in Shiawassee County for the next ten years;
  - 4) develop programs to handle household hazardous waste and to educate the public about pollution prevention and recycling opportunities; and
- WHEREAS, The scope and content of Solid Waste Management Plans is both required and limited by Section 11539 of said Act 451; and
- WHEREAS, The Shiawassee County Solid Waste Planning Committee has prepared the Plan in the required format for approval by the Director of the Michigan Department of Environmental Quality; and
- WHEREAS, The Plan has been subjected to a 90 day public comment period leading to a public hearing on October 11, 2001; and
- WHEREAS, The Plan was adopted by the County Board of Commissioners on February 14, 2002; and
- WHEREAS, Section 11536 of Part 115 of Act 451 of 1994 requires that, before the plan may take effect, it be approved by not less than 67% (18) of the cities, villages and townships within the County.

THEREFORE, BE IT RESOLVED THAT the City of Owosso approves the Shiawassee County Solid Waste Management Plan: June 2001 as adopted by the County Board of Commissioners.

BE IT FURTHER RESOLVED THAT the City Clerk is asked to mail a copy of this resolution to the Shiawassee County Planning Department at 201 North Shiawassee Street, Corunna, MI 48817.

Motion supported by Councilperson Anderson.

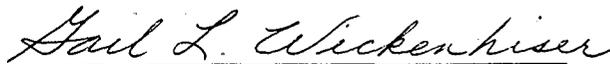
Roll Call Vote.

AYES: Mayor Pro-Tem Stechschulte, Councilpersons Anderson, Crutts, Osika, Petersen, and Mayor Davis.

NAYS: None.

ABSENT: Councilperson Owen.

*I hereby certify that the foregoing is a true and complete copy of a resolution adopted by the Owosso City Council at their regular meeting of March 18, 2002.*

  
Gail L. Wickenhiser, CMC  
Owosso City Clerk

**RESOLUTION  
OF THE TOWNSHIP OF ANTRIM,  
COUNTY OF SHIAWASSEE, MICHIGAN  
TO ADOPT A PLAN FOR THE DEVELOPMENT OF THE COUNTY**

At the regular meeting of Board of Trustees on March 14, 2002, a motion was made by G. Coffey and seconded by R. Hooley to adopt the following resolution.

**WHEREAS:** Part 115 of Act 451 of 1994, as amended; indicates that it is responsibility of the Shiawassee County Board of Commissioner's to create a Solid Waste Management Plan, and,

**WHEREAS:** The County Solid Waste Management Plan enables the County to

1. control the siting of new or enlargement of existing landfills, transfer stations and solid waste processing plants;
2. limit the import of solid waste from other Michigan Counties and export of solid waste from Shiawassee County;
3. insure that facilities are available to handle the non-hazardous solid waste generated in Shiawassee County for the next ten years;
4. develop programs to handle household hazardous waste and to educate the public about pollution prevention and recycling opportunities; and,

**WHEREAS:** The scope and content of Solid Waste Management Plans is both required and limited by Section 11539 of said Act 451; and,

**WHEREAS:** The Shiawassee County Solid Waste Planning Committee has prepared the Plan in the required format for approval by the Director of the Michigan Department of Environmental Quality; and,

**WHEREAS:** The Plan has been subjected to a 90 day public comment period leading to a public hearing on Oct 11, 2001; and,

**WHEREAS:** The Plan was adopted by the County Board of Commissioners on February 14, 2002; and,

**WHEREAS:** Section 11536 of Part 115 of Act 451 of 1994 requires that, before the plan may take effect, it be approved by not less than 67% (or 18) of the cities, villages and townships within the County.

**THEREFORE BE IT RESOLVED:** that the Township of Antrim approves the Shiawassee County Solid Waste Management Plan: June 2001 as adopted by the County Board of Commissioners.

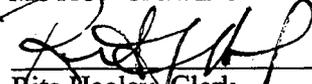
**BE IT FURTHER RESOLVED** that the Township Clerk is asked to mail a copy of this resolution to the Shiawassee County Planning Department at 201 N. Shiawassee St, Corunna, MI 48817

Voting Aye: 3

Voting Nay: 2

Absent: 0

MOTION CARRIED

  
\_\_\_\_\_  
Rita Hooley, Clerk

**RESOLUTION  
OF THE CITY OF LAINGSBURG,  
COUNTY OF SHIAWASSEE, MICHIGAN  
TO ADOPT A PLAN FOR THE DEVELOPMENT OF THE COUNTY**

At the regular meeting of City Council on April 1, 2002, a motion was made by Andersen and seconded by Austin to adopt the following resolution.

**WHEREAS:** Part 115 of Act 451 of 1994, as amended, indicates that it is responsibility of the Shiawassee County Board of Commissioner's to create a Solid Waste Management Plan; and,

**WHEREAS:** The County Solid Waste Management Plan enables the County to

1. control the siting of new or enlargement of existing landfills, transfer stations and solid waste processing plants;
2. limit the import of solid waste from other Michigan Counties and export of solid waste from Shiawassee County;
3. insure that facilities are available to handle the non-hazardous solid waste generated in Shiawassee County for the next ten years;
4. develop programs to handle household hazardous waste and to educate the public about pollution prevention and recycling opportunities; and,

**WHEREAS:** The scope and content of Solid Waste Management Plans is both required and limited by Section 11539 of said Act 451; and,

**WHEREAS:** The Shiawassee County Solid Waste Planning Committee has prepared the Plan in the required format for approval by the Director of the Michigan Department of Environmental Quality; and,

**WHEREAS:** The Plan has been subjected to a 90 day public comment period leading to a public hearing on Oct 11, 2001; and,

**WHEREAS:** The Plan was adopted by the County Board of Commissioners on February 14, 2002; and,

**WHEREAS:** Section 11536 of Part 115 of Act 451 of 1994 requires that, before the plan may take effect, it be approved by not less than 67% (or 18) of the cities villages and townships within the County.

**THEREFORE BE IT RESOLVED:** that the City of Laingsburg approves the Shiawassee County Solid Waste Management Plan: June 2001 as adopted by the County Board of Commissioners.

**BE IT FURTHER RESOLVED,** that the City Clerk is asked to mail a copy of this resolution to the Shiawassee County Planning Department at 201 N. Shiawassee St, Corunna, MI 48817

Voting Aye: Andersen, Austin, Cecil, Highfield, LEonard & Schneider

Voting Nay: None

Absent: Sparkes

MOTION CARRIED

  
Lana Kaiser, City Clerk

**RESOLUTION  
OF THE TOWNSHIP OF HAZELTON,  
COUNTY OF SHIAWASSEE, MICHIGAN  
TO ADOPT A PLAN FOR THE DEVELOPMENT OF THE COUNTY**

At the regular meeting of Board of Trustees on March 18, 02, a motion was made by Raleigh and seconded by Sheridan to adopt the following resolution.

**WHEREAS:** Part 115 of Act 451 of 1994, as amended; indicates that it is responsibility of the Shiawassee County Board of Commissioner's to create a Solid Waste Management Plan; and,

**WHEREAS:** The County Solid Waste Management Plan enables the County to

1. control the siting of new or enlargement of existing landfills, transfer stations and solid waste processing plants;
2. limit the import of solid waste from other Michigan Counties and export of solid waste from Shiawassee County;
3. insure that facilities are available to handle the non-hazardous solid waste generated in Shiawassee County for the next ten years;
4. develop programs to handle household hazardous waste and to educate the public about pollution prevention and recycling opportunities; and,

**WHEREAS:** The scope and content of Solid Waste Management Plans is both required and limited by Section 11539 of said Act 451; and,

**WHEREAS:** The Shiawassee County Solid Waste Planning Committee has prepared the Plan in the required format for approval by the Director of the Michigan Department of Environmental Quality; and,

**WHEREAS:** The Plan has been subjected to a 90 day public comment period leading to a public hearing on Oct 11, 2001; and,

**WHEREAS:** The Plan was adopted by the County Board of Commissioners on February 14, 2002; and,

**WHEREAS:** Section 11536 of Part 115 of Act 451 of 1994 requires that, before the plan may take effect, it be approved by not less than 67% (or 18) of the cities, villages and townships within the County.

**THEREFORE BE IT RESOLVED:** that the Township of Hazelton approves the Shiawassee County Solid Waste Management Plan: June 2001 as adopted by the County Board of Commissioners.

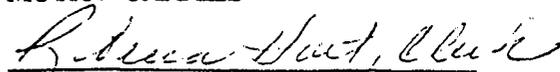
**BE IT FURTHER RESOLVED,** that the Township Clerk is asked to mail a copy of this resolution to the Shiawassee County Planning Department at 201 N. Shiawassee St, Corunna, MI 48817

Voting Aye: Sheridan, Raleigh, Pope, Hart

Voting Nay: \_\_\_\_\_

Absent: Gross

MOTION CARRIED

  
Rebecca Hart, Clerk

**RESOLUTION  
OF THE TOWNSHIP OF PERRY,  
COUNTY OF SHIAWASSEE, MICHIGAN  
TO ADOPT A PLAN FOR THE DEVELOPMENT OF THE COUNTY**

At the regular meeting of Board of Trustees on March 27, 2002, a motion was made by Cunningham and seconded by Shinnell to adopt the following resolution.

**WHEREAS:** Part 115 of Act 451 of 1994, as amended; indicates that it is responsibility of the Shiawassee County Board of Commissioner's to create a Solid Waste Management Plan; and,

**WHEREAS:** The County Solid Waste Management Plan enables the County to

1. control the siting of new or enlargement of existing landfills, transfer stations and solid waste processing plants;
2. limit the import of solid waste from other Michigan Counties and export of solid waste from Shiawassee County;
3. insure that facilities are available to handle the non-hazardous solid waste generated in Shiawassee County for the next ten years;
4. develop programs to handle household hazardous waste and to educate the public about pollution prevention and recycling opportunities; and,

**WHEREAS:** The scope and content of Solid Waste Management Plans is both required and limited by Section 11539 of said Act 451; and,

**WHEREAS:** The Shiawassee County Solid Waste Planning Committee has prepared the Plan in the required format for approval by the Director of the Michigan Department of Environmental Quality; and,

**WHEREAS:** The Plan has been subjected to a 90 day public comment period leading to a public hearing on Oct 11, 2001; and,

**WHEREAS:** The Plan was adopted by the County Board of Commissioners on February 14, 2002; and,

**WHEREAS:** Section 11536 of Part 115 of Act 451 of 1994 requires that, before the plan may take effect, it be approved by not less than 67% (or 18) of the cities, villages and townships within the County.

**THEREFORE BE IT RESOLVED:** that the Township of Perry approves the Shiawassee County Solid Waste Management Plan: June 2001 as adopted by the County Board of Commissioners.

**BE IT FURTHER RESOLVED,** that the Township Clerk is asked to mail a copy of this resolution to the Shiawassee County Planning Department at 201 N. Shiawassee St, Corunna, MI 48817

Voting Aye: Shinnell, Paulica, Cunningham, Force,

Voting Nay: none

Absent: Michalek

MOTION CARRIED -

Sandra Michalek  
Sandra Michalek, Clerk  
SANDRA MICHALEK, Clerk

James Paulica  
JAMES PAULICA - Supervisor

**RESOLUTION  
OF THE TOWNSHIP OF NEW HAVEN,  
COUNTY OF SHIAWASSEE, MICHIGAN  
TO ADOPT A PLAN FOR THE DEVELOPMENT OF THE COUNTY**

At the regular meeting of Board of Trustees on April 16, 2002, a motion was made by Tom Foster and seconded by Don Jones to adopt the following resolution.

**WHEREAS:** Part 115 of Act 451 of 1994, as amended, indicates that it is responsibility of the Shiawassee County Board of Commissioner's to create a Solid Waste Management Plan; and,

**WHEREAS:** The County Solid Waste Management Plan enables the County to

1. control the siting of new or enlargement of existing landfills, transfer stations and solid waste processing plants;
2. limit the import of solid waste from other Michigan Counties and export of solid waste from Shiawassee County;
3. insure that facilities are available to handle the non-hazardous solid waste generated in Shiawassee County for the next ten years;
4. develop programs to handle household hazardous waste and to educate the public about pollution prevention and recycling opportunities; and,

**WHEREAS:** The scope and content of Solid Waste Management Plans is both required and limited by Section 11539 of said Act 451; and,

**WHEREAS:** The Shiawassee County Solid Waste Planning Committee has prepared the Plan in the required format for approval by the Director of the Michigan Department of Environmental Quality; and,

**WHEREAS:** The Plan has been subjected to a 90 day public comment period leading to a public hearing on Oct 11, 2001; and,

**WHEREAS:** The Plan was adopted by the County Board of Commissioners on February 14, 2002, and,

**WHEREAS:** Section 11536 of Part 115 of Act 451 of 1994 requires that, before the plan may take effect, it be approved by not less than 67% (or 18) of the cities, villages and townships within the County.

**THEREFORE BE IT RESOLVED:** that the Township of New Haven approves the Shiawassee County Solid Waste Management Plan: June 2001 as adopted by the County Board of Commissioners.

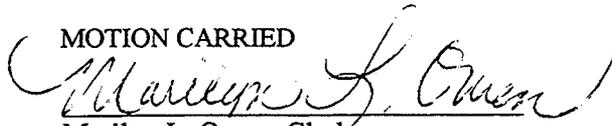
**BE IT FURTHER RESOLVED,** that the Township Clerk is asked to mail a copy of this resolution to the Shiawassee County Planning Department at 201 N. Shiawassee St, Corunna, MI 48817

Voting Aye: Tom Foster, Marilyn L. Owen, Dawn Hudecek, Donald Jones, Al LeCureux

Voting Nay: \_\_\_\_\_

Absent: \_\_\_\_\_

MOTION CARRIED

  
Marilyn L. Owen, Clerk

**RESOLUTION  
OF THE CHARTER TOWNSHIP OF OWOSSO,  
COUNTY OF SHIAWASSEE, MICHIGAN  
TO ADOPT A PLAN FOR THE DEVELOPMENT OF THE COUNTY**

At the regular meeting of Board of Trustees on 4-8-02, a Motion was made by Schutz and seconded by Cudney to adopt the following resolution.

**WHEREAS:** Part 115 of Act 451 of 1994, as amended; indicates that it is responsibility of the Shiawassee County Board of Commissioner's to create a Solid Waste Management Plan; and,

**WHEREAS:** The County Solid Waste Management Plan enables the County to

1. control the siting of new or enlargement of existing landfills, transfer stations and solid waste processing plants;
2. limit the import of solid waste from other Michigan Counties and export of solid waste from Shiawassee County;
3. insure that facilities are available to handle the non-hazardous solid waste generated in Shiawassee County for the next ten years;
4. develop programs to handle household hazardous waste and to educate the public about pollution prevention and recycling opportunities; and,

**WHEREAS:** The scope and content of Solid Waste Management Plans is both required and limited by Section 11539 of said Act 451; and,

**WHEREAS:** The Shiawassee County Solid Waste Planning Committee has prepared the Plan in the required format for approval by the Director of the Michigan Department of Environmental Quality; and,

**WHEREAS:** The Plan has been subjected to a 90 day public comment period leading to a public hearing on Oct 11, 2001; and,

**WHEREAS:** The Plan was adopted by the County Board of Commissioners on February 14, 2002; and,

**WHEREAS:** Section 11536 of Part 115 of Act 451 of 1994 requires that, before the plan may take effect, it be approved by not less than 67% (or 18) of the cities, villages and townships within the County

**THEREFORE BE IT RESOLVED:** that the Charter Township of Owosso approves the Shiawassee County Solid Waste Management Plan: June 2001 as adopted by the County Board of Commissioners.

**BE IT FURTHER RESOLVED,** that the Owosso Charter Township Clerk is asked to mail a copy of this resolution to the Shiawassee County Planning Department at 201 N. Shiawassee St, Corunna, MI 48817

Voting Aye: Seven (7)

Voting Nay: 0

Absent: 0

MOTION CARRIED

Carolyn L. Mowatt  
Carolyn L. Mowatt, Clerk

**RESOLUTION  
OF THE TOWNSHIP OF SHIAWASSEE,  
COUNTY OF SHIAWASSEE, MICHIGAN  
TO ADOPT A PLAN FOR THE DEVELOPMENT OF THE COUNTY**

At the regular meeting of Board of Trustees on April 11, 2002, a motion was made by Braid and seconded by Godfrey to adopt the following resolution.

**WHEREAS:** Part 115 of Act 451 of 1994, as amended; indicates that it is responsibility of the Shiawassee County Board of Commissioner's to create a Solid Waste Management Plan; and,

**WHEREAS:** The County Solid Waste Management Plan enables the County to

1. control the siting of new or enlargement of existing landfills, transfer stations and solid waste processing plants;
2. limit the import of solid waste from other Michigan Counties and export of solid waste from Shiawassee County;
3. insure that facilities are available to handle the non-hazardous solid waste generated in Shiawassee County for the next ten years;
4. develop programs to handle household hazardous waste and to educate the public about pollution prevention and recycling opportunities, and,

**WHEREAS:** The scope and content of Solid Waste Management Plans is both required and limited by Section 11539 of said Act 451; and,

**WHEREAS:** The Shiawassee County Solid Waste Planning Committee has prepared the Plan in the required format for approval by the Director of the Michigan Department of Environmental Quality; and,

**WHEREAS:** The Plan has been subjected to a 90 day public comment period leading to a public hearing on Oct 11, 2001; and,

**WHEREAS:** The Plan was adopted by the County Board of Commissioners on February 14, 2002; and,

**WHEREAS:** Section 11536 of Part 115 of Act 451 of 1994 requires that, before the plan may take effect, it be approved by not less than 67% (or 18) of the cities, villages and townships within the County.

**THEREFORE BE IT RESOLVED:** that the Township of Shiawassee approves the Shiawassee County Solid Waste Management Plan: June 2001 as adopted by the County Board of Commissioners.

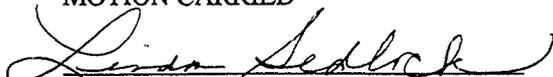
**BE IT FURTHER RESOLVED,** that the Township Clerk is asked to mail a copy of this resolution to the Shiawassee County Planning Department at 201 N. Shiawassee St, Corunna, MI 48817

Voting Aye: Tom BRAID, Richard Godfrey, LINDA Sedlock

Voting Nay: NONE

Absent: LISA DEMAKI KOWSKI

MOTION CARRIED

  
Linda Sedlock, Clerk

**RESOLUTION  
OF THE TOWNSHIP OF VERNON,  
COUNTY OF SHIAWASSEE, MICHIGAN  
TO ADOPT A PLAN FOR THE DEVELOPMENT OF THE COUNTY**

At the regular meeting of Board of Trustees on 4-8-02, a motion was made by Root and seconded by Edwards to adopt the following resolution.

**WHEREAS:** Part 115 of Act 451 of 1994, as amended; indicates that it is responsibility of the Shiawassee County Board of Commissioners to create a Solid Waste Management Plan; and,

**WHEREAS:** The County Solid Waste Management Plan enables the County to

1. control the siting of new or enlargement of existing landfills, transfer stations and solid waste processing plants;
2. limit the import of solid waste from other Michigan Counties and export of solid waste from Shiawassee County;
3. insure that facilities are available to handle the non-hazardous solid waste generated in Shiawassee County for the next ten years;
4. develop programs to handle household hazardous waste and to educate the public about pollution prevention and recycling opportunities; and,

**WHEREAS:** The scope and content of Solid Waste Management Plans is both required and limited by Section 11539 of said Act 451; and,

**WHEREAS:** The Shiawassee County Solid Waste Planning Committee has prepared the Plan in the required format for approval by the Director of the Michigan Department of Environmental Quality; and,

**WHEREAS:** The Plan has been subjected to a 90 day public comment period leading to a public hearing on Oct 11, 2001; and,

**WHEREAS:** The Plan was adopted by the County Board of Commissioners on February 14, 2002; and,

**WHEREAS:** Section 11536 of Part 115 of Act 451 of 1994 requires that, before the plan may take effect, it be approved by not less than 67% (or 18) of the cities, villages and townships within the County.

**THEREFORE BE IT RESOLVED:** that the Township of Vernon approves the Shiawassee County Solid Waste Management Plan: June 2001 as adopted by the County Board of Commissioners.

**BE IT FURTHER RESOLVED,** that the Township Clerk is asked to mail a copy of this resolution to the Shiawassee County Planning Department at 201 N. Shiawassee St, Corunna, MI 48817

Voting Aye: Root, Edwards, Conrad, DeClerg

Voting Nay: none

Absent: Clarke

**MOTION CARRIED**

Charlotte E. Clarke  
Charlotte E. Clarke, Clerk

**RESOLUTION  
OF THE TOWNSHIP OF CALEDONIA,  
COUNTY OF SHIAWASSEE, MICHIGAN  
TO ADOPT A PLAN FOR THE DEVELOPMENT OF THE COUNTY**

At the regular meeting of Board of Trustees on April 1, 2002, a motion was made by DeCaire and seconded by Hagadon to adopt the following resolution.

**WHEREAS:** Part 115 of Act 451 of 1994, as amended, indicates that it is responsibility of the Shiawassee County Board of Commissioner's to create a Solid Waste Management Plan; and,

**WHEREAS:** The County Solid Waste Management Plan enables the County to

1. control the siting of new or enlargement of existing landfills, transfer stations and solid waste processing plants;
2. limit the import of solid waste from other Michigan Counties and export of solid waste from Shiawassee County;
3. insure that facilities are available to handle the non-hazardous solid waste generated in Shiawassee County for the next ten years;
4. develop programs to handle household hazardous waste and to educate the public about pollution prevention and recycling opportunities; and,

**WHEREAS:** The scope and content of Solid Waste Management Plans is both required and limited by Section 11539 of said Act 451; and,

**WHEREAS:** The Shiawassee County Solid Waste Planning Committee has prepared the Plan in the required format for approval by the Director of the Michigan Department of Environmental Quality; and,

**WHEREAS:** The Plan has been subjected to a 90 day public comment period leading to a public hearing on Oct 11, 2001; and,

**WHEREAS:** The Plan was adopted by the County Board of Commissioners on February 14, 2002; and,

**WHEREAS:** Section 11536 of Part 115 of Act 451 of 1994 requires that, before the plan may take effect, it be approved by not less than 67% (or 18) of the cities, villages and townships within the County.

**THEREFORE BE IT RESOLVED:** that the Township of Caledonia approves the Shiawassee County Solid Waste Management Plan: June 2001 as adopted by the County Board of Commissioners.

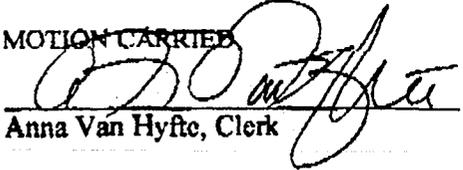
**BE IT FURTHER RESOLVED,** that the Township Clerk is asked to mail a copy of this resolution to the Shiawassee County Planning Department at 201 N. Shiawassee St, Corunna, MI 48817

Voting Aye: DeCaire, Hagadon, Krantz, Wazny.

Voting Nay: NONE

Absent: VAN HYFTE

MOTION CARRIED

  
Anna Van Hyfte, Clerk

**RESOLUTION  
OF THE TOWNSHIP OF FAIRFIELD,  
COUNTY OF SHIAWASSEE, MICHIGAN  
TO ADOPT A PLAN FOR THE DEVELOPMENT OF THE COUNTY**

At the regular meeting of Board of Trustees on March 7, 2002, a motion was made by Steve Maynard and seconded by Scott Miller to adopt the following resolution.

**WHEREAS:** Part 115 of Act 451 of 1994, as amended; indicates that it is responsibility of the Shiawassee County Board of Commissioner's to create a Solid Waste Management Plan; and,

**WHEREAS:** The County Solid Waste Management Plan enables the County to

1. control the siting of new or enlargement of existing landfills, transfer stations and solid waste processing plants;
2. limit the import of solid waste from other Michigan Counties and export of solid waste from Shiawassee County;
3. insure that facilities are available to handle the non-hazardous solid waste generated in Shiawassee County for the next ten years,
4. develop programs to handle household hazardous waste and to educate the public about pollution prevention and recycling opportunities; and,

**WHEREAS:** The scope and content of Solid Waste Management Plans is both required and limited by Section 11539 of said Act 451, and,

**WHEREAS:** The Shiawassee County Solid Waste Planning Committee has prepared the Plan in the required format for approval by the Director of the Michigan Department of Environmental Quality; and,

**WHEREAS:** The Plan has been subjected to a 90 day public comment period leading to a public hearing on Oct 11, 2001; and,

**WHEREAS:** The Plan was adopted by the County Board of Commissioners on February 14, 2002; and,

**WHEREAS:** Section 11536 of Part 115 of Act 451 of 1994 requires that, before the plan may take effect, it be approved by not less than 67% (or 18) of the cities, villages and townships within the County.

**THEREFORE BE IT RESOLVED:** that the Township of Fairfield approves the Shiawassee County Solid Waste Management Plan: June 2001 as adopted by the County Board of Commissioners.

**BE IT FURTHER RESOLVED,** that the Township Clerk is asked to mail a copy of this resolution to the Shiawassee County Planning Department at 201 N. Shiawassee St, Corunna, MI 48817

Voting Aye: Clyde Gilbert, Carolyn Long, Vivian Darling, Scott Miller, Steve Maynard

Voting Nay: \_\_\_\_\_

Absent: \_\_\_\_\_

MOTION CARRIED

Carolyn Long  
Carolyn Long, Clerk

**RESOLUTION  
OF THE TOWNSHIP OF VENICE,  
COUNTY OF SHIAWASSEE, MICHIGAN  
TO ADOPT A PLAN FOR THE DEVELOPMENT OF THE COUNTY**

At the regular meeting of Board of Trustees on March 18, 2002, a motion was made by Ed Rivette and seconded by Kris Hurd to adopt the following resolution.

**WHEREAS:** Part 115 of Act 451 of 1994, as amended, indicates that it is responsibility of the Shiawassee County Board of Commissioner's to create a Solid Waste Management Plan; and,

**WHEREAS:** The County Solid Waste Management Plan enables the County to

1. control the siting of new or enlargement of existing landfills, transfer stations and solid waste processing plants;
2. limit the import of solid waste from other Michigan Counties and export of solid waste from Shiawassee County;
3. insure that facilities are available to handle the non-hazardous solid waste generated in Shiawassee County for the next ten years;
4. develop programs to handle household hazardous waste and to educate the public about pollution prevention and recycling opportunities; and,

**WHEREAS:** The scope and content of Solid Waste Management Plans is both required and limited by Section 11539 of said Act 451; and,

**WHEREAS:** The Shiawassee County Solid Waste Planning Committee has prepared the Plan in the required format for approval by the Director of the Michigan Department of Environmental Quality; and,

**WHEREAS:** The Plan has been subjected to a 90 day public comment period leading to a public hearing on Oct 11, 2001; and,

**WHEREAS:** The Plan was adopted by the County Board of Commissioners on February 14, 2002; and,

**WHEREAS:** Section 11536 of Part 115 of Act 451 of 1994 requires that, before the plan may take effect, it be approved by not less than 67% (or 18) of the cities, villages and townships within the County.

**THEREFORE BE IT RESOLVED:** that the Township of Venice approves the Shiawassee County Solid Waste Management Plan: June 2001 as adopted by the County Board of Commissioners.

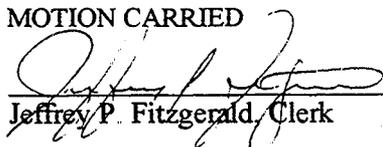
**BE IT FURTHER RESOLVED,** that the Township Clerk is asked to mail a copy of this resolution to the Shiawassee County Planning Department at 201 N. Shiawassee St, Corunna, MI 48817

Voting Aye: 5

Voting Nay: 0

Absent: —

MOTION CARRIED

  
\_\_\_\_\_  
Jeffrey P. Fitzgerald, Clerk

**RESOLUTION  
OF THE TOWNSHIP OF MIDDLEBURY,  
COUNTY OF SHIAWASSEE, MICHIGAN  
TO ADOPT A PLAN FOR THE DEVELOPMENT OF THE COUNTY**

At the regular meeting of Board of Trustees on March 14, 2002, a motion was made by Christine Cooley and seconded by Nancy Watkins to adopt the following resolution

**WHEREAS:** Part 115 of Act 451 of 1994, as amended, indicates that it is responsibility of the Shiawassee County Board of Commissioner's to create a Solid Waste Management Plan and.

**WHEREAS:** The County Solid Waste Management Plan enables the County to

- 1 control the siting of new or enlargement of existing landfills, transfer stations and solid waste processing plants,
- 2 limit the import of solid waste from other Michigan Counties and export of solid waste from Shiawassee County,
- 3 insure that facilities are available to handle the non-hazardous solid waste generated in Shiawassee County for the next ten years,
- 4 develop programs to handle household hazardous waste and to educate the public about pollution prevention and recycling opportunities, and,

**WHEREAS:** The scope and content of Solid Waste Management Plans is both required and limited by Section 11539 of said Act 451, and.

**WHEREAS:** The Shiawassee County Solid Waste Planning Committee has prepared the Plan in the required format for approval by the Director of the Michigan Department of Environmental Quality, and.

**WHEREAS:** The Plan has been subjected to a 90 day public comment period leading to a public hearing on Oct 11, 2001, and.

**WHEREAS:** The Plan was adopted by the County Board of Commissioners on February 14, 2002, and.

**WHEREAS:** Section 11536 of Part 115 of Act 451 of 1994 requires that, before the plan may take effect, it be approved by not less than 67% (or 18) of the cities, villages and townships within the County

**THEREFORE BE IT RESOLVED:** that the Township of Middlebury approves the Shiawassee County Solid Waste Management Plan June 2001 as adopted by the County Board of Commissioners

**BE IT FURTHER RESOLVED,** that the Township Clerk is asked to mail a copy of this resolution to the Shiawassee County Planning Department at 201 N Shiawassee St, Corunna, MI 48817

Voting Aye Nancy Watkins, Christine Cooley, Anthony Sinieropi, Paul Dutton

Voting Nay None

Absent Charles Simpson

MOTION CARRIED

Nancy Watkins, clerk  
Nancy Watkins, Clerk

**RESOLUTION  
OF THE CITY OF PERRY,  
COUNTY OF SHIAWASSEE, MICHIGAN  
TO ADOPT A PLAN FOR THE DEVELOPMENT OF THE COUNTY**

At the regular meeting of City Council on March 19, 2002, a motion was made by Tom Chaput and seconded by Bradley Ford to adopt the following resolution.

**WHEREAS:** Part 115 of Act 451 of 1994, as amended, indicates that it is responsibility of the Shiawassee County Board of Commissioner's to create a Solid Waste Management Plan; and,

**WHEREAS:** The County Solid Waste Management Plan enables the County to

1. control the siting of new or enlargement of existing landfills, transfer stations and solid waste processing plants;
2. limit the import of solid waste from other Michigan Counties and export of solid waste from Shiawassee County;
3. insure that facilities are available to handle the non-hazardous solid waste generated in Shiawassee County for the next ten years;
4. develop programs to handle household hazardous waste and to educate the public about pollution prevention and recycling opportunities; and,

**WHEREAS:** The scope and content of Solid Waste Management Plans is both required and limited by Section 11539 of said Act 451; and,

**WHEREAS:** The Shiawassee County Solid Waste Planning Committee has prepared the Plan in the required format for approval by the Director of the Michigan Department of Environmental Quality; and,

**WHEREAS:** The Plan has been subjected to a 90 day public comment period leading to a public hearing on Oct 11, 2001; and,

**WHEREAS:** The Plan was adopted by the County Board of Commissioners on February 14, 2002; and,

**WHEREAS:** Section 11536 of Part 115 of Act 451 of 1994 requires that, before the plan may take effect, it be approved by not less than 67% (or 18) of the cities villages and townships within the County.

**THEREFORE BE IT RESOLVED:** that the City of Perry approves the Shiawassee County Solid Waste Management Plan: June 2001 as adopted by the County Board of Commissioners.

**BE IT FURTHER RESOLVED,** that the City Clerk is asked to mail a copy of this resolution to the Shiawassee County Planning Department at 201 N. Shiawassee St, Corunna, MI 48817

Voting Aye: Tom Chaput, Bradley Ford, Jean Holley, Thomas Willson

Voting Nay: None

Absent: Lisa Cornish, Susan Schultz

MOTION CARRIED

  
Judy Guenther, City Clerk

**RESOLUTION  
OF THE VILLAGE OF VERNON,  
COUNTY OF SHIAWASSEE, MICHIGAN  
TO ADOPT A PLAN FOR THE DEVELOPMENT OF THE COUNTY**

At the regular meeting of Village Council on April 17, 2002, a motion was made by Fults and seconded by Male to adopt the following resolution.

**WHEREAS:** Part 115 of Act 451 of 1994, as amended; indicates that it is responsibility of the Shiawassee County Board of Commissioners to create a Solid Waste Management Plan; and,

**WHEREAS:** The County Solid Waste Management Plan enables the County to

- 1 control the siting of new or enlargement of existing landfills, transfer stations and solid waste processing plants;
- 2 limit the import of solid waste from other Michigan Counties and export of solid waste from Shiawassee County;
- 3 insure that facilities are available to handle the non-hazardous solid waste generated in Shiawassee County for the next ten years;
- 4 develop programs to handle household hazardous waste and to educate the public about pollution prevention and recycling opportunities; and,

**WHEREAS:** The scope and content of Solid Waste Management Plans is both required and limited by Section 11539 of said Act 451; and,

**WHEREAS:** The Shiawassee County Solid Waste Planning Committee has prepared the Plan in the required format for approval by the Director of the Michigan Department of Environmental Quality; and,

**WHEREAS:** The Plan has been subjected to a 90 day public comment period leading to a public hearing on Oct 11, 2001; and,

**WHEREAS:** The Plan was adopted by the County Board of Commissioners on February 14, 2002; and,

**WHEREAS:** Section 11536 of Part 115 of Act 451 of 1994 requires that, before the plan may take effect, it be approved by not less than 67% (or 18) of the cities villages and townships within the County.

**THEREFORE BE IT RESOLVED:** that the Village of Vernon approves the Shiawassee County Solid Waste Management Plan: June 2001 as adopted by the County Board of Commissioners.

**BE IT FURTHER RESOLVED,** that the Village Clerk is asked to mail a copy of this resolution to the Shiawassee County Planning Department at 201 N. Shiawassee St, Corunna, MI 48817

Voting Aye: President Lezovich, President Pro-Tem Fults, Trustees Chrzan, Cruce, Male and Phillips

Voting Nay: 0

Absent: 0

**MOTION CARRIED**

  
\_\_\_\_\_  
Daniel L. Luick, Village Clerk

**RESOLUTION  
OF THE CITY OF DURAND,  
COUNTY OF SHIAWASSEE, MICHIGAN  
TO ADOPT A PLAN FOR THE DEVELOPMENT OF THE COUNTY**

At the regular meeting of City Council on April 1, 2002, a motion was made by T. Doyle and seconded by L. Krupp to adopt the following resolution.

**WHEREAS:** Part 115 of Act 451 of 1994, as amended; indicates that it is responsibility of the Shiawassee County Board of Commissioner's to create a Solid Waste Management Plan; and,

**WHEREAS:** The County Solid Waste Management Plan enables the County to

1. control the siting of new or enlargement of existing landfills, transfer stations and solid waste processing plants;
2. limit the import of solid waste from other Michigan Counties and export of solid waste from Shiawassee County;
3. insure that facilities are available to handle the non-hazardous solid waste generated in Shiawassee County for the next ten years;
4. develop programs to handle household hazardous waste and to educate the public about pollution prevention and recycling opportunities; and,

**WHEREAS:** The scope and content of Solid Waste Management Plans is both required and limited by Section 11539 of said Act 451; and,

**WHEREAS:** The Shiawassee County Solid Waste Planning Committee has prepared the Plan in the required format for approval by the Director of the Michigan Department of Environmental Quality; and,

**WHEREAS:** The Plan has been subjected to a 90 day public comment period leading to a public hearing on Oct 11, 2001; and,

**WHEREAS:** The Plan was adopted by the County Board of Commissioners on February 14, 2002; and,

**WHEREAS:** Section 11536 of Part 115 of Act 451 of 1994 requires that, before the plan may take effect, it be approved by not less than 67% (or 18) of the cities villages and townships within the County

**THEREFORE BE IT RESOLVED:** that the City of Durand approves the Shiawassee County Solid Waste Management Plan: June 2001 as adopted by the County Board of Commissioners.

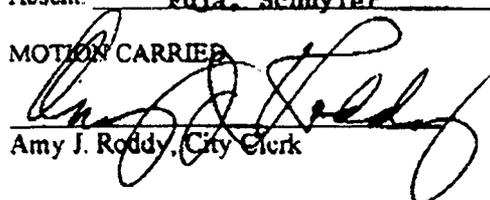
**BE IT FURTHER RESOLVED,** that the City Clerk is asked to mail a copy of this resolution to the Shiawassee County Planning Department at 201 N. Shiawassee St, Corunna, MI 48817

Voting Aye: Canute, Mayor Doyle, T. Doyle, Krupp, Bemis

Voting Nay: none

Absent: Fuja, Schuyler

MOTION CARRIED

  
Amy J. Roddy, City Clerk

SHIAWASSEE COUNTY  
SOLID WASTE MANAGEMENT PLAN

June 2001

As Approved by the County Board of Commisisoners  
on, February 14, 2002

AS REQUIRED BY SECTION 11539a OF  
PART 115, SOLID WASTE MANAGEMENT, OF  
THE NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION  
ACT  
1994 PA 451, AS AMENDED

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**1997 PLAN UPDATE COVER PAGE**

The Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), Part 115, Solid Waste Management, and its Administrative Rules, requires that each County have a Solid Waste Management Plan Update (Plan) approved by the Michigan Department of Environmental Quality (DEQ). Section 11539a requires the DEQ to prepare and make available a standardized format for the preparation of these Plan updates. This document is that format.

DATE SUBMITTED TO THE DEQ:

DESIGNATED PLANNING AGENCY PREPARING THIS PLAN UPDATE:

Shiawassee County Community Development Department

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## SECTION I EXECUTIVE SUMMARY

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

### OVERALL VIEW OF THE COUNTY

| Township or Municipality | Population 2000 | % Land Use |       | Economic Base/Employment % |      |         |       |              |       |         |
|--------------------------|-----------------|------------|-------|----------------------------|------|---------|-------|--------------|-------|---------|
|                          |                 | Rural      | Urban | Agr.                       | Mine | Constr. | Manf. | Transp. Comm | Trade | Service |
| Antrim Township          | 2,050           | 94%        | 6%    | 7.9                        | 0.3  | 7.7     | 32.3  | 7            | 19.1  | 25.7    |
| Bancroft Village         | 616             | 52%        | 48%   | 2.6                        | 0    | 6       | 33.6  | 8.3          | 20.4  | 29.1    |
| Bennington Township      | 3,017           | 93%        | 7%    | 5                          | 0.1  | 4.4     | 29.6  | 3.3          | 13.7  | 43.9    |
| Burns Township           | 2905            | 94%        | 6%    | 7.9                        | 0    | 5       | 38.1  | 4.2          | 7.3   | 37.5    |
| Byron Village            | 595             | 9%         | 91%   | 5.2                        | 0    | 6       | 34.9  | 7.3          | 17.2  | 29.4    |
| Caledonia Township       | 4,427           | 86%        | 14%   | 1.4                        | 0.6  | 6.5     | 31.6  | 2.8          | 17    | 40.1    |
| Corunna City             | 3,381           | 12%        | 88%   | 1.1                        | 0    | 2.9     | 26.9  | 3.6          | 20.1  | 45.4    |
| Durand City              | 3,933           | 10%        | 90%   | 0.5                        | 0    | 6.1     | 28    | 5.1          | 24.7  | 35.6    |
| Fairfield Township       | 745             | 96%        | 4%    | 8.6                        | 2.9  | 4.7     | 28.3  | 7.9          | 5.9   | 41.7    |
| Hazeltown Township       | 1,603           | 1.5%       | 5%    | 4.6                        | 0    | 6       | 33.2  | 3.3          | 23.7  | 29.2    |
| Laingsburg City          | 1,223           | 54%        | 46%   | 0                          | 1    | 6.3     | 20.6  | 4.6          | 19.5  | 48      |
| Lennon Village (pt.)     | 517             | 21%        | 79%   | 0                          | 1.2  | 4.1     | 34.7  | 5.3          | 33.2  | 21.5    |

| Township or Municipality | Population 2000 | % Land Use |           | Economic Base/Employment % |            |            |             |              |             |             |
|--------------------------|-----------------|------------|-----------|----------------------------|------------|------------|-------------|--------------|-------------|-------------|
|                          |                 | Rural      | Urban     | Agr                        | Mine       | Const      | Manf.       | Transp. Comm | Trade       | Service     |
| Middlebury               | 1,491           | 92%        | 8%        | 5.2                        | 1.3        | 4.5        | 31.9        | 5.8          | 18.9        | 32.4        |
| Morrice Village          | 882             | 67%        | 33%       | 0                          | 0          | 11.7       | 22.5        | 6.3          | 23.2        | 36.3        |
| New Haven Township       | 1,293           | 96%        | 4%        | 5.3                        | 0          | 5.5        | 37.1        | 6            | 20.4        | 25.7        |
| New Lothrop Village      | 603             | 73%        | 27%       | 1                          | 0          | 3.8        | 30.6        | 1            | 30.9        | 32.7        |
| Owosso City              | 15,713          | 4%         | 96%       | 0.3                        | 0          | 3.7        | 35.1        | 5.4          | 21.2        | 34.3        |
| Owosso Township          | 4,670           | 89%        | 11%       | 3                          | 0.3        | 5          | 29.7        | 7.4          | 18.9        | 35.7        |
| Perry City               | 2,065           | 26%        | 74%       | 0.7                        | 0          | 4.7        | 19.1        | 6.5          | 25.8        | 43.2        |
| Perry Township           | 3,556           | 96%        | 4%        | 4.8                        | 0.2        | 5.1        | 23.8        | 4.9          | 24.6        | 36.6        |
| Rush Township            | 1,409           | 95%        | 5%        | 7.1                        | 0.6        | 4          | 34.4        | 4.4          | 18.1        | 31.4        |
| Shiawassee Township      | 2,291           | 92%        | 8%        | 5                          | 0.2        | 6.3        | 34.6        | 5.5          | 20.3        | 28.1        |
| Sciota Township          | 1,801           | 86%        | 14%       | 4.3                        | 0.5        | 6.2        | 23.4        | 6.5          | 19.0        | 40.1        |
| Venice Township          | 2,071           | 93%        | 7%        | 4.6                        | 0.2        | 4.7        | 36          | 14.8         | 16.5        | 23.2        |
| Vernon Township          | 4,133           | 84%        | 16%       | 3.5                        | 0.2        | 7.1        | 30.1        | 4.5          | 20.7        | 33.9        |
| Vernon Village           | 847             | 77%        | 23%       | 0.7                        | 1.1        | 3.8        | 35.4        | 6.6          | 24.1        | 28.3        |
| Woodhull Township        | 3,850           | 92%        | 8%        | 3.1                        | 0.4        | 4.6        | 20.5        | 6.2          | 17.2        | 48          |
| <b>Total/Aver.</b>       | <b>71,687</b>   | <b>93%</b> | <b>7%</b> | <b>3.5</b>                 | <b>0.4</b> | <b>5.4</b> | <b>30.2</b> | <b>5.7</b>   | <b>20.1</b> | <b>34.7</b> |

Agr = Agriculture and Forestry; Mine = Mining; Cons = Construction; Manf. = Manufacturing; Trade = Wholesale and Retail; Service = Professional, General, Health, Education, Government.

Source: MIRIS and 1990 US Census (for Land Use and Economic Base) 2000 Census for Population

## CONCLUSIONS

The basic conclusions of the Plan include the belief that the Venice Park Landfill will remain as the primary disposal option for Shiawassee County. The plan also recognizes that counties in the surrounding area currently dispose of a portion of their solid waste at the Venice Park Landfill. The plan re-affirms that Shiawassee County agrees to allow this practice to continue so as long as the use by other designated counties does not interfere with Venice Park's agreement to provide Shiawassee County residents with a maximum of approximately 75,000 tons per year of disposal capacity. The landfill space available to meet the needs of Shiawassee County is further secured by an agreement with the owners of the Venice Park Landfill to limit the capacity of the facility to 730,000 tons per year. The effect of the current agreement is to guarantee that about 10% of the capacity of the Venice Park Landfill is reserved for Shiawassee County's needs.

Curbside recycling in rural areas is not considered to be cost-effective, but an expansion of current recycling programs would generate worthwhile benefits at relatively low costs. Recycling should be encouraged by a collection system that offers volume based pricing, thereby creating the economic incentive of reduced disposal cost for those who recycle.

An increase in demand for the products made from recycled material would help the markets for recycled materials. County and local governments and businesses are encouraged to join with the State and Federal government in purchasing products that are made from recycled materials.

The current collection and disposal systems consist of several private haulers and container services. The system would benefit from increased municipal contracting for solid waste collection in order to provide more cost-effective collection, and recycling opportunities.

The Plan update contains a change in emphasis from that of the 1990 Plan. The updated plan places emphasis on pollution prevention, household hazardous waste programs, public education, and efforts to institutionalize recycling in urban areas. With the approved expansion of the Venice Park Landfill, there is little concern about landfill space availability or the need to limit waste imports from other parts of Michigan. The principal new program advocated by the plan is household hazardous waste collection and disposal.

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

### Alternative Management Systems Summary

| Component                                      | Chosen System   |
|--|---|
| <b>Waste Reduction</b>                         | Status Quo: Industry is reducing waste to save money and for positive public relations.   |
| <b>Pollution Prevention</b>                    | New program to mandate pollution incident prevention plans for private facilities using small quantities of toxic materials or generating liquid waste.   |
| <b>Resource Conservation</b>                   | Public Education to encourage purchasing in bulk and in recyclable containers.  |
| <b>Resource Recovery</b>                       | Existing programs in cities and at the landfill. New program to collect household hazardous waste at a facility to be funded by a grant from the Michigan Department of Environmental Quality.  |
| <b>Volume Reduction</b>                        | Existing practice as part of good landfill operations.  |
| <b>Preferred Disposal Method</b>               | Sanitary Landfill.  |
| <b>Collection, Processing and transporting</b> | Private sector collection processing and transporting is advocated. The Plan encourages municipalities to contract with a single private collection firm. The contractor is encouraged to provide volume based pricing and a recycling program. |
| <b>Ultimate Disposal Area Use</b>              | The proposed future use of the Venice Park Landfill is a privately owned park which is open to the public.  |
| <b>Recycling</b>                               | The plan supports existing recycling with public education programs.  |
| <b>Composting</b>                              | The plan advocates municipal contracting to include yard waste pick up and private sector composting.   |

### PART TWO - INTRODUCTION

Shiawassee County has a population of 71,687 in the Year 2000, generating 197,831 cubic yards of solid waste. Currently, 87% of that waste is disposed of at the Venice Park Landfill. The balance of the waste is disposed of in landfills in Clinton County (5%), Genesee County ( 8%), and Saginaw County (1%). Shiawassee County's waste is about 11.3% of the waste disposed of at Venice Park, which also receives waste from surrounding counties. The landfill has expected life with the approved expansion of 20 years.

The County's waste collection system is primarily operated by private refuse haulers who collect residential, commercial and industrial waste under individual contracts with waste generators. Private haulers also operate under municipal contracts in Venice Township, Hazelton Township, and the Village of Morrice. The City of Perry has publicly operated collection. The County's recycling programs consists of drop off centers at the Landfill; and in Owosso, Laingsburg, and Burns Township. Curbside recycling is provided in the City of Durand, the Village of Vernon and Vernon Township. Several retail stores provide for recycling of such items as batteries, used oil, and plastic milk jugs.

## GOALS AND OBJECTIVES

Goal 1: Fulfill the requirements of part 115 of the Michigan Natural Resources and Environmental Protection Act (NREPA, 1994 PA451, as amended) for solid waste management planning.

Objective 1a: Inventory the existing solid waste management system in Shiawassee County in regards to collection, transportation, processing and disposal issues.

Objective 1b: Estimate the current solid waste generation within Shiawassee County and establish reasonable projections for the next five years and ten years.

Objective 1c: Assess opportunities in waste reduction, composting, recyclable materials and resource recovery, along with the need for landfill facilities to determine the relative feasibility of different options in terms of environmental and monetary cost.

Objective 1d: Inform and educate elected officials and interested citizens of the findings and recommendations resulting from this planning study through public hearings and the distribution of this planning document.

Goal 2: Ensure that the public health, safety, and the environment are protected from improper solid waste collection, transportation, processing, or disposal, in order to protect the quality of the air, the land, and ground and surface waters.

Objective 2a: Identify and assure that Shiawassee County has sufficient disposal capacity to accommodate the solid waste generated within the County for the ten year planing period.

Objective 2b: Assure that the best available technology is used for the protection of public health and the environment in the development and operation of solid waste facilities.

Objective 2c: Assure that solid waste is delivered to licensed disposal areas, except when solid waste is permitted to be disposed of onsite (the site of generation) or otherwise approved for disposal by the Michigan Department of Environmental Quality.

Objective 2d: Assure that the disposal of solid waste continues to be provided as a convenient service to the businesses and residents within the County.

Goal 3: Fulfill the requirements of Section 11531, of the NREPA of 1994, PA 451, as amended, by assuring that solid waste is removed from the site of generation frequently enough to protect the public health.

Objective 3a: Develop enforceable program to assure that the solid waste generated within the county is collected and disposed of at licensed facilities.

Objective 3b: Encourage the development of an Ordinance that will effectively discourage the unlawfull disposal of solid waste.

Goal 4: Reduce the quantity of Shiawassee County's solid waste that is required to be disposed of in landfills.

Objective 4a: Determine the kind and volume of material in the waste stream that could be recycled or composted.

Objective 4b: Identify the environmental benefits and quantify the economic benefits that could result from additional recycling and/or composting.

Objective 4c: Determine which materials are feasible for recycling

Goal 5: Identify the institutional arrangements needed to successfully carry out the Solid Waste Management Plan.

Objective 5a: Develop a resource recovery education program.

Objective 5b: Develop a waste minimization program for County government.

Objective 5c: Encourage municipal franchising of collection with recycling options.

Objective 5d: Encourage the safe disposal of household hazardous waste.

Objective 5e: Encourage annual clean up programs.

Objective 5f: Encourage the development of a program to recycle junk vehicles, and dilapidated mobile homes.

Goal 6: Establish relationships with surrounding counties concerning the import and export of solid waste; and, obtain acknowledgements in other county plans and monitor changes during the planning period.

Goal 7: Establish an educational program that not only promotes reduction, recycling, and reuse of solid waste, but provides specific information on the prevention of all forms of pollution.

Objective 7a: Promote best management practices for the handling and disposal of non-regulated hazardous waste in the home and within farms and small businesses.

Objective 7b: Encourage efforts to protect ground and surface water from possible contamination.

Goal 8: Develop a mechanism to support the implementation and enforcement of the plan.

Objective 8a: Develop an annual budget and assign funding sources for informational, promotional, educational, and regulatory programs that are needed to successfully carry out the mission of Part 115 of NREPA and this management plan.

Objective 8b: Provide for funding through contracts to carry out the budget.

Objective 8c: Continue the Solid Waste Management Committee.

Objective 8d: Report program progress, regulatory action, and level of plan compliance to the Board of Commissioners at least annually.

## Section II Database

1. 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 information was derived from three sources: (1) The current reported volumes from waste haulers and recycling programs within Shiawassee County, (2) Volumes reported according to the MDEQ Annual Solid Waste Report, and (3) Factors developed for the average generation per person from 1990 Plan Update. To extract the average generation figure, each report was compared for percentage make-up of the waste stream (residential, commercial, and industrial) and then pounds per individual were calculated. These figures are the best representation of Shiawassee County's waste available for the planning process

| Waste Type                    | Current Annual Volume In Cubic Yards | Current Annual Volume in Tons | Five Year Annual Volume in Tons | Ten Year Annual Volume in Tons |
|-------------------------------|--------------------------------------|-------------------------------|---------------------------------|--------------------------------|
| Residential Solid Waste       | 147,333                              | 49,111                        | 52,000                          | 55,000                         |
| Commercial Solid Waste        | 31,436                               | 10,479                        | 11,000                          | 12,000                         |
| Industrial Solid Waste        | 19,062                               | 6,354                         | 7,000                           | 8,000                          |
| Sub Total                     | 197,831                              | 65,284                        | 70,000                          | 73,000                         |
| Recovered                     | 3,953                                |                               |                                 |                                |
| Yard Waste                    | 13,813                               |                               |                                 |                                |
| Sub Total                     | 17,766                               | 5,922                         |                                 |                                |
| <b>TOTAL WASTE GENERATED:</b> | <b>215,597</b>                       | <b>71,866</b>                 | <b>73,000</b>                   | <b>76,000</b>                  |

**TOTAL QUANTITY OF WASTE GENERATED: 215,597 Cubic Yards**

**TOTAL QUANTITY OF WASTE REQUIRING DISPOSAL 197,831 Cubic Yards**

### Residential

72,000 residents x 3.7 lbs./day\* x 365 days = 147,333 CU.YD./YR. or 49,111 tons

### Manufacturing

4,150 manufacturing employees x 10.6 lbs/day\* x 260 = 19,062 CU.YD./YR. or 6,354 tons

### Commercial

14,250 service employees x 5.6 lbs/day\* x 260 = 31,436 CU.YD./YR. or 10,479 tons

\*Based on 1997 estimates from EPA, and 3 yards = one ton of waste

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

| <b>Disposal Facility</b>            | <b>FY 2000 Report cu. yds.</b>                     | <b>% of Total</b> | <b>FY 99 Report cu. yds.</b> | <b>% of Total</b> | <b>FY 98 Report cu. yds.</b> | <b>FY 97 Report cu. yds.</b> | <b>FY 96 Report cu. yds.</b> | <b>Current Capacity Million cu. yds.</b> |
|-------------------------------------|--|-------------------|------------------------------|-------------------|------------------------------|------------------------------|------------------------------|--|
| Total                               | 189,435  |                   | 176,506                      |                   | 185,114                      | 158,854                      | 136,608                      |  |
| Brent Run Landfill                  | 18,471   | 5.9%              | 16,037                       | 8.8%              | 82,403                       | 86,044                       | 85,000 est.                  | 14                                       |
| Citizen's Disposal                  | 3,295  | 1.8%              | 3,048                        | 1.7%              | 2,352                        | 1,315                        | 1,155                        | 5.3                                      |
| Granger Watertown Landfill          | 2959   | 1.6%              | 2,374                        | 1.3%              | 1,040                        | 4,831                        | 3,174                        | 7.6                                      |
| Granger Wood Street Landfill        | 6850   | 3.8%              |                              |                   | 3,785                        | 1,850                        | 1,530                        | 11                                       |
| Philip McGill                       |  |                   |                              |                   |                              | 56                           |                              |  |
| Oakland Heights Dev.                |  |                   |                              |                   | 25,056                       |                              |                              |  |
| People's Landfill                   | 64   | 0.0%              |                              |                   | 0                            |                              |                              | 5.3                                      |
| Pitsch Disposal                     | 24   | 0.0%              |                              |                   | 11                           |                              |                              | 4  |
| Saginaw Valley Landfill             |  |                   | 545                          | 0.3%              | 195                          |                              |                              |  |
| Taymouth Landfill                   |  |                   | 3,526                        | 1.9%              | 9,708                        |                              |                              |  |
| Village of Morrice Transfer Station | Waste is ultimately disposed of at Venice Park RDF |                   |                              |                   |                              |                              |                              | N/A                                      |
| City of Owosso Transfer Station     | Waste is ultimately disposed of at Venice Park RDF |                   |                              |                   |                              |                              |                              | N/A                                      |
| Venice Park RDF                     | 157,772  | 86.9%             | 150,976                      | 83.1%             | 60,564                       | 64,758                       | 46,864                       | 1.3                                      |

FACILITY DESCRIPTIONS

June 2001

Facility Type: Type II Landfill

Facility Name: Waste Management of Michigan/Venice Park Recycling and Disposal Facility

County: Shiawassee      Location: Town: T7N Range: R4E      Section(s): 26-27

Map identifying location included in Attachment A

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

Public  Private      Owner: Waste Management of Michigan

| 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 checked="" type="checkbox"/>         | contaminated soils              |
| <input type="checkbox"/>            | open, but closure pending | <input checked="" type="checkbox"/>         | special wastes *                |
|                                     |                           | <input checked="" type="checkbox"/>         | other: Solidification Operation |

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

Site Size:

|                                   |                             |
|-----------------------------------|-----------------------------|
| Total area of facility property:  | 346.97 acres                |
| Total area sited for use:         | 207.15 acres                |
| Total area permitted:             | 207.15 acres                |
| Operating:                        | 81.31 acres                 |
| Not excavated:                    | 70 acres                    |
| Current capacity:                 | 13,600,000 gate cubic yards |
| Estimated lifetime:               | 20+ years                   |
| Estimated days open per year:     | 281 days                    |
| Estimated yearly disposal volume: | 1,200,000 gate cubic yards  |
| Annual energy production:         |                             |
| Landfill gas recovery projects:   | 1.6 megawatts               |
| Waste-to-energy incinerators:     | N/A                         |

FACILITY DESCRIPTIONS

Facility Type: Type II Landfill

Facility Name: Brent Run Landfill

County: Genesee Location: Town: Montrose Range: 5E Section(s): 23

Map identifying location included X No

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

Public X Private Owner: Republic, dba Tri-County

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

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

Site Size:

|                                   |                                 |
|-----------------------------------|---------------------------------|
| Total area of facility property:  | 500 acres                       |
| Total area sited for use:         | 350 acres                       |
| Total area permitted:             | 106.5 acres                     |
| Operating:                        | 38.91 acres                     |
| Not excavated:                    | 67.56 acres                     |
| Current capacity:                 | 14,000,000 Cubic yards in place |
| Estimated lifetime:               | 30+ years                       |
| Estimated days open per year:     | 276 days                        |
| Estimated yearly disposal volume: | 400,000 yds <sup>3</sup>        |

(if applicable)

|                                 |             |
|---------------------------------|-------------|
| Annual energy production:       |             |
| Landfill gas recovery projects: | 2 megawatts |
| Waste-to-energy incinerators:   | N/A         |

FACILITY DESCRIPTIONS

Facility Type: Type II Landfill

Facility Name: Citizen's Disposal, Inc.

County: Genesee Location: Town: 6 Range: 6 Section 23

Map identifying location included in Attachment A

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

Public X Private Owner: Allied Waste Industries, Inc.

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

Explanation of special waste, including a specific lists and/or conditions

Non-hazardous solid wastes. Requires prior review and approval including analytical data and waste profile.

Site Size:

Proposed Expansion

|                                   |                            |                            |
|-----------------------------------|----------------------------|----------------------------|
| Total area of facility property:  | 300+/- acres               |                            |
| Total area sited for use:         | 300+/- acres               |                            |
| Total area permitted:             | 52 acres                   |                            |
| Operating:                        | 52 acres                   |                            |
| Not excavated:                    | 80 acres                   | 80 acres                   |
| Current capacity:                 | 4mm gate yds <sup>3</sup>  | 24mm gate yds <sup>3</sup> |
| Estimated lifetime:               | 5 years                    | 25 yrs.                    |
| Estimated days open per year:     | 300 days                   | 300 days                   |
| Estimated yearly disposal volume: | 792K gate yds <sup>3</sup> | 900K gate yds <sup>3</sup> |

(if applicable)

|                                 |               |
|---------------------------------|---------------|
| Annual energy production:       |               |
| Landfill gas recovery projects: | 2.4 megawatts |
| Waste-to-energy incinerators:   | N/A           |

FACILITY DESCRIPTIONS

Facility Type: Type II Landfill

Facility Name: Arbor Hills

County: Washtenaw

Location: Town: 1S Range: 7E

Section 13

Map identifying location included in Attachment A

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, Inc.

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

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

Site Size:

|                                   |                            |
|-----------------------------------|----------------------------|
| Total area of facility property:  | 337 acres                  |
| Total area sited for use:         | _____ acres                |
| Total area permitted:             | 217 acres                  |
| Operating:                        | 113 acres                  |
| Not excavated:                    | 104 acres                  |
| Current capacity:                 | 6177 mgy <sup>3</sup>      |
| Estimated lifetime:               | 17.6 years                 |
| Estimated days open per year:     | 264 days                   |
| Estimated yearly disposal volume: | 3,500,000 yds <sup>3</sup> |

(if applicable)

|                                 |              |
|---------------------------------|--------------|
| Annual energy production:       |              |
| Landfill gas recovery projects: | 18 megawatts |
| Waste-to-energy incinerators:   | N/A          |

FACILITY DESCRIPTIONS

Facility Type: Type II

Facility Name: Granger Grand River Avenue Landfill

County: Clinton Location: Town: 5N Range: 3W, Section: 29

Map identifying location included in Attachment A

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: Granger Land Development Company

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

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

Site Size:

|                                     |   |
|-------------------------------------|---|
| Total area of facility property: ** | 180.9 acres   |
| Total area sited for use: (Plan)    | 120.9 acres + 67 acres (future permitting in Ingham County) |
| Total area permitted:               |   |
| (For Disposal, i.e. SWB)            | 85.7 acres  |
| Operating: (Licensed and Certified) | 54.1 acres  |
| Not developed                       | 31.6 acres  |
| Current capacity:                   | 7,617,0000 yds <sup>3</sup> Air Yards                       |
| Estimated lifetime:                 | 32 years  |
| Estimated days open per year:       | 300 days  |
| Estimated yearly disposal volume:   | 600,000 yds <sup>3</sup> Gate Yards                         |
| Annual energy production:           |   |
| Landfill gas recovery projects:     | 4.0 megawatts   |
| Waste-to-energy incinerators:       | N/A   |

\*\* Includes acres of (separate) closed facility to be consistent with DEQ numbers on Permits and Licenses

FACILITY DESCRIPTIONS

Facility Type: Type II

Facility Name: Granger Wood Street Landfill

County: Clinton/Ingham Location: Town: 5N/4N Range: 2W Section: 34/3

Map identifying location included in Attachment A

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: Granger Waste Management Company

| 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 pending      | <input checked="" type="checkbox"/> special wastes *          |
|   | <input checked="" type="checkbox"/> other: Type III           |

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

Site Size:

|  |   |
|--|---|
| Total area of facility property: **            | 302.8 acres   |
| Total area sited for use: (Plan)               | 194.8 acres + 67 acres (future permitting in Ingham County) |
| Total area permitted: (For Disposal, i.e. SWB) | 104.3 acres   |
| Operating: (Licensed and Certified)            | 49.5 acres  |
| Not developed                                  | 54.8 acres  |
| Current capacity:                              | 10,981,000 yds <sup>3</sup> Air Yards                       |
| Estimated lifetime:                            | 34 years  |
| Estimated days open per year:                  | 260 days  |
| Estimated yearly disposal volume:              | 600,000 yds <sup>3</sup> Gate Yards                         |
| Annual energy production:                      |   |
| Landfill gas recovery projects:                | 3.2 megawatts   |
| Waste-to-energy incinerators:                  | N/A   |

\*\* Includes acres of (separate) closed facility to be consistent with DEQ numbers on Permits and Licenses  
Also includes spoil/borrow areas to be consistent with DEQ numbers on Permits and Licenses.

FACILITY DESCRIPTIONS

Facility Type: Type II Landfill

Facility Name: People's Landfill

County: Saginaw Location: Town: 10N Range: 5E Section 15

Map identifying location included in Attachment A

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

Public  Private Owner: Waste Management, 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 type="checkbox"/> construction permit       | <input checked="" type="checkbox"/> contaminated soils        |
| <input type="checkbox"/> open, but closure pending | <input checked="" type="checkbox"/> special wastes *          |
|  | <input type="checkbox"/> other:                               |

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

Site Size:

Total area of facility property: 163 acres

Total area sited for use: 110 acres

Total area permitted: 29.1 acres

Operating: 2 acres

Not excavated: 100 acres

Current capacity: 5,301,641 yds<sup>3</sup>

Estimated lifetime: 20 years

Estimated days open per year: 254 days

Estimated yearly disposal volume: 1000 tons

Annual energy production:

Landfill gas recovery projects: 3.2 \*\* megawatts

Waste-to-energy incinerators: N/A

Note: People's Landfill has been approved by the Site Review Committee in 1993 for a 53 acres expansion. The permit was issued in 1993, but it has lapsed. People's has plans to renew the permit and begin excavation within a year.

Note: Numbers are listed as they were reported from the facility.

\*\* this is a combined total for People's Landfill and Taymouth Landfill

FACILITY DESCRIPTIONS

Facility Type: Type II Landfill

Facility Name: Eagle Valley Recycling and Disposal Facility

County: Oakland Location: Town: 4N Range: 10E Section(s): 26,27,35

Map identifying location included in Attachment A

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

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 pending      | <input checked="" type="checkbox"/> special wastes *          |
|   | <input checked="" type="checkbox"/> other:                    |

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

Contaminated soils, sludges, filter cake, process waste, coal ash, chemical containing equipment, used containers, treated medical wastes, contaminated demolition debris, street sweepings, sediment trap materials.

Site Size:

|                                   |           |                                 |
|-----------------------------------|-----------|---------------------------------|
| Total area of facility property:  | 330       | acres                           |
| Total area sited for use:         | 330       | acres                           |
| Total area permitted:             | 89        | acres                           |
| Operating:                        | 75.7      | acres                           |
| Not excavated:                    | 13        | acres                           |
| Current capacity:                 | 4,700,000 | yds <sup>3</sup> bank remaining |
| Estimated lifetime:               | 5.5       | years                           |
| Estimated days open per year:     | 286       | days                            |
| Estimated yearly disposal volume: | 1,650,000 | yds <sup>3</sup> bank remaining |

Annual energy production:

|                                 |                                  |
|---------------------------------|----------------------------------|
| Landfill gas recovery projects: | 233,00 MM Btu/year gas sale 1998 |
| Waste-to-energy incinerators:   | N/A                              |

FACILITY DESCRIPTIONS

Facility Type: Type II Landfill

Facility Name: Pitsch Sanitary Landfill

County: Ionia      Location: Town: 8 Range: 7 Section: 7

Map identifying location included in Attachment A

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

Public  Private    Owner: Pitsch Companies

|                                     |                           |   |                           |
|-------------------------------------|---------------------------|---|---------------------------|
| 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 type="checkbox"/>                    | industrial                |
| <input type="checkbox"/>            | unlicensed                | <input checked="" type="checkbox"/>         | construction & demolition |
| <input type="checkbox"/>            | construction permit       | <input checked="" type="checkbox"/>         | contaminated soils        |
| <input type="checkbox"/>            | open, but closure pending | <input checked="" type="checkbox"/>         | special wastes *          |
|                                     |                           | <input type="checkbox"/>                    | other:                    |

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

| <u>Site Size</u>                  |        |       | <u>After Expansion</u> |
|-----------------------------------|--------|-------|------------------------|
| Total area of facility property:  | 148.44 | acres | 300 acres              |
| Total area sited for use:         | 28.36  | acres | 140 acres              |
| Total area permitted:             | 78.44  | acres | 140 acres              |
| Operating:                        | 9.87   | acres | 10 acres               |
| Not excavated:                    | 70     | acres | 40 acres               |
| Current capacity:                 | 40,000 | tons  | 2,308,225 tons         |
| Estimated lifetime:               | .5     | years | 30 years               |
| Estimated days open per year:     | 307    | days  |                        |
| Estimated yearly disposal volume: | 83,00  | tons  |                        |

(if applicable)

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

FACILITY DESCRIPTIONS

Facility Type: Type II Solid Waste Landfill

Facility Name: Northern Oaks Recycling and Disposal Facility

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

Map identifying location included in Attachment Section: X Yes  No

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

Public X Private    Owner: Waste Management of Michigan, Inc.

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

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

WWTP filter cake, sludge

Site Size:

|                                   |           |                  |
|-----------------------------------|-----------|------------------|
| Total area of facility property:  | 160       | acres            |
| Total area sited for use:         | 76        | acres            |
| Total area permitted:             | 76        | acres            |
| Operating:                        | 19        | acres            |
| Not excavated:                    | 57        | acres            |
| Current capacity:                 | 8,755,100 | yds <sup>3</sup> |
| Estimated lifetime:               | 43        | years            |
| Estimated days open per year:     | 260       | days             |
| Estimated yearly disposal volume: | 409,000   | yds <sup>3</sup> |

(if applicable)

|                                 |     |
|---------------------------------|-----|
| Annual energy production:       |     |
| Landfill gas recovery projects: | N/A |
| Waste-to-energy incinerators:   | N/A |

FACILITY DESCRIPTIONS

Facility Type: Type II Sanitary Landfill

Facility Name: Taymouth Landfill

County: Saginaw Location: Town: 10N, Range: 5E, Section 15

Map identifying location included in Attachment

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: \_\_\_\_\_

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

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

Site Size:

|                                   |                     |
|-----------------------------------|---------------------|
| Total area of facility property:  | <u>135.89</u> acres |
| Total area sited for use:         | <u>43</u> acres     |
| Total area permitted:             | <u>25</u> acres     |
| Operating:                        | <u>15</u> acres     |
| Not excavated:                    | <u>10</u> acres     |
| Current capacity:                 | <u>1.3 M</u> cy's   |
| Estimate lifetime:                | <u>7-8</u> years    |
| Estimated days open per year:     | <u>260</u> days     |
| Estimated yearly disposal volume: | <u>216,000</u> cy's |

(if applicable)

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

FACILITY DESCRIPTIONS

Facility Type: Type III Landfill

Facility Name: Daggett Sand and Gravel

County: Ingham Location: 1016 E. Sherdian Rd, Lansing MI

Map identifying location included in Attachment A

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: Daggett Sand and Gravel, Inc.

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

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

Site Size:

|                                   |                                     |
|-----------------------------------|-------------------------------------|
| Total area of facility property:  | <u>10</u> acres                     |
| Total area sited for use:         | <u>6.4</u> acres                    |
| Total area permitted:             | <u>6.4</u> acres                    |
| Operating:                        | <u>2-3</u> acres                    |
| Not excavated:                    | <u>0</u> acres                      |
| Current capacity:                 | <u>60,000 yds<sup>3</sup></u>       |
| Estimate lifetime:                | <u>7</u> years                      |
| Estimated days open per year:     | <u>250</u> days                     |
| Estimated yearly disposal volume: | <u>7-8 Thousand yds<sup>3</sup></u> |

(if applicable)

|                                 |     |
|---------------------------------|-----|
| Annual energy production:       |     |
| Landfill gas recovery projects: | N/A |
| Waste-to-energy incinerators:   | N/A |

## 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.

| Haulers                   |            |                                |                          |
|---------------------------|------------|--------------------------------|--------------------------|
| Service Provider          | County     | Disposal Facility              | Service Area             |
| Allied Services           | Genesee    | Citizens/Allied,<br>Genesee    | All County               |
| Allied Disposal           | Clinton    | Grangers, Clinton              | SW County                |
| Granger Container Service | Clinton    | Grangers, Clinton              | SW County and Mid County |
| City of Perry             | Shiawassee | Venice Park WMI,<br>Shiawassee | Perry                    |
| Standard Disposal         | Bay        | Citizens/Allied,<br>Genesee    | All County               |
| Adam's and Son Disposal   | Shiawassee | Venice Park WMI<br>Shiawassee  | Mid County               |
| Chupeck Disposal          | Genesee    | Citizens/Allied,<br>Genesee    | East Side                |
| Valley Disposal/WMI       | Shiawassee | Venice Park                    | All County               |
| Tri-County/Republic       | Saginaw    | Republic, Montrose             | All County               |

## **EVALUATION OF DEFICIENCIES AND PROBLEMS**

The following is a description of problems or deficiencies in the existing solid waste management plan. Each problem or deficiency is discussed in terms of the established elements of a solid waste management system.

### **COLLECTION**

The existing private collection system has done a good job of assuring that solid waste is delivered to licensed disposal areas and that the public health, safety, and the environment are protected from improper solid waste collection, transportation, or disposal. However, the existing system has some deficiencies.

The private haulers have not provided an economic incentive for a resident to reduce waste or recycle because there is normally no difference in the cost of residential service based on the volume of waste generated.

Local government contracting with a single service provider can reduce cost of waste collection. However, the current price is relatively low and the public has not been interested in waste collection becoming a service of local government.

Illegal dumping, burning, and disposal of building materials and residential solid waste is a problem.

Few opportunities exist for the proper disposal of agricultural, and household hazardous waste.

### **MANAGEMENT**

- Inadequate funding for educational programs
- Lack of cooperative efforts to establish regional programs, educational programs, and programs to cooperatively market of recyclable materials.
- Poor coverage of recycling in multi-unit housing and manufactured housing communities

### **PROCESSING and TREATMENT**

The existing yard waste composting facility at Venice Park RDF has expanded under the control of the Shiawassee County Zoning Ordinance. The solidification processing plant at Venice Park RDF will continue to attract liquid and special waste to the facility and may increase the environmental risk of the operation. This solidification process is acknowledged by a Department of Air Quality Air Use permit # 72 -96 A, and a finding by the County Planning Commission that the facility is an accessory use to the operation of the landfill.

### **TRANSPORTATION**

Solid waste haulers experience high transportation cost due to weight restrictions on bridges, muddy roads, and the wide dispersion of customers.

### **DISPOSAL**

No disposal problems are anticipated during the planning period. The existing agreement with Waste Management guarantees adequate space with backup space at another Waste Management Facility.

## DEMOGRAPHICS

The following presents the current and projected population densities and centers for five and ten year periods, and 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. When data is extrapolated from yearly data, it is calculated using 365 days per year.

| <b>Shiawassee County</b>              | <b>1980</b>   | <b>1990</b>   | <b>1995*</b> | <b>2000**</b> | <b>2005*</b> | <b>2010*</b> |
|---------------------------------------|---------------|---------------|--------------|---------------|--------------|--------------|
| <b>Population</b>                     | <b>71,140</b> | <b>69,770</b> | 72,000       | <b>71,687</b> | 73,300       | 73,300       |
| <b>Waste Estimates Total CU. YDS*</b> | N/A           | 26470***      | 27439***     | 197,831       | 218,197      | 233,364      |
| <b>Residential</b>                    |               | 13500***      | 14301***     | 147,333       | 157,576      | 166,667      |
| <b>Commercial</b>                     |               | 7890***       | 8125***      | 31,436        | 33,333       | 36,364       |
| <b>Industrial</b>                     |               | 4080***       | 5283***      | 19,062        | 21,212       | 24,242       |
| <b>Waste Estimates Total Tons</b>     |               | 51,940***     | 55,148***    | 65,284        | 70,000       | 75,000       |

Data in Bold Numbers are actual 1980, 1990 and 2000 Census

\* Source: Michigan Department of Management and Budget, Office of the State Demographer, January 1996

\*\* Census 2000 Population and Race Report, April 2001

\*\*\* Estimates from the 1990 Solid Waste Management Plan (appear to be understated and inconsistent with the national standards for waste generation per capita)

**PROJECTIONS**  
**Adjusted for Year 2000 Census**

|                          | <b>1980</b>   | 1985   | <b>1990</b>   | 1995   | 1996   | <b>2000</b>   | 2005   | 2010   |
|--------------------------|---------------|--------|---------------|--------|--------|---------------|--------|--------|
| <b>Shiawassee County</b> | <b>71,140</b> | 69,100 | <b>69,770</b> | 72,000 | 72,065 | <b>71,687</b> | 73,300 | 73,300 |
| <b>Mid County</b>        | <b>28,976</b> | 29,528 | <b>30,622</b> | 31,359 | 28,048 | <b>28,191</b> | 32,129 | 32,422 |
| Owosso                   | 16455         | 16828  |               |        | 16,322 | <b>15,713</b> |        |        |
| Corunna                  | 3206          | 3322   |               |        | 3,091  | <b>3,381</b>  |        |        |
| Caledonia Twp.           | 4785          | 4821   |               |        | 4,514  | <b>4,427</b>  |        |        |
| Owosso Twp.              | 4530          | 4557   |               |        | 4,121  | <b>4,670</b>  |        |        |
| <b>Southwest</b>         | <b>11,551</b> | 12,051 | <b>13,204</b> | 14,170 | 12,171 | <b>13,377</b> | 15,590 | 16,131 |
| Perry City               | 2051          | 2129   |               |        | 2,163  | <b>2,065</b>  |        |        |
| Perry Twp.               | 3546          | 3596   |               |        | 3,099  | <b>3,556</b>  |        |        |
| Morrice                  |               |        |               |        | 599    | <b>882</b>    |        |        |
| Laingsburg               | 1145          | 1148   |               |        | 1,148  | <b>1,223</b>  |        |        |
| Sciota Twp.              | 1527          | 1621   |               |        | 1,578  | <b>1,801</b>  |        |        |
| Woodhull Twp.            | 3361          | 3557   |               |        | 3,584  | <b>3,850</b>  |        |        |
| <b>Southeast</b>         | <b>15,580</b> | 15,579 | <b>15,902</b> | 16,495 | 16,208 | <b>15,001</b> | 17,933 | 18,480 |
| Lennon                   | 3063          | 3041   |               |        | 537    | <b>517</b>    |        |        |
| Venice Twp.              |               |        |               |        | 2,804  | <b>2,071</b>  |        |        |
| Vernon                   | 5003          | 5003   |               |        | 913    | <b>847</b>    |        |        |
| Vernon Twp.              |               |        |               |        | 4,076  | <b>4,133</b>  |        |        |
| Durand                   | 4241          | 4196   |               |        | 4,283  | <b>3,933</b>  |        |        |
| Byron                    | 3273          | 3339   |               |        | 594    | <b>595</b>    |        |        |
| Burns Twp.               |               |        |               |        | 3,001  | <b>2,905</b>  |        |        |
| <b>South-Central</b>     | <b>7,219</b>  | 7,471  | <b>8,087</b>  | 8,636  | 7,733  | <b>7,974</b>  | 9,501  | 9,829  |
| Bennington Twp.          | 2758          | 2846   |               |        | 2,727  | <b>3,017</b>  |        |        |
| Shaiwassee Twp.          | 2709          | 2770   |               |        | 2,749  | <b>2,291</b>  |        |        |
| Bancroft                 |               |        |               |        | 578    | <b>616</b>    |        |        |
| Antrim                   | 1752          | 1855   |               |        | 1679   | <b>2,050</b>  |        |        |
| <b>Northern</b>          | <b>7,814</b>  | 7,842  | <b>8,085</b>  | 8,339  | 7,905  | <b>7,144</b>  | 8,844  | 9,037  |
| Middlebury Twp.          | 1574          | 1574   |               |        | 1,536  | <b>1491</b>   |        |        |
| Fairfield Twp.           | 904           | 920    |               |        | 766    | <b>745</b>    |        |        |
| Rush Twp.                | 1500          | 1504   |               |        | 1,429  | <b>1409</b>   |        |        |
| New Haven Twp.           | 1425          | 1432   |               |        | 1,304  | <b>1293</b>   |        |        |
| Hazelton Twp.            | 2411          | 2442   |               |        | 2,284  | <b>1603</b>   |        |        |
| New Lothrop              |               |        |               |        | 586    | <b>603</b>    |        |        |

Bold Numbers are actual 1980, 1990 and 2000 Census

**DENSITY**

| Shiawassee County  |        |              |              |        |          |
|--------------------|--------|--------------|--------------|--------|----------|
| Municipality       | 71,687 | Pop/Sq. Mile | Square Miles | Acres  | Pop/acre |
| 1 Antrim           | 2,050  | 56.15        | 36.51        | 23,366 | 0.09     |
| 2 Bancroft         | 616    | 1120         | 0.55         | 352    | 1.75     |
| 3 Bennington Twp.  | 3,017  | 83           | 36.47        | 23,341 | 0.13     |
| 4 Burns Twp.       | 2,905  | 84           | 34.48        | 22,067 | 0.13     |
| 5 Byron Village    | 595    | 595          | 1            | 640    | 0.93     |
| 6 Caledonia Twp.   | 4,427  | 140          | 31.66        | 20,262 | 0.22     |
| 7 Corunna          | 3,381  | 1094         | 3.09         | 1,978  | 1.71     |
| 8 Durand           | 3,933  | 2300         | 1.71         | 1,094  | 3.59     |
| 9 Fairfield Twp.   | 745    | 30           | 25.1         | 16,064 | 0.05     |
| 10 Hazelton Twp.   | 1,603  | 44           | 36.26        | 23,206 | 0.07     |
| 11 Laingsburg      | 1,223  | 769          | 1.59         | 1,018  | 1.20     |
| 12 Lennon          | 517    | 646          | 0.8          | 512    | 1.01     |
| 13 Middlebury Twp. | 1,491  | 60           | 24.71        | 15,814 | 0.09     |
| 14 Morrice         | 882    | 882          | 1            | 640    | 1.38     |
| 15 New Haven Twp.  | 1,293  | 36           | 35.69        | 22,842 | 0.06     |
| 16 New Lothrop     | 603    | 603          | 1            | 640    | 0.94     |
| 17 Owosso          | 15,713 | 3233         | 4.86         | 3,110  | 5.05     |
| 18 Owosso Twp.     | 4,670  | 144          | 32.46        | 20,774 | 0.22     |
| 19 Perry           | 2,065  | 759          | 2.72         | 1,741  | 1.19     |
| 20 Perry Twp.      | 3,556  | 115          | 31.02        | 19,853 | 0.18     |
| 21 Rush Twp.       | 1,409  | 40           | 35.2         | 22,528 | 0.06     |
| 22 Sciota Twp.     | 1,801  | 67           | 26.79        | 17,146 | 0.11     |
| 23 Shiawassee Twp. | 2,291  | 63           | 36.15        | 23,136 | 0.10     |
| 24 Venice Twp.     | 2,071  | 57           | 36.65        | 23,456 | 0.09     |
| 25 Vernon Twp.     | 4,133  | 123          | 33.51        | 21,446 | 0.19     |
| 26 Vernon Village  | 847    | 1303         | 0.65         | 416    | 2.04     |
| 27 Woodhull Twp.   | 3,850  | 142          | 27.11        | 17,350 | 0.22     |

## 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 period.

Shiawassee County Land Use Plan of 1980 is nearing the end of its life as a guide to the growth of the County. Several townships have recently completed new land use plans in order to guide the development of their communities. Several other townships are in the process of adopting updated land use plans.

Shiawassee County growth patterns reflect the changes in the economy of the major employment centers both within and outside the County boundaries. Major growth appears to be occurring in the south and southwestern portions of the County and in areas with nearby access to Interstate 69. However, the desire for a rural lifestyle is resulting in new home construction throughout the County.

The major land development issue, related to solid waste management, is sprawl. A future of widely scattered individual lots throughout the county will create the most costly solid waste transportation system, along with higher cost to individuals to bring recyclable materials into population centers. A future where much of the growth occurs in or near a municipality and in rural clusters will enable more options for an efficient solid waste management system.

Future Land Use Planning in the vicinity of the Venice Park RDF has been completed by the Venice Township Planning Commission and adopted by the County Planning Commission. The Future Land Use Plan recognizes the Venice Park landfill site as existing in a high quality farmland area. Additional homes near the landfill are discouraged in the Plan. The plan is implemented by County Zoning Ordinance provisions, which limit residential density to one house per 40-acres in the area surrounding the Venice Park Landfill.

## 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 Alternative is located in the following section. Details regarding non-selected alternatives are located in Appendix B.

### Components of a Solid Waste Management Strategy

Waste reduction includes changes in manufacturing or other processes, which generate solid waste as a function of the process so that a reduced amount of waste is created. Additionally, changes may be made to the waste stream to produce a waste that contains less potential environmental pollutants.

Resource conservation includes reduced resource use per product, increased product life, product reuse, and decreased consumption of products that become solid waste. Implementation of resource conservation can be accomplished through voluntary action by consumers and manufacturers or through legislative measures.

Resource recovery includes source separation or mixed waste processing and the subsequent recovery of valuable materials, or energy. Source separation involves the separation of selected materials at the source of generation. This process may be practiced at residences, commercial establishments, institutions, and industries. The recovered materials may be picked up at the site or the generator may take the materials to a recycling center. Mixed waste processing involves the physical or mechanical separation of valuable recoverable materials from the waste stream after the waste is collected and transported to a solid waste processing facility, often called a material recovery facility or MRF. Mixed waste processing techniques include hand sorting, screening, gravity and magnetic separation, and optical separation.

Volume reduction includes processing by compactors, balers, shredders, and incinerators.

Collection processes and transportation includes the process of transferring the waste from the point of generation to a transfer station, processing plant, resource recovery facility, or final disposal area. The topic also includes the types of collection containers used at the generation site, the types of equipment used to haul the waste, who hauls the waste, and how bulk items will be handled.

Institutional arrangements includes contracts and organizational arrangements and structures, which provide for public and/or private operation of solid waste collection, processing, and disposal systems. It also may include multi-jurisdictional approaches in managing solid waste.

## 1. The Current Solid Waste Management System

### Alternative 1: Maintain the Current Solid Waste Management System ( Status Quo)

#### Summary

The existing system is adequately handling the needs of the community. However, it lacks a public educational component, and effective coordination of the efforts of various local organizations

#### Analysis of Components

##### Waste reduction, pollution prevention

Minimal educational programs are provided by the Soil Conservation District, Community Development Department, and the County Health Department. New businesses are being informally reviewed for pollution prevention measures through the site plan review process under the County Zoning Ordinance.

##### Resource conservation

No current educational or promotional program is offered to encourage reduced consumption of products which become waste. However, the reuse of clothing, and durable goods is being actively pursued by charitable organizations and private business interests.

##### Resource recovery

The existing recycling programs in Owosso, Durand, Morrice, Laingsburg, Venice Township, Vernon Township, the Village of Vernon and the Venice Park Landfill are reducing the waste stream.

##### Volume reduction

Compaction of waste at the landfill is being achieved with rolling compactors (a bulldozer type tractor with large spiked metal wheels), which roll over the trash as it is placed in the fill area causing compaction from the weight of the vehicle. This practice reduces the volume by at least one-half.

##### Sanitary landfill

The Venice Park Land fill uses modern technology in landfill design and operation including methane gas recovery. The facility uses the area method of filling with two protective liners.

##### Collection processes and transportation

Collection is achieved by privately operated rear load packer trucks and front load packer trucks to handle commercial containers.

##### Ultimate disposal area use

The long-term use of the Venice Park Landfill is a privately owned, open to the public, recreational facility

### Institutional arrangements

Shiawassee County has historically allowed the solid waste to be imported to the Venice Park Facility from a large area in the State of Michigan, provided that the facility maintains the capacity to handle all of the waste generated within the county. Currently a contract exist between the County Board of Commissioners and Waste Management, Inc. guarantees the necessary capacity for Shiawassee County and permits the facility to receive waste from a large portion of Michigan.

### Recycling and composting programs

The 1990 plan called for the creation of a recycling coalition that coordinated the work of several groups to expand recycling opportunities. The coalition was formed and was actively supporting voluntary recycling efforts. The existing programs and their accomplishments are listed in the Appendix C of this document. Recycling availability has been limited in recent years due to lack of incentives and low prices for recycled materials.

## **Alternative 2: Active Solid Waste Management Program**

### Summary

An integrated solid waste management program featuring education, training, volunteerism, advertising, promotion, sharing in the cost of recycling, household hazardous waste collection and disposal, and pollution prevention programs.

### Components

#### Waste reduction, pollution prevention

Initiate and promote a voluntary program to assist existing business in waste reduction and pollution prevention. Reward "clean businesses" with "Green Business Certificates" and other positive publicity. Also initiate pay-as -you-throw pricing options for solid waste disposal.

#### Resource conservation

Initiate an education program, which emphasizes the conservation of natural resources through purchasing of products with less packaging and products in easily recyclable or reusable containers. Encourage purchasing of items in bulk containers.

#### Resource Recovery

Develop and participate in the operational cost of three new recycling drop-off centers.

#### Volume reduction

Educate residents concerning waste reduction practices, household composting, and other ways to minimize waste generation.

#### Sanitary landfill

Continue to utilize sanitary landfilling as the disposal method.

#### Ultimate disposal area use

Same as existing solid waste management system.

#### Collection processes and transportation

Encourage curbside recycling in urban areas. Encourage the continued recycling efforts at the Venice Park Landfill including the installation of additional equipment designed to separate or process recyclable materials.

#### Institutional arrangements

Continue existing arrangements with other counties; and encourage municipal franchising with waste haulers as method to achieve volume based pricing and recycling opportunities.

#### Recycling and composting programs

Encourage the establishment of municipal contracts in the cities of Owosso, Corunna, and Laingsburg, to provide for curbside recycling. Encourage municipal contracts to include the pick up and composting of yard waste. Establish rules and guidelines for composting facilities to be located in environmentally sound, isolated locations.

Encourage and participate in the financial support of at least three recycling drop-off centers located near the waste generation centers as identified in this plan. Support recycling with public information and education. At a minimum, the information on recycling facilities should be in newspapers, available through the County and community web site, and in pamphlets. Affiliation with grocery stores and other allies in the recycling effort is recommended. Education programs should be made available to community groups and schools.

The effort should also include coordination with programs in neighboring communities such as Genesee County, Ingham County, Clinton County, Saginaw County, and Livingston County that are established to collect household hazardous waste, and agricultural chemical (pesticides herbicides, and drugs) containers.

### **Alternative 3: Education Based Approach**

#### Summary

This alternative assumes that the existing solid waste management system is consistent with the public perception of the issue. It further assumes that any changes in the solid waste management system will require that the general public first perceive a need for change. The alternative would develop an environmental education program beginning with broad concerns about the quality of life, groundwater protection, future growth, and development. Undertake the program in cooperation with other land use and strategic planning projects within the county to build awareness of environmental issues including solid waste disposal, household hazardous waste, pollution prevention, and agricultural land preservation.

## Components

### Waste reduction, pollution prevention

Minimal educational programs are provided by the Soil Conservation District, Community Development Department, and the County Health Department. New businesses are being informally reviewed for pollution prevention measures through the site plan review process under the County Zoning Ordinance.

### Resource conservation

Initiate an education program, which emphasizes the conservation of natural resources through purchasing of products with less packaging and products in easily recyclable containers. Encourage purchasing of items in bulk containers.

### Resource recovery

Existing recycling programs in Owosso, Durand, Morrice, Laingsburg, Venice Township, Vernon Township, the Village of Vernon and the Venice Park Landfill are reducing the waste stream.

### Volume reduction

Compaction of waste at the landfill is being achieved with rolling compactors (a bulldozer type tractor with large spiked metal wheels), which roll over the trash as it is placed in the fill area causing compaction from the weight of the vehicle. This practice reduces the volume by at least one-half.

### Sanitary landfill

The Venice Park Land fill uses modern technology in landfill design and operation including methane gas recovery. The facility uses the area method of filling with two protective liners.

### Collection processes and transportation

Collection is achieved by privately operated rear load packer trucks and front load packer trucks to handle commercial containers.

### Ultimate disposal area uses

The long-term use of the Venice Park Landfill is a privately owned, open to the public, recreational facility.

### Institutional arrangements

Shiawassee County has historically allowed the solid waste to be imported into the Venice Park Facility from a large area in the State of Michigan, provided that the facility maintains the capacity to handle all of the waste generated within the county. Currently a contract exist between the County Board of Commissioners and Waste Management, Inc. that guarantees the necessary capacity for Shiawassee County and permits the facility to received waste from a large portion of Michigan

### Recycling and composting programs

Develop educational material on the scope of the solid waste problem and the long-term cost associated with landfilling of solid waste. Explain how the existing collection system provides little or no incentive to reduce waste. Measure the success of the program with attitude survey.

### **Alternative 3: Facilities Based Approach**

#### Summary

This approach assumes that during the planning period there is an unmet need for additional facilities to support voluntary efforts in recycling, back yard composting, and household hazardous waste collection. This approach assumes that, based on the experience in other parts of Michigan, there are more people who would choose to recycle if convenient facilities were available. The resulting program would work to initially provide more convenient drop off centers for recyclable and hazardous items.

#### Components

##### Institutional arrangements

Institutional arrangements would be necessary to provide space and limited financial assistance to recycling drop off centers

##### Recycling and composting programs

Arrangements would also need to be made with hauling companies or the users of recycled materials to pick up materials from the drop off centers.

##### Resource recovery

Convenient location for centers such as grocery stores would need to be provided in a cost-effective manner such that the facility needs match the public demand.

##### Waste reduction, pollution prevention

Provide for small business waste audits and pollution prevention assistance.  
Require pollution incident prevention plan for certain types of commercial and industrial activities

##### Resource conservation

Initiate an education program which emphasizes the conservation of natural resources through purchasing of products with less packaging and products in easily recyclable containers. Encourage purchasing of items in bulk containers. Develop educational materials on the scope of the solid waste problem and the long-term cost associated with landfilling of solid waste. Expand how the existing collection system provides little or no incentive to reduce waste. Measure the demand for service and convenience with surveys and comment cards.

### Volume reduction

Compaction of waste at the landfill is being achieved with rolling compactors (a bulldozer type tractor with large spiked metal wheels), which rolls over the trash as it is placed in the fill area causing compaction from the weight of the vehicle. This practice reduces the volume by at least one-half.

### Sanitary landfill

The Venice Park Landfill uses modern technology in landfill design and operation including methane gas recovery. The facility uses the area method of filling with two protective liners.

### Collection processes and transportation

Collection is achieved by privately operated rear load packer trucks and front load packer trucks that handle commercial containers.

### Ultimate disposal area uses

The long-term use of the Venice Park Landfill is a privately owned, open to the public, recreational facility.

## **RANKING OF ALTERNATIVES**

**Table II-1**  
***Solid Waste Management Alternatives Ranking***

| <b>Criterion</b>              | <b>Existing System</b> | <b>Active Program</b> | <b>Educational Based Program</b> | <b>Facilities Based Program</b> |
|-------------------------------|------------------------|-----------------------|----------------------------------|---------------------------------|
| Technical Feasibility         | 4                      | 1                     | 5                                | 1                               |
| Economic Feasibility          | 5                      | 1                     | 3                                | 4                               |
| Energy Consumption/Production | 2                      | 2                     | 3                                | 2                               |
| Land Access/Transportation    | 3                      | 2                     | 2                                | 2                               |
| Environmental Impacts         | 2                      | 5                     | 4                                | 4                               |
| Public Health Effects         | 2                      | 3                     | 4                                | 3                               |
| Public Acceptability          | 4                      | 3                     | 4                                | 2                               |
| Total Points                  | 22                     | 17                    | 25                               | 18                              |
| Ranking Order                 | 2                      | 4                     | 1                                | 3                               |

The various alternatives were ranked by the Solid Waste Management Planning Committee as follows (5= most desirable to 1= less desirable)

### SECTION III 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 area locations and capacity to accept solid waste are identified as well as program management, funding, and enforcement roles for local agencies. Detailed information on recycling programs, evaluation, and coordination of the Selected System is included in Appendix B. Following is an overall description of the Selected System:

#### Waste reduction, Pollution prevention

Waste reduction efforts in both the public and private sector are working well to eliminate scrap material. These programs are driven by the cost of waste disposal and the desire of major waste generators to be good corporate citizens. Pollution prevention, on the other hand, has become a priority concern of the citizens of the county and their governments. Beginning in June of 1999 the process of reviewing site plans for commercial activities started to look at toxic materials, liquid waste, and floor drains. This plan calls for mandatory Pollution Incident Prevention (PIP) Plans for generators of small quantities of hazardous waste. The plan advocates a household hazardous waste (HHW) collection and disposal program. The plan also advocates the establishment of substantial fines for illegal burning of construction and demolition waste and toxic material in residential barrels.

#### Resource conservation

Resource conservation efforts are directed at reducing the consumption of materials and related packaging that quickly becomes a part of the solid waste stream. Increased conservation can be achieved by public education designed to encourage individual consumers and businesses to consider the merits of bulk purchasing and the use of recyclable containers as part of their purchasing practice. This type of education is general achieved through newspaper articles, speaking to interested organizations, and providing material for public educators to use in appropriate classes in the K-12 curriculum. The plan advocates that major institutions within the county provide leadership in purchasing practices that include recycled content.

#### Resource recovery

Recovering material from the waste stream is a relatively expensive process involving either major capital investment or labor-intensive hand picking of the waste stream. This plan recognizes and supports the methane gas recovery facility at the landfill, but does not advocate the establishment of a material recovery facility during this planning period.

#### Volume reduction

Most volume reduction has occurred because of the use of packer trucks and rolling compactor vehicles at the landfill. Volume based pricing is advocated in this plan as a method to both increase the removal of recyclable material from the waste stream (recycling) and to encourage other forms of compacting waste at the point of generation.

#### Sanitary landfill

The plan supports the use of modern sanitary land filling as the preferred means of disposal of non-recyclable materials. The plan strongly supports the use of double plastic lined landfill cells, rather than relying on natural clay or engineered clay liners. The double plastic liner with a leachate collection system and methane gas recovery has made the modern landfill the best available method of relatively low cost disposal.

## SELECTED SYSTEM

### Collection processes and transportation

The Plan supports the private sector as the principal provider of collection and calls for municipalities to contract with a single hauler in order to lower the cost to the consumers and in order to provide the stability necessary for the financial support of either curbside recycling or convenient drop off centers. The benefits of contracting in terms of less packer truck traffic, lower cost, and available recycling are viewed as greatly outweighing the benefits of price competition among haulers for every customer. Experience in other small communities in Michigan has shown that contracting has provided higher quality service for less cost.

### Ultimate disposal area uses

The Venice Park Landfill management and the community have agreed that the final use of the closed landfill may be a privately owned but open to the public park. The relative height of the facility in an area surrounded by flat farmland makes the site ideal for community and family gatherings, winter sledding, and fireworks displays.

### Institutional arrangements

The plan suggested a long-term program for the collection and disposal of household hazardous waste. A grant from the State of Michigan for a facility will be necessary to initiate the program. Cooperative funding for the operation from numerous public and private sector sources will also be needed to sustain the program.

### Recycling and composting programs

Again, the plan advocates that municipal composting in cities be bid out to commercial composting facilities. Transportation of yard waste could be provided either by municipal crews or by a private hauler as part of an overall collection and disposal contract. Commercial compost operations typically have the volume of material and type of facility that makes composting a true resource recovery operation by producing high quality compost with a minimum amount of odor problems. In many cases municipal leaf pick up programs have never produced any quality compost material because of the lack of specialized equipment designed to turn wind rows, control moisture and mask odor.

SELECTED SYSTEM

**IMPORT AUTHORIZATION**

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

**Table 1-A and Table 1-B**

**CURRENT AND FUTURE IMPORT VOLUME AUTHORIZATION OF SOLID WASTE**

| <b>IMPORTING COUNTY</b> | <b>EXPORTING COUNTY</b>   | <b>FACILITY NAME</b> | <b>AUTHORIZED QUANTITY/ DAILY</b>                               | <b>AUTHORIZED QUANTITY/ ANNUAL</b> | <b>AUTHORIZED CONDITIONS</b> |
|-------------------------|---------------------------|----------------------|---|------------------------------------|------------------------------|
| Shiawassee              | Alcona                    | Venice Park          | Unlimited*  | Unlimited*                         | P*                           |
| Shiawassee              | Bay                       | Venice Park          | Unlimited*  | Unlimited*                         | P*                           |
| Shiawassee              | Clinton                   | Venice Park          | Unlimited*  | Unlimited*                         | P*                           |
| Shiawassee              | Eaton                     | Venice Park          | Unlimited*  | Unlimited*                         | P*                           |
| Shiawassee              | Genesee                   | Venice Park          | Unlimited*  | Unlimited*                         | P*                           |
| Shiawassee              | Gratiot                   | Venice Park          | Unlimited*  | Unlimited*                         | P*                           |
| Shiawassee              | Ingham                    | Venice Park          | Unlimited*  | Unlimited*                         | P*                           |
| Shiawassee              | Ionia                     | Venice Park          | Unlimited*  | Unlimited*                         | P*                           |
| Shiawassee              | Isabella                  | Venice Park          | Unlimited*  | Unlimited*                         | P*                           |
| Shiawassee              | Jackson                   | Venice Park          | Unlimited*  | Unlimited*                         | P*                           |
| Shiawassee              | Kent                      | Venice Park          | Unlimited*  | Unlimited*                         | P*                           |
| Shiawassee              | Lake                      | Venice Park          | Unlimited*  | Unlimited*                         | P*                           |
| Shiawassee              | Lapeer                    | Venice Park          | Unlimited*  | Unlimited*                         | P*                           |
| Shiawassee              | Livingston                | Venice Park          | Unlimited*  | Unlimited*                         | P*                           |
| Shiawassee              | Macomb                    | Venice Park          | Unlimited*  | Unlimited*                         | P*                           |
| Shiawassee              | Mecosta                   | Venice Park          | Unlimited*  | Unlimited*                         | P*                           |
| Shiawassee              | Midland                   | Venice Park          | Unlimited*  | Unlimited*                         | P*                           |
| Shiawassee              | Montcalm                  | Venice Park          | Unlimited*  | Unlimited*                         | P*                           |
| Shiawassee              | Newaygo                   | Venice Park          | Unlimited*  | Unlimited*                         | P*                           |
| Shiawassee              | Oakland                   | Venice Park          | Unlimited*  | Unlimited*                         | P*                           |
| Shiawassee              | Osceola                   | Venice Park          | Unlimited*  | Unlimited*                         | P*                           |
| Shiawassee              | Saginaw                   | Venice Park          | Unlimited*  | Unlimited*                         | P*                           |
| Shiawassee              | Washtenaw                 | Venice Park          | Unlimited*  | Unlimited*                         | P*                           |
| Shiawassee              | Wayne                     | Venice Park          | Unlimited*  | Unlimited*                         | P*                           |
| Shiawassee              | Any Other Michigan County | Venice Park          | Less than the daily licensed capacity of the processing plant** | Less than 800 cubic yards**        | O**                          |

Authorization indicated by P = Primary Disposal; C = Contingency Disposal; = Other conditions

\*Provided that the average annual volume capacity of the Venice Park/WMI facility does not exceed 2,000 tons per day, based on a 365 day year and 3 cubic yards per ton; or does not exceed the capacity limitations of any revised operating agreement between the County and/ or Township and the operators of the facility current known as Venice Park RDF

\*\* Venice Park Landfill has an on-site solidification plant that receives relatively small amounts of waste from locations through the State of Michigan. Once processed into solid waste the material is authorized from non-listed counties if less than 800 cubic yards per year

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 and Table 2-B**

**CURRENT AND FUTURE EXPORT VOLUME AUTHORIZATION OF SOLID WASTE**

| EXPORTING COUNTY | IMPORTING COUNTY | FACILITY NAME         | AUTHORIZED QUANTITY DAILY | AUTHORIZED QUANTITY ANNUALLY | AUTHORIZED CONDITIONS |
|------------------|------------------|-----------------------|---------------------------|------------------------------|-----------------------|
| Shiawassee       | Genesee          | Citizen's Brent Run   | Unlimited                 | Unlimited                    | P                     |
| Shiawassee       | Saginaw          | People's              | Unlimited                 | Unlimited                    | P                     |
|                  |                  | Taymouth              | Unlimited                 | Unlimited                    | P                     |
| Shiawassee       | Washtenaw        | Arbor Hills           | Unlimited                 | Unlimited                    | P                     |
| Shiawassee       | Clinton          | Granger, Grand River. | Unlimited                 | 500,000 GYD <sup>3</sup> /YR | P                     |
|                  |                  | Granger, Wood St.     | Unlimited                 | Unlimited                    | P                     |
| Shiawassee       | Oakland          | Eagle Valley          | Unlimited                 | Unlimited                    | P                     |
| Shiawassee       | Clare            | Northern Oaks         | Unlimited                 | Unlimited                    | P                     |
| Shiawassee       | Calhoun          | BFI                   | Unlimited                 | Unlimited                    | P                     |
| Shiawassee       | Ionia            | Pitsch                | Unlimited                 | Unlimited                    | P                     |

Facilities are only listed if the exporting county is restricted to using specific facilities within the importing county  
 Authorization indicated by P = Primary Disposal; C = Contingency Disposal

SELECTED SYSTEM

**SOLID WASTE DISPOSAL AREAS**

The following identifies the names of existing disposal areas which will be utilized to provide the required capacity and management needs for the solid waste generated within the County for the next five years and, if possible, the next ten years. This document contains 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:

| Facility                 | County         | Operator  | OK  |
|--------------------------|----------------|-----------|-----|
| Brent Run Landfill       | Genesee        | Republic  | Yes |
| Citizen's Disposal, Inc. | Genesee        | Citizen's | Yes |
| Eagle Valley RDF         | Oakland        | WMI       | Yes |
| Granger Grand River      | Clinton        | Granger   | Yes |
| Granger Wood Street      | Clinton/Ingham | Granger   | Yes |
| Northern Oaks RDF        | Clare          | WMI       | Yes |
| People's Landfill        | Saginaw        | WMI       | Yes |
| Taymouth Landfill        | Saginaw        |           | Yes |
| Pitsch Disposal          | Ionia          | Pitsch    | Yes |
| Venice Park RDF          | Shiawassee     | WMI       | Yes |

Type III Landfill:

|                  |         |         |     |
|------------------|---------|---------|-----|
| Daggett Type III | Clinton | Daggett | Yes |
|------------------|---------|---------|-----|

Type A Transfer Facility

|                         |            |     |     |
|-------------------------|------------|-----|-----|
| Owosso Transfer Station | Shiawassee | WMI | Yes |
|-------------------------|------------|-----|-----|

Type B Transfer Facility: None

|                          |            |     |     |
|--------------------------|------------|-----|-----|
| Morrice Transfer Station | Shiawassee | WMI | Yes |
|--------------------------|------------|-----|-----|

Processing

|                                     |            |     |     |
|-------------------------------------|------------|-----|-----|
| Venice Park Solidification Facility | Shiawassee | WMI | Yes |
|-------------------------------------|------------|-----|-----|

See Section II for a list of facility descriptions of disposal facilities, which will be utilized to provide the required capacity, and management needs for solid waste generated within the County for the next five to ten years.

SELECTED SYSTEM

**SOLID WASTE COLLECTION SERVICES AND TRANSPORTATION:**

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

Commercial and municipal solid waste collection services are provided by private waste haulers in Shiawassee County.

COLLECTION SERVICES

| Service Provider          | Service Area    | Payment            | Disposal Facility                  |
|---------------------------|-----------------|--------------------|------------------------------------|
| Allied Disposal Bath, MI  | SW County       | Customer           | Granger Landfills - Clinton County |
| Allied Services           | All County      | Customer           | Citizens/Allied - Genesee County   |
| Granger Container Service | SW & Mid County | Customer           | Granger Landfills - Clinton County |
| City of Perry             | Same            | Municipal Contract | Venice Park WMI - Shiawassee Co.   |
| Adam's Disposal           |                 | Customer           | Venice Park WMI/Shiawassee Co.     |
| Chupek Disposal           |                 | Customer           | WMI, Citizens/Allied, Republic     |
| Standard Disposal         | All County      | Customer           | Citizens/Allied - Genesee County   |
| Tri-County                | Northern County | Customer           | Republic - Genesee                 |
| Valley Disposal/WMI       | County-Wide     | Customer           | Venice Park WMI - Shiawassee Co.   |

TRANSPORTATION

In order to transport waste to the Venice Park Landfill from outside the County and to move waste within the County major all weather roads must be maintained by either the State of Michigan or the County Road Commission. Road maintenance and rebuilding county roads in the vicinity of the Venice Park Landfill are major concern of both Venice Township and the County Road Commission.

SELECTED SYSTEM

**RESOURCE CONSERVATION EFFORTS**

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

| <b>Effort Description</b>                                       | <b>Est. Diversion Tons/Yr.</b> |                       |                        |
|---|--------------------------------|-----------------------|------------------------|
|   | <b><u>Current</u></b>          | <b><u>5th yr.</u></b> | <b><u>10th yr.</u></b> |
| Education and promotion on the purchase of durable goods        | N/A                            | 100                   | 200                    |
| Education and promotion on reuse useful products                | N/A                            | 100                   | 200                    |
| Education and promotion on purchasing recycled content products | N/A                            | 150                   | 300                    |
| Education and promotion on other waste reduction techniques     | N/A                            | 175                   | 300                    |

SELECTED SYSTEM

**WASTE REDUCTION, RECYCLING, & COMPOSTING PROGRAMS:**

**Volume Reduction Techniques**

The following describes the techniques utilized and proposed to be used throughout Shiawassee 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 |                                 |
|-----------------------|---|---------------------------------|
|                       | As Tipped                                     | Compacted at Landfill           |
| Compaction            | 183,000 gate cyds                             | Estimated 84,180 in place cyds. |

## 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.

### Volume of Material Available to Recycle

| Waste Composition*  | % of Total Waste | Amount in Cubic Yds* | Reported Diversion in CYD's 1997 | Percent of Total |
|---------------------|------------------|----------------------|----------------------------------|------------------|
| Paper & Paper Board | 39.2             | 84,584               | 2,657                            | 32%              |
| Glass***            | 6.2              | 13,378               | 312                              | 2.3%             |
| Metal***            | 7.6              | 16,399               | 819                              | 5%               |
| Food Waste          | 8.9              | 19,186               | N/A                              |                  |
| Wood                | 7.1              | 15,320               | N/A                              |                  |
| Plastic***          | 11.8             | 25,461               | 165                              | .6 %             |
| Yard Waste          | 6.6              | 14,241               | 13,813                           | 97%              |
| Other**             | 12.6             | 27,206               | N/A                              |                  |
| Total               | 100              | 215,775              | 17,766                           | 8.2%             |

\* EPA, 1997 Measuring Recycling, A Guide for State and Local Governments

\*\* Other materials included: construction and demolition, tires, household hazardous waste, batteries, diapers, cat litter, etc.

\*\*\*Impact of the Michigan Bottle Bill based on national estimates

### Current Conditions and Impediments to Recycling

Under the current conditions, recycling is driven by the desire of citizens to not waste resources, to do their part for the environment, and to support community projects.

The current conditions leave recycling as voluntary, not very convenient, and of little or no immediate economic value to the citizens. The current market prices for recycled commodities are low, and the cost of disposal is often not a major concern. The cost of disposal is generally a fixed cost and is not reduced for those who recycle. Curbside collection of recyclable material has generally not been available in rural areas. Recycling education programs have not been actively pursued by the public sector. Recycling information is not easily available to the public. No current brochure is in circulation. The newspapers do not regularly contain information on how to and where to recycle. The community based Internet service provider web site contains no information on recycling nor does the Mid Shiawassee County information kiosk.

## SELECTED SYSTEM

### Reducing or Eliminating Impediments to Recycling

| IMPEDIMENT  | POTENTIAL SOLUTION  |
|---|---|
| Inadequate Recycling Education  | Direct an agency to provide education.  |
| Few Economic Incentives to Recycle  | Encourage volume based pricing of solid waste removal to institute pay-as-you-throw pricing.  |
| Lack of easy access to information on available recycling facilities              | Direct an agency to promote existing recycling facilities.  |
| Construction and demolition material is not always considered solid waste.        | Require in demolition permits that construction material be either recycled and/or landfilled   |
| Recycling is not convenient   | Promote expansion of grocery store based drop off centers.  |
| Recycling is not convenient   | Encourage municipalities to contract with a single hauler who will provide curbside recycling as part of the service.                           |
| Residential trash burning is viewed as an alternative to recycling paper products | Provide education on the benefits of recycling and the problem with burning and ash disposal. Encourage municipalities to enforce burning laws. |

### **Decision of Recycling Programs**

- Recycling programs within the County are feasible. Details of existing and planned programs are included on the following pages.
- Composting programs within the County are feasible. Details of existing and planned programs are included on the following pages.
- Programs for source separation of potentially hazardous materials are feasible and details are included on the following pages.

## SELECTED SYSTEM

### RECYCLING AND COMPOSTING

The following is a brief analysis of the recycling and composting programs selected for the County in this Plan. The analysis covers various factors within the County and the impacts of these factors on recycling and composting. Following the written analysis the tables 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 lists the recycling, composting, and source separation of hazardous materials programs that are proposed in the future for the County. It is not this plan's intention to prohibit additional programs or expansions of current programs to be implemented beyond those listed.

Some resource recovery programs are already in place for County residents to use. Expansion of these programs to increase participation, recover more material, or include more items for collection will be the focus for the County Solid Waste Program.

Economics are an essential factor behind recycling operations in the County. Therefore, the focus of recycling programs will be on materials that are the most marketable, and provide the highest rate of return. Lack of stable markets in the area and the relatively low return on materials collected have lead to certain items being eliminated from collection by local recycling organizations. For resource recovery to continue in the County, emphasis needs to be placed on establishing and securing markets for materials generated. Typical materials collected include glass, certain plastics, metal, office paper, corrugated cardboard, newspaper, and magazines

The existing programs are located around disposal facilities in or near cities. County-based programs were created as a result of the 1990 Solid Waste Management Plan. The 1993 Report to the Michigan Department of Natural Resources indicates the need for four (4) recycling drop off centers. Currently recyclable materials can be dropped off at facilities in Burns Township, Venice Township, Owosso, and Laingsburg. Although not as convenient for the users as curbside recycling, the existing programs have done a good job of responding to the demand for recycling. The plan does not call for additional drop off locations. The plan calls for education and information to support the existing efforts.

TABLE III-1

RECYCLING:

| Program Name                 | Service Area     | Public /Private | Collection Point | Frequency Collected | Materials Collected   | Program Management Responsibilities |                  |                  |
|------------------------------|------------------|-----------------|------------------|---------------------|---|-------------------------------------|------------------|------------------|
|                              |                  |                 |                  |                     |   | Operation                           | Evaluation       | Development      |
| Venice Park RDF              | County           | Private         | Drop-off         | Daily               | Plastics, Newspaper, Corrugated Other Paper, Glass, Metals, Tires     | Private                             | Private          | Private          |
| Mother Earth Recycling*      | Mid-County       | Private         | Drop-off         | Daily               | Plastics, Newspaper, Corrugated Other Paper, Glass, Metals            | Private                             | Private          | Private          |
| Durand Iron                  | County           | Private         | On Site          | Daily               | Metals  | Private                             | Private          | Private          |
| Ovid-Iron-Metal              | County           | Private         | On Site          | Daily               | Metals  | Private                             | Private          | Private          |
| Shiawassee Council on Aging  | SE Planning Area | Public          | Drop-off         | Daily               | Newspaper   | Council on Aging                    | Council on Aging | Council on Aging |
| WMI Owosso Transfer Station  | Mid-County       | Private         | Drop-off         | Bi-weekly           | Newspaper, Corrugated   | Private                             | Private          | Private          |
| Greater Laingsburg Recyclers | Laingsburg Area  | Public          | Drop-off         | Monthly             | Plastics, Newspaper, Corrugated Other Paper, Glass, Metals, Magazines | Volunteer                           | Volunteer        | Volunteer        |
| VG's Food Center             | Mid-County       | Private         | Drop-off         | Daily               | Plastics, Newspaper, Corrugated Other Paper, Glass, Metals, Tires     | Private                             | Private          | Private          |
| Burns Township               | SE County        | Public          | Drop-off         | Monthly             | Plastics, Newspaper, Corrugated Other Paper, Glass, Metals            | Township                            | Township         | Township         |
| Vernon Township              | Township         | Public          | Curbside         | Weekly              | Plastics, Newspaper, Corrugated Other Paper, Glass, Metals            | Township                            | Township         | Township         |
| Village of Vernon            | Village          | Public          | Curbside         | Weekly              | Plastics, Newspaper, Corrugated Other Paper, Glass, Metals            | Village                             | Village          | Village          |
| City of Durand               | City             | Public          | Curbside         | Weekly              | Plastics, Newspaper, Corrugated Other Paper, Glass, Metals            | City                                | City             | City             |

\* May be closed by 2002

TABLE III-2

COMPOSTING:

| Program Name       | Service Area   | Public/Private | Collection Point | Frequency Collected      | Materials Collected     | Program Management Responsibilities |              |              |
|--------------------|----------------|----------------|------------------|--------------------------|-------------------------|-------------------------------------|--------------|--------------|
|                    |                |                |                  |                          |                         | Operation                           | Evaluation   | Development  |
| Venice Park RDF    | County         | Private        | Drop-off         | Spring<br>Summer<br>Fall | Grass<br>Leaves<br>Wood | Private                             | Private      | Private      |
| City of Owosso     | City Limits    | Public         | Drop-off         | Fall                     | Leaves                  | Municipality                        | Municipality | Municipality |
| City of Durand     | City Limits    | Public         | Drop-off         | Fall                     | Leaves                  | Municipality                        | Municipality | Municipality |
| City of Corunna    | City Limits    | Public         | Drop-off         | Fall                     | Leaves                  | Municipality                        | Municipality | Municipality |
| City of Perry      | City Limits    | Public         | Drop-off         | Fall                     | Leaves                  | Municipality                        | Municipality | Municipality |
| Village of Morris  | Village Limits | Private        | Drop-off         | Fall                     | Leaves                  | Municipality                        | Municipality | Municipality |
| City of Laingsburg | City Limits    | Public         | Curb-side        | Fall                     | Leaves<br>Wood          | Municipality                        | Municipality | Municipality |
| XYZ Landscaping    | E ½ of County  | Private        | On-site          | Daily                    | Grass<br>Leaves<br>Wood | Private                             | Private      | Private      |

TABLE III-3

SOURCE SEPARATION OF POTENTIALLY HAZARDOUS MATERIALS:

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

| Program Name      | Service Area | Public/Private | Collection Point | Frequency Collected | Materials Collected  | Program Management Responsibilities |            |             |
|-------------------|--------------|----------------|------------------|---------------------|----------------------|-------------------------------------|------------|-------------|
|                   |              |                |                  |                     |                      | Operation                           | Evaluation | Development |
| TSC, Owosso       | Mid-County   | Private        | Drop-off         | daily               | Automotive Batteries | Private                             | Private    | Private     |
| Auto-Zone, Owosso | Mid-County   | Private        | Drop-off         | daily               | Waste Oil            | Private                             | Private    | Private     |

TABLE III-4

PROPOSED RECYCLING:

| Program Name | Service Area | Public/Private | Collection Point | Frequency Collected | Materials Collected | Program Management Responsibilities |            |             |
|--------------|--------------|----------------|------------------|---------------------|---------------------|-------------------------------------|------------|-------------|
|              |              |                |                  |                     |                     | Operation                           | Evaluation | Development |
| None         |              |                |                  |                     |                     |                                     |            |             |

TABLE III-5

PROPOSED COMPOSTING:

| Program Name | Service Area | Public/Private | Collection Point | Frequency Collected | Materials Collected | Program Management Responsibilities |            |             |
|--------------|--------------|----------------|------------------|---------------------|---------------------|-------------------------------------|------------|-------------|
|              |              |                |                  |                     |                     | Operation                           | Evaluation | Development |
| None         |              |                |                  |                     |                     |                                     |            |             |

TABLE III-6

**PROPOSED SOURCE SEPARATION OF POTENTIALLY HAZARDOUS MATERIALS**

| Program Name                  | Service Area | Public/Private | Collection Point | Frequency Collected | Materials Collected  | Program Management Responsibilities |            |             |
|-------------------------------|--------------|----------------|------------------|---------------------|--|-------------------------------------|------------|-------------|
|                               |              |                |                  |                     |  | Operation                           | Evaluation | Development |
| Shiawassee County HHW Program | County       | Public         | Drop off         | Spring<br>Fall      | Aerosol Cans,<br>Automotive Products,<br>Lead Acid Batteries,<br>Household Batteries,<br>Cleaners and Polishers,<br>Hobby and Art Supplies,<br>Paints and Solvents,<br>Pesticides and<br>Herbicides, Personal and<br>Health Care Products. | County                              | County     | County      |

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.

| <u>Environmental Groups</u>     | <u>Activities</u>                                    |
|---------------------------------|--|
| Friends of the Shiawassee River | Annual River Clean up of tires, C&D, and MSW         |
| Soil Conservation Service       | Watershed Management Program and USDA Programs       |
| Greater Laingsburg Recycling    | Monthly Recycling Drop Center, Solid Waste Education |

| <u>Other: Management Entities</u> | <u>Program</u>                     |
|-----------------------------------|------------------------------------|
| Venice Park Recycling             | Recycling Drop Off Center          |
| Durand Senior Center              | Newspaper Recycling                |
| VG's Food Stores                  | Drop Off Center, Plastic Milk Jugs |
| City of Laingsburg                | Recycling Drop Off Center          |
| Mother Earth Recycling*           | Recycling Drop Off Center          |
| Tri-County Republic               | Recycling Drop Off Center          |
| MSU Cooperative Extension         | Recycling Education                |

\* may be closed in 2002

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.

| <b>Collected Material:</b>  | <b>Projected Annual Tons Diverted:</b> |        |         |
|-----------------------------|--|--------|---------|
|                             | Current                                | 5th Yr | 10th Yr |
| A. TOTAL PLASTICS           | 43.7                                   | 50     | 75      |
| B. NEWSPAPER                | 1,629                                  | 2,000  | 2,400   |
| C. CORRUGATED CONTAINERS    | 94                                     | 125    | 160     |
| D. TOTAL OTHER PAPER        | 75                                     | 100    | 150     |
| E. TOTAL GLASS              | 104.5                                  | 125    | 150     |
| F. STYROFOAM                | 12.22                                  | 15     | 0       |
| G. GRASS AND LEAVES         | 4,646                                  | 6,000  | 700     |
| I. CONSTRUCTION/ DEMOLITION | 1,525                                  | 1,530  | 1,575   |
| J. FOOD AND FOOD PROCESSING | N/A                                    |        |         |
| K. TIRES                    | 1400                                   | 1,500  | 1,550   |
| L. TOTAL METALS             | 363.15                                 | 400    | 500     |

**MARKET AVAILABILITY FOR COLLECTED MATERIALS:**

The following identifies how much recovered material the existing markets are able to utilize; and divert from the County's solid waste stream.

| Collected Material: (tons)     | In-State Material | Out-of-State Markets |
|--------------------------------|-------------------|----------------------|
| A. TOTAL PLASTICS:             | 43.7              |                      |
| B. NEWSPAPER:                  | 1629              |                      |
| C. CORRUGATED CONTAINERS       | 94                |                      |
| D. TOTAL OTHER PAPER           | 75                |                      |
| E. TOTAL GLASS                 | 54.5              | 50                   |
| F. OTHER MATERIALS CONCRETE    | 1,299.54          |                      |
| G. GRASS AND LEAVES            | 4646              |                      |
| H. TOTAL WOOD WASTE            | N/A               |                      |
| I. CONSTRUCTION AND DEMOLITION | 20                |                      |
| J. FOOD AND FOOD PROCESSING    | N/A               |                      |
| K. TIRES                       | 1400              |                      |
| L. TOTAL METALS                | 363.15            |                      |

SELECTED SYSTEM

The Market availability for recycling is a moving target. Mergers and fluctuating prices have resulted in a constantly changing market.

|                      |                        |
|----------------------|------------------------|
| Dart Container Corp  | Polystyrene Foam       |
| Glass Recyclers Ltd. | Glass Container        |
| Applegate Insulation | Newspaper              |
| Averill Recycling    | Mixed Paper            |
| Marsh Products       | Concrete               |
| Clean Tech           | Mixed Plastic          |
| Lorbec Metals        | White Goods and Metals |
| WM-Mideast           | Mixed Paper            |
| Allwaste Recycling   | Mixed Glass            |

MDEQ Recycled Materials Directory

**EDUCATIONAL AND INFORMATIONAL PROGRAMS:**

It is often necessary to provide educational and informational programs regarding the various components of a solid waste management system before and during its implementation. These programs are offered to avoid miscommunication, which results in improper handling of solid waste, and to provide assistance to the various entities that 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 1</u> | <u>Delivery Medium 2</u> | <u>Targeted Audience 3</u> | <u>Program Provider 4</u> |
|------------------------|--------------------------|----------------------------|---------------------------|
| 1                      | n f r o                  | p                          | EX HD DPA O               |
| 2                      | w f                      | p                          | EX                        |
| 3                      | n f                      | p                          | EX HD DPA                 |
| 4                      | n f                      | p                          | EX DPA                    |
| 5                      | n f                      | p                          | DPA                       |
| 6                      | w                        | b i                        | HD                        |

1 Identified by 1 = recycling; 2 = composting; 3 = household hazardous waste; 4 = resource conservation; 5 = volume reduction; 6 = pollution prevention

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

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

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

SELECTED SYSTEM

**TIMETABLE FOR SELECTED SYSTEM IMPLEMENTATION**

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

TABLE III-7

| <b>Management Components</b>            | <b>Timeline</b> |
|---|-----------------|
| Waste reduction, pollution prevention   | 2001-2005       |
| Resource conservation                   | 2000-2005       |
| Resource recovery                       | On-going        |
| Volume reduction                        | On-going        |
| Sanitary landfill                       | On-going        |
| Collection processes and transportation | On-going        |
| Ultimate disposal area uses             | 2001-2005       |
| Institutional arrangements              | 2001-2005       |
| Recycling and composting programs       | On-going        |

SELECTED SYSTEM

**SITING REVIEW PROCEDURES**

AUTHORIZED DISPOSAL AREA TYPES

- Type II and Type III Landfills
- Transfer Stations
- Processing Facilities

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

- Municipal Solid Waste Incinerator

SITING CRITERIA AND PROCESS

Any facilities requiring a construction permit under Act 451, Part 115 and proposed to be located in Shiawassee County shall undergo a review.

The Shiawassee County Planning Commission is responsible for making a determination of consistency or inconsistency in accordance with the siting mechanisms contained in the Plan. The Director of the Michigan Department of Environmental Quality (MDEQ) will make the final determination of consistency as part of the review of a construction permit application for the facility.

**Overview**

A Solid Waste Review Committee (SWRC) appointed by the County Board of Commissioners (BOC) will evaluate the project for its compliance and consistency with the criteria established in the Solid Waste Management Plan. The SWRC shall evaluate the proposal for consistency or inconsistency with the Plan and forward its findings to the County Planning Commission (CPC).

The CPC is responsible for verifying that the SWRC reviewed the proposal(s) in accordance with the siting criteria contained in the Plan. The CPC is responsible for making a determination of consistency or inconsistency in accordance with the siting mechanisms contained in the Plan.

**Section I - SWRC Appointment Process**

The Solid Waste Review Committee (SWRC) is appointed by the Shiawassee County Board of Commissioners.

Membership of this Committee shall be as follows:

|  |  |
|--|--|
| 1.- Solid Waste Industry Representative                                | 1.- Environmental Interest Group Representative                                |
| 1.- Local Government Representative (from the proposed host community) | 1 - The Director of the Environmental Health Division of the Health Department |
| 1.- County Planning Commissioner                                       | 1 - General Public   |
| 1 - County Commissioner  |  |

## Section II - Committee Procedures

The SWRC shall adopt its own by-laws and establish its own Chair. Proposals submitted to the SWRC may not be altered or amended once the Committee has begun deliberations. The SWRC and CPC shall not amend or alter these criteria and procedures outlined in the Solid Waste Review Process.

The SWRC Committee shall be appointed within 60 days of the approval of this plan by DEQ, except the local government representative, who shall be appointed within 30 days of the time a proposal is submitted. The initial appointments shall terminate at the end of the calendar year. There after the SWRC shall be appointed to one-year terms based on a calendar year.

## Section III - General Procedures for Submittal and Determination of Consistency

A proposal for Determination of Consistency with the Shiawassee County Solid Waste Management Plan shall be submitted to the staff of the *County Planning Commission (CPC)*, in accordance with the timelines detailed in this section.

To be considered administratively complete, the proposal must include all of the information required in Section IV, all necessary documentation demonstrating compliance with the criteria in Section V or Section VI (whichever is applicable), and a written description of the proposed facility and its intended use. Additional information may be submitted by the developer to elaborate on any significant points of the proposal.

The CPC staff shall determine if the proposal is administratively complete within 15 calendar days after receipt of the proposal. If a proposal does not contain information or documentation required in Sections IV and V or VI and a written description of the proposed facility and its intended use, it shall be returned to the developer as administratively incomplete. Written notification, listing all missing items, will be sent by the CPC staff to the developer; and the fee paid to the County by the developer for consistency review shall also be refunded.

After initial denial, the developer may resubmit a completed proposal and the application fee within 15 calendar days with no penalties and the proposal shall be considered under the current review process. If the *returned* proposal is not determined to contain all missing items listed in the first denial, within 15 calendar days, the proposal shall be returned to the developer along with the fee paid to the county and the matter shall be considered void and no longer under review. If the developer continues to pursue a MDEQ construction permit with a void submittal, the County will consider the matter inconsistent with this Plan.

The developer shall not be penalized for missing information that is subsequently identified by the SWRC during the review period, unless the developer fails to submit the additional information in accordance with the following procedures. The SWRC must inform the developer in writing, listing all items identified as missing from the proposal. The review process shall continue, *if* all missing information identified is submitted by the developer within 10 calendar days of the identification of any missing item(s). The SWRC shall then incorporate this information into the review process. If information is determined to be missing during the final days of, or after the end of the 60 day SWRC review period, the developer will still have 10 days to submit the information and the SWRC shall have no more than 5 working days to evaluate the material. If the developer fails to submit the additional information within the prescribed time limits, the proposal shall be determined to be inconsistent with this Plan.

## SELECTED SYSTEM

The SWRC staff shall, within 5 calendar days of receipt of a proposal for Consistency Determination, inform the SWRC, the CPC, and the BOC of the receipt of a proposal. A public notice will be posted upon the receipt of the application in an area accessible to the public during normal business hours. The BOC shall, at the next scheduled meeting, publicly announce the receipt of a proposal. A notice will be placed in a newspaper having significant circulation in the County regarding the receipt of the proposal.

Within 5 calendar days of receipt of the proposal by the SWRC staff, notice will be given to the proposed host community. A host community is defined as any Shiawassee County township, city or village within which property is owned by or is under option to the project proponent and which is incorporated in the total site of the proposed project. Townships, cities, or villages adjacent to the site of the proposed project may also be notified.

Fifteen (15) copies of the proposal and an application fee must be submitted by the developer to the SWRC with the proposal. An additional 10 copies may be requested from the developer if the County receives requests for additional copies.

Application fees shall be established annually by resolution. The fee schedule shall be available at the Community Development Department. The application fee will be used for the project review. Any portion of the fee not used in the review will be returned to the applicant. Application fees for proposals found to be administratively incomplete shall be refunded to the developer.

The review period for a proposal begins on the day the proposal is determined to be administratively complete by SWRC staff, or at the end of 15 calendar days after receipt of proposal if the SWRC staff fails to act as specified above. The host community, the SWRC, CPC, and the BOC shall be informed of the starting date of the review period within the first five working days after the determination is made.

The SWRC review period shall not exceed 60 calendar days unless an extension is agreed to by the SWRC and the developer. No more than one extension, of 15 calendar days duration is allowed.

Within the first 15 calendar days of review period, an informational meeting shall be scheduled by the SWRC. The meeting shall take place within the first 30 days of the review period. To the extent possible, the meeting shall be set in a location convenient for the community where the project is proposed. The purpose of the informational meeting is to present the proposal as submitted and to orient citizens and participants to the process. No formal testimony in support or opposing the proposal will be received. An opportunity for limited public comment will be provided by the SWRC at the beginning or the end of the meeting.

Notice of the meeting shall be published no less than seven calendar days before the meeting. Every municipality in the County shall receive a notice of the meeting no less than seven calendar days before the meeting. SWRC staff shall give at least seven calendar days notice to property owners and building occupants within 300 feet of all properties owned by or under option to the proponent that are part of the proposal.

Within seven calendar days after the end of the review period, the SWRC shall forward its recommendation for consistency or inconsistency, based solely on the siting criteria contained in the Plan, to the CPC. The CPC shall begin review of the proposal(s) at the end of the seven-day period.

Notice of the SWRC's decision shall be transmitted to every community in the County and the developer within five working days of the action.

If the SWRC fails to make a recommendation to the CPC on consistency of the proposal(s) within the seven day time period, then the CPC shall review the proposal(s) in accordance with the provisions of the siting criteria in the Plan, and within 45 calendar days, find the proposal(s) consistent or inconsistent with the Plan.

## SELECTED SYSTEM

If the SWRC fails to execute any of the assigned responsibilities or misses any of the established deadlines, the process immediately proceeds to the CPC for completion. If, because of the failure by the SWRC to act in accordance with the deadlines, the CPC assumes responsibility for reviewing a proposal(s), then the remaining deadlines and procedures imposed on the SWRC are transferred to the CPC. The CPC will have 15 calendar days to set schedules necessary to complete the remaining responsibilities for proposal(s) review.

Within 45 calendar days after the CPC receives a recommendation from the SWRC on a proposal's consistency with the Shiawassee County Solid Waste Management Plan, the CPC shall find the proposal(s) consistent or inconsistent with the Plan in accordance with the procedures approved as part of this Plan. If the CPC fails to act within that time, the proposal(s) shall be considered by the County to be consistent with the Plan. Final determination of consistency shall be made by the Director of the MDEQ.

### **Section IV - Requirements for Administrative Completeness - All Part 115 Facilities**

At the time a developer submits a proposal for review, all documentation (with content as would be submitted to the MDEQ for a construction permit) needed to demonstrate compliance with the informational requirements and the primary siting criteria detailed in Section IV and Va or VIa must be submitted. Shiawassee County acknowledges that some aspects of the proposal may change during the construction permitting process with MDEQ. All information requested is to provide an overview of the intent of the developer.

All proposals submitted to the SWRC shall contain, at a minimum, the following information with content as stated above. This data is for informational purposes only. The submittal of the information is sufficient for the purposes of administrative completeness. Neither the SWRC nor the BOC may evaluate the adequacy of the information required by this Section. The SWRC and/or the BOC may not require additional information or alter this list of items in any way.

Developers must submit this information for the proposal to be considered administratively complete. Evaluation of a proposal's consistency with the Shiawassee County Solid Waste Management Plan will be based on the Criteria in Section V or VI

Submitted proposals must be:

Typewritten on standard (8 1/2" x 11") paper with print no smaller than 10 point  
Contain a table of contents, identifying all sections, appendices, and attachments.

The proposal submitted must include:

#### **1. Name, Address, and Telephone for:**

- *Applicant*
- *Property owner of the proposed site*
- *Consulting engineers*
- *Designated project contact*

Does the proposal contain the information specified above?  Yes  No

#### **2. Proposed Site Location and Orientation**

SELECTED SYSTEM

a) **Legal Description of the Project Area**

Does the proposal contain the information specified above?  Yes  No

b) **Site Location Map** (showing all roadways and principal land features within two miles of the site)

Does the proposal contain the information specified above?  Yes  No

c) **Topographic Map** - A contour map at 1 inch = 200 feet scale for the operation area and a contour map at 1 inch = 400 feet scale for the entire site.

Does the proposal contain the information specified above?  Yes  No

d) **Proposed Site Size**

Does the proposal contain the information specified above?  Yes  No

e) **Access Roads**

- Location
- Surface condition and material
- Proposed access point to facility

Does the proposal contain the information specified above?  Yes  No

f) **Location of the wellheads of private water wells within one (1) mile and public water systems within three (3) miles of the site.**

Does the proposal contain the information specified above?  Yes  No

**3. Land Use and Cover**

a) **Site Land Use and Ground Cover**

Does the proposal contain the information specified above?  Yes  No

b) **Locations each of the following within a one (1) mile radius of the proposed site**

- Residences
- Commercial establishments
- Industries
- Institutions including schools, churches, hospitals, etc.
- Surrounding zoning

Does the proposal contain the information specified above?  Yes  No

c) **Location of Existing Utilities and Utilities to be moved**

Does the proposal contain the information specified above?  Yes  No

SELECTED SYSTEM

d) *Location of any public use airport licensed by the Bureau of Aeronautics, Michigan Department of Transportation that is within 10,000 feet of the active fill area.*

Does the proposal contain the information specified above? Yes No

e). *Location of 100-year flood plains on the site and within 1000 feet of the active fill area or work area as identified on MDNR prepared flood plain maps and as defined in the Act 641 Administrative Rules. If MDNR flood plain maps are not available, the developer may submit information from an alternate source selected by the developer.*

Does the proposal contain the information specified above? Yes No

f) *Determination of regulated wetlands from the MDNR or by an independent consulting firm hired by the developer.*

Does the proposal contain the information specified above? Yes No

g) *General soil characteristic*

Does the proposal contain the information specified above? Yes No

**4. Proposed Site and Facility Design**

a) *Overview of Proposal*

Does the proposal contain the information specified above? Yes No

b) *Location and Size*

From this point forward use the applicable subsection for the type of proposed facility

**Use the following for: Landfills**

c) *A narrative description detailing the following*

- Useful life and capacity of the proposed facility, including plans for composting and recovery of reusable and recyclable items
- Proposed Fill Area
- Proposed Borrow Area
- Proposed service area
- Cells
- On-site roads
- Structures
- Proposed leak detection systems

Does the proposal contain the information specified above? Yes No

d) *Proposed Design elements including liner systems*

Does the proposal contain the information specified above? Yes No

e) *Proposed Leachate Collection, Disposal and Monitoring Systems*

SELECTED SYSTEM

Does the proposal contain the information specified above? Yes No

**f) *Proposed Methane Gas Collection and Treatment System***

Does the proposal contain the information specified above? Yes No

**g) *Expected Roadway Traffic***

- Expected number of vehicles per day using the site
- Expected size of vehicles using the site

Does the proposal contain the information specified above? Yes No

**h) *Time Frames for Development, Use, and Closure***

Does the proposal contain the information specified above? Yes No

**i) *Odor Control Program* - the program must outline**

- Control Measures
- Monitoring process and response plan

Does the proposal contain the information specified above? Yes No

**j) *Fugitive Dust Control Program (daily use)* - the program must outline**

- Control Measures
- Monitoring process and response plan

Does the proposal contain the information specified above? Yes No

**k) *Intercounty transfer of waste***

Intercounty transportation of waste must be in compliance with the provisions authorized by the Shiawassee County Solid Waste Management Plan.

Does the proposal contain the information specified above? Yes No

**l) *Other Information***

The developer may submit additional information highlighting significant or unique features of the proposal.

Does the proposal contain the information specified above? Yes No

**Use the following for: Transfer Stations, Processing Plants, Composting Facilities, and Solidification Plants**

**c) *A narrative description detailing the following***

- Proposed service area

SELECTED SYSTEM

- Capacity
- Proposed Work Area
- On-site roads
- Structures
- Proposed liquid collection system

Does the proposal contain the information specified above? Yes No

d) ***Proposed Design elements***

Does the proposal contain the information specified above? Yes No

e) ***Proposed Liquid Collection, Disposal and Monitoring Systems***

Does the proposal contain the information specified above? Yes No

f) ***Expected Roadway Traffic***

- Expected number of vehicles per day using the site
- Expected size of vehicles using the site

Does the proposal contain the information specified above? Yes No

g) ***Time frames for Development, Use, and Closure***

Does the proposal contain the information specified above? Yes No

h) ***Odor Control Program*** - the program must outline

- Control Measures
- Monitoring process and response plan

Does the proposal contain the information specified above? Yes No

i) ***Fugitive Dust Control Program (daily use) - the program must outline***

- Control Measures
- Monitoring process and response plan

Does the proposal contain the information specified above? Yes No

j) ***Intercounty transfer of waste***

- Intercounty transportation of waste must be in compliance with the provisions authorized by the Shiawassee County Solid Waste Management Plan.

Does the proposal contain the information specified above? Yes No

k) ***Other Information***

SELECTED SYSTEM

- The developer may submit additional information highlighting significant or unique features of the proposal.

Does the proposal contain the information specified above? Yes No

**Section V - Siting Criteria - Sanitary Landfills**

In order for a landfill to be found consistent with the Shiawassee County Solid Waste Management Plan, the following Primary Criteria (Section V) must be met.

**Section V - Primary Criteria**

1. All proposed new sites and expansions of existing sites must meet Act 451, Part 115 vertical isolation to groundwater. The developer shall submit a signed statement which of the facility will meet Act 451, Part 115 requirements for vertical isolation to ground

*Siting language changes III-29-ITB*

Is a signed statement included? Yes No

2. All proposed new sites and expansion of existing sites must control drainage of storm water from the disposal area of the site. Systems must be designed to control, at a minimum, run-off volume from a 25-year, 24-hour rainfall event. The developer shall submit a signed statement which states that the design of this facility will control, at a minimum, run-off volume from a 25-year, 24-hour rainfall event.

Is a signed statement included? Yes No

3. Active fill areas and leachate collection, storage, and pre-treatment facilities (exclusive of hook-ups to sanitary sewer systems) must comply with the following isolation distances from public and private water supplies.

- a) A minimum of 2,000 feet isolation distance measured from the active work area (as defined in Part 115 Admin.Rules) down gradient, in the direction of groundwater flow of the first potable aquifer, to any existing Type 1 or Type 2A well-head as defined by PA 399 of 1976. Test wells existing at the time of the reviews are not subject to this isolation requirement.
- b) All other isolation distances from the active work area to any public and private water supplies must be in compliance with the provisions of Act 451, part 115. (Note: including the provision requiring 800-ft. isolation distance from private wells)

Does the proposal maintain the isolation distances specified above? Yes No

4. A facility shall not be located in an area of groundwater recharge as defined by the United States Geological Survey or in a well-head protection area as approved by the MDEQ. The developer shall submit a signed statement stating the facility is not in a groundwater recharge area or a wellhead protection area.

Is a signed statement included? Yes No

5. The exterior boundaries of the active work area for a landfill may not be located:

- a) Within 1,000 feet of an historic site, district or structure included on the national or state register of historic places or the state historical preservation officer.
- b) Within 1,000 feet of domiciles, schools (public or private), or an established outdoor recreation area

SELECTED SYSTEM

- c) Within 1,000 feet of inland lakes and perennial streams
- d) Within 4,000 feet of an existing platted subdivision
- e) Within 500 feet of adjacent property lines and road rights-of-way

Does the proposal maintain the isolation distances specified above? Yes No

6. If a radius of 1500 feet is drawn from any point on the perimeter of the active waste management area of the proposed disposal facility, and if that encompassed area has more than 25 domiciles, excluding those that are owned by the proposer, then the proposal is inconsistent with the Plan.

Does the proposal encompass more than 25 dwelling units? Yes No

7. The landfill shall not be constructed within 10,000 feet of a licensed airport runway.

Is the active work area within 10,000 linear feet of the edge of the runway? Yes No

8. A facility shall not be constructed on lands enrolled under Part 361, Farmland and Open Space Preservation, Act ( PA 116)

Is the active work area located on land enrolled under the Act? Yes No

9. A facility shall not be located in a 100 year flood plain as defined by Rule 323.311 of the administrative rules of Part 31, Water Resources Protection, of Act 451.

Is the active work area located in a 100 year flood plain? Yes No

10. A facility must be located on a parcel of at least 50 acres.

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Is the land in single ownership at least 50 acres in area? Yes No

11. A facility shall be located on a paved, all weather "class A" road. If the proposed facility is not on a "class A" road, the developer must include a signed statement to provide for upgrading and/or maintenance of the road serving the facility.

Is the site accessible via a county, "class A" roadway? Yes No

If the site is not directly accessible via a county, all-weather roadway  
Is the signed statement included? Yes No

12. The developer must provide a traffic safety study for all access roads to the facility. Issues of concern or hazardous conditions identified, as part of the study must be discussed by the developer in the proposal.



Are any and all hazardous conditions identified in the study resolved to the satisfaction of the agency responsible for the road or roads? Yes No

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13 Access to the site by truck traffic shall not be directly through a residential subdivision in which the roads were constructed primarily for local traffic within the boundaries of the subdivision.

Does the proposal identify access to the site that avoids direct routing through residential subdivisions as specified above? Yes No

14. The developer must submit a signed statement agreeing to provide staging and parking for trucks, employees, and visitors in an amount that is consistent with local ordinances and that will assure that the adjacent roads will remain free of waiting vehicles.

Is a signed statement with specific on site parking and staging plans included? Yes No

15. The developer must submit a signed statement agreeing to specific landscaping, including shrubbery, trees and berming, which are provided and maintained to beautify the view of the landfill.

Is a signed statement with specific landscaping, including shrubbery, trees and berming plans included? Yes No

16. A landfill may only be located on property zoned as agricultural or industrial at the time the facility developer applies to the County for a determination of consistency under the Plan. Facilities may not be located on property zoned residential.

Does the proposal contain the documentation specified above? Yes No



17. The owner and operator of a facility shall agree to cooperate with the County and host community on all current and future recycling, composting and household hazardous waste reduction activities. The developer must include a signed statement agreeing to this stipulation.

Is the signed statement included? Yes No

18. The owner and operator of a facility shall submit a detailed plan describing the proposed final end use of the site.

Does the proposal include written plans as stipulated above? Yes No

19. Upon written demonstration by the MDEQ that a situation exists, which is caused in part or in total by the solid waste facility, that impacts on the health or lives of residents by reason of actual contamination of certain water supplies, the owner/operator agrees to immediately provide an alternative source of water meeting the Safe Drinking Water Standards to those affected and designated users. The quantity shall be sufficient to satisfy all normal drinking and household uses. The developer must include a signed statement agreeing to this stipulation.

Is a signed statement included? Yes No

20. The developer must provide a written statement agreeing to provide the County and the host community copies of all quarterly monitoring reports required by the MDEQ.

Is a signed statement included? Yes No

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21. All operators of solid waste facilities permitted and licensed under Act 451 (formerly Act 641) in Shiawassee County must provide a written statement agreeing to submit to SWRC staff and the clerk of the host community in which the facility is located on or before the 30th day following the end of each calendar quarter, a report which covers the preceding quarterly 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 cubic gate yards and tons;
- e) Total quantity of waste received at the facility during the past three months originating from out-county sources in cubic gate yards and tons by county of origin;
- f) An estimate of remaining permitted capacity for continued waste disposal. The method for calculating this capacity must be included in the quarterly report.

Is a signed statement included? Yes No

22. The proposal shall include an Emergency Response Plan, which has been approved by the fire department having jurisdiction. 

Has the Emergency Response Plan been approved by the fire chief having jurisdiction over the site?  
Yes No

23. The existing site plan review process, which is utilized by the county or a local unit of government as part of its established practice, or as required by a zoning ordinance may be used to make authoritative recommendations concerning public roads, utilities, surface water drainage, vehicle access, landscaping, compliance with MDEQ administrative rules, and compliance with other related laws. However, it is understood that any site plan review is advisory to the decision on plan compliance made by the SWRC. 

Are the results of the advisory site plan review submitted? Yes No

**Section VI - Siting Criteria - Transfer Stations, Processing Plants, Composting Facilities, Solidification Plants,**

1. Collection, storage, and processes for the removal of liquid waste resulting from the operation of the facility shall be contained in a building. Floors must be sealed and sloped away from the entrance to prevent the unauthorized discharge of liquids to groundwater. All collection systems shall be double contained.

Does the proposal include the above specifications? Yes No

2. The active work area as defined in Part 115 of Act 451, as amended, shall not be located within 500 feet of adjacent property lines, road right-of-way, or lakes and perennial streams when the site is located in an agriculturally zoned area. The active work area shall not be located within 100 feet of adjacent property lines right-of-way lines, or lakes and perennial streams when the site is located in an industrially zoned area.

Does the proposal maintain the isolation distances specified above? Yes No

SELECTED SYSTEM

3. The licensed active work area, as defined in Part 115 of Act 451 rules, shall not be located within 500 feet of any existing public park, recreation area or school grounds. 

Is specific documentation included?  Yes  No

4. A facility shall be located on a paved, "class A" road. If a facility is not on such a road, the developer must include a signed statement to provide for upgrading and/or maintenance of the road serving the facility.

Is the site accessible via a county, a "class a" roadway?  Yes  No  
If not, is the signed statement included?  Yes  No

5. The developer must provide written abatement plans for the control of noise, vibration, odor, and litter. 

Are the satisfactory plans included?  Yes  No

6. The developer must provide a traffic safety study for all access roads to the facility. Issues of concern or hazardous conditions identified as part of the study must be discussed by the developer in the proposal.

Are all hazardous condition identified in the study resolved to the satisfaction of the agency responsible for the road/s?  Yes  No

7. Access to the site by truck traffic shall not be directly through a residential subdivision in which the roads were constructed primarily for local traffic within the boundaries of the subdivision.

Does the proposal identify the access requirements specified above?  Yes  No

8. The site must provide adequate staging and parking areas for trucks, employees, and visitors such that access roads remain free of waiting vehicles. 

Does the site design provide adequate staging/parking as indicated above?  Yes  No

9. The proposed site must be located in an area zoned for any of the following general uses: industrial or agricultural zoned areas. Facilities may not be located in areas zoned residential.

Is the site in one of the acceptable zoning classifications above?  Yes  No

10. A facility shall not be located in a 100 year flood plain as defined by Rule 323.311 of the administrative rules of Part 31, Water Resources Protection, of Act 451.

Is the site proposed in a 100-year flood plain?  Yes  No

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

Is specific documentation included?  Yes  No

12. Landscaping, including shrubbery, trees, and berming, shall be provided and maintained to beautify the view of the facility in accordance with local zoning requirements. The developer must include a signed statement agreeing to this stipulation.

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Is a signed statement included? Yes No

13. The owner and operator of a facility shall agree to cooperate with the County and host community on all current and future recycling, composting and household hazardous waste reduction activities. The developer must include a signed statement agreeing to this stipulation.

Is the signed statement included? Yes No

14. All operators of solid waste facilities permitted and licensed under Act 451 (formerly Act 641) in Shiawassee County must provide a written statement agreeing to submit to the SWRC staff and the clerk of the host community in which the facility is located on or before the 30th day after the end of each calendar quarter a 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 cubic gate yards and tons;
- e) Total quantity of waste received at the facility during the past three months originating from out-County sources in cubic gate yards and tons by county of origin.

Is a signed statement included? Yes No

15. The proposal shall include an Emergency Response Plan, which has been approved by the fire department having jurisdiction.

Has the Emergency Response Plan been approved by the fire chief having jurisdiction over the site?  
Yes No

16. The existing site plan review process, which is utilized by the county or a local unit of government as part of its established practice, or as required by a zoning ordinance may be used to make authoritative recommendations concerning public roads, utilities, surface water drainage, vehicle access, landscaping, compliance with MDEQ administrative rules, and compliance with other related laws. However, it is understood that any site plan review is advisory to the decision on plan compliance made by the County Planning Commission.

Are the results of the advisory Site plan review submitted? Yes No

## SELECTED SYSTEM

### **SOLID WASTE MANAGEMENT COMPONENTS**

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

#### **IDENTIFICATION OF RESPONSIBLE PARTIES**

The following documents the entities within the County that will have management responsibilities over the following areas of the Plan.

##### **Resource Conservation:**

Resource Conservation Education: - Any organization which provides an educational program including: the Soil Conservation District, MSU Cooperative Extension Service, the Shiawassee County Health Department, and the Community Development Department, Greater Laingsburg Recyclers.

Source or Waste Reduction - All manufacturers and packagers

Product Reuse - All thrift and second hand stores

Reduced Material Volume - Landfill operators, Waste haulers, Retail Bailleurs of Corrugated Cardboard

Increased Product Lifetime - Manufacturers

Decreased Consumption - All organizations which provide private or public education

##### **Resource Recovery Programs:**

Composting - City and Village governing bodies

Recycling – Volunteer organizations or municipalities

Energy Production - Venice Park RDF, Waste Management, and any other Sanitary Landfill sited within the County

##### **Volume Reduction Techniques:**

Venice Park RDF, Waste Management, and any other Sanitary Landfill sited within the County

##### **Collection Processes:**

Private Haulers

##### **Transportation:**

Private Haulers

##### **Disposal Areas:**

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Processing Plants - Venice Park RDF

Incineration - Not Applicable

Transfer Stations - Private haulers and local governments

Sanitary Landfills - Venice Park RDF, Waste Management, and any other Sanitary Landfill sited within the County

### **Ultimate Disposal Area Uses:**

Venice Township Board of Trustees in cooperation with the operator of the Sanitary Landfill

### **Local Responsibility for Plan Update Monitoring & Enforcement:**

Shiawassee County Community Development Department  
Shiawassee County Board of Commissioners

### **Educational and Informational Programs:**

MSU Cooperative Extension Service  
Shiawassee County Community Development Department  
Venice Park RDF, Waste Management  
Shiawassee County Health Department  
Cities and Village governmental bodies  
Soil Conservation Service  
Greater Laingsburg Recyclers

SELECTED SYSTEM

**LOCAL ORDINANCES AND REGULATIONS AFFECTING SOLID WASTE DISPOSAL**

The 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 must be described.

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

Facilities, which lie outside of the physical area of Part 115 control or license, that are accessory to the operation of a licensed facility are subject to county or local land use regulations. In addition, any part of the operation of licensed facility that is not regulated by Part 115 is under the jurisdiction of county or local land use regulations.

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.

Subjects:

- Yard waste hauling and containers
- Waste Collection
- Waste Transportation
- Recycling
- Composting
- The regulation of the accumulation and storage of material defined a "junk" in local ordinances, except when storage of material is determined to be an illegal landfill.
- Burning of Yard Waste
- Illegal Dumping
- Requiring Demolition Permits to specified the site of disposal of C&D Waste
- Regulation of the location and screening of commercial waste containers
- Pollution prevention regulations which regulate materials in quantities that are less than those covered by State Law or that regulate types hazardous materials which are not covered State laws

Units of Government:

The County of Shiawassee and all cities, villages and townships

## Section IV

### CAPACITY CERTIFICATIONS

Every County with less than ten years of capacity identified in its 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.

Sufficient capacity for the next ten years for the estimated 73,000 tons of waste generated is Shiawassee County guaranteed by the combination of an exiting agreement between the Shiawassee County Board of Commissioners, Venice Township and Waste Management of Michigan, Inc. which contains a commitment of air space to meet the Counties disposal needs until July 1, 2009. The agreement also limits the annual capacity of the facility to 2,000 tons per day until July 1, 2014, in order to assure the long-term capacity of the facility to serve the needs of Shiawassee County.

In addition to this agreement the county has unlimited authorization to export to Saginaw County's Peoples Landfill; Genesee County's Brent Run and Citizen's Landfill; and Ionia County's Pitsch Landfill. The County also has authorization to export to Clinton County's Granger Landfills provided that the annual capacity of the 2,000,000 cubic yards per year is not exceeded.

| Landfills                | County     | Capacity in Gate Yards* | Life in Year |
|--------------------------|------------|-------------------------|--------------|
| Venice Park              | Shiawassee | 13,600,000 cyds         | 20           |
| Brent Run                | Genesee    | 14,000,000 cyds         | 30           |
| Citizen's Disposal       | Genesee    | 4,000,000 cyds          | 25           |
| Granger: Wood St.        | Clinton    | 21,962,000 cyds         | 34           |
| Granger: Grand River     | Clinton    | 15,234,000 cyds         | 32           |
| People's Landfill        | Saginaw    | 5,301,641 cyds          | 20           |
| Pitsch Sanitary Landfill | Ionia      | 4,500,000 cyds          | 22           |

\*Quantities base on facility descriptions and 2:1 gate to air yards

$197,831 \text{ cyds} \times 10 \text{ yrs} =$   
 $1,978,310 \text{ cyds/10 yrs}$   
 Venice Park - **In Cty.**  
 13,600,000 gcyds  
 Brent Run - **Impl Export**  
 14,000,000 cyds  
 Citizens - 4,000,000 gcyds

APPENDIX

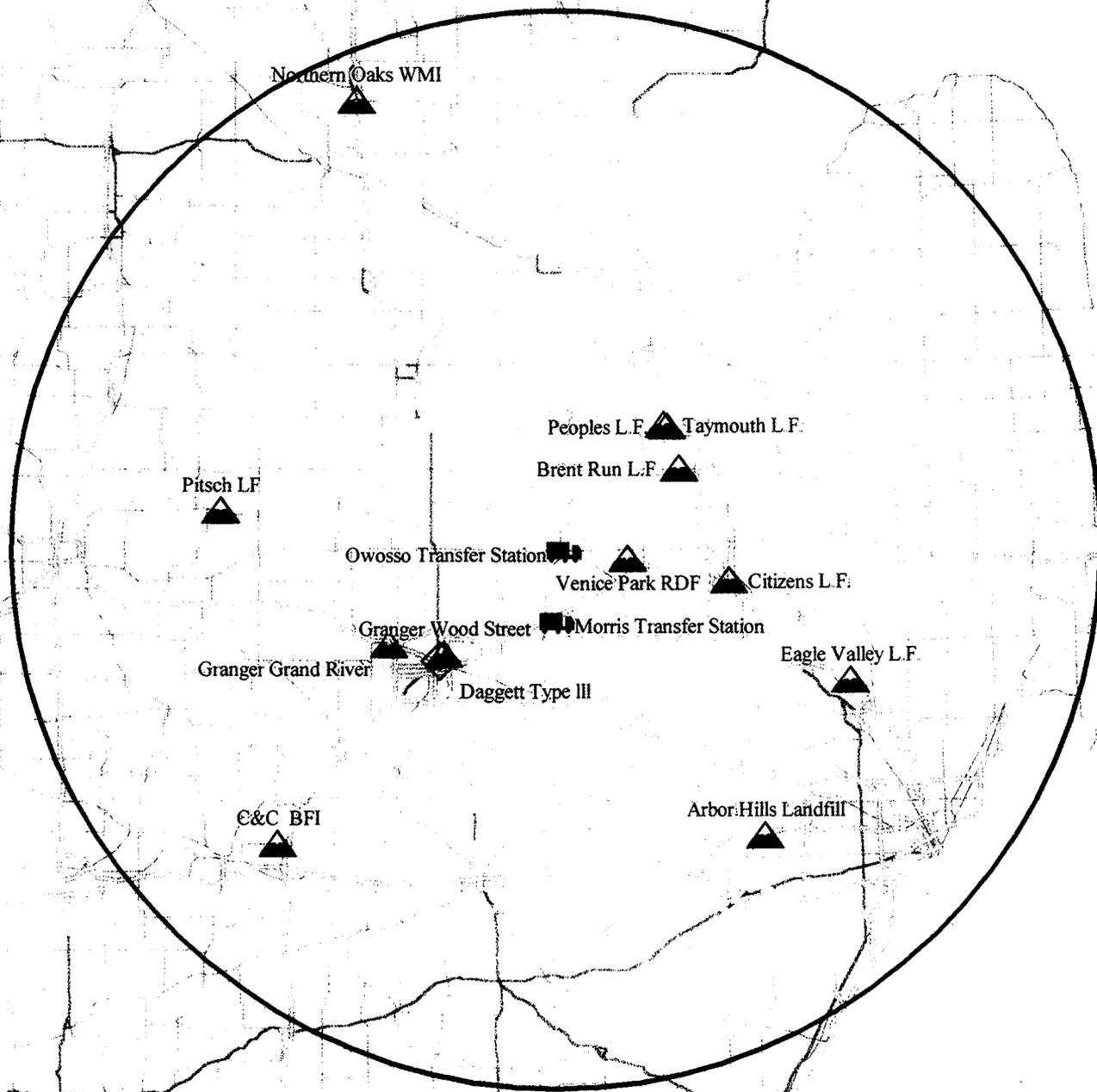
ADDITIONAL INFORMATION

REGARDING THE

SELECTED

SYSTEM

# Appendix A: Authorized Facilities



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## APPENDIX A

### ADDITIONAL INFORMATION REGARDING THE SELECTED SYSTEM

#### EVALUATION OF RECYCLING

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

A. The following factors were explored to determine what their effects would be on the resource recovery system for the selected system.

##### **Solid Waste Collection System:**

The existing private collection system provides relatively low cost collection. This system provides little incentive for residential recycling since the cost of disposal remains virtually the same regardless of the volume generated. Commercial and industrial recycling options are available to waste generators and are utilized by businesses to save money.

##### **Recycled material markets:**

The material markets for most recycled materials has not consistently supported recycling centers. Only through donated facilities, volunteer labor, charitable donations and /or government subsidies have such programs been able to continue to offer recycling to the community.

##### **Transportation Networks:**

Transportation cost in rural and small towns within Shiawassee County have made curbside recycling very costly. The density of residential development is often low to support curbside pick up. The distance to materials markets relative to the amount of material collected is excessive.

##### **Local Composting and Recycling Support Groups:**

A countywide recycling coalition was formed in the early 1990s. The group operated for about three years before dissolving. However, community based groups in Durand, Laingsburg, Owosso, Morrice, and Perry, have remained and continued to operate programs which support recycling.

Most Cities and Villages within the county manage fall leaves by piling them and allowing composting to occur. The Cities of Owosso and Laingsburg uses modern composting practices to derive a usable product.

##### **Institutional Arrangements:**

Efforts by municipalities to contract with a single waste hauler have had mixed success within the County. In some communities, the public has been reluctant to support the municipality's effort to contract for waste hauling, even when promised lower cost and/or curbside recycling service.

##### **Population Growth:**

The loss of population in several cities and villages, along with the growth of rural areas is making it more difficult to provide either curbside recycling services or convenient drop-off centers for recycling.

B. The following strategies are recommended for minimizing the above mentioned impediments to recycling and composting activities.

The plan calls for public education as the principal method for changing attitudes about recycling in the county. The approach is to change the focus from recycling to pollution prevention. Educational programs which support the household hazardous waste separation will also advocate removing reusable materials from the waste stream. Surface water protection education will emphasize the proper disposal of waste automotive fluids, tires, leaves, and brush in order to keep those materials out of rivers and streams. Ground water education will not only focus on the maintenance of on site sewage disposal system and wells, but will explain the wisdom of avoiding the unnecessary burial of reusable materials.

#### C. Program Coordination

Efforts to achieve coordination and cooperation among future programs are not perceived as a major problem in Shiawassee County. At the present time, most waste is going to a single landfill and is being transported by about five haulers. An interdepartmental staff of about five professionals will manage the proposed pollution prevention programs and keep the elected officials informed.

In the area of municipal composting the plan calls for the municipalities, with the exception of Owosso, to contract the actual composting of yard waste to an organization that uses modern composting practices and produces a reusable product.

#### D. Benefits of recycling and composting:

The environmental benefit of recycling is the reuse of material rather than the constant production and disposal of raw material. Recycling also lessens the potential for pollution caused by the disposal of solid waste. The economic benefits of recycling are saving energy, water and the reduced cost of manufacturing with recycled materials. Recycling also lessens the need for additional landfills. The economic benefit of recycling to an individual household is not evident today since the cost of recycling many materials is higher than the cost of disposal. However, it is commonly argued, that the true long-term cost of landfilling municipal solid waste is not reflected in the cost of disposal. The true cost of disposal is logically hidden within the cost of the items purchased.

The economic benefit of modern composting of yard waste is the production of free or low cost compost material.

#### E. Feasibility of Source Separation of Materials that Contain Potentially Hazardous Materials at the Disposal Site

Solid waste haulers are not likely to observe or remove typical household hazardous waste in the waste stream. Some larger items such as automotive batteries are typically recovered by the landfill operator.

## DETAILED FEATURES OF RECYCLING AND COMPOSTING PROGRAMS

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

| Materials    | Volume Being Recycled | Volume Available 1994 |
|--------------|-----------------------|-----------------------|
| Newspaper    | 632 tons              | 7312 tons             |
| Mixed Paper  | 242 tons              | N/A                   |
| Corrugated   | 101 tons              | N/A                   |
| Office Paper | 3 tons                | N/A                   |
| Glass        | 68 tons               | 1720 tons             |
| Metals       | 188 tons              | 1300 tons             |
| Plastics     | 64 tons               | 430 tons              |
| Used Oil     | 3500 gal              | N/A                   |
| White Goods  | 2015.4 tons           | N/A                   |
| Concrete     | 13,000 tons           | N/A                   |
| Styrofoam    | 12.22 tons            | N/A                   |

\* Resource Recycling Systems, Inc. Clean Michigan Fact Sheet MDNR, 1994

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

### EQUIPMENT SELECTION

Existing Programs: The programs listed below use commercial storage containers, which are either owned by the recycling center or provided by the buyer of the materials.

Venice Park Recycling

Mother Earth Recycling Center has bailing equipment

Durand Council on Aging

Greater Laingsburg Recyclers

VG's Grocery Store uses commercial storage containers to collect plastic milk jugs.

Goodwill

Salvation Army

### **Proposed Programs:**

No change is anticipated

**SITE AVAILABILITY & SELECTION**

Existing Programs: Existing sites are adequate for recycling centers except Mother Earth Recycling Center in Owosso. Mother Earth's building is dilapidated and will likely be ordered to be demolished in the next few years.

Proposed Programs: No change is anticipated

**Composting Operating Parameters:**

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

**Existing Programs:**

| <u>Program Name:</u>          | <u>pH Range</u>         | <u>Heat Range</u> | <u>Other Parameter</u> |
|-------------------------------|-------------------------|-------------------|------------------------|
|                               | <u>Measurement Unit</u> |                   |                        |
| <u>Venice Park Composting</u> | 6.0-8.5                 | 60 °. Celsius     | No plastic bags        |

**Proposed Programs:**

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

No change is anticipated

**COORDINATION EFFORTS:**

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

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

**EXISTING INSTITUTIONAL ARRANGEMENTS**

A formal agreement exist between WMI and Venice Township that deals with truck traffic, road maintenance, litter control, and other concerns. The agreement also provides curbside solid waste pick up of solid waste and recyclable materials for the residents of the township. The Township of Venice has also initiated an ordinance that deals with yard waste entering the township. The township has a standing committee to monitor the Landfill's compliance with the Host Township Agreement and the relevant local ordinances.

A formal agreement exists between WMI and the County, which guarantees capacity for the needs of the County, authorizes the recent expansion of the facility, and lists the counties authorized to import waste into the County. Managing the contractual agreement between the County and WMI is part of the responsibility of the County's Community Development Department.

The ultimate responsibility for implementing the Solid Waste Management Plan rests with the Shiawassee County Board of Commissioners. The Board of Commissioners has charged the County Planning Director to be cognizant of any pertinent ordinances, restrictions, or ongoing commitments contained in plans for air quality, water quality, or waste management, which may be required to meet state or federal standards. Any county level decision affecting current or anticipated programs for solid waste management, air quality, water quality, or land use planning will be made only thorough consultation with the Planning Director.

**COSTS & FUNDING:**

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

| <b>System Component<sup>1</sup></b>                     | <b>Estimated Costs</b> | <b>Potential Funding Sources</b>  |
|---|------------------------|---|
| <u>Composting Programs</u>                              | N/A                    | Municipal Budget  |
| <u>Recycling and Household Hazardous Waste Programs</u> | \$100,000/year         | State Grants, Sale of Materials, Donations, State and Local Government Assistance   |
| <u>Overall Solid Waste Management Planning</u>          | \$25,000 / year        | County Surcharge  |
| <u>Education and Public Information</u>                 | \$7,500 to 10,000/year | Existing Agency Budgets, Grants, Cooperative Arrangements with Allied Organizations |

<sup>1</sup> These components and their sub-components may vary with each system.

## EVALUATION SUMMARY OF THE SELECTED SYSTEM:

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

### Solid Waste Management Alternatives Ranking

| <b>Criterion</b>              | <b>Existing System</b> | <b>Active Program</b> | <b>Educational Based Program</b> | <b>Facilities Based Program</b> |
|-------------------------------|------------------------|-----------------------|----------------------------------|---------------------------------|
| Technical Feasibility         | 4                      | 1                     | 5                                | 1                               |
| Economic Feasibility          | 5                      | 1                     | 3                                | 4                               |
| Energy Consumption/Production | 2                      | 2                     | 3                                | 2                               |
| Land Access/Transportation    | 3                      | 2                     | 2                                | 2                               |
| Environmental Impacts         | 2                      | 5                     | 4                                | 4                               |
| Public Health Effects         | 2                      | 3                     | 4                                | 3                               |
| Public Acceptability          | 4                      | 3                     | 4                                | 2                               |
| Total Points                  | 22                     | 17                    | 25                               | 18                              |
| Ranking Order                 | 2                      | 4                     | 1                                | 3                               |

The various alternatives were ranked as follows (5=most desirable to 1= less desirable)

| Selection Consideration  | Evaluation      | Impact on Selected Management System |
|--|-----------------|--------------------------------------|
| Existing Collection, Management, Processing, Treatment, Transportation and Disposal Problems by Type and Volume Including: |                 |                                      |
| Residential and Commercial Solid Waste   | Accepted at the | No impact on                         |
| Industrial Sludges   | Venice Park     | process of selecting                 |
| Pre Treatment Residues   | RDF and not     | alternative                          |
| Municipal Sewage Sludge  | restricted from | management                           |
| Air Pollution Control Residue  | importing       | systems.                             |
| Contaminated Site Cleanup Waste  | Counties        |                                      |
| Other (i.e. Medical Waste)   |                 |                                      |

Additional information can found in the records and files of Shiawassee County's solid waste "information repository" located in the Community Development Department.

**ADVANTAGES AND DISADVANTAGES OF THE SELECTED SYSTEM:**

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

**ADVANTAGES:**

1. Public Health:

The proposed solid waste management system will provide for the public health by assuring that the best available technology is used in landfill design, leachate collection system and methane gas recovery systems. In addition, an effort will be made to remove household hazardous and other "small quantities" of hazardous materials for the waste stream.

2. Economics:

Sanitary landfilling, as the primary means of disposals is the most cost-effective method of disposing of solid waste, if the landfill is designed, constructed, and maintained properly. The cost of recycling is currently significantly higher than the cost of disposal at landfills. Recycling, although expensive, promotes the broader goal of reuse of materials as opposed to the unnecessary consumption of raw materials, energy and water associated with production of goods with new materials.

3. Environmental Effects:

The selected alternative focuses on new programs in the areas of pollution prevention and environmental education. The approach is directed at activities that have an easily understood impact on the environment, in terms of water quality.

4. Energy Use:

The plan calls for municipal contracting for both curbside disposal and recycling drop-off centers. Significant fuel can be saved if one hauler per week rather than four or five haulers serve a community. Energy is also saved by modern landfill practices, which recover methane gas as a fuel to produce electricity.

5. Siting Problems:

New siting criteria for landfills, transfer stations, and processing plants are contained within this plan. These criteria require timely decisions based upon a straight forward set of criteria; and are designed to allow well designed and located proposals to be approved.

**DISADVANTAGES:**

1. The selected alternative relies heavily on the continuation of current practices in the private sector. County government has little control over these practices.
2. The selected alternative requires significant public education to occur. The plan does not provide a direct funding source for a public education program.
3. The selected program anticipates that existing recycling efforts can be financially maintained, and that pollution prevention education will encourage recycling and increase the demand for well managed recycling drop off centers. The plan provides minimal direct funding source to support recycling efforts.
4. The selected alternative strongly encourages municipalities to contract with a single waste hauler, but provides no specific measures to achieve that objective.
5. The plan expects cooperative efforts to fund new activities. The plan relies heavily on grants and the use of existing budgeted funds. Several of the proposed activities would be more easily achieved if the plan provided for new sources of funding.
6. The selected alternative does not alter the current economic situation that makes landfilling material easier and less costly than recycling.

The Solid Waste Management Committee believes that an approach which emphasizes pollution prevention will have a higher degree of public acceptance and support than an approach which emphasizes financial support of recycling programs. Throughout the planning process the principal concerns voice at the meetings have been about ground water and surface water quality.

# Appendix B

## NON-SELECTED SYSTEMS

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

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

### **ALTERNATIVE 1: CURRENT SOLID WASTE MANAGEMENT SYSTEM**

#### **SYSTEM COMPONENTS:**

##### **RESOURCE CONSERVATION EFFORTS:**

No educational or promotional programs.

##### **VOLUME REDUCTION TECHNIQUES:**

Existing landfill and haulers practices are adequate.

##### **RESOURCE RECOVERY PROGRAMS:**

Existing programs at Owosso, Durand, Morrice, Laingsburg, and Venice Park Landfill are meeting the demand for recycling drop off centers.

##### **COLLECTION PROCESSES:**

Private collection and two transfer stations are adequate.

##### **TRANSPORTATION:**

High transportation cost to take recyclable to markets located in major metropolitan areas.

##### **DISPOSAL AREAS:**

Sufficient disposal capacity.

##### **INSTITUTIONAL ARRANGEMENTS:**

Public resistance to additional municipal contracts for pick up and hauling of solid waste.

##### **EDUCATIONAL AND INFORMATIONAL PROGRAMS:**

Very little public education or information available on solid waste issues.

**CAPITAL, OPERATIONAL, AND MAINTENANCE COSTS:**

No capital cost. Maintenance costs of roads associated with private landfill are managed in township host agreement. Minimal operating cost associated with responding to public inquiries concerning recycling and household hazardous waste.

Significant cost associated with issues related to the landfill and managing the 1990 Solid Waste Management Plan.

**EVALUATION SUMMARY OF NON-SELECTED SYSTEM:**

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

The existing system was discarded because it fails to provide adequate public education and information on solid waste related issues. It was also discarded because it lacks a specific direction for future programs.

**ADVANTAGES AND DISADVANTAGES OF THE NON-SELECTED SYSTEM:**

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

**ADVANTAGES:**

1. Low cost to public sector.
2. No advocacy of changes in the behavior of the general public.
3. Less liability.
4. Responsive to the concerns of general public.

**DISADVANTAGES:**

1. Insufficient public education and information on options for waste management.
2. Insufficient public education on environmental issues related to waste disposal.
3. Lack of a program to properly dispose of household hazardous waste materials.

## **ALTERNATIVE 2: ACTIVE SOLID WASTE MANAGEMENT PROGRAM SYSTEM COMPONENTS:**

### **RESOURCE CONSERVATION EFFORTS:**

Initiate an education program that emphasizes the conservation of natural resources through purchasing of products with less packaging and products in easily recyclable containers. Encourage purchasing of items in bulk containers.

### **VOLUME REDUCTION TECHNIQUES:**

Educate residents concerning waste reduction practices, household composting, and other ways to minimize waste generation.

### **RESOURCE RECOVERY PROGRAMS:**

Develop and participate in the operational cost of three new recycling drop-off centers.

### **COLLECTION PROCESSES:**

Encourage curbside recycling in urban areas. Encourage the continue recycling efforts at the Venice Park Landfill including the installation of additional equipment designed to separate or process recyclable materials.

### **TRANSPORTATION:**

High transportation cost to take recyclable materials to markets that are located in major metropolitan areas.

### **DISPOSAL AREAS:**

Sufficient disposal capacity.

### **INSTITUTIONAL ARRANGEMENTS:**

Continue existing arrangements with other counties; and encourage municipal franchising with waste haulers as method to achieve volume based pricing and recycling opportunities.

### **EDUCATIONAL AND INFORMATIONAL PROGRAMS:**

A major public information program designed to encourage residential and commercial recycling, residential and large-scale composting and pollution prevention.

### **CAPITAL, OPERATIONAL, AND MAINTENANCE COSTS:**

High cost associated with operating the program.

## **EVALUATION SUMMARY OF NON-SELECTED SYSTEM:**

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

The active system was discarded because it is costly in terms of both capital and operating cost.

## **ADVANTAGES AND DISADVANTAGES OF THE NON-SELECTED SYSTEM:**

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

### **ADVANTAGES:**

1. Effective in handling most solid waste related problems.
2. Comprehensive in terms of managing recycling and the solid waste stream.

### **DISADVANTAGES:**

1. Requires rules and regulations concerning the practices businesses and families.
2. Increases the public liability.
3. Premature in terms of the public support and available volunteers.
4. Beyond the current financial capability of the County of Shiawassee.

## **ALTERNATIVE 3: FACILITIES BASED APPROACH TO SOLID WASTE MANAGEMENT.**

### **SYSTEM COMPONENTS**

#### **RESOURCE CONSERVATION EFFORTS:**

Initiate an education program that emphasizes the conservation of natural resources through purchasing of products with less packaging and products in easily recyclable containers. Encourage purchasing of items in bulk containers.

#### **VOLUME REDUCTION TECHNIQUES:**

Educate residents concerning waste reduction practices, household composting, and other ways to minimize waste generation.

#### **RESOURCE RECOVERY PROGRAMS:**

Develop and participate in the capital cost of three new recycling drop-off centers located in proximity to residential population centers or along work trip routes.

#### **COLLECTION PROCESSES:**

Encourage curbside recycling in urban areas. Encourage the continue recycling efforts at the Venice Park Landfill including the installation of additional equipment designed to separate or process recyclable materials

#### **TRANSPORTATION:**

High transportation cost to take recyclable to markets located in major metropolitan areas.

#### **DISPOSAL AREAS:**

Sufficient disposal capacity.

#### **INSTITUTIONAL ARRANGEMENTS:**

Continue existing arrangements with other counties; and encourage municipal franchising with waste haulers as method to achieve volume based pricing and recycling opportunities.

#### **EDUCATIONAL AND INFORMATIONAL PROGRAMS:**

A major public information program would be required to encourage residential and commercial recycling, residential and large-scale composting and pollution prevention.

#### **CAPITAL, OPERATIONAL, AND MAINTENANCE COSTS:**

The County would become a major source of capital to support resource recovery programs.

## **EVALUATION SUMMARY OF NON-SELECTED SYSTEM**

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

This approach assumes that during the planning period there is an unmet need for additional facilities to support voluntary efforts in recycling, back yard composting, and household hazardous waste collection. This approach assumes that based on experience in other parts of Michigan, that there are more people who would choose to recycle if convenient facilities were available. The resulting program would work to initially provide more convenient drop of centers for recyclable and hazardous items.

### **ADVANTAGES AND DISADVANTAGES OF THE NON-SELECTED SYSTEM:**

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

#### **ADVANTAGES:**

1. Defines an important but limited role for the County.
2. Minimizes long term operational cost by restricting the County's participation to capital cost.

#### **DISADVANTAGES:**

1. Increases the public liability.
2. Premature in terms of the public support and available volunteers.
3. Beyond the current financial capability of the County of Shiawassee.

## Appendix C

# PUBLIC PARTICIPATION AND APPROVAL

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

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

### SOLID WASTE PLANNING MANAGEMENT COMMITTEE MEETINGS

| No.  | DATE               | TIME      | PLACE                        |
|--|--------------------|-----------|------------------------------|
| 1  | March 31, 1998     | 6:30 p.m. | Board of Comm Room, Corunna  |
| 2  | April 23, 1998     | 6:30 p.m. | Board of Comm Room, Corunna  |
| 3  | May 21, 1998       | 7:00 p.m. | Board of Comm Room, Corunna  |
| 4  | June 18, 1998      | 7:00 p.m. | Board of Comm Room, Corunna  |
| 5  | July 16, 1998      | 7:00 p.m. | Board of Comm Room, Corunna  |
| 6  | August 20, 1998    | 7:00 p.m. | Board of Comm Room, Corunna  |
| 7  | September 17, 1998 | 7:00 p.m. | Board of Comm Room, Corunna  |
| 8  | November 19, 1998  | 7:00 p.m. | Board of Comm Room, Corunna  |
| 9  | February 4, 1999   | 7:00 p.m. | Board of Comm Room, Corunna  |
| 10   | May 27, 1999       | 7:00 p.m. | Board of Comm Room, Corunna  |
| 11   | August 17, 2000    | 7:00 p.m. | Board of Comm. Room, Corunna |
| 12   | September 20, 2000 | 7:00 p.m. | Board of Comm Room, Corunna  |
| 13   | November 30, 2000  | 7:00 p.m. | Board of Comm Room, Corunna  |
| 14   | May 17, 2001       | 7:00 p.m. | Board of Comm Room, Corunna  |
| 15   | June 14, 2001      | 7:00 p.m. | Board of Comm Room, Corunna  |
| 16   | July 12, 2001      | 7:00 p.m. | Board of Comm Room, Corunna  |
| <b>Public Hearing</b>                                    |                    |           |                              |
| 17   | October 11, 2001   | 7:00 p.m. | Board of Comm Room, Corunna  |
| <b>Approval Meeting</b>                                  |                    |           |                              |
| 18   | December 20, 2001  | 7:00 p.m. | Board of Comm Room, Corunna  |
| <b>Respond to Concerns of the Board of Commissioners</b> |                    |           |                              |
| 19   | January 24, 2002   | 7:00 p.m. | Board of Comm Room, Corunna  |

### PLANNING COMMITTEE APPOINTMENT PROCEDURE:

The County Board of Commission asked for input and recommendations from the Shiawassee Townships Association, the mayors, of the cities, refuse haulers and the operator of the Venice

Park Landfill. Proposed appointees names were discussed at several meetings of the County Board's Economic and Physical Development Committee. Candidate names were then reviewed by the entire Board of Commissioners at a Committee of the Whole meeting and finally brought before the full Board in regular session for action.

## PLANNING COMMITTEE

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

### Four representatives of the solid waste management industry:

1. Chuck Cassie                      Waste Management, Inc.
2. Kevin Beste                      Browning Ferris Industries
3. Ric Crawford                      LSG Trucking
4. Karrol Knapp                      Durand Iron

### One representative from an industrial waste generator:

1. Jeffery Hoose                      Memorial Healthcare Center

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

1. Carla Wysko                      Shiawassee Soil Conservation District
2. Ellen Link                      Laingsburg Community Recyclers

### One representative from County government

All government representatives shall be elected officials or a designee of an elected official.

1. Don Platt                      County Zoning Administrator, appointed by the Board of Commissioners

### One representative from township government:

1. Dennis Braid                      Venice Township Supervisor

### One representative from city government:

1. Phil Hathaway                      City of Owosso

### One representative from the regional solid waste planning agency:

1. Norma Lee                      GLS Regional Planning Agency

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

1. Tim Doyle                      Durand Resident
2. Jodi Keck                      Caledonia Township Resident
3. Terry McLeod                      Resident near the Landfill

# The Argus-Press Company

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Richard E. Campbell, Chairman  
Thomas E. Campbell, President & Publisher

## AFFIDAVIT OF PUBLICATION

In the matter of the Notice of Public Hearing on Shiawassee County Solid Waste Management Plan - October 11, 2001

STATE OF MICHIGAN )  
County of Shiawassee ) ss Thomas E. Campbell

Being first duly sworn, says that he is the Publisher of THE ARGUS-PRESS, a newspaper published in the English language for the dissemination of local or transmitted news and intelligence of a general character and legal news, which is a duly qualified newspaper and that annexed hereto is a copy of a certain order taken from said newspaper, in which the order was published once, and that the only insertion of said Notice was on the 7th day of September, A. D., 2001.

### NOTICE OF PUBLIC HEARING

In accordance with Section 11535 of Part 115 of the Natural Resources and Environmental Protection Act 451 of 1194, as amended; Notice is hereby given of Public Hearing on the Shiawassee County Solid Waste Management Plan. Copies of the Plan are available for public inspection at the Shiawassee County Community Development Department, Planning Division, 201 N. Shiawassee Street, Corunna, Michigan. Phone 989.743.2229. A copy of the plan is available for inspection or copying at cost by interested persons. The Hearing will be held on:

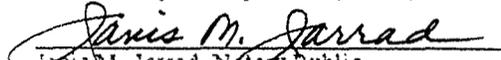
Date: October 11, 2001  
Time: 7:00 p.m.  
Place: Board of Commissioner's Room  
Surbeck Building, First Floor  
210 N. Shiawassee Street, Corunna, Michigan

For further information call Dennis Dunnigan at 989.743.2229  
Publish: September 7, 2001

SIGNED:



Subscribed and sworn to before me  
this 7th day of September, A. D., 2001.

  
James M. Jarrad, Notary Public  
Shiawassee County, Michigan  
My Commission expires January 18, 2003

**Hearing Record: Written**



**Saginaw County Metropolitan  
Planning Commission**

400 Court Street

Saginaw, Michigan 48602

Phone: (517) 797-6800 • Fax: (517) 797-6809

August 14, 2001

Dennis Dunnigan  
Shiawassee County Community Development Department  
201 N. Shiawassee Street  
Corunna, Michigan 48817

Dear Mr. Dunnigan,

The Saginaw County Planning Department has reviewed the Shiawassee County Solid Waste Management Plan and found it to be thorough and concise. This exchange of letters between Saginaw and Shiawassee County will suffice as a written reciprocal agreement to allow the free flow of solid waste between our counties. We have no comments except that this appears to be a very good plan. Congratulations on all your hard work.

Sincerely,

A handwritten signature in black ink that reads "William W. Wright".

William W. Wright,  
Planning Director

## **Hearing Record: Minutes**

**Designating Planning Agency  
Public Hearing on the Solid Waste Management Plan of 2001  
October 11, 2001 7:00 p.m.  
Board of Commissioner's Room  
Surbeck Building, First Floor  
210 N. Shiawassee Street, Corunna, Michigan**

Present were: Don Platt, Dennis Braid, Phil Hathaway, Ellen Link, Chuck Cassie, Norma Lee, Tim Doyle, and Terry McLeod, Ric Crawford, Dennis Dunnigan, Steve Esling and Don McLeod,

Mr. Dunnigan explained that the plan is responsive to an outline and model for Solid Waste Management Plans, which is mandated by the State of Michigan. Much of what the plan contains are tables and forms that are required by the model. The plan estimates the amount of solid waste generated in the County and indicates which facilities are authorized to dispose of that waste. The facilities and counties receiving the waste have acknowledged their willingness to accept waste from Shiawassee County. The plan also specifies which other counties may use the disposal facilities in Shiawassee County (Venice Park Landfill and the Transfer Stations). The regulation of import and export of waste is done to insure that adequate disposal capacity is available for Shiawassee County. The plan allows several other counties in Michigan to use the Venice Park Landfill, including all counties with GM plants. The plan acknowledges the existing programs that are designed reduce, reuse and recycling solid waste. The plan proposes that the County initiate programs to remove household hazardous waste (HHW) from the waste stream that is destined for landfills. I am happy to say that this program will be beginning in the late spring of 1992, with grant funding from the State of Michigan. The plan recommends that the HHW program be expanded into broader efforts to prevent pollution of ground water and surface water. The program would include working with businesses that use small quantities of hazardous materials and monitoring the quality of ground and surface water. Pollution prevention initiative is proposed to be handled by a working group of existing personnel from the County Environmental Health Division, in Community Development Department, Drain Commissioner's Office, U.S. Natural Resource and Conservation Service, and the Michigan Department of Environmental Quality.

Mr. Dunnigan indicated that the suggestion of the staff of the Department of Environmental (DEQ) Quality and a complementary letter from Saginaw County are the only written Hearing comments received to date. However, the record is open until October 29, 2001 for additional comments.

The floor was open for comments on the draft plan. Mr. Hathaway asked if the existing Owosso Transfer Station complies with the proposed siting criteria. He further asked if the Transfer Station would be allowed to expand under the proposed siting criteria. Mr. Hathaway also objected to the DEQ's comment which indicate that the an advisory Site Plan Review Process can not be use in siting new facilities because Part 115 rules preempt local ordinances. The Hearing was declared closed.

Discussion followed on several of the suggestions made by the DEQ staff.

It was agreed to meet again on November 8, 2001 to consider various changes to the plan which are based on the comments received during the 90 day review process and the Public Hearing.

Meeting was adjourned at 9:00 p.m.

Hearing record prepared by Dennis C. Dunnigan, DPA

## **Appendix D Plan Implementation Strategy and Attachments**

### **Plan Implementation Strategy**

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

The County views its primary responsibility as insuring that landfill space is available for the residents of the county. A landfill needs to be within a reasonable hauling distance from the sources of waste generation. Adequate capacity needs to be available for the future. This plan and the existing agreement with WMI discharge that responsibility.

The existing agreement between Waste Management of Michigan, Inc. and the Shiawassee County Board of Commissioners contains a commitment of airspace to meet the counties disposal needs until July 1, 2009. The agreement provides for an annual average volume capacity of the Venice Park RDF of 2,000 tons per day. Waste Management and Venice Township have a parrell agreement which also insures capacity.

In addition to the primary concern, the County intends to create a pollution prevention program. The first initiative is a grant application for funding of a household hazardous waste facility and program. This program will work in cooperation with ongoing programs to address non-point sources of pollution and the programs dealing with illicit storm sewer connections and failing on-site septic systems. These programs are being initiated by the coordinated efforts of the Soils Conservation District, the Environmental Health Division of the County Health Department, and the Community Development Department under the oversight of the County Board of Commissioners. Grants and current budgets will fund the proposed programs. The agencies that are currently involved have accepted responsibility within their grant agreements. The next step is to institutionalize sufficient funding to support ongoing efforts in dealing with small quantities of hazardous waste and public environmental education. Once the funding is secured, the program will operated by either contracting with an existing agency or by adding staff at the County level.

Educational activities will begin with an initiative to inform the public of the available recycling opportunities. This will be achieved by sponsoring the placement of information on where and how to recycle in local newspapers, the printing of a brochure on available recycling, and adding recycling information to the Counties web page.

The Shiawassee Board of Commissioners has the primary responsibility for implementing the plan. The County Community Development Department is the line department of the Board of Commissioners charged with solid waste management planning and carrying out plan implementation activities within the budgetary control and operational oversight of the Board of Commissioners.