STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
LANSING

RICK SNYDER
GOVERNOR

DAN WYANT
DIRECTOR

October 24, 2014

Mr. Mike Gingell, Chairperson
Oakland County Board of Commissioners
1200 North Telegraph Road
County Service Center, Building 12 East
Pontiac, Michigan 48341-0421

Dear Mr. Gingell:

The locally approved amendment to the Oakland County Solid Waste Management Plan (Plan Amendment) received by the Department of Environmental Quality (DEQ) on July 3, 2014, is hereby approved.

The Plan Amendment makes the following changes:

- Adds the BP-Pontiac facility located at 900 Baldwin Road, Pontiac, as a processing facility and transfer station.
- Identifies the BP-Pontiac facility located at 900 Baldwin Road, Pontiac, as a solid waste disposal area that is approved for both a processing facility and a transfer station, and for which further siting is not required.
- Updates the map in the attachment section of all solid waste disposal facilities including the proposed BP-Pontiac processing/transfer facility.

The DEQ would like to thank Oakland County for its efforts in addressing its solid waste management issues. If you have any questions, please contact Ms. Rhonda S. Oyer, Chief, Sustainable Materials Management Unit, Solid Waste Section, Office of Waste Management and Radiological Protection, at 517-284-6591; oyerr@michigan.gov; or DEQ, P.O. Box 30241, Lansing, Michigan 48909-7741.

Sincerely,

Bryce Feighner, P.E., Chief
Office of Waste Management and
Radiological Protection
517-284-6551

Requested Amendment to the Oakland County

Solid Waste Management Plan

Oakland County requests an amendment to its 1999 Solid Waste Management Plan which was approved by the Michigan Department of Environmental Quality on June 24, 2003.

The requested amendment is for the inclusion of a proposed Type A Transfer Station and a Waste Processing Facility to be located on the same piece of property in the City of Pontiac at 900 Baldwin Avenue.

The specific pages of the Plan that will be amended are listed below in the order they appear in the Plan. Copies of revised tables and facility descriptions are included where applicable.

Section III -1 THE SELECTED SOLID WASTE MANAGEMENT SYSTEM

- Under "Designated Act 451 Solid Waste Disposal Area Facilities: Oakland County, Michigan on page III-4 and 5, list the Pontiac facility as both a Transfer Station and a Waste Processing Facility. Specifically, list the facility under:
    - <u>Waste Processing Facilities</u>
        - BP-Pontiac, 900 Baldwin Road, Pontiac, New Designation
    - <u>Transfer Stations</u>
        - BP-Pontiac, 900 Baldwin Road, Pontiac, New Designation

Section III – 4 SOLID WASTE DISPOSAL AREAS

- Under "Designated Solid Waste Disposal Areas in Oakland County:" on page III-12, list the Pontiac facility as both a Transfer Station and a Waste Processing Facility. A revised table is attached. Specifically, list the facility under:
    - <u>Type A Transfer Facility</u>
        - BP-Pontiac
    - <u>Processing Facility</u>
        - BP-Pontiac

Section III – 4 CONTINUED: SOLID WASTE FACILITY DESCRIPTIONS

- Provide 2 Facility Description sheets within Section III for the Pontiac disposal facility. One will be listed as a Waste Transfer facility - pages III-24 (a) and III-24 (b). The other will be listed as a Waste Processing facility – pages III-30 (a) and III-30 (b). The facility descriptions are attached.

Section III – 4 CONTINUED: SOLID WASTE FACILITY DESCRIPTIONS

- On page III-54 and 56, include the Pontiac facilities under "A.4: Solid Waste Processing Facility Disposal Areas" and under "A.5: Solid Waste Transfer Station Disposal Area". Revised tables are attached. Specifically, list the facilities as:
    - A.4: Solid Waste Processing Facility Disposal Areas
        - BP-Pontiac / New / 990 Baldwin Road, Pontiac / The site is located in Section 17 and 20 in the City of Pontiac and is 38 acres, more or less. The site is to be shared with a waste processing facility.
    - A.5: Solid Waste Transfer Station Disposal Area
        - BP-Pontiac / New / 990 Baldwin Road, Pontiac / The site is located in Section 17 and 20 in the City of Pontiac and is 38 acres, more or less. The site is to be shared with a transfer station facility.

Attachment C – MAPS

- A Revised list of designated facilities and a facility map are included, which identify the location of the proposed facility.

III-4 SOLID WASTE DISPOSAL AREAS

Designated Solid Waste Disposal Areas in Oakland County – revised table – November 2013

Type II Landfill:	Type A Transfer Facility:
Collier Road Landfill	Allied Waste Transfer Station – Southfield
Eagle Valley Landfill	Allied Waste Site – Pontiac
Oakland Heights Landfill	SOCRRA Transfer Station – Troy
SOCRRA Landfill	SOCRRA Transfer Station – Madison Heights
	City of Pontiac Site – Pontiac
	Waste Management Site – Pontiac
Type III Landfill:	FPT – Pontiac Division – Pontiac
None Designated	BP – Pontiac
	Processing Facility:
	SOCRRA MRF Site – Troy
Incinerator:	RRRASOC MRF Site – Southfield
None Designated	Allied Waste Site – Pontiac
	City of Pontiac Site – Pontiac
	Waste Management Site – Pontiac
Waste-to-Energy Incinerator:	FPT – Pontiac Division – Pontiac
None Designated	BP – Pontiac
Other:	Waste Piles:
None Designated	None Designated

SELECTED SYSTEM

FACILITY DESCRIPTIONS

Facility Type: Waste Transfer

Facility Name: BP-Pontiac

County: Oakland Location: City of Pontiac Town: 3N Range: 10E Section(s) 17 and 20

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: see list on reverse side

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

*Explanation of special wastes, including a specific list and/or conditions: Sludge, auto fluff, non-friable asbestos

Site Size:

Total area of facility property:	38	acres
Total area sited for use:	38	acres
Total area permitted:	38	acres
Operating:	N/A	acres
Not excavated:	N/A	acres
Current capacity:	1,750	tons per day
Estimated lifetime:	TBD	years
Estimated days open per year:	286	days
Estimated yearly disposal volume:	500,500	tons

(if applicable)

Annual energy production:

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

1) Pine Tree Acres Landfill; Macomb County; ☒ Public ☐ Private Owner: Pine Tree Acres, Inc.;

2) Brent Run Landfill; Genesee County; ☒ Public ☐ Private Owner: Brent Run Landfill, Inc.;

3) Citizens Disposal Landfill; Genesee County; ☒ Public ☐ Private Owner: Citizens Landfill, Inc.;

4) Richfield Landfill; Genesee County; ☒ Public ☐ Private Owner: Richfield Landfill, Inc.;

5) Carleton Farms Landfill; Wayne County; ☒ Public ☐ Private Owner: Republic Services of Michigan I, LLC;

6) Michigan Disposal Waste Treatment Plant; Wayne County; ☒ Public ☐ Private Owner: Michigan Disposal, Inc.;

7) Riverview Land Preserve; Wayne County; ☒ Public ☐ Private Owner: City of Riverview;

8) Sauk Trail Hills Landfill; Wayne County; ☒ Public ☐ Private Owner: Sauk Trail Development, Inc.;

9) Woodland Meadows Landfill; Wayne County; ☒ Public ☐ Private Owner: Waste Management of Michigan, Inc.;

10) City of Livonia Landfill; Wayne County; ☒ Public ☐ Private Owner: City of Livonia;

11) Detroit Incinerator; Wayne County; ☒ Public ☐ Private Owner: Detroit Renewable Power, LLC

SELECTED SYSTEM

FACILITY DESCRIPTIONS

Facility Type: Waste Processing

Facility Name: BP-Pontiac

County: Oakland Location: City of Pontiac Town: 3N Range: 10E Section(s) 17 and 20

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: see list on reverse side

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

*Explanation of special wastes, including a specific list and/or conditions: Sludge, auto fluff, non-friable asbestos

Site Size:

Total area of facility property:	38	acres
Total area sited for use:	38	acres
Total area permitted:	38	acres
Operating:	N/A	acres
Not excavated:	N/A	acres
Current capacity:	1,750	tons per day
Estimated lifetime:	TBD	years
Estimated days open per year:	286	days
Estimated yearly disposal volume:	500,500	tons

(if applicable)

Annual energy production:

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

1) Pine Tree Acres Landfill; Macomb County; ☒ Public ☐ Private Owner: Pine Tree Acres, Inc.;

2) Brent Run Landfill; Genesee County; ☒ Public ☐ Private Owner: Brent Run Landfill, Inc.;

3) Citizens Disposal Landfill; Genesee County; ☒ Public ☐ Private Owner: Citizens Landfill, Inc.;

4) Richfield Landfill; Genesee County; ☒ Public ☐ Private Owner: Richfield Landfill, Inc.;

5) Carleton Farms Landfill; Wayne County; ☒ Public ☐ Private Owner: Republic Services of Michigan I, LLC;

6) Michigan Disposal Waste Treatment Plant; Wayne County; ☒ Public ☐ Private Owner: Michigan Disposal, Inc.;

7) Riverview Land Preserve; Wayne County; ☒ Public ☐ Private Owner: City of Riverview;

8) Sauk Trail Hills Landfill; Wayne County; ☒ Public ☐ Private Owner: Sauk Trail Development, Inc.;

9) Woodland Meadows Landfill; Wayne County; ☒ Public ☐ Private Owner: Waste Management of Michigan, Inc.;

10) City of Livonia Landfill; Wayne County; ☒ Public ☐ Private Owner: City of Livonia;

11) Detroit Incinerator; Wayne County; ☒ Public ☐ Private Owner: Detroit Renewable Power, LLC

SELECTED SYSTEM

Solid Waste Processing Facility Disposal Areas – revised table – November 2013

Name of facility	New or Existing Designation	Address	Area Approved for Which Siting is Not Required
SOCRRA Waste Processing Plant	Existing	995 Coolidge Hwy, Troy	The site is located in Section 32 of Troy Township. This facility shares a 10.88 acre site with a SOCRRA transfer station. At present, the facility is operated as a source separated MRF.
RRRASOC Waste Processing Plant	Existing	20000 West Eight Mile Road, Southfield	The site is located in Section 35 of Southfield Township and is 6.2 acres in size, more or less. At present, the facility is operated as a source separated MRF.
Allied Waste Industries Waste Processing Plant	Existing	1591 Highwood, Pontiac	This site is located in Sections 8 and 9 of Pontiac Township and contains some 40 acres, more or less. The proposed waste processing facility has not been placed under construction as of October 1999. The site is to be shared with a transfer station facility.
City of Pontiac Waste Processing Plant	New	575 Collier Road, Pontiac	This site is located on the non-wetlands portion of the Collier Road Sanitary Landfill properties identified in Pontiac's November, 1998 designation request which lay in Section 8, Section 9 and in that part of Section 4 which lies southeast of a line which runs through a point on the joint section line between Section 4 and Section 5 which is located 470 feet North of the joint corner of Sections 4, 5, 8 and 9 and which line has a bearing of North 53 degrees 21 minutes 00 seconds East. Access to the facility from the public road system must be from Collier Road. The permissible area contains 132 acres, more or less. The proposed waste processing facility has not been placed under construction as of October, 1999. The site is to be shared with a transfer station facility.
Waste Management – City Waste Sys. Waste Processing Plant	Existing	1525 West Highwood, Pontiac	This site is located in Section 9 of Pontiac Township and contains some 15 acres, more or less. The proposed waste processing facility has not been placed under construction as of October, 1999. The site is to be shared with a Waste Management transfer station facility.
FPT (Ferrous Processing & Trading)	New	500 Collier Road, Pontiac	This site is located in Section 9 of Pontiac Township and contains some 38 acres, more or less. The proposed waste processing facility has not been placed under construction as of June, 2000.
BP-Pontiac	New	900 Baldwin Road, Pontiac	This site is located in Sections 17 and 20 in the City of Pontiac and is 38 acres, more or less. The site is to be shared with a transfer station facility.

SELECTED SYSTEM

Solid Waste Transfer Station Disposal Areas – revised table – November 2013

Name of facility	New or Existing Designation	Address	Area Approved for Which Siting is Not Required
Allied Waste Industries Transfer Station	Existing	21430 W. Eight Mile Road, Southfield	This site is located in Section 34 of Southfield Township and contains 5.5 acres, more or less.
SOCRRA Transfer Station	Existing	991 Coolidge Hwy., Troy	This site is located in Section 32 of Troy Township and contains 10.9 acres, more or less. The site is shared with the SOCRRA waste processing facility, where source separated activities are currently occurring.
Allied Waste Industries Transfer Station	Existing	1591 Highwood, Pontiac	The transfer station site is located in Sections 8 and 9 of Pontiac Township and contains 40 acres, more or less. The proposed transfer station has not been placed under construction as of October, 1999. The site is to be shared with a MRF facility.
City of Pontiac Transfer Station	New	575 Collier Road, Pontiac	This transfer station is located on the non-wetlands portion of the Collier Road Sanitary Landfill properties identified in Pontiac's November, 1998 designation request which lay in Section 8, Section 9 and in that part of Section 4 which lies southeast of a line which runs through a point on the joint section line between Section 4 and Section 5 which is located 470 feet North of the joint corner of Sections 4, 5, 8 and 9 and which line has a bearing of North 53 degrees 21 minutes 00 seconds East. Access to the facility from the public road system must be from Collier Road. The permissible area contains 132 acres, more or less. The proposed transfer station has not been placed under construction as of October, 1999. The site is to be shared with a MRF facility.
Waste Management – City Waste Systems, Inc. Transfer Station	Existing	1525 West Highwood, Pontiac	The transfer station site is located in Section 9 of Pontiac Township and contains 15 acres, more or less. The proposed transfer station has not been placed under construction as of October, 1999. The site is to be shared with a Waste Management MRF facility.
FPT (Ferrous Processing & Trading)	New	500 Collier Road, Pontiac	This site is located in Section 9 of Pontiac Township and contains some 38 acres, more or less. The proposed waste processing facility has not been placed under construction as of June, 2000.
BP-Pontiac	New	900 Baldwin Road, Pontiac	The site is located in Sections 17 and 20 in the City of Pontiac and is 38 acres, more or less. The site is to be shared with a waste processing facility.

Oakland County's Designated Act 451 Solid Waste Disposal Facilities
November, 2013

Designation Type/Name	Address	Municipality	Comment
Type II Landfills			
Collier Road Landfill	575 Collier Road	Pontiac	Existing
Eagle Valley Recycling & Disposal Facility	600 W. Silverbell	Orion Township	Existing
Oakland Heights Dev.	2350 Brown Road	Auburn Hills	Existing
SOCRRA	741 Avon Road	Rochester Hills	Existing
Waste Processing Facilities			
Allied Waste Industries	1591 Highwood	Pontiac	Existing
RRRASOC	20000 W. Eight Mile Rd.	Southfield	Existing
SOCRRA	995 Coolidge Highway	Troy	Existing
Waste Management	1525 West Highwood	Pontiac	Existing
Collier Road	575 Collier Road	Pontiac	New (in 2000)
FPT Pontiac	500 Collier Road	Pontiac	New (in 2000)
BP – Pontiac	900 Baldwin Road	Pontiac	New
Transfer Stations			
Allied Waste Industries	21430 W. Eight Mile Rd.	Southfield	Existing
Allied Waste Industries	1591 Highwood	Pontiac	Existing
SOCRRA	991 Coolidge Highway	Troy	Existing
Waste Management	1525 West Highwood	Pontiac	Existing
Collier Road	575 Collier Road	Pontiac	New (in 2000)
FPT Pontiac Division	500 Collier Road	Pontiac	New (in 2000)
SOCRRA	29740 John R Road	Madison Heights	Revised existing "Disposal Area" Designation changed To transfer station (2000)
BP – Pontiac	900 Baldwin Road	Pontiac	New

OAKLAND COUNTY MICHIGAN
Economic Development & Community Affairs

L. Brooks Patterson, County Executive
Executive Office Building
2100 Pontiac Lake Road, Bldg. 41W
Waterford, MI 48328-0412
248.858.0720
www.advantageoakland.com

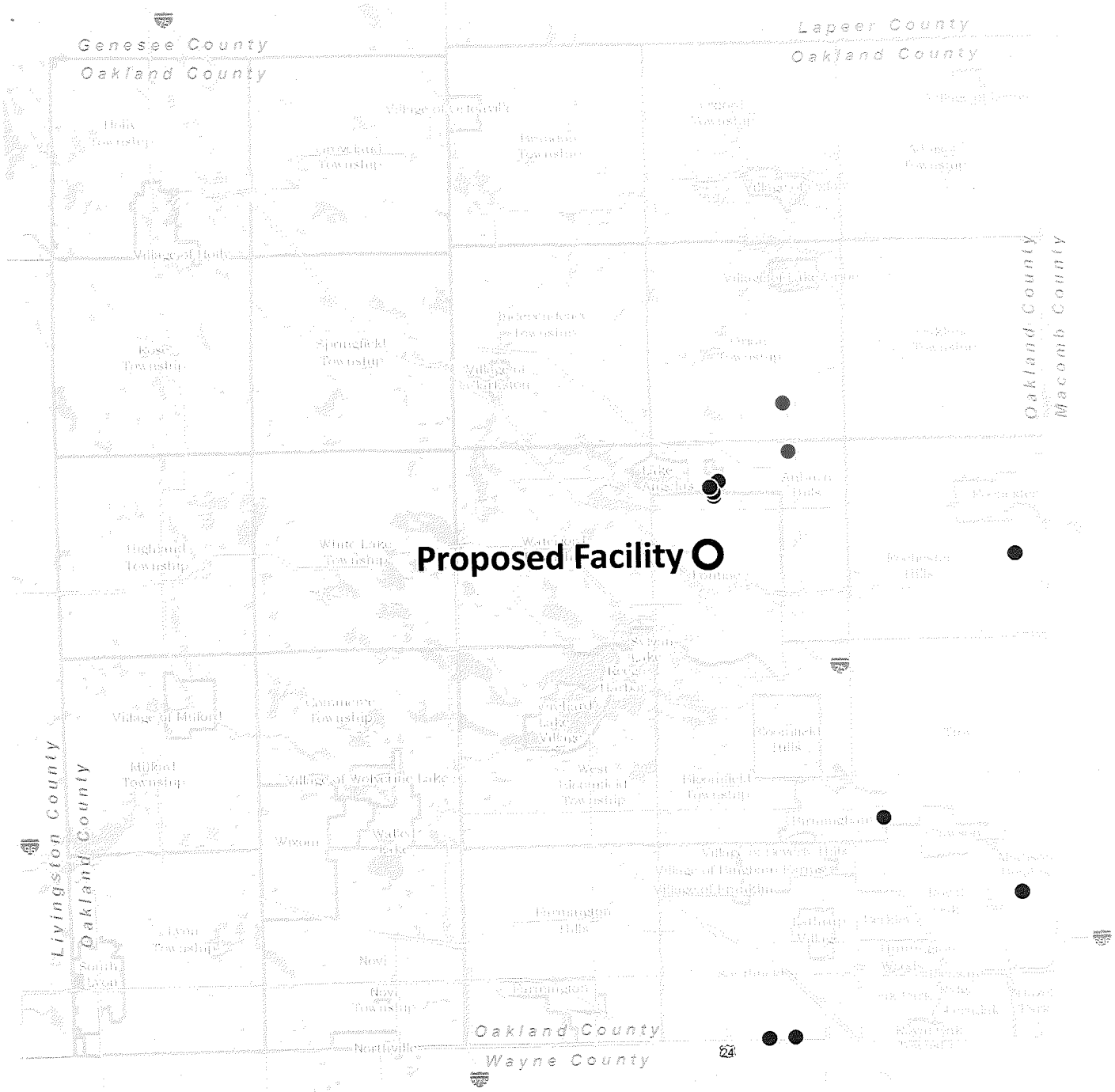
Oakland County Solid Waste Plan Designated Facilities

Legend

- Municipal Boundary
- Landfill (Type II)
- Transfer Station/Waste Processing Facility

Type II landfills, or municipal landfills can accept virtually any non-hazardous solid waste for disposal.

Transfer stations are facilities where municipal solid waste is unloaded from collection vehicles and briefly held while it is reloaded onto larger long-distance transport vehicles for shipment to landfills or other treatment or disposal facilities.



0 3 6 Miles

Map created: October 9, 2013

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
LANSING

JENNIFER M. GRANHOLM
GOVERNOR

STEVEN E. CHESTER
DIRECTOR

June 24, 2003

Mr. Thomas A. Law, Chair
Oakland County Board of Commissioners
1200 North Telegraph Road
Pontiac, Michigan 48341

Dear Mr. Law:

The Department of Environmental Quality (DEQ) received the locally-approved update to the Oakland County (County) Solid Waste Management Plan (Plan) on March 1, 2002. The Plan is approved with the following agreed upon modifications as outlined in the August 7, 2002, letter to Mr. Martin J. Seaman, Manager, Oakland County Waste Resource Division, from Ms. Lynn Dumroese, DEQ, Waste and Hazardous Materials Division (WHMD), and as confirmed by the Oakland County Board of Commissioners' Miscellaneous Resolution Number 03090 as transmitted from Mr. Seaman, on April 29, 2003, to Ms. Dumroese, the DEQ makes the following modifications to the Plan:

On page III-53, the third paragraph states the Plan demonstrates in excess of 66 months of disposal capacity for the duration of the planning period; therefore, no siting criteria and process are included in the Plan. Section 11533(1) of Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, requires each county solid waste management plan (County Plan) to identify disposal capacity for a ten-year period. Additionally, Section 11538(2) of Part 115 indicates that if a County Plan does not demonstrate ten years of disposal capacity, then the County Plan must demonstrate at least five years of capacity and include a siting mechanism that will ensure necessary capacity can be sited. A siting mechanism is not required if the County Plan demonstrates disposal capacity for a ten-year period; therefore, the reference to 66 months of available disposal capacity on page III-53 of the Plan is changed to ten years of disposal capacity.

On page III-54, the area approved for which siting is not required for the Eagle Valley Recycling and Disposal Facility (Facility) states: "Expansions of the disposal area footprint beyond limits identified in the consent judgment documents may not occur without the approval of the Township Board." This requirement is based on a 1991 Oakland County Circuit Court consent judgment that indicates the Facility must also receive approval for any expansions from Orion Township. Additionally, Oakland County's intent was to allow expansions for the Facility as long as the Orion Township Board approves the expansion and the total acreage does not go beyond 330 acres. Section 11538(3) of Part 115 requires that a siting mechanism not be subject to discretionary acts on behalf of the local planning entity and that the procedure will

guarantee a decision. Requiring approval from Orion Township, without defining any siting criteria, involves discretionary decision-making authority. The consent judgment exists and operates independently of the Plan; therefore, since the County's intent is to authorize any expansions up to 330 acres, the following language replaces this sentence: "The County has determined that future expansions, not to exceed 330 total acres, are consistent with the Plan; however, the Facility is subject to the requirements of the 1991 consent judgment."

With these modifications, the 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. The Plan is enforceable; however, 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 the County's authority to implement these enforceable mechanisms.

The Plan may also contain other provisions that are neither required nor expressly authorized for inclusion in a solid waste management plan. 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, or you may contact me.

Sincerely,

Steven E. Chester
Director
517-373-7917

cc: Senator Mike Bishop
Senator Nancy Cassis
Senator Deborah Cherry
Senator Gilda Jacobs
Senator Shirley Johnson
Representative Fran Amos
Representative Paul Condino
Representative Craig DeRoche
Representative John Garfield
Representative Ruth Johnson
Representative Andy Meisner
Representative John Pappageorge
Representative Clarence Phillips
Representative Marc Shulman
Representative John Stakoe
Representative Shelley Taub
Representative Aldo Vagnozzi
Representative Chris Ward
Representative David Woodward
Mr. Martin J. Seaman, Oakland County Waste Resource Division
Mr. Jim Sygo, Deputy Director, DEQ
Ms. Carol Linteau, Legislative Liaison, DEQ
Mr. George W. Bruchmann, DEQ
Mr. Frank Ruswick, DEQ
Mr. Lonnie C. Lee, DEQ
Dr. Benedict Okwumabua, DEQ
Ms. Rhonda Oyer Zimmerman, DEQ
Ms. Lynn Dumroese, DEQ
Oakland County File

OAKLAND
COUNTY MICHIGAN

L. BROOKS PATTERSON
OAKLAND COUNTY EXECUTIVE

April 29, 2003

Waste & Hazardous Materials Division
MAY 0 8 2003

Ms. Lynn Dumroese
Solid Waste Management Unit - Waste Management Division
Michigan Department of Environmental Quality
Constitution Hall
525 West Allegan Street
P.O. Box 30241
Lansing, MI 48909-7741

Dear Ms. Dumroese,

Attached is a signed resolution passed by the Oakland County Board of Commissioners on April 17, 2003. The Board of Commissioners concurred with your recommendations of the two changes in the Oakland County Solid Waste Management Plan and authorizes my conveyance of these changes to you. The changes are as followed:

(1) The reference to 66 months of available disposal capacity on page 111-53 of the Plan is changed to ten years of disposal capacity.

(2) On page 111-54, the area approved for which siting is not required for the Eagle Valley Recycling and Disposal Facility (Facility) is changed to, "The County has determined that future expansions, not to exceed 330 total acres, are consistent with the Plan; however, the Facility is subject to the requirements of the 1991 consent judgment."

Thank you and we look forward to approval of the Oakland County Solid Waste Management Plan so that we may continue our efforts for comprehensive, convenient, and cost effective waste reduction and resource recovery efforts.

Sincerely,

Martin J Seaman | pgp

Martin J Seaman
Manager, Waste Resource Division

Designated representative of:
L. Brooks Patterson, Oakland County Executive,
Oakland County Designated Planning Agency, and
Thomas Law, Chair
Oakland County Board of Commissioners

cc: L. Brooks Patterson, Oakland County Executive
Thomas Law, Chair, Oakland County Board of Commissioners
Rhonda Oyer Zimmerman, DEQ
Lonnie Lee, DEQ

WASTE RESOURCE MANAGEMENT

MARTIN J SEAMAN, MANAGER
1200 N. TELEGRAPH ROAD
PONTIAC, MI 48341-0409

TEL 248.858.1352
FAX 248.452.9172
WWW.CO.OAKLAND.MI.US

Printed on Recycled Paper

April 17, 2003

MISCELLANEOUS RESOLUTION #03090
BY: Planning and Building Committee, Charles E. Palmer, Chairperson
IN RE: WASTE MANAGEMENT DIVISION - RESOLUTION APPROVING CHANGES TO THE 1999 SOLID WASTE PLAN UPDATE-June 15, 2000
To the Oakland County Board of Commissioners

Chairperson, Ladies and Gentlemen:

WHEREAS, the Oakland County Solid Waste Planning Committee (SWPC); the Oakland County Board of Commissioners, and over 2/3rds of the County's 61 units of government have approved the 1999 Solid Waste Plan Update (THE PLAN) dated June 15, 2000, and;

WHEREAS, upon local approval from all communities hosting solid waste facilities and the required 2/3rds of all communities within the County, THE PLAN was forwarded to the Michigan Department of Environmental Quality (DEQ) for review and approval by the Director, and;

WHEREAS, the DEQ has reviewed the THE PLAN and has found one typographical error and has concerns about specific wording of an adjudicated manner between entities named in THE PLAN, and;

WHEREAS, accepting the changes recommended by the DEQ will clarify their understanding of the plan, and satisfy any possible interpretive concerns which may arise from THE PLAN without changing any substantial or minor elements of the plan, and;

WHEREAS, the Designated Planning Agency (DPA) recommends accepting the recommended changes to facilitate final acceptance of THE PLAN;

NOW THEREFORE BE IT RESOLVED, The Oakland County Board of Commissioners approves the following changes: the reference to 66 months of available disposal capacity on page III-53 of THE PLAN to ten years of disposal capacity, and;

BE IT FURTHER RESOLVED, to replace the sentence on page III-54 of THE PLAN, regarding the area approved for which siting is not required for the Eagle Valley Recycling and Disposal Facility with "The County has determined that future expansions, not to exceed 330 total acres, are consistent with the Plan; however, the Facility is subject to the requirements of the 1991consent judgment."

BE IT FURTHER RESOLVED, that the DPA be authorized to make and convey these changes to THE PLAN to the DEQ, along with this resolution.

Chairperson, on behalf of the Planning and Building Committee, I move the adoption of the foregoing resolution.

Planning and Building Committee

Planning & Building Committee Vote:
Motion carried on unanimous roll call vote

Resolution #03090 April 17, 2003

Moved by Palmer supported by Gregory the resolution be adopted.

AYES: Middleton, Moffitt, Moss, Palmer, Patterson, Potter, Rogers, Scott, Suarez, Zack, Bullard, Coleman, Coulter, Crawford, Douglas, Gregory, Hatchett, Jamian, Knollenberg, Law, Long, McMillin. (22)
NAYS: None. (0)

A sufficient majority having voted therefore, the resolution was adopted.

I HEREBY APPROVE THE FOREGOING RESOLUTION

L. Brooks Patterson, County Executive 4/25/03 Date

STATE OF MICHIGAN)
COUNTY OF OAKLAND)
I, G. William Caddell, Clerk of the County of Oakland, do hereby certify that the foregoing resolution is a true and accurate copy of a resolution adopted by the Oakland County Board of Commissioners on April 17, 2003, with the original record thereof now remaining in my office.

In Testimony Whereof, I have hereunto set my hand and affixed the seal of the County of Oakland at Pontiac, Michigan this 17th day of April, 2003.

G. William Caddell, County Clerk

OAKLAND
COUNTY MICHIGAN

L. BROOKS PATTERSON
OAKLAND COUNTY EXECUTIVE

WASTE MANAGEMENT DIVISION
MAR 0 1 2002

February 21, 2002

Michigan Department of Environmental Quality
Lynn Dumroese, Environmental Quality Analyst
John A. Hannah Building
P.O. Box 30241
Lansing, MI 48909-7741

Dear Ms. Dumroese,

Please be advised that 44 of the 61 local municipalities have approved the Oakland County Solid Waste Plan, surpassing the 67% required for local adoption. We are especially pleased that all municipalities who host a solid waste facility have approved the Plan.

Enclosed please find a list of the municipalities who have approved the Plan, copies of their resolutions, as well as another copy of the version of the Plan that was approved by these municipalities.

I look forward to receiving the director's approval of the Plan or your comments. Please be advised that any typographical changes will be completed upon your department's approval for distribution.

If you have any questions or concerns, please feel free to contact me at 248-858-1352.

Very truly yours,

Martin J Seaman, Manager
Solid Waste Management Division

SOLID WASTE
MANAGEMENT

MARTIN J SEAMAN, MANAGER
1200 N. TELEGRAPH ROAD
NTIAC, MI 48341-0409

TEL 248.858.1352
FAX 248.452.9172
WWW.CO.OAKLAND.MI.US
Printed on Recycled Paper

SOLID WASTE MANAGEMENT PLAN 1999 UPDATE

OAKLAND
COUNTY MICHIGAN

Approved June 15, 2000
By the County Board of Commissioners

L. Brooks Patterson
Oakland County Executive

COUNTY OF OAKLAND MICHIGAN SEAL

Recycled Paper

Oakland County Board of Commissioners

WASTE MANAGEMENT DIVISION
MAR 2 3 200
RECEIVED

Fran Amos
Michelle Friedman Appel
David Buckley
Brenda A. Causey-Mitchell
Ronald Colasanti
Nancy Dingleday
Sue Ann Douglas
David N. Galloway
John P. Garfield
Vincent Gregory
Donald W. Jensen
Thomas A. Law
John P. McCulloch, Ch
Ruel E. McPherson
Tim W. Melton
Frank H. Millard
David L. Moffitt
Lawrence A. Obrecht
Charles Palmer
William R. Patterson
Kay Schmid
Terry Sever
George W. Suarez
Shelley Goodman Taub

Oakland County Solid Waste Planning Committee

Environmental Interest Groups
Timothy Carpenter, EMEAC
Dawn Furlong, VOCAL

General Public
Loyola Koch, Clarkston
Patrick Kresnak, Auburn Hills
Mary Ann Ryan, Orion Township

Elected County Official
Sue Ann Douglas, Commissioner

Elected City Official
Nancy Bates, City Council Member

Elected Township Official
Jill Bastian, Township Clerk

Solid Waste Industry
Mike Csapo, RRRASOC
Robert Leininger, Waste Management
Dick Padlo, PMDS
Thomas Waffen, SOCRRA

SEMCOG Representative
Ardath Regan, AWQB Chairperson
SWPC Chairperson

Industrial Waste Generator
Vacant

Elected Official's Designees
William R. Patterson, Commissioner
Thomas Biasell, Public Services Director
Robert DePalma, Township Supervisor

1999 SOLID WASTE MANAGEMENT PLAN UPDATE

OAKLAND COUNTY, MICHIGAN

MDEQ ADMINISTRATIVE DETAIL PAGE

DATE SUBMITTED TO THE MDEQ: XXXX

Oakland County Board of Commissioners Approval: June 15, 2000

Solid Waste Planning Committee
Recommended Plan Update: October 21, 1999

1999 PLAN UPDATE:

This document, once approved by the Oakland County Board of Commissioners, by at least 41 (67% of 61) of Oakland County's municipalities, and subsequently by the MDEQ Director, supersedes and replaces all prior solid waste management plans for Oakland County.

PLAN REGION:

The Plan Update covers all Act 451, Part 115 non-hazardous solid wastes which are generated within Oakland County with the exception of those generated within the City of Northville. The City of Northville has been approved to be included in the Wayne County solid waste planning effort in concert with Section 11536 of Part 115 of the Natural Resources and Environmental Protection Act. Resolutions have been approved by each County Board of Commissioners covering this arrangement. See Appendix.

DESIGNATED PLANNING AGENCY
PREPARING THIS PLAN UPDATE: Office of the Oakland County Executive

CONTACT PERSON: Martin J Seaman

ADDRESS: Solid Waste Planning
One Public Works Drive
Waterford, MI 48328-1907

PHONE: 248-858-1352

FAX: 248-858-1066

E-MAIL: seamanm@co.oakland.mi.us

CENTRAL REPOSITORY
LOCATION: Solid Waste Planning Office Noted Above

THIS PAGE INTENTIONALLY LEFT BLANK

Oakland County Solid Waste Management Plan

June 15, 2000

Table of Contents

I EXECUTIVE SUMMARY I-1

OVERVIEW OF THE COUNTY I-2
THE SOLID WASTE PLANNING PROCESS I-2
THE PLAN'S SELECTED ALTERNATIVE I-3
AUTHORIZED MANAGEMENT COMPONENT I-6
TIMETABLE - IMPLEMENTING THE PLAN'S ENFORCEABLE PROGRAM I-7

I-2 INTRODUCTION I-8

GOALS AND OBJECTIVES I-8

II DATA BASE II-1

RESIDENTIAL WASTE STREAM II-1
COMMERCIAL/INDUSTRIAL WASTE GENERATION II-3
SPECIAL WASTE STREAMS II-3
MAJOR WASTE GENERATORS II-4
TOTAL WASTE GENERATION II-5
TOTAL WASTE DISPOSAL II-6

II-2 SOLID WASTE DISPOSAL AREAS II-8

II-3 SOLID WASTE FACILITY DESCRIPTIONS II-10

II-4 SOLID WASTE COLLECTION SERVICES AND TRANSPORTATION INFRASTRUCTURE II-17

SOLID WASTE COLLECTION SERVICES II-17
RECYCLING COLLECTION SERVICES II-18
YARD WASTE COLLECTION SERVICES II-20

II-5 EVALUATION OF DEFICIENCIES AND PROBLEMS II-21

II-6 DEMOGRAPHICS II-23

II-7 LAND DEVELOPMENT II-25

II-8 SOLID WASTE MANAGEMENT ALTERNATIVES II-26

III THE SELECTED SOLID WASTE MANAGEMENT SYSTEM III-1

III-2 IMPORT AUTHORIZATION III-7

III-3 EXPORT AUTHORIZATION III-9

III-4 SOLID WASTE DISPOSAL AREAS III-12

III-5 SOLID WASTE COLLECTION SERVICES & TRANSPORTATION III-31

III-6 RESOURCE CONSERVATION EFFORTS III-32

III-7 WASTE REDUCTION, RECYCLING, COMPOSTING III-34

III-8 TIMETABLE FOR SYSTEM IMPLEMENTATION III-52

III-9 SITING REVIEW PROCEDURES III-53

AUTHORIZED DISPOSAL AREA TYPES III-53

SITING CRITERIA AND PROCESS III-58

III-10 SOLID WASTE MANAGEMENT COMPONENTS III-59

STRENGTHS OF THE CURRENT MANAGEMENT SYSTEM III-59

NEEDS OF THE MANAGEMENT COMPONENT III-59

FURTHER DEVELOPMENT OF THE MANAGEMENT COMPONENT III-60

IMPLEMENTATION OF THE MANAGEMENT COMPONENT III-61

III-11 IDENTIFICATION OF RESPONSIBLE PARTIES III-64

III-12 LOCAL ORDINANCES AND REGULATIONS III-66

III-13 CAPACITY CERTIFICATIONS III-67

APPENDICES

APPENDIX A: ADDITIONAL INFORMATION: SELECTED SYSTEM A-1

APPENDIX B: ADDITIONAL INFORMATION: NON-SELECTED SYSTEMS B-1

APPENDIX C: PUBLIC PARTICIPATION AND APPROVAL C-1

APPENDIX D: PLAN IMPLEMENTATION STRATEGY D-1

APPENDIX E: RESOLUTIONS REGARDING PLANNING AREA E-1

ATTACHMENTS

RESOLUTIONS ..... A

LISTED CAPACITY ..... B

MAPS C

INTER-COUNTY AGREEMENTS *Not applicable* ..... D

DETAILED POPULATION DATA ..... E

WASTE GENERATION DATA ..... F

SPECIAL CONDITIONS ..... G

FINAL REPORT: OF THE OAKLAND COUNTY SOLID WASTE PLANNING COMMITTEE ..... H

I-1 EXECUTIVE SUMMARY

The following summarizes the solid waste management system selected to manage the solid waste within Oakland County.

OVERVIEW OF THE COUNTY

Oakland County, in 1998, was home to approximately 1,176,000 residents and its businesses and industries provided more than 782,000 jobs to people who reside throughout southeastern Michigan. Oakland County's population is 12.1% of the State total while the employment values represent 15.5% of the State's total. The County is governed by 61 local units of government - 30 cities, 10 villages and 21 townships. The County has more municipalities (61) than any other Michigan county (with Wayne County to the south being second with 43 municipalities). Michigan's 83 counties average 21.5 municipalities each.

Oakland County covers 910 square miles immediately north of the city of Detroit, in southeast Michigan. The County ranks third in per capita income for counties across the U.S. with a population of more than one million. Per capita income rose 40.6 percent between 1991 and 1996 ($27,120 vs. $38,127). The median income was $57,360 in 1997, an increase of 35.6 percent from 1991.

Oakland County boasts some 450 fresh-water lakes and 88,000 acres of parkland, in addition to more than 244,000 acres of open space and agricultural land. Land use patterns are displayed in Table I-1 below.

Table I-1: Oakland County Land Use

	Agricultural & Vacant	Outdoor Recreation & Conservation	Water	Institutional, Commercial Industrial	Residential	Transportation, Communication & Utility
% of total	42.1%	9.9%	4.7%	9.1%	28.1%	6.1%
Acres	244,000	57,100	35,300	53,000	163,000	35,300

Source: Oakland County Planning & Economic Development Services, *Economic Summary*, 1999/2000 Edition

Oakland County has determined that population data and employment data (by type and place of work) as historically available from the U.S. Census Bureau and as projected into the future by the Southeastern Michigan Council of Governments (SEMCOG) together form an appropriate baseline for estimating the existing and future solid waste stream generated within the planning area. SEMCOG's projections of both population and employment by place of work are based upon existing and projected land use and development patterns.

Table I-2: Oakland County Population/Employment

	1990	1995	2000	2005	2010	2020	% Change '95-'20
Population	1,080,225	1,147,464	1,188,817	1,228,944	1,269,053	1,356,879	18.16%
Households	409,289	438,717	460,252	482,105	504,695	550,391	25.4%
Total Employment	680,181	744,394	805,163	855,150	882,302	886,675	19.12%

Source: SEMCOG 2020 Regional Development Forecas *Totals do not include Northville*

THE SOLID WASTE PLANNING PROCESS

The Designated Planning Agency (DPA) and the Solid Waste Planning Committee (SWPC) completed a comprehensive strategic planning process that outlined strengths, weaknesses, opportunities, and threats that are part of the current and potential future solid waste management system that services the County. This analysis was used to create goals and objectives which are provided immediately after this Executive Summary. These goals and the strategic analysis formed the basis for developing the solid waste management strategy and the selected alternative that is described in this Plan as the Plan's Enforceable Program and Process as provided for in Part 115, Section 11533 (1) of the Michigan Natural Resources and Environmental Protection Act (NREPA).

In developing the Plan's Enforceable Program and Process, the DPA and SWPC first screened out strategies that were technically, economically or politically unsuitable for the County. The DPA and SWPC then reviewed a set of solid waste management program strategies in the following areas that were viewed as technically and economically feasible:

- Clean Community
- Drop-Off Residential Recycling
- Residential Yard Waste Composting
- Material Transfer and Processing
- Recycling Incentives
- Curbside Residential Recycling
- Commercial Recycling
- Disposal

These program strategies were assembled as System Alternatives that varied by level of landfill diversion, capital and operating cost and implementation requirements. At this stage in the strategic planning process, some of the Strategic Alternatives were determined to be unsuitable for the County based on an evaluation of the overall technical and economic feasibility of each approach and its ability to:

- build on the strengths of the local and regional situation,
- address current deficiencies and weaknesses,
- work with organizational approaches that the County is willing to consider,
- be fundable through systems that the County can implement,
- respond to and build community involvement and support,
- be enforceable, and
- set measurable goals that can be tracked to determine progress.

Appendix B of the Plan contains further detail regarding the System Alternatives that were not selected as part of the Plan's Enforceable Program.

The strategic planning process was carried through to final conclusions regarding the program strategies that would make up the Plan's Selected Alternative and become the foundation for the Plan's Enforceable Program as required by statute. The strategic planning process included surveying of the views of key stakeholders in the planning process, and others considered to be critical to implementation of the plan - primarily local government officials. The Selected Alternative is described briefly below and in the balance of the Plan with further detail provided in Appendix A of the Plan.

THE PLAN'S SELECTED ALTERNATIVE

The Plan's Enforceable Program provides for the implementation of the Oakland County Regional Waste Management and Material Recovery Program, implemented jointly by units of government within the county in cooperation with other public agencies and private firms. Details are provided in Part III of this Plan with additional supporting material provided in Appendix A.

Following is a more detailed description of the specific program elements that are part of the Selected Alternative and the Plan's Enforceable Program. Specific details on who will implement the Plan's Enforceable Program are covered in Part III, the Plan's Authorized Management Program. The timing of implementation of the Plan's Enforceable Program are then provided in the Plan's Timetable for Implementation that follows. The County's Solid Waste Program, implemented jointly by units of government within the county in cooperation with other public agencies and private firms, will include the following features:

In the Plan's Enforceable Program comprehensive solid waste collection services will be made available to all households and businesses in the County. Proactive steps will be taken to reduce the incidence of illegal dumping and litter and target areas will be policed with enforcement of violations. Household hazardous waste collection services will be provided and expanded to include collection of small quantities of agricultural pesticides and herbicides. Existing "Adopt-a- ____" programs will be expanded and promoted with volunteers and business/service group sponsorship for periodic cleaning of roadsides, streambanks, lakeshores, parks and forests. Should specified levels of diversion not be reached, incentives for increased adoption of and participation in recovery programs will be evaluated, including bans on disposal of certain materials, pay-as-you-throw solid waste collection systems, and others as deemed appropriate.

Solid waste generated within Oakland County will be primarily collected by private sector solid waste service providers with public sector service providers where local practices dictate. An increase is anticipated in the amount of the total residential waste stream collected under contract with municipalities. Currently 1/3 of municipalities do not collect residential waste under contract. An increase is also expected in the total volume of wastes handled through transfer station operations prior to delivery for landfill disposal or composting while the remainder will continue to be directly transported directly to landfills, compost operations or material recovery facilities.

Existing transfer station operations in Oakland County owned and managed by SOCRRA and by Allied Waste Industries will continue to operate with additional transfer station facilities designated for construction in order to increase availability of transfer capacity throughout the County. Expansions in material recycling facilities are expected as needed to keep up with increasing recovery efforts.

Existing collection services and the existing transportation infrastructure will continue to operate and grow as needed to accommodate the future waste stream within the existing matrix of disposal area facilities to which the stream is currently distributed for processing, composting or disposal. Some incremental changes will emerge as individual municipalities impose minimum standards or policies on existing inadequate services or as full service program elements are implemented and refined.

As landfill capacity within the county becomes depleted, Oakland County will require access to a considerable additional amount of transfer station capacity to serve its needs unless additional landfill capacity is made available within close proximity. Facility specifics will be developed as details of future disposal capacity availability are known and as industry develops alternative solutions.

Resource Recovery Programs:

Oakland County believes that resource recovery programs must be a continued part of the ongoing solid waste management system. The extremely successful efforts conducted by the SOCRRA and RRRASOC municipalities are proof of what concerted efforts can produce. These efforts are highlighted in other sections of this document.

The composition of the Oakland County waste stream has been analyzed in earlier planning efforts. Continued review and analysis of the waste stream and comparison of this material to updated national data confirms that little change in waste stream composition has occurred from that noted within the Oakland County 1990 Plan Update and the 1994 Plan Amendment documents. A substantial percentage of the stream is potentially recoverable through yard clipping programs and recovery of recyclable materials.

Michigan's banning of yard clippings from landfills produced remarkable volume reduction results within a short time period. Although minimal additional improvements may be anticipated in the future (both in the diversion percentage achieved and in the end product quality areas), the successes of this program have largely been realized. In Oakland County, no additional volume reduction over that rate currently observed is projected for the yard clipping programs. Recovery of recyclable materials is however another story. Much more can be accomplished and impediments to achievement of the countywide volume reduction goals do exist. These impediments generally result from the lack of convenient full-service program offerings and/or the lack of participation by all generators in programs that do exist. These impediments are viewed as nearly universal problems.

Existing municipal programs are highlighted within the Database section of this report and in Attachment H ("Report of Municipally Sponsored Solid Waste Programs" as part of the Final Report of the Solid Waste Planning Committee). It is anticipated that program offerings within all municipalities will ultimately be expanded to match the level of services currently offered within the principal authority municipalities.

The County will urge that appropriate resource conservation, waste reduction, pollution prevention and resource recovery programs be adopted by each municipality and by the business community. Facilities that accept recyclables as well as solid waste educational providers and opportunities will be periodically identified as resources for each waste generator within the County and this information will be made widely available. Municipalities that find it necessary to become involved with waste reduction and recycling programs to increase volume reduction achievement levels will be urged to do so and to increase the economic effectiveness of these efforts, they will be urged to consider cooperative approaches along with other municipalities. Technical assistance and education will be offered by the County to municipalities and businesses that are in the process of establishing new programs. This will include continued monitoring of program performance, as well as evaluation of under-served areas and sectors of the County.

Recycling Incentives:

Proactive education and promotion strategies would encourage responsible solid waste management and strong reduce/reuse/recycle behavior. Through continued monitoring of program performance, the County will determine whether waste reduction and recovery goals are being met, and may evaluate incentive programs such as Pay As You Throw (PAYT) programs, bundling of service contracts, and/or banning of certain materials from landfills. Recycling drop-offs would add more materials to encourage overall participation in program by more citizens and

businesses. A comprehensive outreach and education program would promote all aspects of the expanded system and improvements.

Drop-Off Residential Recycling:

The existing network of drop-off sites for recycling will continue to be developed with upgrades to continually improve visibility and user convenience especially for those generators not serviced by curbside or other point of generation recycling systems. Selected sites would be developed as "super drop-offs" that collected a wider range of material with staff to assist in site operations and vehicle unloading. Efforts would be directed at increasing the range of materials handled at all drop-offs and standardizing those materials to provide consistent service throughout the County.

Curbside Residential Recycling:

Curbside collection of recyclables would be provided in all the more densely populated areas of the County, preferably through municipally arranged contracts in order to provide for the most cost effective service. In other areas, subscription curbside recycling would be available for residents that were willing to make their own arrangements for the service with area haulers.

Multi-Family Residential Recycling:

Residents of two and three-family multi-family housing would be serviced by municipally contracted curbside recycling services where available or by subscription based curbside services. Four and more unit multi-family housing would be serviced with recycling depot systems at dumpster locations within each multi-family complex by a recycling service provider under contract with facility management. High-rise multi-family housing residents would be provided with recycling services as part of the trash chute system in each facility.

Commercial Recycling:

Small businesses would be encouraged to use the drop-off recycling network for smaller volumes of paper and containers or use curbside recycling services if they already use curbside trash collection services. Larger commercial, institutional and industrial generators would arrange with their own service providers to have recycling service provided at a level of accessibility matching that of their solid waste service. Existing corrugated collection routes would be expanded to include more businesses and office paper added where appropriate.

Material Transfer and Processing:

Arrangements would be made to provide access to a material recovery facility (MRF) convenient to all areas of the County. This will likely require expansion of existing MRF's to increase throughput, sorting capability and the overall number of accepted materials, and also require additional MRF capacity in the central and northern parts of the County to expand access to these services for those parts of the County. These arrangements would include guarantees that sufficient capacity was available to meet the County's needs over the long term and that the facilities would be able to process commingled containers and commingled fibers as well as presorted recyclables like OCC.

Composting

Fall leaf collection would be provided in most villages/town/city areas. Backyard composting would be encouraged through distribution of backyard bins at discount rates and encouragement

of "grass-cycling" as demonstrated in the SOCRRA area. Access to permanent drop-off options for yard waste would be encouraged throughout the County and the long term viability of the yard waste composting sites serving the County monitored to assure their continued availability.

Clean Community

Household hazardous waste collection programs are not uniformly available to all residents of the County. The County will encourage and promote the establishment of such programs by each of the municipalities whether through their own individual efforts or through collective approaches. Additionally, the County will encourage the private sector to establish free market collection points which may be accessed by any resident for the proper disposal of household hazardous wastes for nominal fees. Such programs should be available to the public throughout the year. Finally, the County will periodically identify the availability of such programs, be they municipally or private sector sponsored, and make such information widely available.

AUTHORIZED MANAGEMENT COMPONENT

The Selected Alternative as described above is established by this Plan as the Plan's Enforceable Program defining the Oakland County Solid Waste Management System, implemented jointly by units of government within the county in cooperation with other public agencies and private firms. The Plan's Enforceable Program includes a "Management Component" that defines details of who will take responsibility for implementation and how that will be accomplished. This Authorized Management Component is described briefly below and further detailed in Part III of the Plan under a section with the same name.

The Authorized Management Component builds on the County's current organizational and management structure. Further development of the Plan's Authorized Management Component is provided for as part of the Plan's Enforceable Program and Process.

These developments may take a number of forms and will only be initiated after an evaluation of the best steps that can be taken to build on the strengths of the current system already in place. These steps will be detailed in an "implementation action plan" that the Plan's Implementation Agency will develop. These action steps will provide for a method of implementing the selected alternative, including all aspects of the Plan's Enforceable Program.

Components of the Management System will include:

- A County program for recycling and related solid waste management services, if necessary, will be developed that meets the requirements of this Plan and that meets any import requirements of County Plans where landfills used by Oakland County are located.
- Local units of government within the County will be asked to take steps to implement, within their jurisdictions, the types of collection, disposal and material recovery services called for in the selected alternative.
- A legal/ordinance framework will be evaluated if necessary, to help establish necessary controls for funding mechanisms and the delegation of authority.
- Contracts and intergovernmental agreements between the various participants in the system will be evaluated and developed as needed in order to specify services, exchange of resources, and establish funding mechanisms.

- The County will continue in the role of a designated implementation agency with necessary staffing/administrative capability to reach project goals.
- The County will play a supporting role in encouraging economically healthy businesses, industries and communities with minimal environmental impact.

TIMETABLE - IMPLEMENTING THE PLAN'S ENFORCEABLE PROGRAM

The Plan's Enforceable Program includes an implementation timeline for the Plan's Authorized Management Component and Selected Alternative. The following table summarizes key milestones for implementing the Plan's Enforceable Program and is further detailed in Part III of the Plan under a section with the same name.

Management Components	Timeline
1) Develop/Adopt Implementation Action Plan	2000
2) Assist Local Units in Organizational Development	2000-2001
3) Preliminary Program Specifications for Planned Programs	2000-2001
4) Establish Budgets for Planned Programs	2000-2001
5) Finalize Plans for Organizational System Development by Locals	2000-2001
6) Develop Additional Recycling Processing Capacity	2000-2001
7) Initiate all Outreach/Education Programs	2000-2001
8) Procure all Other System Improvements	2000-2003
9) Evaluation of Need for Transfer, Processing and MRF Capacity	2001-2002
10) Develop Transfer, Processing and MRF Capacity if Needed	2002-2006
11) Evaluate Incentive Programs, as needed	2002-2006
12) Develop Program Specifications for Further Program Expansion	2001-2003
13) Establish Budgets for Further Program Expansion	2005-2006
14) Finalize Any Upgrades to Funding Structure and Mechanisms	2005-2006
15) Initiate Further Expansion of Outreach/Education Programs	2005-2006
16) Implement all Further Program Expansion System Improvements	2006-2008
17) Data Tracking to Assess Program Performance	Annual/Ongoing
18) Update Implementation Action Plan	Annual/Ongoing

I-2 INTRODUCTION

To comply with Part 115 and its requirements, the Oakland County Solid Waste Plan establishes an Enforceable Program and Process that is directed toward goals and objectives based on the purposes stated in Part 115, Section 11538.(1)(a), 11541.(4) and the State Solid Waste Policy adopted pursuant to this Section, and Administrative Rules 711 (b)(i) and (ii).

GOALS AND OBJECTIVES

Goals and Objectives for the Oakland County Plan's Enforceable Program and Process as adopted by the Solid Waste Planning Committee follow:

The primary goal of the Oakland County Solid Waste Management Plan is the adoption of a plan of action which, when implemented, will minimize future adverse impacts upon the public health, the environment and the landscape as a result of the generation, handling, processing and disposal of Act 451, Part 115 non-hazardous solid wastes.

To achieve this goal, the plan of action will focus upon the objectives following.

- Minimize the future amounts of solid wastes generated within Oakland County.
- Ensure that solid wastes are source separated so that imbedded resources may be easily collected, processed and recovered.
- Achieve a reduction in the percentage of solid wastes that are destined for either incineration and/or landfilling of at least 30% through source reduction, reuse, recycling and composting by the year 2010 over that achieved in 1990.
- Ensure that solid wastes, source separated recyclable materials, and yard wastes are collected and removed from the site of generation frequently enough to protect the public health.
- Ensure that such materials are handled, processed and disposed of at properly licensed and operated facilities.
- Minimize pollution resulting from solid wastes thereby preventing adverse effects on the public's health and the environment (including the groundwater and surface water quality, air quality and land quality) which may result from improper solid waste collection, transportation, processing or disposal.
- Approve and locate new solid waste handling, processing and disposal facilities only as may be required to meet local needs while carefully respecting and blending with the topography and surrounding land uses.
- Ensure that all Oakland County solid waste generators have access to a full range of solid waste handling, processing and disposal services.

II-1 DATA BASE

This section identifies sources of waste generation within the county, total quantity of solid waste generated to be disposed, and sources of the information.

The following database is derived from the listed sources:

- Southeast Michigan Council of Governments 2020 Regional Development Forecast
- Oakland County Planning Department
- Office of the Oakland County Executive
- Solid waste authorities (SOCRRA and RRRASOC)
- Interviews with municipal program operations and private sector service providers

THE PLANNING AREA

The solid waste management plan update planning area includes all of Oakland County with the exception of that area lying within the city of Northville. As provided for by Act 451, Northville has chosen to be included within the Wayne County solid waste planning effort. This local option has received the approval of the Board of Commissioners of each county (see Appendix E for copies of resolutions to that effect). As noted in the material following, the waste stream generated within the planning area remains at 99.80% of that generated within the entire county.

Residential Waste Stream

Residential solid waste data was calculated by applying a waste generation rate (pounds per person per day) to population totals for each municipality. The waste generation rate was modified for single and multi-family dwelling units, and for rural and urban land use characteristics with a final average of 3.77 pounds per person. These generation calculations are then presented in Table II-1 following, as required by the Plan Format. A more detailed description of how estimates were calculated may be found in Attachment F.

Table II-1 Residential Waste Generation by Municipality (tons per year)

Municipalities	*1998*	*Municipalities*	*1998*
Addison Township	3,508	Madison Heights	21,645
Auburn Hills	14,023	Milford	4,654
Berkley	12,545	Milford Township	5,344
Beverly Hills	7,632	Novi	31,306
Bingham Farms	657	Oak Park	22,550
Birmingham	14,323	Oakland Township	6,774
Bloomfield Hills	2,697	Orchard Lake	1,453
Bloomfield Township	31,116	Orion Township	16,600
Brandon Township	7,756	Ortonville	1,161
Clarkston	672	Oxford	2,362
Clawson	9,589	Oxford Township	6,515
Commerce Township	20,717	Pleasant Ridge	2,081
Farmington	6,877	Pontiac	47,735
Farmington Hills	54,849	Rochester	5,420
Ferndale	18,287	Rochester Hills	48,337
Franklin	1,588	Rose Township	3,807
Groveland Township	3,489	Royal Oak	45,654
Hazel Park	14,487	Royal Oak Township	3,128
Highland Township	11,914	South Lyon	6,731
Holly	4,121	Southfield	49,852
Holly Township	2,310	Springfield Township	8,348
Huntington Woods	4,858	Sylvan Lake	1,416
Independence Township	18,677	Troy	58,112
Keego Harbor	2,029	Walled Lake	4,409
Lake Angelus	208	Waterford Township	49,724
Lake Orion	2,113	West Bloomfield Township	42,081
Lathrup Village	3,165	White Lake Township	16,903
Leonard	241	Wixom	8,329
Lyon Township	6,201	Wolverine Lake	3,435
		County Total Residential Waste	**806,555**

Commercial/Industrial Waste Generation

Commercial waste generation was determined by multiplying estimated pounds per employee per day for specific Standard Industrial Codes (SIC) by the actual employment numbers in Oakland County. Pounds per employee per day figures were generated by data drawn from actual waste assessments and surveys of commercial and industrial establishments in Michigan and Oakland County. Employment numbers were obtained for the year 1998 from the SEMCOG 2020 Regional Development Forecast. The resulting waste generation calculations are presented below for commercial and industrial SIC (standard industrial classifications).

Table II-2 Commercial Waste Generation

SIC	SIC Description	## of employees (1998)[1]	lbs/ empl/ day[2]	Tons/ year (1998)
0700-1999	Ag/Mining/Construction	8,678	5	5,641
4000-4999	Transportation/Public Utilities	29,393	5.8	22,162
5000-5199	Wholesale Trade	50,811	12	79,265
5200-5999	Retail Trade	142,288	9.5	236,584
6000-6999	Finance, Insurance, Real Estate	122,754	6	95,748
7000-7999	Services	335,307	6.6	287,721
99--	Public Administration	11,540	5.5	8,251
	TOTAL	700,771	5.75	735,372

Source: SEMCOG Regional Development Forecast 2020

[1] ~~Employment numbers modified to reflect actual employment in office~~ administration

[2] Assumes 260 days of operation per year except for Retail Trade category at 350 days/yr; source of data are studies conducted by Resource Recycling Systems Inc.

Table II-3 Industrial Waste Generation

SIC	SIC Description	## of employees (1998)*	lbs/ empl/ day	Tons/ year (1998)
2000-3999	Manufacturing	80,084	6.89	100,699

** Employment numbers modified to reflect actual employment in office administration*

Special Waste Streams

Sewage sludge is generated by a number of municipal and privately-operated wastewater treatment programs in Oakland County. At this time, most of this waste is disposed through the City of Detroit Wastewater Treatment Facility where it is incinerated and the ash disposed in landfills. Other wastewater treatment programs in Oakland County use land application methods for disposal. No other special waste streams have been identified at this time, however, a portion of the overall waste stream called Industrial Special Wastes (ISW) and Construction and Demolition Debris (CDD) are accounted for in Table II-4 following. CDD wastes are distributed on a pounds per capita basis. This does not, or is not intended to accurately reflect the source of CDD wastes. These wastes will be produced where construction and demolition activities are now occurring and the source will change dramatically from time-to-time. Additionally, a similar approach is taken in the distribution of ISW wastes.

Table II-4 Industrial Special Wastes/Construction and Demolition Debris

Description	Multiplier	Tons/ year (1998)
Industrial Special Waste	9.83 pds per manuf. employee per day	143,668
Construction & Demolition Debris	0.7 lbs per capita per day	165,035

Major Waste Generators

Oakland County continues to experience growth in the business sector. Overall, the county does not anticipate major problems associated with managing the commercial and industrial solid waste generated within its borders. Table II-5 provides a list of major business and industrial waste generators in the County.

Table II-5 Major Waste Generators in Oakland County

Generator	Location	Type	## empl
General Motors	Various	Automotive manufacturer	26,005
Chrysler Corp.	Various	Automotive manufacturer	20,894
EDS Corp.	Troy	Global information services	9,900
William Beaumont Hospital	Royal Oak	Hospital	7,931
Kmart Corp	Troy	Retail HQ	6,000
Ameritech Michigan	Various	Communications	5,000
Providence Hosp & Med Cen	Southfield	Hospital/Medical Centers	4,024
Mercy Health Services	Farmington Hills	Hospital/Medical Centers	3,916
Oakland Co. Govt	Pontiac	County government	3,713
Blue Cross and Blue Shield	Various	Insurance	3,545
Ford Motor Co.	Various	Automotive Manufacturer	3,530
Progressive Tool & Industries	Southfield	Manufacturer	3,480
Compuware Corp	Farmington Hills	Information technology	2,482
Bank One	Various	Financial services	2,407
Henry Ford Health System	Various	Health care	2,142

TOTAL WASTE GENERATION

Act 451 non-hazardous wastes are comprised of three principal components - municipal solid wastes (MSW), construction and demolition debris (CDD) and industrial special wastes (ISW). The MSW component is comprised of solid wastes generated by the single family residential, multi-family residential, commercial and industrial land uses. This primary component (approximately 84% of Oakland County's total solid waste stream) must be disposed in Type II landfill facilities. The industrial component of MSW (generally comprised of industrial housekeeping wastes such as packaging, cafeteria and washroom wastes, and office wastes) is exclusive of industrial special wastes (ISW), such as foundry sands. ISW is comprised of those wastes of such a character that they do not have to be disposed of in Type II landfills but may be disposed of in lessor standard Type III facilities because of their relatively benign nature. Construction and demolition debris (CDD) may also be disposed of in Type III landfill facilities.

Centers of waste generation and detail on future waste generation are described in Attachment F.

Waste generation is shown in Tables II-6 and II-7 below. Waste generation was projected into the future based on projected population growth patterns. Table II-6 shows projections in tons per year; while Table II-7 shows projections in gateyards per year.

Table II-6 Total Waste Generated (Tons per year)

Sector	1998 Tons Generated	2003 Tons Generated	2008 Tons Generated
Residential	806,555	834,501	862,102
Commercial	735,372	799,199	841,735
Industrial	100,699	92,497	87,153
MSW Sub-total	*1,642,627*	*1,726,196*	*1,790,991*
Construction/Demolition	165,035	173,055	179,511
Industrial Special Waste	143,668	131,966	124,342
Total Annual Tons	**1,951,329**	**2,031,217**	**2,094,844**

Table II-7: Total Waste Generated (Gateyards per year)

Sector	1998 Gateyards Generated	2003 Gateyards Generated	2008 Gateyards Generated
Residential	2,419,665	2,503,503	2,586,305
Commercial	2,206,117	2,397,596	2,525,206
Industrial	302,097	277,490	261,460
MSW Sub-total	*4,927,879*	*5,178,589*	*5,372,971*
Construction/Demolition	330,069	346,110	359,022
Industrial Special Waste	164,198	150,823	142,111
Total Annual Cubic Yards	**5,422,147**	**5,675,522**	**5,874,104**

** cubic yards were converted from tons using several conversion factors; 3 gateyards per ton for the municipal waste stream; 2 gateyards per ton for CDD and 1.14 gateyard per ton for ISW*

TOTAL WASTE DISPOSAL

Total waste generation for 1998 was projected and compared to actual 1998 landfill disposal data for Oakland County waste plus reported recovery (recycling and composting) totals. In 1998, it is estimated that a considerable amount of the residential waste stream (24.35%) is currently diverted from disposal in landfills through recycling (7.65%) and yard clipping (16.7%) programs. Additionally, it is estimated that 15% of the commercial municipal solid waste stream is recovered (13% through recycling and 2% through yard clipping composting), and that 15% of the industrial municipal solid waste, construction and demolition debris and industrial special waste is recovered through recycling efforts. The final diversion rate currently being achieved, net after allowance for process residues which result from the recycling and composting operations, is calculated to be 18.12%. Recovery (recycling and composting) was projected for the future, and subtracted from total generation projections for the 2003 and 2008 planning years in order to obtain disposal estimates. Future recovery was based on expected growth for existing programs and achievement of stated County recovery goals, resulting in total disposed projections contained in Tables II-8, II-9, and II-10 below.

A percentage of estimated recovery (composting and recycling) is documented, particularly for the residential portion of the waste stream. This is due to highly successful programs at RRRASOC and SOCRRA. Recovery from the remaining residential stream plus commercial, industrial and special wastes are less well documented and must be estimated based on comparisons to other similar regions. Finally, in comparing generation estimates to actual reported disposed data, it should be noted that the Michigan DEQ Annual Landfill Report indicates that 4,157,815 cubic yards of Oakland County waste were disposed in 1998, compared to an estimated generation rate of 5,422,147 cubic yards(gateyards), indicating a difference of 1,264,332 cubic yards which can assumed to be materials diverted to recycling and composting. Translated to tonnage, this amount is approximately 350,000 tons of material either recycled, composted or reduced through volume reduction techniques (assumes conversion rate of approximately 600 pounds per cubic yard, and allowing for deduction of process residues).

Disposal values are displayed three ways, in Tables II-8 through II-10 below. The first is based on tons per year, as calculated by waste generation and recovery modeling described above. The second table shows "gateyards", reflecting the volume as delivered at the landfill gate. This assumes 666 pounds per cubic yard for municipal solid waste (or three gateyards per ton), 1000 pounds/cubic yard for CDD and 1,750 pounds/cubic yard for ISW. The third table shows "bankyards", reflecting the actual space waste takes up in a landfill. The bankyard conversion factor is two gateyards per bankyard for municipal solid waste and one gateyard per bankyard for Type III waste.

Table II-8: Total Disposal (tons per year)

Sector	1998 Tons Disposed	2003 Tons Disposed	2008 Tons Disposed
Residential	615,517	616,152	607,539
Commercial	630,097	639,231	607,682
Industrial	86,349	74,571	63,308
MSW Sub-total	*1,331,963*	*1,329,954*	*1,278,529*
Construction/Demolition	142,136	139,439	130,527
Industrial Special Waste	123,734	106,331	90,412
Total Annual Tons	**1,597,833**	**1,575,724**	**1,499,468**

Table II-9: Total Disposal (gateyards per year)

Sector	1998 CY Disposed	2003 CY Disposed	2008 CY Disposed
Residential	1,846,550	1,848,456	1,822,616
Commercial	1,890,290	1,917,693	1,823,047
Industrial	259,048	223,421	190,119
MSW Sub-total	*3,995,888*	*3,989,571*	*3,835,782*
Construction/Demolition	284,272	278,540	260,864
Industrial Special Waste	141,410	121,665	103,498
Total Annual Cubic Yards	**4,421,571**	**4,389,776**	**4,200,145**

Table II-10: Total Disposal (landfill bankyards per year)

Sector	1998 BY Disposed	2003 BY Disposed	2008 BY Disposed
Residential	929,275	924,228	911,308
Commercial	945,145	958,846	911,524
Industrial	129,524	111,711	95,059
MSW Sub-total	*1,997,944*	*1,994,785*	*1,917,891*
Construction/Demolition	142,136	139,270	130,432
Industrial Special Waste	141,410	121,665	103,498
Total Annual Cubic Yards	**2,281,491**	**2,255,720**	**2,151,822**

II-2 SOLID WASTE DISPOSAL AREAS

The following includes an inventory and descriptions of currently existing solid waste disposal areas within the County or to be utilized by the County to meet its disposal needs for the planning period.

Oakland County's solid waste is currently handled, processed and disposed at a number of Act 451 designated facilities as described below. No current flow control arrangements wherein wastes or source separated materials are required to be delivered to specific facilities exist other than those contained within voluntary contractual arrangements by municipalities.

Transfer Stations:

- Allied Waste Industries, Eight Mile Road, City of Southfield
- SOCRRA transfer station, Coolidge Highway, City of Troy
- SOCRRA transfer station, John R Road, City of Madison Heights*

** The SOCRRA transfer station site on John R in Madison Heights is actually designated as an all-purpose "Disposal Area" site except that it may not be used for a sanitary landfill, an incinerator or a waste-to-energy plant.*

Waste Processing Plants*:

- RRRASOC MRF, Eight Mile Road, City of Southfield
- SOCRRA MRF Coolidge Highway, City of Troy

**The RRRASOC and SOCRRA facilities are designated but not currently licensed or operated as waste processing plants. Both facilities process source separated recyclables at these locations.*

Type II Landfills (Oakland County):

- Collier Road, Collier Road, City of Pontiac
- Eagle Valley, Silverbell Road, Orion Township
- Oakland Heights, Brown Road, City of Auburn Hills
- SOCRRA, School Road, City of Rochester Hills

Type II Landfills (non-Oakland County):

- Citizens Disposal, Mundy Township, Genesee County
- Brent Run, Montrose Township, Genesee County
- Pioneer Rock, Burnside Township, Lapeer County
- Arbor Hills, Salem Township, Washtenaw County
- Sauk Trail Hills, Canton Township, Wayne County
- Woodland Meadows, Van Buren Township, Wayne County
- Carleton Farms, Salem Township, Wayne County
- Riverview, City of Riverview, Wayne County
- Ford Motor Allen Park, City of Allen Park, Wayne County
- Pine Tree Acres, Lenox Township, Macomb County
- Hastings Sanitary, Hastings Township, Barry County
- McGill Road, Blackman Township, Jackson County
- Venice Park, Venice Township, Shiawassee County
- Adrian Landfill, Palmyra Township, Lenawee County

Type III Landfills:

- Wayne Disposal - Rockwood landfill, Berlin Township, Monroe County
- Sibley Quarry, Monguagon Township, Wayne County
- Salzburg Road, Midland Township, Midland County

Incinerators and Waste-to-Energy (WTE) Plants:

- Greater Detroit Resource Recovery Authority, City of Detroit, Wayne County

Other sites are currently designated in the previous Oakland County solid waste management plan but are not listed above since these facilities are not currently operating. These include combination waste processing plant and transfer station designations of two sites on Highwood in the City of Pontiac owned by Allied Waste Industries and Waste Management, both of which have yet to be constructed and the WTE designation of the GM Truck and Coach site on South Boulevard in the City of Pontiac which ceased operations in the spring of 1997.

The County's waste stream is also handled at a variety of other non-licensed facilities such as recycling drop-off centers, small transfer operations and pure source separated MRFs, none of which require Act 451 designation. Numerous closed landfills, dump sites, and incineration plant sites exist in Oakland County. Some remain as reminders of past poor practices. More than 65 landfill and dump sites (used since World War II) exist.

Inter-County Flows of Act 451 Wastes:

Michigan's Act 451 provides that wastes may be disposed of at Act 451 facilities in other counties if the export and import of the wastes are explicitly authorized in the approved solid waste management plans of the counties involved. Oakland County currently authorizes the export of wastes to all Michigan counties and to other states and countries. Imports into Oakland County are also authorized from a select list of generally contiguous counties. Additionally, the Oakland County Board of Commissioners has, since adoption of the 1994 plan amendments which established the inter-county flow authorizations, adopted a broader free market, no inter-county flow restriction stance which points the way for a release of current import restrictions.

Other disposal area facilities such as transfer stations or processing plants are also utilized. No attempt is made herein to specifically identify those located in contiguous counties.

Descriptions of currently existing facilities located within Oakland County follow.

II-3 SOLID WASTE FACILITY DESCRIPTIONS

Facility Type: Landfill

Facility Name: Oakland Heights Development

County: Oakland Location: Auburn Hills Town 3N Range 10E Section(s) 2

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: Allied Waste Industries

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

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

Site Size:

Total area of facility property:	120.74	acres
Total area sited for use:	83.4	acres
Total area permitted:	120.7	acres
Operating:	65.1	acres
Not excavated:	18.3	acres
Current capacity:	5,085,000	bankyards
Estimated lifetime:	5	years
Estimated days open per year:	309	days
Estimated yearly disposal volume:	2,000,000	gate yards

(if applicable)

Annual energy production:

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

DATA BASE

FACILITY DESCRIPTIONS

Facility Type: Landfill

Facility Name: Eagle Valley RDF

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

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

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

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

Site Size:

Total area of facility property:	330	acres
Total area sited for use:	330	acres
Total area permitted:	89	acres
Operating:	89	acres
Not excavated:	0	acres
Current capacity:	3,400,000	bankyards
Estimated lifetime:	4.4	years
Estimated days open per year:	286	days
Estimated yearly disposal volume:	1,500,000	gate yards

(if applicable)

Annual energy production:

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

DATA BASE

FACILITY DESCRIPTIONS

Facility Type: Landfill

Facility Name: Collier Road Landfill

County: Oakland Location: Pontiac Town: 3N Range 10E Section(s) 4, 5, 8, 9

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: _____

X Public ____ Private Owner: City of Pontiac

Operating Status (check)		Waste Types Received (check all that apply)	
X	open	X	residential
	closed	X	commercial
X	licensed	X	industrial
	unlicensed	X	construction & demolition
	construction permit	X	contaminated soils
	open, 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:	210	acres
Total area sited for use:		acres
Total area permitted:		acres
Operating:		acres
Not excavated:		acres
Current capacity:	953,000	bankyards
Estimated lifetime:	8	years
Estimated days open per year:		days
Estimated yearly disposal volume:	250,000	gate cubic yards

(if applicable)

Annual energy production:

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

DATA BASE

FACILITY DESCRIPTIONS

Facility Type: Landfill/Compost

Facility Name: Southeastern Oakland County Resource Recovery Authority (SOCRRA)

County: Oakland Location: Rochester Hills Town: 3N Range 11E Section(s) 13, 24

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: _____

X Public ____ Private Owner: Southeast Oakland County Resource Recovery Authority

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

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

_____

Site Size:

Total area of facility property:	183	acres
Total area sited for use:	____	acres
Total area permitted:	____	acres
Operating:	____	acres
Not excavated:	____	acres
Current capacity:	0	
Estimated lifetime:	0	years
Estimated days open per year:	____	days
Estimated yearly disposal volume:	0	compacted cubic yards

(if applicable)

Annual energy production:

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

DATA BASE

FACILITY DESCRIPTIONS

Facility Type: Waste Transfer

Facility Name: Allied Waste Industries Transfer Station

County: Oakland Location: Southfield Town: 1N Range 10E Section(s) 34

Map identifying location included in Attachment Section: X Yes ____ No

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

____ Public X Private Owner: Allied Waste Industries

Operating Status (check)		Waste Types Received (check all that apply)	
X	open	X	residential
	closed	X	commercial
X	licensed	X	industrial
	unlicensed	X	construction & demolition
	construction permit	X	contaminated soils
	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:	5.5	acres
Total area sited for use:		acres
Total area permitted:		acres
Operating:		acres
Not excavated:		acres
Current capacity:		years
Estimated days open per year:		days
Estimated yearly disposal volume:		compacted cubic yards

(if applicable)

Annual energy production:

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

DATA BASE

FACILITY DESCRIPTIONS

Facility Type: Waste Transfer

Facility Name: SOCRRA Transfer Station

County: Oakland Location: Troy Town: 2N Range 11E 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: _____

X Public ____ Private Owner: Southeast Oakland County Resource Recovery Authority

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

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

_____

Site Size:

Total area of facility property:	10.9	acres
Total area sited for use:		acres
Total area permitted:		acres
Operating:		acres
Not excavated:		acres

Current capacity:		
Estimated lifetime:		years
Estimated days open per year:		days
Estimated yearly disposal volume:		compacted cubic yards

(if applicable)

Annual energy production:

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

DATA BASE

FACILITY DESCRIPTIONS

Facility Type: Waste Transfer

Facility Name: SOCRRA Transfer Station

County: Oakland Location: Madison Heights Town: 1N Range 11E Section(s) 12

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: _____

X Public ____ Private Owner: Southeast Oakland County Resource Recovery Authority

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

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

_____

Site Size:

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

Current capacity:		
Estimated lifetime:		years
Estimated days open per year:		days
Estimated yearly disposal volume:		compacted cubic yards

(if applicable)

Annual energy production:

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

II-4 SOLID WASTE COLLECTION SERVICES AND TRANSPORTATION INFRASTRUCTURE

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

Solid Waste Collection Services

Solid waste collection and disposal services in Oakland County are provided primarily by private sector entrepreneurs through individual agreement with individual waste generators. Nearly two thirds of the County's entire Act 451 solid waste stream is handled in such a manner.

Some of the County's municipalities choose to manage the provision of solid waste services for at least a portion of the solid waste generators within their jurisdiction. This is generally accomplished by the award of very specific contracts for the collection, processing and disposal of wastes to final selected vendors after periodic receipt of bids. In some instances, designated haulers have been identified by municipalities and a majority of the community's single family residents take advantage of such arrangements.

Beyond the single family residential waste generator, few other solid waste generators are offered services under the guise of the municipal programs. Those not being serviced must make such arrangements on their own. Local government involvement beyond adoption of basic health, safety and welfare ordinances or beyond the oversight management of municipal solid waste service contracts is very limited.

Fourteen municipalities in the southeast sector of the County joined together in 1951 to form the Southeast Oakland County Incinerator Authority which would manage the receipt and disposal of wastes handled by the municipalities, generally being the single family residential waste stream. The original fourteen member municipalities were Berkeley, Beverly Hills, Birmingham, Clawson, Ferndale, Hazel Park, Huntington Woods, Lathrup Village, Madison Heights, Oak Park, Pleasant Ridge, Royal Oak, Royal Oak Township, and Troy. Beginning in 1955, the authority operated a transfer station, a Type II landfill, and a 600 ton per day design capacity incinerator. The incinerator was closed in mid 1988 and the site is currently operated as a transfer station. In May, 1989, the Authority changed its name to the Southeastern Oakland County Resource Recovery Authority (SOCRRA). Since the spring of 1991, the Authority has operated a phone for appointment household hazardous waste (HHW) program for its residents. This program is widely envied throughout southeast Michigan. In 1992, the Authority opened a source separated material recovery facility adjacent to its transfer station in the City of Troy. The Authority's landfill presently is operated as a yard waste composting facility and the landfill is currently receiving only the compost operation residues and noncompostable yard wastes. In 1997, as original authority debt has been paid off, two municipalities (Madison Heights and Royal Oak Township) are no longer with the Authority.

Oakland County's municipalities were questioned as to the specific service levels provided as of January 1, 1996. A summary of survey results is attached as part of Attachment H.

Curbside municipal solid waste services are offered in 42 communities for mixed-wastes, in 39 communities for recyclables, and within the same 39 for yard wastes. Twenty-four municipalities offer all three curbside services in addition to offering access (at least on a periodic basis) for residents to a household hazardous waste (HHW) collection program. Thirteen additional communities offer the full curbside services including mixed, recyclables and yard wastes. Approximately 32% of the entire Act 451 waste stream is managed through the municipal programs.

The remainder is managed directly by the waste generators, generally through arrangements with private sector service providers.

Table II-11: Waste Collection & Disposal Service Providers

Service Provider	Service Type	Service Area
A&All Waste	Collection	Variable
Compliance Mgt Assoc.	Collection	Variable
Great Lakes Waste Service (Allied)	Collection and disposal	County-wide
Waste Management, Inc.	Collection and disposal	County-wide
Take-away trash service	Collection	Pontiac area
Cohen Scrap Metal/Rubbish Removal	Collection	Tri-county metro area
United Environmental Services, Inc.	Industrial & commercial containers	Tri-county metro area
Tringali Sanitation	Collection and disposal	Tri-county metro area
Montgomery & Sons	Industrial & commercial containers	Oakland County
J&D Rubbish Removal	Light hauling	Oakland County
Rogan & Son Co.	Collection and disposal	Clarkston
TNR Dumpster Rental	Industrial & commercial containers	County-wide
American Recycling	Construction & Roll-offs	County-wide
Republic	Collection and disposal	County-wide
Painter and Ruthenberg	Collection	Variable
Car Trucking	Collection	Variable
Waste-Away	Collection	Variable
Various other clean-up companies and small haulers too numerous to name	Collection	County-wide

Recycling Collection Services

Two solid waste authorities (SOCRRA and RRRASOC) offer recycling services to their member communities in Oakland County. SOCRRA operates a materials recovery facility in Troy that processed 19,400 tons of recyclables in 1998 from private waste haulers serving its 12 member communities. Some additional tonnage is also processed at the facility, including some commercially-generated corrugated cardboard.

Eight municipalities in the southwest sector of the County joined together as the Resource Recycling and Recovery Authority of Southwest Oakland County (RRRASOC) in 1989. The Authority owns and manages the operation of a material recovery facility for source separated recyclables which is located in the City of Southfield. The facility, which opened for operations in late 1994, receives the source separated recyclables not only from member communities, but from any municipality in the region. The Authority additionally operates recyclable material drop-off centers located throughout its jurisdiction for all Authority residents. The eight municipalities are Lyon Township and the cities of South Lyon, Wixom, Walled Lake, Novi, Farmington, Farmington Hills and Southfield. Individual member communities are responsible for contracting for the collection of residential recyclable materials with private sector service providers. In 1998, RRRASOC processed 9,600 tons of recyclables for its member communities, and a total of 53,000 tons of material from commercial sources and other municipalities (both Oakland and non-Oakland County).

Most other Oakland municipalities are served by either curbside recycling (subscription or by contract) services and/or drop-off recycling.

Table II-12: Recycling Service Providers

Service Provider	Service Type	Location/Service Area
Various waste haulers	Curbside recycling	14 SOCRRA communities
Various waste haulers	Curbside / drop-off recycling	RRRASOC communities
Various waste haulers	Curbside / drop-off recycling	Non-authority communities
Various municipalities	Drop-off recycling	Various
Recycling Authority-RRRASOC	Material Recovery Facility	8 communities +
Recycling Authority-SOCRRA	Material Recovery Facility	12 member communities
Fulcircle Ballast Recyclers	Lamp/ballast recycler	state-wide
Shred-it	Paper shredder/recycler	Tri-county metro area
Alan Blum, Co.	Paper recycler	Tri-county metro area
Royal Oak Waste Paper	Paper recycler	Tri-county metro area
MidStates Fibers, Inc.	Paper recycler	Tri-county metro area
ARC Scrap Mgt Inc.	Scrap metal processor	Birmingham
Action Metal Recycling	Scrap metal processor	Pontiac
AFCO Corp	Scrap metal processor	Holly
Bresler Metal Co.	Scrap metal processor	W. Bloomfield Twp
Crest Metals	Scrap metal processor	Southfield
Data Metal	Scrap metal processor	Southfield
Dixson Metal Processing	Scrap metal processor	Independence Twp
Drayton Iron & Metal	Scrap metal processor	Drayton Plains
FPT Pontiac Div.	Scrap metal processor	Pontiac
Fishman & Sons	Scrap metal processor	Royal Oak
Franklin Metal	Scrap metal processor	Southfield
GJK Metals	Scrap metal processor	Southfield
Mann Metals	Scrap metal processor	Walled Lake
Marker Metal Co.	Scrap metal processor	Northville
Marwol Metals Ltd	Scrap metal processor	Southfield
Matz Metal Co.	Scrap metal processor	Farmington Hills
Metaltex Corp	Scrap metal processor	Southfield
Mike Wiener Scrap Iron & Metal	Scrap metal processor	Southfield
Purther Recycling, Inc.	Scrap metal processor	Bingham Farms
R&E Scrap Metals	Scrap metal processor	Oak Park
Rose Metal Recycling	Scrap metal processor	Farmington Hills
Royal Oak Metal	Scrap metal processor	Royal Oak
Tri-State Metal Recycling	Scrap metal processor	Oak Park
Starbound Inc.	Scrap rubber recycler	Novi
Various others	Scrap and other recyclables	Various

Yard Waste Collection Services

Oakland County has a solid history of yard waste composting programs, with SOCRRA leading the way with the largest yard waste composting facility in Michigan. SOCRRA also boasts an aggressive yard waste reduction education program, and has documented declines in yard waste generation since those programs began nearly 10 years ago. SOCRRA in 1998 documented more than 48,000 tons of yard waste as composted or reduced through education programs.

Most other communities contract for yard waste collection services with material going to privately-operated facilities outside the county (Washtenaw and Macomb counties), with the exception the City of Pontiac which operates a yard waste composting program.

Table II-13: Yard Waste Service Providers

Service Provider	Service Type	Service Area	Compost Facility
Various waste haulers	Curbside collection of leaves, grass, brush (seasonal)	SOCRRA communities	SOCRRA
City of Pontiac	Curbside collection of leaves, grass, brush (seasonal)	City of Pontiac	City of Pontiac
Various waste haulers	Curbside collection of leaves, grass, brush (seasonal)	Oakland County	Arbor Hills, King of the Wind Farms, Tuthill Composting, Mr. Rubbish, others

II-5 EVALUATION OF DEFICIENCIES AND PROBLEMS

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

Evaluation of Existing Solid Waste Facilities and Services:

Municipally managed programs handle about 32% of Oakland's waste stream. The majority of this service is provided by private sector firms under contract to the municipalities. Local government officials are generally satisfied with the current levels of municipally offered solid waste services. All of the remaining waste stream is handled through arrangements made by the waste generators directly with the private sector providers. Intense competition exists among the private sector waste industries even with consolidation of the marketplace in recent years and generators are generally satisfied that good service is delivered or that it can easily be obtained.

The public generally perceives that solid wastes are being collected, handled, processed and disposed of in an adequate manner. The cost of providing solid waste services has remained highly competitive generally because of the regional excess of landfill capacity. Minimal problems are perceived. Public comments or questions generally are aimed at services that are not easily or readily available such as disposal points for household hazardous waste, oil and fuels, pesticides, yard wastes and etc.. Complaints about disposal facilities are generally handled quickly by the facility owners and/or operators and little public outcry or pressure exists for expanded or changed services. In fact, public interest in the overall subject has dwindled from that exhibited in the early part of this decade.

However, even given these prevalent viewpoints on the subject, a close look at existing facilities and management systems reveals several areas that are problematic.

1. The majority of in-county landfill disposal capacity may be depleted before the end of the year 2006. Costs will increase as the percentage of the waste stream handled by exports and the distance to the disposal points increases. During 1997 and 1998, an average of 40% of the County's waste stream was exported, principally to disposal facilities in contiguous counties. Siting new landfills in the County is difficult due to the high price of land, environmental considerations relating to soils and groundwaters, and sites with access to the freeway system over all weather roads without seasonal load limitations are limited or the provision of such roadway facilities is expensive.

2. Some Michigan counties that are willing to accept the import of wastes from Oakland County impose conditions that the municipality from which the wastes originated must have had volume reduction programs. Some Oakland municipalities are lacking in recycling program options which may limit the availability of disposal options and result in the required long distance export of the wastes.

3. The private sector has not stepped forward to provide convenient at-cost HHW disposal services for the general public. With the exception of those that reside within the SOCRRA municipalities, where appointments can be made on any business day to dispose of HHW materials at SOCRRA facilities throughout the year, the County's residents inquire or complain most frequently about this lacking.

4. Multi-family residents are generally not offered access to aggressive recycling programs, even in municipalities where such services to single family residents are offered. Logistics are a problem within many multi-family projects and the provision of such programs is challenging.

5. Few municipalities direct their attention to waste reduction programs for the non-residential waste stream.

6. Current recycling and volume reduction efforts do not begin to approach the goals adopted within the County's 1990 Solid Waste Management Plan update. These goals are shown in the table following. It is now recognized that the originally adopted volume reduction goals are difficult to measure and perhaps not realistically achievable. Revised, realistic goals need to be adopted.

Volume Reduction Goals for Oakland County's 1990 Solid Waste Management Plan

VR Technique	1995	2005
Source Reduction & Reuse	5%	10%
Yard Waste Composting	5%	5%
Recycling	20%	35%
Totals	30%	50%

7. The solid waste industry in southeastern Michigan has undergone a dramatic restructuring. Consolidations have occurred or are currently underway such that by the year 2000, services may essentially be offered by only 2 or 3 major service providers. This phenomenon is particularly true without regard to disposal services. A decade ago, more than 60 haulers competed within the County to provide disposal services. Today, the total number of firms providing basic solid waste services numbers less than ten and although the names of some long established local businesses have remained unchanged, ownership of the firms is gradually being acquired by the large operations. The result is that the quality of services and the level of attention paid to individual customers may be gradually diminishing. As the major handling, processing and disposal facilities come under the ownership of only a few, access to such facilities by the remaining small operations may become severely restricted. Given such pressures and given the increasing average distance to access facilities, the remaining small operations will most likely accept purchase by the major operations. All of these situations may cause the economics of the marketplace to be dramatically dynamic.

8. The economic times as measured by full employment and high average income levels are excellent. The cost of waste disposal services is generally viewed as being stable and reasonable. Excess daily operating capacity exists at the landfills within the region and wastes are imported into these facilities from generation points outside of Michigan. These several factors together may be contributing to attitudes which have permitted an increase in per capita waste generation rates. Few are willing to actively consider the subject of waste management planning (unless a designated facility is located or proposed to be located within their realm of influence) and many believe that the subject of waste disposal is simply not a problem to worry about. Some local governmental units have reduced their solid waste service offerings from levels that existed earlier in the decade and others are actively considering dropping some program elements to achieve short-term savings.

II-6 DEMOGRAPHICS

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

Population

Oakland County, in 1998, was home to approximately 1,176,000 residents and its businesses and industries provided more than 782,000 jobs to people who reside throughout southeastern Michigan. Oakland County's population is 12.1% of the State total while the employment values represent 15.5% of the State's total. The County geographically encompasses some 910 square miles and is governed by 61 local units of government - 30 cities, 10 villages and 21 townships. The County has more municipalities (61) than any other Michigan county (with Wayne County to the south being second with 43 municipalities). Michigan's 83 counties average 21.5 municipalities each.

The County population is expected to grow to 1,188,817 by the year 2000, and to 1,356,879 by the year 2020. The number of households in 1998 was more than 458,000 and is expected to reach close to half a million by 2000.

The following presents the current and projected population densities and centers for five and ten year periods.

Table II-14 Oakland County Population

	1995	1998	2003	2008
Addison Township	5,483	5784	6258	6715
Auburn Hills	19,663	20995	23225	25119
Berkley	16,986	16917	16758	16641
Beverly Hills	10,341	10195	10009	9949
Bingham Farms	995	946	890	864
Birmingham	20,147	20115	20053	20056
Bloomfield Hills	4,427	4501	4626	4752
Bloomfield Township	43,133	42813	42227	41599
Brandon Township	12,220	12902	13959	14989
Clarkston	977	968	948	924
Clawson	13,606	13353	13003	12781
Commerce Township	26,267	28007	30754	33440
Farmington	10,190	10188	10170	10163
Farmington Hills	78,008	79199	81046	82386
Ferndale	25,054	24980	24803	24681
Franklin	2,679	2583	2476	2425
Groveland Township	5,432	5759	6285	6811
Hazel Park	20,108	19728	19203	18930
Highland Township	19,071	19771	20926	22268
Holly	5,809	5936	6092	6251
Holly Township	3,660	3826	4074	4294
Huntington Woods	6,429	6461	6503	6550
Independence Township	28,498	30771	34255	37198
Keego Harbor	2,938	2912	2880	2877
Lake Angelus	338	361	417	513
Lake Orion	3,009	3001	2982	2961
Lathrup Village	4,296	4222	4120	4045
Leonard	380	390	401	414
Lyon Township	10,571	11377	12634	14114
Madison Heights	31,436	30736	29800	29089
Milford	6,301	6624	7128	7442
Milford Township	8,142	8804	9850	10847
Northville (part)	3,408	3371	3276	3165
Novi	41,595	45989	53417	60982
Novi Township	0	0	0	0
Oak Park	30,905	30943	30894	30974
Oakland Township	10,232	11197	13134	15768
Orchard Lake	2,326	2357	2407	2470
Orion Township	25,409	27223	30079	32706
Ortonville	1,524	1626	1792	1951
Oxford	3,235	3350	3479	3516
Oxford Township	10,278	10801	11646	12494
Pleasant Ridge	2,805	2774	2721	2685
Pontiac	70,018	68261	65748	63950
Rochester	7,798	8211	8903	9647
Rochester Hills	66,365	68316	71085	73076
Rose Township	5,853	6274	6951	7613
Royal Oak	65,367	64949	64447	64373
Royal Oak Township	5,256	5395	5636	5930
South Lyon	7,503	8146	9279	10362
Southfield	75,574	74888	73843	73240
Springfield Township	12,660	13826	15756	17673
Sylvan Lake	1,915	1910	1881	1835
Troy	79,002	81026	84181	85786
Walled Lake	6,479	6719	7052	7399
Waterford Township	69,222	69622	70386	71363
West Bloomfield Township	57,162	58258	59928	61592
White Lake Township	26,527	27985	30228	32085
Wixom	11,487	12757	15035	17408
Wolverine Lake	4,676	4620	4527	4441
County Totals	**1,151,175**	1,192,412	1,232,499	1,272,624
Less Northville	*3,408*	*3,346*	*3,230*	*3,121*
Solid Waste Planning Values	**1,147,767**	**1,172,546**	**1,213,188**	**1,253,409**

Source: SEMCOG Regional Development Forecast 2020; modified to meet plan year dates (i.e. 1998, 2003, 2008); modifications included simple straight-line estimates of population increases

II-7 LAND DEVELOPMENT

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

Oakland County covers 910 square miles immediately north of the city of Detroit, in southeast Michigan. The County ranks third in per capita income for counties across the U.S. with a population of more than one million. Per capita income rose 40.6 percent between 1991 and 1996 ($27,120 vs. $38,127). The median income was $57,360 in 1997, an increase of 35.6 percent from 1991.

Oakland County boasts some 450 fresh-water lakes and 88,000 acres of parkland, in addition to more than 244,000 acres of open space and agricultural land. Land use patterns are displayed in Table II-15.

Table II-15: Oakland County Land Use

	Agricultural & Vacant	Outdoor Recreation & Conservation	Water	Institutional, Commercial Industrial	Residential	Transportation, Communication & Utility
Percentage of total	42.1%	9.9%	4.7%	9.1%	28.1%	6.1%
Acres	244,000	57,100	35,300	53,000	163,000	35,300

Source: Oakland County Planning & Economic Development Services, *Economic Summary*, 1999/2000 Edition

II-8 SOLID WASTE MANAGEMENT ALTERNATIVES

The Designated Planning Agency (DPA) and the Solid Waste Planning Committee (SWPC) completed a comprehensive strategic planning process that outlined strengths, weaknesses, opportunities, and threats that are part of the current and potential future solid waste management system that services the County. This analysis was used to create goals and objectives which are provided immediately after the Executive Summary. These goals and the strategic analysis formed the basis for developing the solid waste management strategy and the selected alternative that is described in this Plan as the Plan's Enforceable Program and Process as provided for in Part 115, Section 11533 (1) of the Michigan Natural Resources and Environmental Protection Act (NREPA).

In developing the Plan's Enforceable Program and Process the DPA and SWPC first screened out strategies that were technically, politically or economically unsuitable for the County. Certain waste management technologies, incineration, for example, were determined based on historical experience for the region to not be economically and technically appropriate for further analysis.

The DPA and SWPC then reviewed solid waste management program strategies that were viewed as technically and economically feasible. These program strategies were considered as potential System Alternatives that varied by level of landfill diversion, capital and operating cost and implementation requirements. These program strategies were examined based on their key features, advantages, disadvantages, overall performance and cost impact and applicability for the county. Much of this analysis is contained in a series of reports and studies prepared for the County during the implementation process for the preceding plan.

At this stage in the strategic planning process some program strategies were determined to be unsuitable for the County based on overall technical and economic feasibility of various approaches and their ability to:

- *build on the strengths of the local and regional situation,*
- address current deficiencies and weaknesses,
- work with organizational approaches that the County is willing to consider,
- be fundable through systems that the County can implement,
- respond to and build community involvement and support,
- be enforceable, and
- set measurable goals that can be tracked to determine progress.

THE PLAN'S SELECTED ALTERNATIVE

The strategic planning process was carried through to final conclusions regarding the program strategies that would make up the Plan's Selected Alternative and become the foundation for the Plan's Enforceable Program as required by statute. The strategic planning process included final evaluation and ranking against the criteria as well as listening to the views of key stakeholders in the planning process, and others considered to be critical to implementation of the plan - primarily local government officials and service providers.

The DPA and SWPC concluded that a Regional Waste Management and Material Recovery System was the optimum choice as the Selected Alternative for the Plan's Enforceable Program. This Selected Alternative is described in the balance of the Plan with further detail provided in Appendix A of the Plan. Appendix B of the Plan contains further detail regarding the System Alternatives that were not selected as part of the Plan's Enforceable Program.

III-1 THE SELECTED SOLID WASTE MANAGEMENT SYSTEM

The Selected Solid Waste Management System (Selected System) is a comprehensive approach to managing Oakland 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 to area residents and businesses through a regional approach to solid waste management. Proposed disposal area locations and capacity to accept solid waste are identified, as well as program management, funding and enforcement roles for local agencies. Detailed information on recycling programs, evaluation, and coordination of the Selected System is included in Appendix A. Following is an overall description of the Selected System.

Through the Strategic Planning Process described in the previous section the County has selected a Regional Waste Management and Material Recovery System as the optimum choice for the Selected Alternative and the Plan's Enforceable Program with system development building on current practices over the complete 10-year planning period.

Following is a more detailed description of the specific program elements that are part of the Selected Alternative and the Plan's Enforceable Program and Process provided for in Part 115, Section 11533 (1) of NREPA. Specific details on who will implement the Plan's Enforceable Program are covered in the next section covering the Plan's Authorized Management Program. The timing of implementation of the Plan's Enforceable Program are then provided in the Plan's Timetable for Implementation that follows. The Plan's Enforceable Program, also to be known as the Oakland County Regional Waste Management and Material Recovery Program, implemented jointly by units of government within the county in cooperation with other public agencies and private firms will include features as follows:

- Solid Waste Efforts, including:
  - Current and Future Import/Export Authorization and Related Conditions
  - Disposal Areas to be Used in the Plan's Enforceable Program
  - Solid Waste Collection Services and Transportation

- Resource Conservation Efforts, including:
  - Projections of Diversion in Table III-1
  - Waste Reduction, Recycling and Composting Programs
  - Volume Reduction Techniques

- Resource Recovery and Recycling Efforts, including:
  - Overview of Resource Recovery and Recycling Programs
  - Recycling and Composting
  - Details of Current and Future Programs in Tables III-2 through III-7
  - Identification of Resource Recovery Management Entities
  - Projections of Diversion
  - Market Availability
  - Educational and Informational Programs

Further details on the "who, what, when, where, and how" of the Plan's Enforceable Program then continue with the following sections:

- Timetable for Selected System Implementation
- Siting Review Procedures
- Solid Waste Management Components
- Identification of Responsible Parties
- Local Ordinances and Regulations Affecting Solid Waste Disposal
- Capacity Certifications

Oakland County's Selected Management Alternative

The Goals and Objectives of the Oakland County Solid Waste Management Plan can be effectively achieved with a continuation of the present day solid waste management practices employed by the County's more aggressive municipalities, by adoption of similar approaches by the remaining communities, and with a substantially greater focus upon resource conservation, waste reduction, pollution prevention and recycling by all of the County's waste generators including residents, businesses and industries. Therefore, a Regional Waste Management and Material Recovery System will become the Selected Alternative and the Plan's Enforceable Program and consist of the following components.

The waste stream is normally to be separated by waste generators at the point of generation prior to collection into at least four components - recyclable materials, yard clippings, household hazardous wastes, and solid wastes. One of the objectives of this planning effort is to achieve a reduction in the waste stream which is destined for final disposal (either incineration or landfilling) of at least 28.4% by the Year 2008 through source reduction, reuse, recycling and composting. Today, total wastes generated on a per capita basis are higher than previously recorded and a volume reduction rate of only 18.1% is observed through recycling and composting. New efforts will be required and not all waste generators currently participate in existing efforts.

Waste Reduction and Conservation

Citizens, businesses, and industries are encouraged to explore the options available to their lifestyles, practices, and processes which will reduce the amount of solid wastes requiring disposal and reduce the level of environmental pollutants contained in the wastes. Resource conservation, waste reduction and pollution prevention must be voluntarily provided by all.

Recycling

Recyclable materials are to be collected from the sites of generation or from drop-off recycling centers and hauled either to material recovery facilities where they are to be processed and prepared for shipment to end users or hauled directly to end users where recyclables will be converted into raw materials and/or new products.

Composting

Yard clippings that must be disposed of away from the site of generation are to be collected from the site or from drop-off centers and transported to composting facilities for conversion to compost humus or transported to alternative yard clipping processing facilities.

Disposal

Wastes remaining after removal of recyclable materials and yard clippings as well as residues from all recycling, processing and composting operations are to be disposed of in properly licensed landfills located in Oakland County, in properly licensed disposal facilities located in other Michigan counties (where the host county's locally approved solid waste management plan is permissive towards such imports), or in properly licensed disposal facilities located elsewhere.

Collection, handling, processing and disposal of the waste stream elements by private sector solid waste service providers operating either through contracts with municipalities or through direct contracts with the residential, commercial or industrial occupants of all properties in the County is generally recognized as being the most economical and preferred operating method with variations including collection by municipal crews when local practices dictate.

Responsible Parties

The County's municipalities (cities, villages and townships) remain as the lead governmental units in setting solid waste program basics and in establishing minimum standards for community services. In this role, they monitor the service levels provided to solid waste generators within their jurisdictions by the private sector. The private sector solid waste service industry offers collection services for each of the basic waste stream elements - recyclable materials, yard clippings and the remaining wastes. To the extent that such collection services are not willingly offered by the private sector in a timely and effective manner or within competitive price ranges or should the waste generators not appropriately utilize the offered services, the County's municipalities are urged to cause the delivery of appropriate services. This can be accomplished by any one or a combination of approaches. These include awarding franchises for delivery of services, contracting for services on behalf of each solid waste generator, by the designation of preferred haulers, by the adoption of licensing scenarios aimed directly at full-service providers, or by other approaches.

Municipalities must be aware that some host counties of disposal facilities used for the disposal of locally generated wastes may well require that minimum volume reduction program effort levels exist within the municipality of generation prior to the continued acceptance of these export wastes. The municipality must be knowledgeable on local program achievement levels and be able to certify that it meets or exceeds such standards or the community's access to certain disposal facilities may be limited or restricted. This will be essential if Oakland County is to continue to use a regional network of landfill disposal areas.

Oakland County's municipalities are urged to provide specialized solid waste services requested by many waste generators if such services as offered by the private sector are not readily or conveniently available. For example, such services would include the establishment of drop-off locations for recyclable materials, yard clippings and/or bulky household items; household hazardous waste collection programs; Freon removal programs; or mixed-waste drop-off points. Additionally, basic education and information efforts aimed directly at the services locally available would be periodically provided. Those municipalities who are not currently joined together with other municipalities on solid waste issues are encouraged to participate in joint efforts or to become involved in the creation of new authorities so that they may act as a single larger agency in the management and/or provision of solid waste services. The municipal authority approach can provide an excellent administrative and economic basis for the provision of necessary specialized solid waste services.

The County's continuing role on solid waste management plan issues will be to guide the on-going Act 451 solid waste planning efforts; to periodically monitor and report on the volume reduction achievement efforts and successes of each municipality; to urge and encourage the municipalities and the business community to expand program efforts to fulfill noted voids; to continually monitor the availability of handling, processing and disposal facilities to ensure that sufficient capacity continues to exist to handle the County's entire waste stream; to provide periodically updated information on programs, facilities and educational opportunities to the county's waste generators; to continually monitor the availability of waste stream generation and recovery data; to monitor legislation which may effect the provision of solid waste services and required processing, handling or disposal facilities; and to communicate on these issues with each municipality.

Facility Designation

A primary function of the solid waste management planning process is the designation of sites upon which identified solid waste disposal area facilities may be constructed and operated. Michigan law will not allow the issuance of permits for such facilities without their specific designation within the planning documents of the host county. Oakland County has previously designated sites where specific disposal area facilities may be constructed and operated. This Plan designates 11 sites as existing or planned transfer, waste processing or disposal areas. Three of the sites are specifically designated for Type II landfills only; four sites have dual waste processing and transfer station designations; one site is designated for waste processing only; and two sites are designated as transfer only. Disposal area facility designations from the previous Plan Update will be retained with the exception of the broadly designated "disposal area" site which will be changed to transfer station. Additionally, the designation for Pontiac's Collier Road landfill will be modified to allow for the future operation of a waste processing facility and/or a transfer station should the City deem it necessary. All four landfill sites are owned by municipalities or are specifically managed to meet and address municipal concerns through host community agreements and/or consent judgment documents.

Designated Act 451 Solid Waste Disposal Area Facilities: Oakland County, MI

Basic Designation Type/Facility	Address	Municipality	Comment
Type II Landfills			
Collier Road Landfill	575 Collier Road	Pontiac	Existing
Eagle Valley Recycling and Disposal Facility	600 W. Silverbell Rd	Orion Township	Existing
Oakland Heights Development	2350 Brown Road	Auburn Hills	Existing
SOCRRA	741 School Road	Rochester Hills	Existing
Waste Processing Facilities			
Allied Waste Industries	1591 Highwood	Pontiac	Existing
RRRASOC	20000 W. 8 Mile Rd	Southfield	Existing
SOCRRA	995 Coolidge Hwy	Troy	Existing
Waste Management	1525 W. Highwood	Pontiac	Existing
Collier Road	575 Collier Road	Pontiac	New Designation
FTP – Pontiac Division	500 Collier Road	Pontiac	New designation

SELECTED SYSTEM

Transfer Stations

Allied Waste Industries	21430 W. 8 Mile Rd	Southfield	Existing
Allied Waste Industries	1591 Highwood	Pontiac	Existing
SOCRRA	991 Coolidge Hwy	Troy	Existing
Waste Management	1525 W. Highwood	Pontiac	Existing
Collier Road	575 Collier Road	Pontiac	New designation
SOCRRA	29470 John R Road	Madison	Existing "Disposal Area" designation changed to Transfer Station
FPT - Pontiac Division	500 Collier Road	Pontiac	New Designation

Disposal Capacity

Existing landfill disposal capacity within Oakland County may be depleted within the planning period. Even given this circumstance, Oakland County in cooperation with other Michigan counties has access opportunities to more than a sufficient amount of landfill disposal capacity to meet its disposal needs for the five-year and ten-year planning periods. As capacity is available for more than the ten-year planning period, an Interim Siting Mechanism for the designation of additional landfill disposal capacity is not contained within the plan and the County will not be required to annually prepare an analysis and certification of available solid waste disposal capacity and then report the results to the MDEQ.

Uncertainty exists, however, as it relates to the continuing availability of in-county landfill capacity. While it is conceivable that Oakland County will be required to export 100% of its waste stream by the end of the next decade, conversely, it is also possible that an existing facility could be expanded and current disposal patterns and export opportunities could continue largely unchanged. The County is barred from participation in the decision process on this potential facility expansion. These two potential scenarios would result in dramatically different sets of required solid waste handling facilities. Therefore, it will be assumed that if landfill capacity in the County is depleted within the planning period, steps should be taken, with County initiative, to cause the development of solid waste transfer and processing capacity at sites already identified in this Plan to compact that portion that needs to be disposed for cost effective hauling to the regional network of landfill disposal capacity that is identified in this Plan. Additional material recovery capacity will be added as needed to maximize waste reduction opportunities necessary to meet Plan goals.

Should such a system expansion fail to develop, a plan amendment process should be initiated by the County to either deal with the siting of additional landfill capacity within the County, to site additional handling facilities that might be required to ultimately bring Oakland County into a 100% export mode, to achieve agreement on some combination thereof, or to explore other alternative solutions. The amendment process should be completed in a timely manner so that sufficient time is available to design, permit, construct and begin operation of new or expanded facilities prior to depletion of existing disposal capacity resources.

Although annual certification to the MDEQ on available disposal capacity for Oakland County waste generators is not required, the County staff will continue to annually examine these issues

and to communicate their findings to the Board of Commissioners and to each municipality. This approach will help ensure that a solid waste crisis situation does not suddenly appear.

Import and Export Authorizations

Oakland County authorizes the export of wastes generated within the County to existing and future disposal facilities located in each of the other 82 Michigan counties and to existing and future disposal facilities located elsewhere. **No limitation is placed upon the amount of wastes that may be exported.**

Oakland County waste generators and service providers operating within Oakland County must understand that although this export authorization is broadly given, as Michigan law is currently written, the right to export to facilities located in a given Michigan county is subject to any limitations that may be imposed by the facility's host county's solid waste management plan and then finally subject to additional limitations that may be imposed by the facility operator. Caution must be exercised to ensure that anticipated exports are in fact permissible.

Oakland County authorizes the import of wastes generated within each of the other 82 Michigan counties to existing and future disposal facilities located in Oakland County subject to the following. **Limitations on the amount of wastes that may be imported into Oakland County from a given county will be equal to the limitations imposed by that county's solid waste management plan upon exports from Oakland County or upon a lower value if specified by the exporting other county.** Additional limitations may be imposed by the operators of existing and future Oakland County disposal facilities.

III-2 IMPORT AUTHORIZATION

The tables in this section are required by the Michigan DEQ and formally indicate which counties are authorized to bring waste into Oakland County for disposal. Tables are included for currently operating facilities, as well as for any facilities which might be developed in the future.

Oakland County authorizes the import of wastes generated within each of the other 82 Michigan counties to existing and future disposal facilities located in Oakland County.

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

Table 1-A: CURRENT IMPORT VOLUME AUTHORIZATION OF SOLID WASTE

IMPORTING COUNTY	EXPORTING COUNTY	FACILITY NAME[1]	AUTHORIZED QUANTITY/ DAILY	AUTHORIZED QUANTITY/ ANNUAL	AUTHORIZED CONDITIONS[2]
Oakland	All Michigan Counties	n.a.	n.a.	n.a.	*

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

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

* Condition for Current Imports to County Selected Sites:

***Limitations on the amount of wastes that may be imported into Oakland County from a given county will be equal to the limitations imposed by that county's solid waste management plan upon exports from Oakland County or upon a lower value if specified by the exporting other county.** Additional limitations may be imposed by the operators of existing and future Oakland County disposal facilities.

SELECTED SYSTEM

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

Table 1-B: FUTURE IMPORT VOLUME AUTHORIZATION OF SOLID WASTE CONTINGENT ON NEW FACILITIES BEING SITED

IMPORTING COUNTY	EXPORTING COUNTY	FACILITY NAME[1]	AUTHORIZED QUANTITY/ DAILY	AUTHORIZED QUANTITY/ ANNUAL	AUTHORIZED CONDITIONS[2]
Oakland	All Michigan Counties	n.a.	n.a.	n.a.	*

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

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

* Condition for Future Imports to the County Selected Site:

Limitations on the amount of wastes that may be imported into Oakland County from a given county will be equal to the limitations imposed by that county's solid waste management plan upon exports from Oakland County or upon a lower value if specified by the exporting other county. Additional limitations may be imposed by the operators of existing and future Oakland County disposal facilities.

III-3 EXPORT AUTHORIZATION

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

Table 2-A: CURRENT EXPORT VOLUME AUTHORIZATION OF SOLID WASTE

IMPORTING COUNTY	EXPORTING COUNTY	FACILITY NAME[1]	AUTHORIZED QUANTITY/ DAILY	AUTHORIZED QUANTITY/ ANNUAL	AUTHORIZED CONDITIONS[2]
Wayne	Oakland	NA	NA	NA	P*
Macomb	Oakland	NA	NA	NA	P*
Monroe	Oakland	NA	NA	NA	P*
Livingston	Oakland	NA	NA	NA	P*
Genesee	Oakland	NA	NA	NA	P*
Lapeer	Oakland	NA	NA	NA	P*
Jackson	Oakland	NA	NA	NA	P*
Midland	Oakland	NA	NA	NA	P*
Bay	Oakland	NA	NA	NA	P*
Saginaw	Oakland	NA	NA	NA	P*
Sanilac	Oakland	NA	NA	NA	P*
Crawford	Oakland	NA	NA	NA	P*
Leelanau	Oakland	NA	NA	NA	P*
Manistee	Oakland	NA	NA	NA	P*
Antrim	Oakland	NA	NA	NA	P*
Benzie	Oakland	NA	NA	NA	P*
Kalkaska	Oakland	NA	NA	NA	P*
Emmet	Oakland	NA	NA	NA	P*
Missaukee	Oakland	NA	NA	NA	P*
Mecosta	Oakland	NA	NA	NA	P*
Montmorency	Oakland	NA	NA	NA	P*
Wexford	Oakland	NA	NA	NA	P*
Clare	Oakland	NA	NA	NA	P*
Osceola	Oakland	NA	NA	NA	P*
Muskegon	Oakland	NA	NA	NA	P*
Ottawa	Oakland	NA	NA	NA	P*
Kent	Oakland	NA	NA	NA	P*
Clinton	Oakland	NA	NA	NA	P*
Shiawasee	Oakland	NA	NA	NA	P*
Kalamazoo	Oakland	NA	NA	NA	P*

_____Additional authorizations and Condition for those authorizations are listed on an attached page.

Table 2-A: Continued:

CURRENT EXPORT VOLUME AUTHORIZATION OF SOLID WASTE

IMPORTING COUNTY	EXPORTING COUNTY	FACILITY NAME[1]	AUTHORIZED QUANTITY/ DAILY	AUTHORIZED QUANTITY/ ANNUAL	AUTHORIZED CONDITIONS[2]
Chippewa	Oakland	NA	NA	NA	P*
Presque Isle	Oakland	NA	NA	NA	P*
Charlevoix	Oakland	NA	NA	NA	P*
Barry	Oakland	NA	NA	NA	P*
Ingham	Oakland	NA	NA	NA	P*
Calhoun	Oakland	NA	NA	NA	P*
Berrien	Oakland	NA	NA	NA	P*
St. Joseph	Oakland	NA	NA	NA	P*
Lenawee	Oakland	NA	NA	NA	P*
Montcalm	Oakland	NA	NA	NA	P*
Menominee	Oakland	NA	NA	NA	P*
Delta	Oakland	NA	NA	NA	P*
Ontonagon	Oakland	NA	NA	NA	P*

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

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

* Condition for Current Exports:

Oakland County authorizes the export of wastes generated within the County to existing disposal facilities located in each of the other 82 Michigan counties and to existing disposal facilities located elsewhere. **No limitation is placed upon the amount of wastes that may be exported.**

Oakland County waste generators and service providers operating within Oakland County must understand that although this export authorization is broadly given, as Michigan law is currently written, the right to export to facilities located in a given Michigan county is subject to any limitations that may be imposed by the facility's host county's solid waste management plan and then finally subject to additional limitations that may be imposed by the facility operator. Caution must be exercised to ensure that anticipated exports are in fact permissible.

SELECTED SYSTEM

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

Table 2-B: FUTURE EXPORT VOLUME AUTHORIZATION OF SOLID WASTE CONTINGENT ON NEW FACILITIES BEING SITED

IMPORTING COUNTY	EXPORTING COUNTY	FACILITY NAME[1]	AUTHORIZED QUANTITY/ DAILY	AUTHORIZED QUANTITY/ ANNUAL	AUTHORIZED CONDITIONS[2]
All Michigan Counties	Oakland	NA	NA	NA	P *

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

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

* Condition for Future Exports:

Oakland County authorizes the export of wastes generated within the County to future disposal facilities located in each of the other 82 Michigan counties and to future disposal facilities located elsewhere. **No limitation is placed upon the amount of wastes that may be exported.**

Oakland County waste generators and service providers operating within Oakland County must understand that although this export authorization is broadly given, as Michigan law is currently written, the right to export to facilities located in a given Michigan county is subject to any limitations that may be imposed by the facility's host county's solid waste management plan and then finally subject to additional limitations that may be imposed by the facility operator. Caution must be exercised to ensure that anticipated exports are in fact permissible.

III- 4 SOLID WASTE DISPOSAL AREAS

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

Designated Solid Waste Disposal Areas in Oakland County:

The following pages contain descriptions of the solid waste disposal facilities listed below which are located within the County and which will be utilized by the County for the planning period. These facilities are specifically designated in Section III-9, Siting Review Procedures, Subsection Authorized Disposal Area Types. 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.

Type II Landfill:
Collier Road Landfill
Eagle Valley Landfill
Oakland Heights Landfill
SOCRRA Landfill
Type III Landfill:
None Designated
Incinerator:
None Designated
Waste-to-Energy Incinerator
None Designated
Other:
None Designated

Type A Transfer Facility:
Allied Waste Transfer Station – Southfield
Allied Waste Site – Pontiac
SOCRRA Transfer Station – Troy
SOCRRA Transfer Station – Madison Hts.
City of Pontiac Site- Pontiac
Waste Management Site- Pontiac
FPT – Pontiac Division- Pontiac
Processing Facility:
SOCRRA MRF Site – Troy
RRRASOC MRF Site – Southfield
Allied Waste Site – Pontiac
City of Pontiac Site- Pontiac
Waste Management Site- Pontiac
FPT – Pontiac Division-Pontiac
Waste Piles:
None Designated

Designated Solid Waste Disposal Areas Not in Oakland County:

Disposal facilities located outside of the County will be utilized by the County for the planning period as long as they are properly identified and sited consistent with the host County's Plan. 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.

Wastes exported from Oakland County into another Michigan county must meet any conditions or restriction imposed by the importing county.

All existing non-hazardous waste landfill disposal areas in Michigan are designated in this Plan for receipt of Oakland County generated solid waste. These facilities are identified within MDEQ's annual landfill reports and by reference, the FY 98 report is included herein (also see http://www.deq.state.mi.us/wmd/). The name and location of each facility may be viewed within this basic reference material. The landfill and waste-to-energy facilities located within contiguous and other nearby counties are listed below. Most were specifically used during the past three years, some were available and not used and others are anticipated to become newly available as indicated.

Landfill	Host County	Notes
Arbor Hills	Washtenaw	Historical usage pattern
Adrian Landfill	Lenawee	Available, not used last three years
Brent Run	Genesee	Historical usage pattern
Carleton Farms	Wayne	Historical usage pattern
Citizen's Disposal	Genesee	Historical usage pattern
Ford Motor Company	Wayne	Historical usage pattern
GDRRA	Wayne	Available, not used last three years
Pine Tree Acres	Macomb	Historical usage pattern
Phillip McGill Road	Jackson	Available, not used last three years
Pioneer Rock	Lapeer	Available, currently closed but potentially available
Riverview	Wayne	Available, not used last three years
Salzburg Road	Midland	Available, not used last three years
Sauk Trail Hills	Wayne	Historical usage pattern
Sibley Quarry	Wayne	Available, not used last three years
Standard Rockwood	Monroe	Historical usage pattern
Tri City	Sanilac	Newly available, 99 plan update
Venice Park	Shiawassee	Available, not used last three years
Westside	St. Joseph	Newly available, 99 plan update
Woodland Meadows	Wayne	Historical usage pattern

Other disposal area facilities such as transfer stations or processing plants are also utilized. No attempt is made herein to specifically identify those located in contiguous counties.

III- 4 CONTINUED: SOLID WASTE FACILITY DESCRIPTIONS

Facility Type: Landfill

Facility Name: Oakland Heights Development

County: Oakland Location: Auburn Hills Town 3N Range 10E Section(s) 2

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: Allied Waste Industries

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

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

Site Size:

Total area of facility property:	120.74	acres
Total area sited for use:	83.4	acres
Total area permitted:	120.7	acres
Operating:	65.1	acres
Not excavated:	18.3	acres
Current capacity:	5,085,000	bankyards
Estimated lifetime:	5	years
Estimated days open per year:	309	days
Estimated yearly disposal volume:	2,000,000	gate yards

(if applicable)

Annual energy production:

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

SELECTED SYSTEM

FACILITY DESCRIPTIONS

Facility Type: Landfill

Facility Name: Eagle Valley RDF

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

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

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

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

Site Size:

Total area of facility property:	330	acres
Total area sited for use:	330	acres
Total area permitted:	89	acres
Operating:	89	acres
Not excavated:	0	acres
Current capacity:	3,400,000	bank yards
Estimated lifetime:	4.4	years
Estimated days open per year:	286	days
Estimated yearly disposal volume:	1,500,000	gate yards

(if applicable)

Annual energy production:

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

SELECTED SYSTEM

FACILITY DESCRIPTIONS

Facility Type: Landfill

Facility Name: Collier Road Landfill

County: Oakland Location: Pontiac Town: 3N Range 10E Section(s) 4, 5, 8, 9

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: ____

X Public ____ Private Owner: City of Pontiac

Operating Status (check)		Waste Types Received (check all that apply)	
X	open	X	residential
	closed	X	commercial
X	licensed	X	industrial
	unlicensed	X	construction & demolition
	construction permit	X	contaminated soils
	open, 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:	210	acres
Total area sited for use:		acres
Total area permitted:		acres
Operating:		acres
Not excavated:		acres
Current capacity:	953,000	bankyards
Estimated lifetime:	8	years
Estimated days open per year:		days
Estimated yearly disposal volume:	250,000	gate cubic yards

(if applicable)

Annual energy production:

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

SELECTED SYSTEM

FACILITY DESCRIPTIONS

Facility Type: Landfill/Compost

Facility Name: Southeastern Oakland County Resource Recovery Authority (SOCRRA)

County: Oakland Location: Rochester Hills Town: 3N Range 11E Section(s) 13, 24

Map identifying location included in Attachment Section: _____ Yes _____ No

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

X Public _____ Private Owner: Southeast Oakland County Resource Recovery Authority

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

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

_____

Site Size:

Total area of facility property:	183	acres
Total area sited for use:	_____	acres
Total area permitted:	_____	acres
Operating:	_____	acres
Not excavated:	_____	acres

Current capacity:	0	
Estimated lifetime:	0	years
Estimated days open per year:	_____	days
Estimated yearly disposal volume:	0	compacted cubic yards

(if applicable)

Annual energy production:

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

SELECTED SYSTEM

FACILITY DESCRIPTIONS

Facility Type: Waste Transfer

Facility Name: Allied Waste Industries Transfer Station

County: Oakland Location: Southfield Town: 1N Range 10E Section(s) 34

Map identifying location included in Attachment Section: X Yes ____ No

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

____ Public X Private Owner: Allied Waste Industries

Operating Status (check)		Waste Types Received (check all that apply)	
X	open	X	residential
	closed	X	commercial
X	licensed	X	industrial
	unlicensed	X	construction & demolition
	construction permit	X	contaminated soils
	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:	5.5	acres
Total area sited for use:		acres
Total area permitted:		acres
Operating:		acres
Not excavated:		acres
Current capacity:		
Estimated lifetime:		years
Estimated days open per year:		days
Estimated yearly disposal volume:		compacted cubic yards

(if applicable)

Annual energy production:

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

SELECTED SYSTEM

FACILITY DESCRIPTIONS

Facility Type: Waste Transfer

Facility Name: SOCRRA Transfer Station

County: Oakland Location: Troy Town: 2N Range 11E 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: ____

X Public ____ Private Owner: SOCRRA

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

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

Site Size:

Total area of facility property:	10.9	acres
Total area sited for use:		acres
Total area permitted:		acres
Operating:		acres
Not excavated:		acres

Current capacity:		
Estimated lifetime:		years
Estimated days open per year:		days
Estimated yearly disposal volume:		gate yards

(if applicable)

Annual energy production:

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

SELECTED SYSTEM

FACILITY DESCRIPTIONS

Facility Type: Waste Transfer

Facility Name: SOCRRA Transfer Station

County: Oakland Location: Madison Heights Town: 1N Range: 11E Section(s) 12

Map identifying location included in Attachment Section: _____ Yes _____ No

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

X Public _____ PrivateOwner: Southeast Oakland County Resource Recovery Authority

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

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

_____

Site Size:

Total area of facility property:	19	acres
Total area sited for use:		acres
Total area permitted:		acres
Operating:		acres
Not excavated:		acres
Current capacity:		
Estimated lifetime:		years
Estimated days open per year:		days
Estimated yearly disposal volume:		compacted cubic yards

(if applicable)

Annual energy production:

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

SELECTED SYSTEM

FACILITY DESCRIPTIONS

Facility Type: Waste Transfer

Facility Name: Allied Waste Industries Transfer Station

County: Oakland Location: Pontiac Town: 3N Range 10E Section(s) 8,9

Map identifying location included in Attachment Section: X Yes ____ No

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

____ Public X Private Owner: Allied Waste Industries

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

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

_____

Site Size:

Total area of facility property:	40	acres
Total area sited for use:	____	acres
Total area permitted:	____	acres
Operating:	____	acres
Not excavated:	____	acres

Current capacity:	____	
Estimated lifetime:	____	years
Estimated days open per year:	____	days
Estimated yearly disposal volume:	____	compacted cubic yards

(if applicable)

Annual energy production:

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

SELECTED SYSTEM

FACILITY DESCRIPTIONS

Facility Type: Waste Transfer

Facility Name: Waste Management - City Waste Systems, Inc.

County: Oakland Location: Pontiac Town: 3N Range 10E Section(s) 8,9

Map identifying location included in Attachment Section: X Yes ____ No

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

____ Public X Private Owner: Waste Management - City Waste Systems

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

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

Site Size:

Total area of facility property:	15	acres
Total area sited for use:	15	acres
Total area permitted:	____	acres
Operating:	____	acres
Not excavated:	____	acres
Current capacity:	____	
Estimated lifetime:	____	years
Estimated days open per year:	____	days
Estimated yearly disposal volume:	____	compacted cubic yards

(if applicable)

Annual energy production:

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

SELECTED SYSTEM

FACILITY DESCRIPTIONS

Facility Type: Waste Transfer

Facility Name: City of Pontiac Transfer Station

County: Oakland Location: Pontiac Town: 3N Range 10E Section(s) 4,8,9,

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: _____

X Public ____ Private Owner: City of Pontiac

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

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

_____

Site Size:

Total area of facility property:	132	acres
Total area sited for use:	____	acres
Total area permitted:	____	acres
Operating:	____	acres
Not excavated:	____	acres

Current capacity:	____	
Estimated lifetime:	____	years
Estimated days open per year:	____	days
Estimated yearly disposal volume:	____	compacted cubic yards

(if applicable)

Annual energy production:

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

SELECTED SYSTEM

FACILITY DESCRIPTIONS

Facility Type: Waste Transfer

Facility Name: FPT – Pontiac Division

County: Oakland Location: Pontiac Town: 3N Range 10E Section(s) 8,9

Map identifying location included in Attachment Section: X Yes ____ No

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

____ Public X Private Owner: Ferrous Processing and Trading, L.L.C.

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

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

____

Site Size:

Total area of facility property:	38	acres
Total area sited for use:	____	acres
Total area permitted:	____	acres
Operating:	____	acres
Not excavated:	____	acres
Current capacity:	____	
Estimated lifetime:	____	years
Estimated days open per year:	260	days
Estimated yearly disposal volume:	____	compacted cubic yards

(if applicable)

Annual energy production:

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

SELECTED SYSTEM

FACILITY DESCRIPTIONS

Facility Type: Waste Processing

Facility Name: SOCRRA Transfer Station

County: Oakland Location: Troy Town: 2N Range 11E 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: ____

X Public ____ Private Owner: Southeast Oakland County Resource Recovery Authority

Operating Status (check)		Waste Types Received (check all that apply)	
____	open	X	residential
____	closed	X	commercial
____	licensed	X	industrial
____	unlicensed	____	construction & demolition
____	construction permit	____	contaminated soils
X	designated but not permitted as such	____	other:

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

Site Size:

Total area of facility property:	10.9	acres
Total area sited for use:	____	acres
Total area permitted:	____	acres
Operating:	____	acres
Not excavated:	____	acres

Current capacity:	____	
Estimated lifetime:	____	years
Estimated days open per year:	____	days
Estimated yearly disposal volume:	____	compacted cubic yards

(if applicable)

Annual energy production:

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

SELECTED SYSTEM

FACILITY DESCRIPTIONS

Facility Type: Waste Processing

Facility Name: RRRASOC Material Facility

County: Oakland Location: Southfield Town: 1N Range 10E Section(s) 35

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: ____

X Public ____ Private Owner: RRRASOC (Resource, Recovery & Recycling Authority of Southwest Oakland County)

Operating Status (check)		Waste Types Received (check all that apply)	
____	open	X	residential
____	closed	X	commercial
____	licensed	X	industrial
____	unlicensed	____	construction & demolition
____	construction permit	____	contaminated soils
____	open, but closure pending	____	special wastes *
X	designated but not permitted	____	other:

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

____

Site Size:

Total area of facility property:	6.2	acres
Total area sited for use:	____	acres
Total area permitted:	____	acres
Operating:	____	acres
Not excavated:	____	acres

Current capacity:	____	
Estimated lifetime:	____	years
Estimated days open per year:	____	days
Estimated yearly disposal volume:	____	compacted cubic yards

(if applicable)

Annual energy production:

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

SELECTED SYSTEM

FACILITY DESCRIPTIONS

Facility Type: Waste Processing

Facility Name: City of Pontiac Transfer Station

County: Oakland Location: Pontiac Town: 3N Range 10E Section(s) 4,8,9,

Map identifying location included in Attachment Section: _____ Yes _____ No

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

X Public _____ Private Owner: City of Pontiac

Operating Status (check)		Waste Types Received (check all that apply)	
_____	open	X	residential
_____	closed	X	commercial
_____	licensed	X	industrial
_____	unlicensed	X	construction & demolition
_____	construction permit	X	contaminated soils
_____	open, but closure pending	X	special wastes *
X	designated but not yet developed	X	other:

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

_____

Site Size:

Total area of facility property:	132	acres
Total area sited for use:	_____	acres
Total area permitted:	_____	acres
Operating:	_____	acres
Not excavated:	_____	acres

Current capacity:	_____	
Estimated lifetime:	_____	years
Estimated days open per year:	_____	days
Estimated yearly disposal volume:	_____	compacted cubic yards

(if applicable)

Annual energy production:

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

SELECTED SYSTEM

FACILITY DESCRIPTIONS

Facility Type: Waste Processing

Facility Name: Allied Waste Industries Transfer Station

County: Oakland Location: Pontiac Town: 3N Range 10E Section(s) 8,9

Map identifying location included in Attachment Section: _____ Yes _____ No

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

_____ Public X Private Owner: Allied Waste Industries

Operating Status (check)		Waste Types Received (check all that apply)	
_____	open	X	residential
_____	closed	X	commercial
_____	licensed	X	industrial
_____	unlicensed	X	construction & demolition
_____	construction permit	X	contaminated soils
_____	open, but closure pending	X	special wastes *
_____	designated but not yet developed	X	other:

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

_____

Site Size:

Total area of facility property:	40	acres
Total area sited for use:	_____	acres
Total area permitted:	_____	acres
Operating:	_____	acres
Not excavated:	_____	acres
Current capacity:	_____	
Estimated lifetime:	_____	years
Estimated days open per year:	_____	days
Estimated yearly disposal volume:	_____	compacted cubic yards

(if applicable)

Annual energy production:

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

SELECTED SYSTEM

FACILITY DESCRIPTIONS

Facility Type: Waste Processing Facility

Facility Name: Waste Management - City Waste Systems, Inc.

County: Oakland Location: Pontiac Town: 3N Range 10E Section(s) 8,9

Map identifying location included in Attachment Section: ____ Yes 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: ____

____ Public X Private Owner: Waste Management - City Waste Systems

Operating Status (check)		Waste Types Received (check all that apply)	
____	open	X	residential
____	closed	X	commercial
____	licensed	X	industrial
____	unlicensed	X	construction & demolition
____	construction permit	X	contaminated soils
____	open, but closure pending	X	special wastes *
X	designated but not yet developed	X	other:

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

Site Size:

Total area of facility property:	15	acres
Total area sited for use:	15	acres
Total area permitted:		acres
Operating:		acres
Not excavated:		acres
Current capacity:		
Estimated lifetime:		years
Estimated days open per year:		days
Estimated yearly disposal volume:		compacted cubic yards

(if applicable)

Annual energy production:

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

SELECTED SYSTEM

FACILITY DESCRIPTIONS

Facility Type: Waste Processing

Facility Name: FPT – Pontiac Division

County: Oakland Location: City of Pontiac Town: 3N Range 10E Section(s) 8,9

Map identifying location included in Attachment Section: X Yes ____ No

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

____ Public X Private Owner: Ferrous Processing and Trading, L.L.C.

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

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

_____

Site Size:

Total area of facility property:	38	acres
Total area sited for use:	____	acres
Total area permitted:	____	acres
Operating:	____	acres
Not excavated:	____	acres
Current capacity:	____	
Estimated lifetime:	____	years
Estimated days open per year:	260	days
Estimated yearly disposal volume:	____	compacted cubic yards

(if applicable)

Annual energy production:

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

III-5 SOLID WASTE COLLECTION SERVICES & 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.

In the Plan's Enforceable Program comprehensive solid waste collection services will be made available to all households and businesses in the County. Proactive steps will be taken to reduce the incidence of illegal dumping and litter and target areas will be policed with enforcement of violations. Household hazardous waste collection services will be provided and expanded to include collection of small quantities of agricultural pesticides and herbicides. "Adopt a ____" programs will be continue to be expanded and promoted with volunteers and business/service group sponsorship for periodic cleaning of roadsides, streambanks, lakeshores, parks and forests. Should specified levels of diversion not be reached, incentives for increased adoption of and participation in recovery programs will be evaluated, including bans on disposal of certain materials, pay-as-you-throw solid waste collection systems, and others as deemed appropriate.

Solid waste generated within Oakland County will be primarily collected by private sector solid waste service providers with public sector service providers where local practices dictate. An increase is anticipated in the amount of the total residential waste stream collected under contract with municipalities while the remainder will be collected through agreements with individual waste generators. An increase is also expected in the total volume of wastes handled through transfer station operations prior to delivery for landfill disposal or composting while the remainder will continue to be directly transported directly to landfills, compost operations or material recovery facilities.

Existing transfer station operations in Oakland County owned and managed by SOCRRA and by Allied Waste Industries will continue to operate with additional transfer station facilities designated for construction in order to increase availability of transfer capacity throughout the County.

Existing collection services and the existing transportation infrastructure will continue to operate and grow as needed to accommodate the future waste stream within the existing matrix of disposal area facilities to which the stream is currently distributed for processing, composting or disposal. Some incremental changes will emerge as individual municipalities impose minimum standards or policies on existing inadequate services or as full service program elements are implemented and refined.

As landfill capacity within the county becomes depleted, Oakland County will require access to a considerable additional amount of transfer station capacity to serve its needs unless additional landfill capacity is made available within close proximity. Facility specifics will be developed as details of future disposal capacity availability are known and as industry develops alternative solutions.

Nothing in this section is intended to prohibit the transport of solid waste generated in Oakland County out of the State of Michigan as provided by federal or state law.

III-6 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.

The Resource Conservation Efforts will rely on education and incentives to encourage source reduction, reuse and recycling with the following projected impact in measurable programs and additional impact in source reduction that cannot be measured.

Oakland County supports the basic concepts of resource conservation (reduced resource use per product, increased product life, product reuse and decreased consumption of products which become solid waste); of waste reduction (changes in manufacturing or other processes which generate solid waste so that a reduced amount of waste is created); and of pollution prevention (changes in manufacturing or other processes or changes that may be made directly to the waste stream to produce waste that contains less potential for environmental pollution). Oakland County seeks the benefits that may be achieved from such efforts. This Plan encourages all waste generators to explore means to increase resource conservation, to reduce the amount of waste generated and to minimize the environmental pollutants contained in the final stream.

Successful resource conservation, waste reduction, and pollution prevention efforts are driven by knowledgeable waste generators. A considerable amount of educational, informational, and promotional effort is needed on a regular basis to sustain and increase interest in these concepts. It is believed that beyond the local sponsorship of household hazardous waste programs, little of significance can be accomplished by the simple adoption of countywide or community-wide regulations or informational programs to promote resource conservation, waste reduction or pollution prevention. Such efforts must instead be very broad based and be aimed at every waste generator, state and nation-wide. The state and federal governments should provide educational, informational and promotional materials on these subjects. Educational efforts could not only be directed to commercial and industrial waste generators but towards individual consumers on such items as the purchase of reusable items rather than disposable, selecting products that are manufactured using recycled materials, that are packaged in recyclable containers, or by purchasing goods in the bulk to reduce the amount of packaging waste. The state level material should be widely promoted in every forum and distributed to all educational institutions and local governmental units from where it may additionally be transmitted to the individual generators and consumers. Since resource conservation, waste reduction and pollution prevention efforts are provided voluntarily and will change with technologies and public awareness, and since it is extremely difficult to measure the current success levels being achieved, this plan does not assign a specific volume reduction goal for these items or establish a value on the amount of wastes currently diverted from landfill disposal.

Household hazardous waste collection programs are not uniformly available to all residents of the County. The County will encourage and promote the establishment of such programs by each of the municipalities whether through their own individual efforts or through collective

approaches. Additionally, the County will encourage the private sector to establish free market collection points which may be accessed by any resident for the proper disposal of household hazardous wastes for nominal fees. Such programs should be available to the public throughout the year. Finally, the County will periodically identify the availability of such programs, be they municipally or private sector sponsored, and make such information widely available.

Table III-1: Resource Conservation Effort

Description	**Est. Diversion Tons/Yr**		
	1998	**2003**	**2008**
Residential Yard Waste	132,422	137,019	142,448
Residential Recycling	58,616	81,339	113,022
Commercial Yard Waste	14,457	15,712	16,549
Commercial Recycling	90,819	144,255	217,504
Industrial Recycling	14,350	17,926	23,845
C&D Recycling	22,899	33,616	48,984
Industrial Special Waste Recycling	19,934	25,634	33,930
Oakland County Totals (after deducting process residue)	353,496	455,493	595,375
% of waste stream diverted	**18.12%**	**22.42%**	**28.42%**

III-7 WASTE REDUCTION, RECYCLING, & COMPOSTING:

Volume Reduction Techniques:

The following describes the techniques utilized and proposed to be used throughout the County which reduces the volume of solid waste requiring disposal. 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.

The Plan's Enforceable Program provides for high compaction waste transfer in order to increase the density of loads that are transported to landfills, thus lowering tip fees at those landfills and/or reducing transportation costs. This will reduce the gate yards taken in at these landfills but will not impact bank yards (i.e.: estimated air space conserved in cubic yards) since the final compaction density at landfills is not expected to change. Landfills will use less energy, fuel, etc. to reach those densities, however, which does provide some economic benefit to the landfill owner.

This Plan also promotes increased reliance of yard waste reduction techniques, such as those documented and employed by SOCRRA and other communities. These include backyard composting, mulching of grass clippings and low-maintenance plantings that generate less wastes. For example, collection of grass in SOCRRA communities dropped from a high of 24,567 tons in 1990-91, to just 7,208 tons in 1996-97, largely due to aggressive public education programs.

Resource Recovery Programs:

Oakland County believes that resource recovery programs must be a continued part of the ongoing solid waste management system. The extremely successful efforts conducted by the SOCRRA and RRRASOC municipalities are proof of what concerted efforts can produce. These efforts are highlighted in other sections of this document.

The composition of the Oakland County waste stream has been analyzed in earlier planning efforts. Continued review and analysis of the waste stream and comparison of this material to updated national data confirms that little change in waste stream composition has occurred from that noted within the Oakland County 1990 Plan Update and the 1994 Plan Amendment documents. A substantial percentage of the stream is potentially recoverable through yard clipping programs and recovery of recyclable materials.

Michigan's banning of yard clippings from landfills produced remarkable volume reduction results within a short time period. Although minimal additional improvements may be anticipated in the future (both in the diversion percentage achieved and in the end product quality areas), the successes of this program have largely been realized. In Oakland County, no additional volume reduction over that rate currently observed is projected for the yard clipping programs. Recovery of recyclable materials is however another story. Much more can be accomplished and impediments to achievement of the countywide volume reduction goals do exist. These impediments generally result from the lack of convenient full-service program offerings and/or

the lack of participation by all generators in programs that do exist. These impediments are viewed as nearly universal problems.

Existing municipal programs are highlighted within the Database section of this report and in Attachment H ("Report of Municipally Sponsored Solid Waste Programs" as part of the Background Report). It is anticipated that program offerings within all municipalities will ultimately be expanded to match the level of services currently offered within the principal authority municipalities.

The County will urge that appropriate resource conservation, waste reduction, pollution prevention and resource recovery programs be adopted by each municipality and by the business community. Facilities that accept recyclables as well as solid waste educational providers and opportunities will be periodically identified as resources for each waste generator within the County and this information will be made widely available. Municipalities that find it necessary to become involved with waste reduction and recycling programs to increase volume reduction achievement levels will be urged to do so and to increase the economic effectiveness of these efforts, they will be urged to consider cooperative approaches along with other municipalities. Technical assistance and education will be offered by the County to municipalities and businesses that are in the process of establishing new programs. This will include continued monitoring of program performance, as well as evaluation of under-served areas and sectors of the County.

Over the coming years, additional opportunities to assist all waste generators in achieving higher volume reduction levels are possible. These might include County recognition of high performance resource conservation, waste reduction and pollution prevention efforts by businesses; recognition of municipalities that aid their citizens and businesses in achieving high volume reduction levels; identification and recognition of school programs and other organizations that offer continuing solid waste educational opportunities; and perhaps the organization of a business advisory council to provide an open forum on recycling and volume reduction issues . Oakland County will remain flexible and be open to the use of all reasonable avenues which will continue the encouragement of resource conservation, waste reduction, pollution prevention, and resource recovery programs.

OVERVIEW OF RESOURCE RECOVERY AND RECYCLING 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.

Total waste generation for Oakland County was calculated using pounds per person per day (residential) and pounds per employee per day (commercial and industrial) models. These numbers were compared and reconciled with actual disposal and recovery data to determine a final generation number. Using population projected out over the planning period (adjusted for seasonal population variation) waste generation was then estimated. The County then evaluated various material recovery and waste reduction strategies, and compared actual recovery rates for the current system against what may be possible given new program implementation. With target recovery goals in mind (25 percent for 2005 and 30 percent for 2010), the County was able to determine target material tonnage for recovery and then matched actual programs and recovery benchmarks from other communities, needed to meet those goals.

RECYCLING AND COMPOSTING

The following is a brief analysis of the recycling and composting programs selected for the County in this Plan. Additional information on operation of recycling and composting programs is included in Appendix A. The analysis covers various factors within the County and the impacts of these factors on recycling and composting. Tables that follow this subsection 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 that follow this subsection list the recycling, composting, and source separation of hazardous materials programs that are proposed in the future for the County. It is not the intent of this Plan's update to prohibit additional programs or expansions of current programs to be implemented beyond those listed.

Recycling

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

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

The following recycling systems would be developed:

Recycling Incentives:

Proactive education and promotion strategies would encourage responsible solid waste management and strong reduce/reuse/recycle behavior. Through continued monitoring of program performance, the County will determine whether waste reduction and recovery goals are being met, and may evaluate incentive programs such as Pay As You Throw (PAYT) programs, bundling of service contracts, and/or banning of certain materials from landfills.

SELECTED SYSTEM

Recycling drop-offs would add more materials to encourage overall participation in program by more citizens and businesses. An comprehensive outreach and education program would promote all aspects of the expanded system and improvements.

Drop-Off Residential Recycling:

The existing network of drop-off sites for recycling will continue to be developed with upgrades to continually improve visibility and user convenience especially for those generators not serviced by curbside or other point of generation recycling systems. Selected sites would be developed as "super drop-offs" that collected a wider range of material with staff to assist in site operations and vehicle unloading. Efforts would be directed at increasing the range of materials handled at all drop-offs and standardizing those materials to provide consistent service throughout the County.

Curbside Residential Recycling:

Curbside collection of recyclables would be provided in all the more densely populated areas of the County, preferably through municipally arranged contracts in order to provide for the most cost effective service. In other areas, subscription curbside recycling would be available for residents that were willing to make their own arrangements for the service with area haulers.

Multi-Family Residential Recycling:

Residents of two and three-family multi-family housing would be serviced by municipally contracted curbside recycling services where available or by subscription based curbside services. Four and more unit multi-family housing would be serviced with recycling depot systems at dumpster locations within each multi-family complex by a recycling service provider under contract with facility management. High-rise multi-family housing residents would be provided with recycling services as part of the trash chute system in each facility.

Commercial Recycling:

Small businesses would be encouraged to use the drop-off recycling network for smaller volumes of paper and containers or use curbside recycling services if they already use curbside trash collection services. Larger commercial, institutional and industrial generators would arrange with their own service providers to have recycling service provided at a level of accessibility matching that of their solid waste service. Existing corrugated collection routes would be expanded to include more businesses and office paper added where appropriate.

Material Transfer and Processing:

Arrangements would be made to provide access to a material recovery facility (MRF) convenient to all areas of the County. This will likely require expansion of existing MRF's to increase throughput, sorting capability and the overall number of accepted materials, and also require additional MRF capacity in the central and northern parts of the County to expand access to these services for those parts of the County. These arrangements would include guarantees that sufficient capacity was available to meet the County's needs over the long term and that the facilities would be able to process commingled containers and commingled fibers as well as presorted recyclables like OCC.

Composting

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

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

Residential Yard Waste Composting:

Fall leaf collection would be provided in most villages/town/city areas. Backyard composting would be encouraged through distribution of backyard bins at discount rates and encouragement of "grass-cycling" as demonstrated in the SOCRRA area. Access to permanent drop-off options for yard waste would be encouraged throughout the County and the long term viability of the yard waste composting sites serving the County monitored to assure their continued availability.

Clean Community

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

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

Clean Community Programs:

Access to household hazardous waste collection centers will be provided throughout the County.

TABLE III-2: RECYCLING: Based on Current Programs

Program Name	Service Area	Public or Private	Collect-ion Point[2]	Collection Frequency[3]	Program Management Responsibilities[1]			
					Mater-ials[4]	Devel-opment	Opera-tion	Evalu-ation
Drop-off	Addison Twp, Auburn Hills, Brandon Twp, Clarkston, Holly Twp, Independence Twp, Lyon Twp, Novi, Ortonville, Oxford Twp, Pontiac, Rose Twp, Springfield Twp, Waterford Twp	Public	Drop-off sites	Variable	A, B, C, D, E, L, F1	3, 5	5, 3	3
Curbside (subscrip-tion or by contract)	Berkley, Beverly Hills, Bingham Farms, Birmingham, Bloomfield Twp, Clawson, Commerce Twp, Farmington , Farmington Hills, Ferndale, Franklin, Hazel Park, Highland Twp, Holly, Huntington Woods, Keego Harbor, Lake Orion, Lathrup Village, Leonard, Madison Heights, Milford, Milford Twp, Oak Park, Orchard Lake, Oxford, Pleasant Ridge, Rochester, Royal Oak, South Lyon, Southfield, Troy, Walled Lake, White Lake Twp, Wixom	Private, public	Curb-side	Weekly, bi-weekly	A, B, C, D, E, L, F1	3, 5	5, 3	3

Source of information: 1997 Study, "Report on Municipally Sponsored Solid Waste Programs" as included in Attachment H. This information was current as of January 1, 1996. Please note that some communities have improved their services since then and changes have occurred in the services currently accessible to residents

[1] Program Management Responsibilities: 1=Designated Planning Agency; 2= County Board of Commissioners; 3=City/County Departments of Public Works; 4= Environmental Group; 5=Private Owner/Operator; 6=Other

[2] Collection Point: c=curbside; d=drop-off; o=onsite

[3] Collection Frequency: d=daily; b=bi-weekly; m=monthly; Sp=Spring; Su=Summer; Fa=Fall; Wi=Winter

[4] Material Types: A=Plastics; B=Newspaper; C= Corrugated Containers; D=Other paper; E=Total Glass; F1=Other materials; G=Grass and Leaves; H=Wood Waste; I=Construction & Demolition; J=Food & Food Processing; K=Tires; L=Total Metals

TABLE III-3: COMPOSTING:

Program Name	Service Area	Public or Private	Collection Point[2]	Collection Frequency[3]	Materials[4]	Program Management Responsibilities[1]: Development	Operation	Evaluation
Curbside YW pickup	Berkley, Beverly Hills, Bingham Farms, Birmingham, Bloomfield Twp, Clawson, Commerce Twp, Farmington , Farmington Hills, Ferndale, Hazel Park, Highland Twp, Holly, Huntington Woods, Keego Harbor, Lake Orion, Lathrup Village, Leonard, Madison Heights, Milford, Milford Twp, Oak Park, Orchard Lake, Oxford, Pleasant Ridge, Pontiac, Rochester, Royal Oak, South Lyon, Southfield, Troy, Walled Lake, White Lake Twp, Wixom	Private, Public	Curbside	Seasonal and weekly	L, Gr, Brush	3, 5	5, 3	3
YW Drop-off	Berkley, Beverly Hills, Birmingham, Ferndale, Hazel Park, Highland Twp, Lathrup Village, Madison Heights, Oak Park, Pleasant Ridge, Pontiac, Rochester Hills, Royal Oak, Royal Oak Twp, Sylvan Lake, Troy, Waterford Twp	Private/, Public	Drop-off	Seasonal and weekly	L, Gr, Brush	3, 5	5, 3	3

Source of information: 1997 Study, "Report on Municipally Sponsored Solid Waste Programs" as included in Attachment H. This information was current as of January 1, 1996. Please note that some communities have improved their services since then and changes have occurred in the services currently accessible to residents

[1] Program Management Responsibilities: 1=Designated Planning Agency; 2= County Board of Commissioners; 3=City/County Departments of Public Works; 4= Environmental Group; 5=Private Owner/Operator; 6=Other

[2] Collection Point: c=curbside; d=drop-off; o=onsite

[3] Collection Frequency: d=daily; w=weekly; b=bi-weekly; m=monthly; Sp=Spring; Su=Summer; Fa=Fall; Wi=Winter

[4] Material Types: G=Grass; L=Leaves F=Food; Br=Brush; W=Wood; P=Paper; S=Municipal Sewage Sludge; A=Animal Waste/Bedding; M=Municipal Solid Waste

TABLE III-4: SOURCE SEPARATION OF POTENTIALLY HAZARDOUS MATERIALS:

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

Program Name	Service Area	Public or Private	Collection Point[2]	Collection Frequency[3]	Program Management Responsibilities[1]			
					Materials[4]	Development	Operation	Evaluation
SOCRRA HHW Program	SOCRRA member communities	Public	Drop-off	by appt.	A; B2; C; H; P; PS; PH; U	6 (SW Authority)	Private	6 (SW Authority)
RRRASOC HHW Program	RRRASOC member communities	Public	Drop-off	schedule	A; B2; C; H; P; PS; PH; U	6 (SW Authority)	Private	6 (SW Authority)

Source of information: 1997 Study, "Report on Municipally Sponsored Solid Waste Programs" as included in Attachment H. This information was current as of January 1, 1996. Please note that some communities have improved their services since then and changes have occurred in the services currently accessible to residents Many communities provide Household Hazardous Waste Collection opportunities on a periodic basis.

[1] Program Management Responsibilities: 1=Designated Planning Agency; 2= County Board of Commissioners; 3=City/County Departments of Public Works; 4= Environmental Group; 5=Private Owner/Operator; 6=Other

[2] Collection Point: c=curbside; d=drop-off; o=onsite

[3] Collection Frequency: d=daily; w=weekly; b=bi-weekly; m=monthly; Sp=Spring; Su=Summer; Fa=Fall; Wi=Winter

[4] Materials: AR=Aerosol Cans; A=Automotive Products except Used Oil, Oil Filters & Antifreeze; AN=Antifreeze; B1=Lead Acid Batteries; B2=Household Batteries; C=Cleaners and Polishers; H=Hobby and Art Supplies; OF=Used Oil Filters; P=Paints and Solvents; PS=Pesticides and Herbicides; PH=Personal and Health Products; U=Used Oil; OT=Other Materials

TABLE III-5: PROPOSED RECYCLING

Program Name	Service Area	Public or Private	Collect-ion Point[2]	Collection Frequency[3]	Program Management Responsibilities[1]			
					Mater-ials[4]	Devel-opment	Opera-tion	Evalu-ation
Weekly curbside	ALL OAKLAND RESIDENTS	Private, Public	Curbside	Weekly	A, B, C, D, E, F1	3, 5, 1	5, 3	1, 3
Drop-off recycling	ALL OAKLAND RESIDENTS	Private, Public	Drop-off	24-hour	A, B, C, D, E, F1, H, I, K, L	3, 5, 1	5, 3	1, 3

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

[1] Program Management Responsibilities: 1=Designated Planning Agency; 2= County Board of Commissioners; 3=City/County Departments of Public Works; 4= Environmental Group; 5=Private Owner/Operator; 6=Other

[2] Collection Point: c=curbside; d=drop-off; o=onsite

[3] Collection Frequency: d=daily; w= weekly; b=bi-weekly; m=monthly; Sp=Spring; Su=Summer; Fa=Fall; Wi=Winter

[4] Material Types: A=Plastics; B=Newspaper; C= Corrugated Containers; D=Other Paper; E=Total Glass; F1=Other Materials; G=Grass and Leaves; H=Wood Waste; I=Construction & Demolition; J=Food & Food Processing; K=Tires; L=Total Metals

TABLE III-6: PROPOSED COMPOSTING:

Program Name	Service Area	Public or Private	Collect-ion Point[2]	Collect-ion Frequency[3]	Program Management Responsibilities[1]			
					Mater-ials[4]	Devel-opment	Opera -tion	Evalu-ation
Curbside pickup	ALL OAKLAND COUNTY RESIDENTS	Public, Private	Curbside	Weekly thru grow season	L, Gr, Br	3, 5	3,5	3,1
YW Drop-off	ALL OAKLAND RESIDENTS	Public, Private	Drop-off	Weekly thru grow season	L, Gr, Br	3, 5	3,5	3,1

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

[1] Program Management Responsibilities: 1=Designated Planning Agency; 2= County Board of Commissioners; 3=City/County Departments of Public Works; 4= Environmental Group; 5=Private Owner/Operator; 6=Other

[2] Collection Point: c=curbside; d=drop-off; o=onsite

[3] Collection Frequency: d=daily; b=bi-weekly; m=monthly; Sp=Spring; Su=Summer; Fa=Fall; Wi=Winter

[4] Material Types: G=Grass; L=Leaves F=Food; Br=Brush; W=Wood; P=Paper; S=Municipal Sewage Sludge; A=Animal Waste/Bedding; M=Municipal Solid Waste

TABLE III-7: PROPOSED SOURCE SEPARATION OF POTENTIALLY HAZARDOUS MATERIALS:

Program Name	Service Area	Public or Private	Collect-ion Point[2]	Collection Frequency[3]	Program Management Responsibilities[1]			
					Mater-ials[4]	Devel-opment	Opera-tion	Evalu-ation
HHW Collection	ALL OAKLAND RESIDENTS	Public, Private	Drop-off	On-call	AR, A, AN, B1, B2, C, H, OF, P, PS, PH, U	3, 5, 1	5	3,1
YW Drop-off	ALL OAKLAND RESIDENTS	Public, Private	Drop-off	Weekly thru grow season	L, Gr, Br	3, 5	3,5	3,1

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

[1] Program Management Responsibilities: 1=Designated Planning Agency; 2= County Board of Commissioners; 3=City/County Departments of Public Works; 4= Environmental Group; 5=Private Owner/Operator; 6=Other

[2] Collection Point: c=curbside; d=drop-off; o=onsite

[3] Collection Frequency: d=daily; w=weekly; b=bi-weekly; m=monthly; Sp=Spring; Su=Summer; Fa=Fall; Wi=Winter

[4] Materials: AR=Aerosol Cans; A=Automotive Products except Used Oil, Oil Filters & Antifreeze; AN=Antifreeze; B1=Lead Acid Batteries; B2=Household Batteries; C=Cleaners and Polishers; H=Hobby and Art Supplies; OF=Used Oil Filters; P=Paints and Solvents; PS=Pesticides and Herbicides; PH=Personal and Health Products; U=Used Oil; OT=Other Materials as identified

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.

Oakland County:

The County's continuing role on solid waste management plan issues will be to guide the on-going Act 451 solid waste planning efforts; to periodically monitor and report on the volume reduction achievement efforts and successes of each municipality; to urge and encourage the municipalities and the business community to expand program efforts to fulfill noted voids; to continually monitor the availability of handling, processing and disposal facilities to ensure that sufficient capacity continues to exist to handle the County's entire waste stream; to provide periodically updated information on programs, facilities and educational opportunities to the county's waste generators; to continually monitor the availability of waste stream generation and recovery data; to monitor legislation which may effect the provision of solid waste services and required processing, handling or disposal facilities; and to communicate on these issues with each municipality.

Various Service Providers

Private sector and non-profit sector service providers will deliver solid waste and recycling services under the terms of the Plan's Enforceable Program .

Various Service Providers for Construction and Demolition Material Collection:

Private sector and non-profit sector service providers may deliver on-site collection of construction and demolition material throughout the county.

Various Landscaping/Nursery Companies:

Private sector and non-profit sector service providers may deliver yard waste collection services and serve as hosts for yard waste drop-off sites.

Solid Waste Authorities (e.g. RRRASOC, SOCRRA)

Municipal authorities will arrange for delivery of solid waste and recycling services to their member municipalities.

Cities, Villages and Townships:

Oakland County's municipalities are urged to provide specialized solid waste services requested by many waste generators if such services as offered by the private sector are not readily or conveniently available. For example, such services would include the establishment of drop-off locations for recyclable materials, yard clippings and/or bulky household items; household hazardous waste collection programs; Freon removal programs; or mixed-waste drop-off points. Additionally, basic education and information efforts aimed directly at the services locally available would be periodically provided. Those municipalities who are not currently joined together with other municipalities on solid waste issues are encouraged to participate in joint efforts or to become involved in the creation of new authorities so that they may act as a single larger agency in the management and/or provision of solid waste services. The municipal

authority approach can provide an excellent administrative and economic basis for the provision of necessary specialized solid waste services.

Environmental Groups:

MSU Cooperative Extension Service will provide education on composting, disposal and recycling of home and agricultural toxics.

Identification of Resource Recovery Management Entities:

The level and intensity of the resource recovery programs offered within each community are ultimately established by the local municipality. This remains true even if it appears that the municipality plays no active role and the entire program is that represented by private sector offerings. Should the private sector offerings fail to measure up to local expectations, the municipality has the ability to cause specified programs to be offered. While some municipalities have been reluctant to become involved, others have made great strides in achieving proper program implementation. Excellent existing programs are directly managed by each form of municipal government in Oakland County, be that a city, village or township government. An educated public has frequently persuaded local elected officials to increase their access to such programs. This planning document encourages citizens to maintain an active dialogue with municipal officials on these issues and to make their needs known. In 1999, the only entities separate from municipalities who have management responsibility for dealing with such programs are the two solid waste authorities, SOCRRA and RRRASOC. These authorities are owned and governed by their member municipalities. SOCRRA currently has 12 member municipalities which represent 25% of the County's total population and RRRASOC has 8 municipal members which represent an additional 21% of the total population. On a parallel track, however, the Oakland County Solid Waste Division of the Office of the County Executive has made a commitment to monitor and evaluate progress towards achievement of waste reduction goals, as well as ensuring long-term disposal capacity is available. To this end, the County will encourage and facilitate the development and implementation of programs designed to serve a range of waste generators that may not be otherwise addressed, including commercial and industrial firms, special waste generators including construction and demolition debris, under-served municipalities, and others.

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.

Projected Diversion Rates:

In 1998, it is estimated that a considerable amount of the residential waste stream (24.35% prior to calculating for process residue) is currently diverted from disposal in landfills through recycling (7.65%) and yard clipping (16.7%) programs. Additionally, it is estimated that 15% of the commercial municipal solid waste stream is recovered (13% through recycling and 2% through yard clipping composting), and that 15% of the industrial municipal solid waste, construction and demolition debris and industrial special waste is recovered through recycling efforts. The final diversion rate currently being achieved, net after allowance for process residues which result from the recycling and composting operations, is calculated to be 18.12%.

The year 2010 diversion rate goal can be reached if all municipalities in the County quickly strive to reach the same residential volume reduction achievement levels currently being achieved by municipalities within the two authorities, if every residential program including the existing successful programs reaches to even higher levels by increased participation and effort, and if dramatically improved diversion rates are accomplished by waste generators of other portions of the waste stream.

It is recognized that failure to achieve the projected diversion rates would result in a greater future need for landfill disposal capacity. Therefore, this document frequently displays future disposal needs at existing observed diversion rates and at the projected diversion goal rates. Exhibits 29 and 30 in the Database section of this document show details of the waste stream in terms of tons per day before and after volume reduction efforts and in terms of annual gateyards and bankyard needs. Exhibit 29 shows the baseline effort with unchanged diversion rates and Exhibit 30 shows the same information under the more aggressive volume reduction achievement assumptions.

Achievement of the projected diversion rates for the Oakland County waste stream will not meet Michigan's original solid waste management goals (as adopted by Michigan's Natural Resources Commission in May, 1988 and published in the June, 1988 Solid Waste Policy documents) to reduce land disposal to only "unusable residues" or 10-20% of the waste stream by the year 2005. First, the use of incineration or waste-to-energy incineration facilities, both having been previously utilized in the County, are not considered to be socially or politically acceptable technologies for use in the future. Placing this issue to the side, Michigan's remaining goal elements were established to dispose of only 40-60% of the waste stream in landfills after reduction (8-12%), reuse (4-6%), composting (8-12%), and recycling (20-30%). Diversions achieved through reduction and reuse are extremely difficult to measure and no diversion goal is set for these approaches. It must once again be noted that the existing waste stream, prior to yard waste composting or recycling, is higher on a per capita basis than previously recorded or projected. However, it is believed that Oakland County's goal of a 25% diversion rate by the year 2005 and a 30% diversion rate by the year 2010 through yard waste composting and recycling programs is realistically achievable (but only with aggressive implementation efforts).

Existing and Projected Diversion Rates

(Percentage of the Waste Stream Not Destined for Final Disposal)

Waste Stream Category	Year 1998	Year 2005	Year 2010
Residential Yard Wastes	16.70%	16.70%	16.70%
Residential Recycling	7.65%	12.00%	15.00%
Commercial Yard Wastes	2.00%	2.00%	2.00%
Commercial Recycling	13.00%	23.00%	30.00%
Industrial Recycling	15.00%	24.00%	32.00%
CDD Recycling	15.00%	25.00%	32.50%
ISW Recycling	15.00%	25.00%	32.50%
Net After Inclusion of Process Residues	18.12%	25.31%	30.49%

While in the process of examining diversion rates, it quickly becomes obvious that concrete data regarding waste generation and recovery is lacking. With the exception of the residential waste stream handled by the County's two existing solid waste authorities, little detailed information is readily available. Few others are willing to share specific information on the waste stream that they handle. The County will therefore continue to encourage the development of programs to capture detailed waste generation and resource recovery data across all segments of the total waste stream and across all types of waste generators. Additionally, these programs should examine the amount of process residues that result from the various composting, recycling, and volume reduction operations. Only with accurate data on these items can existing diversion rates be reasonably calculated or can future diversion rates be projected with some degree of certainty.

Collected Material:	Projected Annual Tons Diverted:			Collected Material:	Projected Annual Tons Diverted:		
	Year 1998	Year 2003	Year 2008		Year 1998	Year 2003	Year 2008
A. TOTAL PLASTICS	4,914	7,306	10,631	G. GRASS AND LEAVES	146,879	15,3722	158,091
B. NEWSPAPER	16,379	24,352	35,437	H. WOOD WASTE	*	*	*
C. CARDBOARD	65,514	97,409	141,748	I. CONSTR. & DEMO.	22,899	33,616	48,984
D. OTHER PAPER	16,379	24,352	35,437	J. FOOD PROCESSING	*	*	*
E. GLASS	8,189	12,176	17,719	K. TIRES	*	*	*
F. OTHER MATERIALS *	33,037	45,116	62,280	L. TOTAL METALS	24,568	36,528	53,156
				M. TOTAL ALL MATERIALS	353,497	456,494	595,376

*Other material category includes tires, food, wood waste and industrial special waste recycling

MARKET AVAILABILITY FOR COLLECTED MATERIALS:

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

Note that recyclable materials are commodity products and that the actual movement of these materials to end-markets will fluctuate during the course of the plan. In some cases these commodities will only be used in-state due to the weight of the material, high transportation costs and relatively low value per ton. This is frequently the case for yard waste, wood waste and other similar materials. Other materials that have higher levels of demand worldwide will, from time to time, be shipped out-of-state and in some cases out of the country and overseas, as market conditions dictate.

Collected Material:	In-State Markets	Out-of-State Markets	Collected Material	In-State Markets	Out-of-State Markets
A. TOTAL PLASTICS	100 %		G. GRASS AND LEAVES	100 %	
B. NEWSPAPER	100 %		H. WOOD WASTE	100 %	
C. CARDBOARD	100 %		I. CONSTR. & DEMO.	100 %	
D. OTHER PAPER	100 %		J. FOOD PROCESSING	100 %	
E. GLASS	100 %		K. TIRES	100 %	
F. OTHER MATERIALS	100 %		L. TOTAL METALS	100 %	

Market Availability for Collected Materials:

Market availability for recovered recyclable materials is the key to the success level that can be achieved with recycling programs. If there is no market for a collected material, there is little reason to collect such materials since they would ultimately have to be disposed of to clear storage areas. At present, the operators of the material recovery facilities which handle the Oakland County recyclables have been successful in moving the materials back into the manufacturing stream. The market for recovered materials, whether located within Michigan or elsewhere, changes frequently and is dependent even upon world economics. It is anticipated that these successes will continue to exist.

EDUCATIONAL AND INFORMATIONAL PROGRAMS:

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

Program Topic	Delivery Medium	Targeted Audience	Program Provider
Recycling/general solid waste education	Displays at community event	General public	Solid Waste Authorities, DPA, non-profits
Recycling, household hazardous waste	Radio public service announcements	General public	Solid Waste Authorities, service providers, non-profits
Household Hazardous Waste	Newspaper ads for collection schedules	General public	Solid Waste Authorities, service providers, non-profits
Resource exchange for Household Hazardous Waste	Classified ads in newspaper	General public	Solid Waste Authorities, service providers,
General solid waste education	School presentations	School-age children	Solid Waste Authorities, service providers, non-profits
General solid waste education, recycling	Tours at Transfer Facility/Recycling Processing Facility	General public; students	Solid Waste Authorities, service providers
Resource conservation, recycling	Presentations to community groups	General public; businesses	Solid Waste Authorities, service providers, non-profits, DPA
All programs	Newsletter (several times per year)	General public	Solid Waste Authorities, service providers
All programs	Internet Web Based Information	General public	DPA
All programs	Brochures, flyers	General public; businesses	DPA, Cooperative Extension, Solid Waste Authorities
Household hazardous waste	Volunteer program to assist with collection program	Volunteers	Solid Waste Authorities, service providers

Educational and Informational Programs:

Educational and informational programs regarding the various components of the locally offered solid waste services are generally required to avoid improper handling of wastes and to maximize the effectiveness of the program offerings. Oakland County's municipalities are well aware of the need for proper communications as reported in the appendix material on the municipal programs. RRRASOC and SOCRRA have each established excellent Internet web sites providing detailed information on their communities' programs and upon authority owned facilities. These may be viewed at "oeonline.com/rrrasoc" and at "socrra.org" and both are considered to be an excellent examples of providing for communication of program basics.

In addition to the use of the Internet, it is anticipated that traditional delivery mediums will continue to be utilized to deliver educational and informational topics. These generally include direct mailings, workshops, newspapers, newsletters, cable TV, flyers and posters and cover the whole realm of solid waste services such as recycling, yard waste, household hazardous waste, drop-off sites, bulky items, and specific rules and schedules for collection programs. The target audience for this material is generally the resident population or general public. Specialized programs are sometimes aimed at a more specific audience such as businesses or industries or to the children within the K-12 school system. The provider of the programs generally is the municipality or operating under the direction of the municipality, the solid waste service provider. In Oakland County with 61 local units of government, the potential number of individual program providers is large and no specific attempt is made here to be all inclusive. However, municipal efforts in this area will be periodically reported upon by the County.

III-8 TIMETABLE FOR SELECTED SYSTEM IMPLEMENTATION

This timetable is a guideline to implement components of the Plan's Enforceable Program. The timeline gives a range of time in which the component will be implemented such as "2000-2001" or "On-going." Timelines may be adjusted later, if necessary.

All elements of the selected management plan may essentially be considered as on-going components. In terms of volume reduction achievement levels, it is anticipated that all Oakland County municipalities will have ensured that a full range of "curb-side" collection services is provided by the private sector or is offered through special efforts of the municipality to each residential waste generator by the year 5 of the planning period. By Year 10 of the planning period, it is anticipated that a full and continuous public awareness of the benefits of waste reduction and resource recovery will have made a dramatic difference in the amount of materials recovered and allow the County to meet its year 10 planning period goals.

Management Components	Timeline
1) Develop/Adopt Implementation Action Plan	2000
2) Assist Local Units in Organizational Development	2000-2001
3) Preliminary Program Specifications for Planned Programs	2000-2001
4) Establish Budgets for Planned Programs	2000-2001
5) Finalize Plans for Organizational System Development by Locals	2000-2001
6) Develop Additional Recycling Processing Capacity	2000-2001
7) Initiate all Outreach/Education Programs	2000-2001
8) Procure all Other System Improvements	2000-2003
9) Evaluation of Need for Transfer, Processing and MRF Capacity	2001-2002
10) Develop Transfer, Processing and MRF Capacity if Needed	2002-2006
11) Evaluate Incentive Programs, as needed	2002-2006
12) Develop Program Specifications for Further Program Expansion	2001-2003
13) Establish Budgets for Further Program Expansion	2005-2006
14) Finalize Any Upgrades to Funding Structure and Mechanisms	2005-2006
15) Initiate Further Expansion of Outreach/Education Programs	2005-2006
16) Implement all Further Program Expansion System Improvements	2006-2008
17) Data Tracking to Assess Program Performance	Annual/Ongoing
18) Update Implementation Action Plan	Annual/Ongoing

III-9 SITING REVIEW PROCEDURES

The Siting Review Procedures contained in this Plan begins with a description of Authorized Disposal Area Types. No Siting Criteria and Process is included in this Plan, as provided for in Part 115 Section 11537 (a) of NREPA and explained below.

RETURN TO APPROVAL LETTER

AUTHORIZED DISPOSAL AREA TYPES

Per the requirements of Part 115 Section 11533 of NREPA, this Plan includes an Enforceable Program and Process that assures that the nonhazardous solid waste to be generated in the planning area over the next 10 years will be collected and recovered, processed, and disposed of at disposal areas that comply with state law and rules promulgated by the Michigan DEQ governing the location, design and operation of the disposal areas.

As provided for in Part 115 Section 11537 (a) of NREPA, this Plan demonstrates that the planning area has in excess of 66 months of available disposal capacity and will have in excess of 66 months of available disposal capacity for the duration of the 5 year planning period for which this Plan is provided. Thus no Siting Criteria and Process is included in this Plan.

This Plan does not include an annual certification process, as provided for in Part 115 Section 11538 (2) of NREPA, since specific disposal areas are identified in this *Plan* for the ten year period after approval of the Plan and, as such, is not required to provide the annual certification process described in Part 115 Section 11538 (4) of NREPA, or the interim siting mechanism described in Part 115 Section 11538 (3) of NREPA.

A: Facilities Included in this Plan:

This Plan's Enforceable Program and Process, per the requirements of Part 115 Section 11533 of NREPA, includes existing and new disposal areas within the County as described below. Disposal areas at specific sites identified in this Plan are automatically included in the Plan.

A.1: Type III Landfill Disposal Areas: This disposal area designation is for a sanitary landfill which will not handle municipal solid wastes or hazardous wastes but will accept construction and demolition debris, industrial special wastes, and other Type III wastes. No Type III Landfill Disposal Areas are designated in this Plan.

A.2: Waste-to-Energy Plant and Incinerator Disposal Areas: This disposal area designation is for municipal solid waste incinerators, incinerators which will additionally incorporate recovery of energy from the waste stream, and waste-to-energy plants. No Waste-to-Energy Plants and Incinerators are designated in this Plan.

A.3: Type II Landfill Disposal Areas: This disposal area designation is for a sanitary landfill which will handle municipal solid waste and/or municipal solid waste incinerator ash. Municipal solid wastes are generally defined as household waste from single and multiple dwellings, hotels, motels, and other residential sources, or this household waste together with solid waste from commercial, institutional, municipal, county, or industrial sources that, if disposed of would not be required to be placed in a hazardous wastes disposal facility. These facilities may also receive other types of solid waste, such as nonhazardous sludges, industrial wastes, and all wastes which may be legally disposed of in a Type III landfill.

SELECTED SYSTEM

Type II Landfill disposal areas as described in the Plan's Enforceable Program are included in the Plan for the following sites. Type II landfill designations are applicable to all acreage of the named sites and the site's total disposal capacity and disposal area footprint sizes may be maximized to the extent permitted by Act 451. Any limitations to this basic designation approach are specifically identified.

Name of Facility	New or Existing Designation	Address	Area Approved for Which Siting is Not Required
Collier Road Landfill	Existing	575 Collier Road, Pontiac	The Type II landfill site contains 210 acres, more or less. The site is located in Sections 4, 5, 8 and 9 of Pontiac Township and is currently owned and operated by the City of Pontiac.
Eagle Valley Recycling and Disposal Facility	Existing	600 West Silverbell Road, Orion Township	The Type II landfill site is located in Sections 26 and 27 of Orion Township and contains 330 acres, more or less. Capacity is limited by a tri-party consent judgment involving the County, the Township and the site owner controlling certain aspects of the disposal area which was filed in 1991 in the Oakland County Circuit Court. Expansions of the disposal area footprint beyond limits identified in the consent judgment documents may not occur without the approval of the Township Board. The site is currently owned and operated by Waste Management. A host community agreement exists between Waste Management and Orion Township.
Oakland Heights Develop-ment	Existing	2350 Brown Road, Auburn Hills	The Type II landfill site contains 175 acres, more or less, with a sanitary landfill footprint of approximately 94 acres. The site is located in Section 2 of Pontiac Township and is currently owned and operated by Allied Waste Industries, Inc. A host community agreement exists between Allied Waste Industries, Inc. and the City of Auburn Hills.
South-eastern Oakland County Resource Recovery Authority	Existing	741 School Road, Rochester Hills	The Type II landfill site contains 183 acres more or less, is located in Sections 13 and 24 of Avon Township and is currently owned and operated by the Southeast Oakland County Resource Recovery Authority. A consent judgment involving the City of Rochester Hills and SOCRRA as filed in 1994 in the Oakland County Circuit Court controls existing operations at this site. The facility is presently operated as a composting site and the disposal area is used for yard waste debris and compost residues.

RETURN TO APPROVAL LETTER

These sites have been set aside for use as Type II Landfill disposal areas and are automatically included in the Plan and do not have to be processed through any Plan siting mechanism.

A.4: Solid Waste Processing Facility Disposal Areas: This disposal area designation is for processing plants or manufacturing or industrial operations which are designed for the purpose of recovering materials from a solid waste stream which is not generated onsite. Recycling facilities or yard waste composting facilities that process only source separated materials do not require Act 451 designation unless process residues equal or exceed 10% of the total volume of material received. Several Material Recovery Facilities (MRF's) in the County do not strictly require such a designation as a Solid Waste Processing Facility Disposal Area. However,

maximum flexibility is sought for the projects in case ultimately, some recyclables might best be processed from mixed-wastes. Should that eventuality occur, the owners or operators of the MRF involved may choose to apply for construction and/or operating permits from the Michigan Department of Environmental Quality. Otherwise, the facilities must be operated as source separated MRFs.

Name of Facility	New or Existing Designation	Address	Area Approved for Which Siting is Not Required
SOCRRA Waste Processing Plant	Existing	995 Coolidge Hwy, Troy	The site is located in Section 32 of Troy Township. This facility shares a 10.88 acre site with a SOCRRA transfer station. At present, the facility is operated as a source separated MRF.
RRRASOC Waste Processing Plant	Existing	20000 West Eight Mile Road, Southfield	The site is located in Section 35 of Southfield Township and is 6.2 acres in size, more or less. At present, the facility is operated as a source separated MRF.
Allied Waste Industries Waste Processing Plant	Existing	1591 Highwood, Pontiac	This site is located in Sections 8 and 9 of Pontiac Township and contains some 40 acres, more or less. The proposed waste processing facility has not been placed under construction as of October 1999. The site is to be shared with a transfer station facility.
City of Pontiac Waste Processing Plant	New	575 Collier Road, Pontiac	This site is located on the non-wetlands portions of the Collier Road Sanitary Landfill properties identified in Pontiac's November, 1998 designation request which lay in Section 8, Section 9 and in that part of Section 4 which lies southeast of a line which runs through a point on the joint section line between Section 4 and Section 5 which is located 470 feet North of the joint corner of Sections 4, 5, 8 and 9 and which line has a bearing of North 53 degrees 21 minutes 00 seconds East. Access to the facility from the public road system must be from Collier Road. The permissible area contains 132 acres, more or less. The proposed waste processing facility has not been placed under construction as of October, 1999. The site is to be shared with a transfer station facility.
Waste Manage-ment – City Waste Sys. Waste Processing Plant	Existing	1525 West Highwood, Pontiac	This site is located in Section 9 of Pontiac Township and contains some 15 acres, more or less. The proposed waste processing facility has not been placed under construction as of October, 1999. The site is to be shared with a Waste Management transfer station facility.
FPT (Ferrous Processing & Trading)	New	500 Collier Road, Pontiac	This site is located in Section 9 of Pontiac Township and contains some 38 acres, more or less. The proposed waste processing facility has not been placed under construction as of June, 2000.

These sites have been set aside for use as Solid Waste Processing Facility Disposal Areas and are automatically included in the Plan and do not have to be processed through any Plan siting mechanism.

SELECTED SYSTEM

A.5: Solid Waste Transfer Station Disposal Area: This disposal area designation is for a tract of land, a building and any appurtenances, or a container, or any combination of land, buildings, or containers that is used or intended for use in the rehandling or storage of solid waste incidental to the transportation of the solid waste, but is not located at the site of generation or the site of disposal of the solid waste.

Following are the designated sites for the Solid Waste Transfer Station Disposal Areas within Oakland County.

Name of Facility	New or Existing Designation	Address	Area Approved for Which Siting is Not Required
Allied Waste Industries Transfer Station	Existing	21430 W Eight Mile Rd, South-field	The site is located in Section 34 of Southfield Township and contains 5.5 acres, more or less.
SOCRRA Transfer Station	Existing	991 Coolidge Hwy., Troy	The site is located in Section 32 of Troy Township and contains 10.9 acres, more or less. The site is shared with the SOCRRA waste processing facility, where source separated activities are currently occurring.
Allied Waste Industries Transfer Station	Existing	1591 High-wood, Pontiac	The transfer station site is located in Sections 8 and 9 of Pontiac Township and contains 40 acres, more or less. The proposed transfer station has not been placed under construction as of October, 1999. The site is to be shared with a MRF facility.
City of Pontiac Transfer Station	New	575 Collier Road, City of Pontiac	This transfer station site is located on the non-wetlands portions of the Collier Road Sanitary Landfill properties identified in Pontiac's November, 1998 designation request which lay in Section 8, Section 9 and in that part of Section 4 which lies southeast of a line which runs through a point on the joint section line between Section 4 and Section 5 which is located 470 feet North of the joint corner of Sections 4, 5, 8 and 9 and which line has a bearing of North 53 degrees 21 minutes 00 seconds East. Access to the facility from the public road system must be from Collier Road. The permissible area contains 132 acres, more or less. The proposed transfer station has not been placed under construction as of October, 1999. The site is to be shared with a MRF facility.
Waste Management - City Waste Systems, Inc. Transfer Station	Existing	1525 West High-wood, Pontiac.	The transfer station site is located in Section 9 of Pontiac Township and contains 15 acres, more or less. The proposed transfer station has not been placed under construction as of October, 1999. The site is to be shared with a Waste Management MRF facility.
FPT (Ferrous Processing & Trading)	New	500 Collier Road Pontiac	This site is located in Section 9 of Pontiac Township and contains some 38 acres, more or less. The proposed waste processing facility has not been placed under construction as of June, 2000.

These sites have been set aside for use as Solid Waste Transfer Facility Disposal Areas and are automatically included in the Plan and do not have to be processed through any Plan siting mechanism. Act 451 defines these as Type A Solid Waste Transfer Station Disposal Areas.

It should be noted that transfer stations not designed to accept wastes from vehicles with mechanical compaction devices or those that accept less than 200 uncompacted cubic yards of solid wastes per day, are labeled as Type B transfer facilities and are not subject to the construction and operating license requirements of Act 451. However, these facilities must comply with the operating requirements and rules of Act 451. Additionally, transfer stations that are designed and operated to receive domestic and commercial solid wastes from vehicles unloaded by hand are labeled as Type B transfer facilities.

Oakland county chooses not to inventory existing Type B transfer facilities and to declare that all Type B transfer facilities as defined above which exist within the County as of October 1, 1999 are consistent with the Plan. New Type B transfer facilities which become operational after this date and which are owned or sponsored by county agencies or host municipalities will automatically be consistent with the plan. Any other Type B transfer facility is not consistent with the Plan and will not be allowed to be sited prior to an appropriate amendment to this Plan.

A.6: **Change of Existing Solid Waste Disposal Facility to Designations** as a Solid Waste Transfer Station Disposal Area: The 1994 Plan Amendments established a special designation category for SOCRRA properties located at 29470 John R Road in the City of Madison Heights. The 19 acre site was designated as a "disposal area" which could be used for any Act 451 disposal area facility except that the site could not be used for a sanitary landfill, an incinerator or as a waste-to-energy plant. This location was the site of SOCRRA's incinerator which ceased operations in 1988 after operating for more than 30 years. Since that time, the site has been operated as a transfer station and has been used for various recyclable materials processing and recovery purposes.

The "disposal area" designation for the SOCRRA site at 29470 John R Road in the City of Madison Heights is herewith changed to the designation of transfer station. The site description is changed as follows.

Name of Facility	Address	Area Approved for Which Siting is Not Required
SOCRRA Transfer Station	29740 John R Road, Madison Heights	The site is located in Section 12 of Royal Oak Township and contains 19 acres, more or less. The site is to be shared with various SOCRRA source separated recyclable materials processing and recovery activities.

This site has been set aside for use as Solid Waste Transfer Facility Disposal Area and is automatically included in the Plan and does not have to be processed through any Plan siting mechanism. Act 451 defines this as a Type A Solid Waste Transfer Station Disposal Area.

B: Facilities Not Included in this Plan:

A proposal for any other disposal area as defined in Part 115 or NREPA, whether a solid waste transfer facility, incinerator, sanitary landfill, processing plant or other solid waste handling or disposal area utilized in the disposal of solid waste is specifically excluded from the Plan and will not be allowed to be sited prior to an appropriate amendment to this Plan.

C: Plan Amendment to Include a Facility Not Included in this Plan:

New disposal area facilities not previously designated within this Chapter may be considered for plan consistency as part of a future 5-year plan update process or as a free-standing plan amendment, depending upon where in the planning cycle such applications are received by the County. If a proposed facility is not consistent with, or in compliance with this Plan, the facility proposer can request that the County amend the Plan. The procedure to amend this Plan is the same as the process for adopting this Plan, as provided for in Section 115 of NREPA. A request to amend the Plan should be made to the County Executive. Upon receipt of such a request to amend the Plan, the County shall prepare a budget showing the costs anticipated to amend the Plan. Upon adoption of that Budget by the County Board of Commissioners and authorization to initiate the Plan Amendment process the total amount of that budget shall become the fee charged to consider a proposed amendment to the Plan. Initiation of the Plan Amendment process does not guarantee that the applicant's proposed facility will be found to be consistent with the Plan and thus may not be included in any Plan Update or amendment.

D: Other Facilities - Facilities Not Requiring Designation:

This Plan Update purposely does not designate a variety of other solid waste facilities, including the following, inasmuch as these are permissible under Act 451 (or other laws and regulations) without specific designation. Specifically, Oakland County chooses to let the location of such facilities to be controlled by the host municipalities through their normal zoning and site plan approval processes.

A. Recycling drop-off centers
B. Source separated compost sites
C. Source separated recyclable materials processing plants
D. Household Hazardous Waste drop-off centers or sites
E. Medical waste incinerators (regulated under Act 23, P.A. of 1990 and the Michigan Public Health Codes.)

SITING CRITERIA AND PROCESS

No Siting Criteria and Process is included in this Plan, as provided for in Part 115 Section 11537 (a) of NREPA and explained above.

III-10 SOLID WASTE MANAGEMENT COMPONENTS

The following identifies the management responsibilities and institutional arrangements necessary for the implementation of the Plan's Enforceable Program and Process. 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.

STRENGTHS OF THE CURRENT MANAGEMENT SYSTEM

Oakland County benefits from having an established infrastructure for solid waste management and recovery from which to build on. This includes 1) existing landfill/hauling operations in the county and in adjacent counties, 2) a network of recycling service providers including public sector as well as private sector operations, 3) recycling processing facilities in the county and in adjacent counties with an interest in servicing the County and 4) yard waste composting facilities in the county and in adjacent counties.

This system is organized and managed through a combination of public and private sector efforts that include dedicated staff and resources within the County, at local units of government, in local authorities organized by those local units, and within private firms providing waste management and material recovery services. These entities work together through a combination of contracts, ordinances, intergovernmental agreements and service specifications. This Plan Update will be a part of this organization and management system also.

The current organizational and management structure as just described is deemed to be consistent with the Plan and is authorized as the basis for further development of the Plan's Management Component with all the assignment of powers able to be provided for by the Plan.

NEEDS OF THE MANAGEMENT COMPONENT

There are three principal gaps that need to be addressed in the Plan's Enforceable Program and in developing a management component capable of implementing the selected alternative.

1) Strengthening incentives for developing new programs within the selected system is a critical element of the necessary management component. This is especially critical given the potential need for additional solid waste transfer, processing and material recovery capabilities.

2) Strengthening the funding mechanism for "value added" programs is a critical element of the necessary management component. The "value added" programs are the services and program functions that are difficult to link to a particular user under a typical system and include household hazardous waste services, overall education/promotion of the programs, drop-off recycling programs, overall program management, planning and development costs, selected program capital and operating costs and other services as deemed necessary.

3) Implementing an organizational mechanism that provides local units of government, businesses and other generators, with the necessary organizational and management tools and appropriate incentives such that households and businesses within their jurisdiction will have access to cost effective disposal and material recovery services needed to further develop the selected alternative.

SELECTED SYSTEM

The Management Components that are authorized by this Plan's Enforceable Program include all organizational mechanisms deemed necessary to enable the above funding and organizational mechanisms to work, further developed as described below.

FURTHER DEVELOPMENT OF THE MANAGEMENT COMPONENT

The Authorized Management Component builds on the County's current organizational and management structure. Further development of the Plan's Authorized Management Component is provided for as part of the Plan's Enforceable Program and Process, as deemed necessary to enable development of organizational mechanisms that are required for plan implementation.

These developments may take a number of forms and will only be initiated after an evaluation of the best steps that can be taken to build on the strengths of the current system already in place. These steps will be detailed in an "implementation action plan" that the Plan's Implementation Agency will coordinate development of in order to provide the necessary details required to carry out the Plan's Enforceable Program. These action steps are expected to follow some, if not all, of the following description of an enhanced management system that will provide for a method of implementing the selected alternative, including all aspects of the Plan's Enforceable Program.

Components of the Management System will include:

- A County program for recycling and related solid waste management services, if necessary, will be developed that meets the requirements of this Plan and that meets any import requirements of County Plans where landfills used by Oakland County are located.
- Local units of government within the County will be asked to take steps to implement, within their jurisdictions, the types of collection, disposal and material recovery services called for in the selected alternative.
- A legal/ordinance framework will be evaluated if necessary, to help establish necessary controls for funding mechanisms and the delegation of authority.
- Contracts and intergovernmental agreements between the various participants in the system will be evaluated and developed as needed in order to specify services, exchange of resources, and establish funding mechanisms.
- The County will establish the role of a designated implementation agency with necessary staffing/administrative capability to reach project goals.
- The County will play a supporting role in encouraging economically healthy businesses, industries and communities with minimal environmental impact.

IMPLEMENTATION OF THE MANAGEMENT COMPONENT

In evaluating options and making final decisions, the Management Component of the Plan's Enforceable Program provides for the County to take steps required for implementing the selected alternative, both organizationally and legally. These steps are expected to follow some, if not all, of the following more detailed description of a management system that will provide for a method of funding the Selected Alternative.

Key components of the organizational and management structure required to develop a suitable funding mechanism to implement the Selected Alternative include:

A: Designation of the County Solid Waste Division under the direction of the Office of the County Executive as the designated implementation agency, with the role of Manager, staff and supporting County administrative leadership assigned to existing resources if possible.

B: Development of an Implementation Strategy/Work Plan by the Manager of the County Solid Waste Division, including details of development and operation of the selected components of the Plan's Enforceable Program and also including responsibility for development and adoption of an annual strategic plan and budget. The action plan format will provide for a means to be updated on a regular basis based on monitoring of progress towards plan goals and targeted diversion rates, and a mechanism for evaluating underserved areas of the County.

C: Utilize the statutory authorities and powers of the County as provided for by Michigan law, enabling support for implementation by local units of government of the selected alternative and the Plan's Enforceable Program with appropriate legal, management and financial capabilities.

D: Participation by the County as needed, via intergovernmental contracts and other organizational and legal instruments, in order to further the development of the ability of local units of government to organize as needed to arrange for the provision of solid waste collection, disposal and material recovery services called for in the selected alternative. Local units of government will be encouraged to accomplish this by any one or a combination of approaches. These include awarding franchises for delivery of services, contracting for services on behalf of each solid waste generator, by the designation of preferred haulers, by the adoption of licensing scenarios aimed directly at full-service providers, or by other approaches. Those municipalities who are not currently joined together with other municipalities on solid waste issues are encouraged to participate in joint efforts or to become involved in the creation of new authorities so that they may act as a single larger agency in the management and/or provision of solid waste services. The municipal authority approach can provide an excellent administrative and economic basis for the provision of necessary specialized solid waste services.

E: Drafting and adoption, if needed, of an Oakland County Regional Waste Management and Material Recovery System Ordinance and Administrative Rules, as necessary to further enhance the ability of local units of government to create a basic framework for their participation in the Regional Waste Management and Material Recovery System.

F: Full utilization of the service contracting capability of the County and local units of government as needed to arrange for funding and operation of solid waste collection, disposal and material recovery programs as needed to implement the selected alternative.

These organizational and management structures as just described are deemed to be consistent with the Plan and authorized as the basis for further development of the Plan's Management Component with all the assignment of powers able to be provided for by the Plan.

Other steps that will be taken as part of the Management Component include:

G: Development of a comprehensive "Implementation Action Plan" covering all aspects of Solid Waste Plan program implementation, where specific milestones will be identified for the coming years -- serving as a road map to guide the Designated Plan Implementation Agency for Oakland County.

H: Evaluation of the need for intergovernmental contracts between the County and participating local units of government to set up supporting funding mechanisms and take additional steps to assign certain powers and responsibilities to facilitate development of the selected alternative. Any such intergovernmental agreements would be built on the home rule authority assigned by the Michigan Constitution to local units of government, resulting in intergovernmental arrangements that structure the basic framework of the solid waste and recycling system for the County. Taking these steps will involve an education and technical assistance process with communities in the County to identify and resolve specific issues that need to be addressed before the communities are able to identify, evaluate and begin implementation of appropriate intergovernmental arrangements.

I: System improvements, new services, contracts, intergovernmental agreements and ordinance structures would be further evaluated, detailed, incorporated into the Action Plan and then implemented. Much of the implementation would be by private and/or non-profit or other governmental agencies with service contracts being the principal means to define services and the necessary flow of funds.

J: Upon implementation, progress will be tracked through methodical data compilation and analysis in order to measure, on an annual basis, overall waste generation, reduction and recycling, benchmark performance against goals, and target future implementation planning. Regular updates of system performance and new goals will be incorporated into the continuously updated Implementation Action Plan as they develop. Programs and services will be evaluated to meet the needs of underserved areas of the County, as well as centers of waste generation that are not currently receiving services, such as small businesses, construction and demolition contractors or special waste generators.

K: Leveraging of contributed resources will be encouraged in order to reduce program budget requirements and build community support for the Regional Waste Management and Material Recovery System development. These approaches will be used to build the perception for residents and businesses that the "community recycling program" is theirs - run for their benefit and for an improved quality of life and better business climate. Public and private service agencies as well as school groups will be involved as much as practical.

L: Private bank financing will be expected to be available for capital improvements made by private companies and non-profits that are involved in the system -- supported by the contracting framework described above with long contract timelines, sufficient funds and suitable allocation of risk.

M: Agency funds from public entities will be an important part of the mix of operating and capital funding that are needed to sustain the system. These funds will be part of ongoing operational cost areas that are already part of municipal budgets. In addition, these agency funds may be used to assist in part with capital requirements for some of the projects.

N: Bond financing may be a funding mechanism that is used depending on how the overall system is structured and the level of involvement by the county and/or area municipalities.

O: Further steps should be taken to access the fundraising power of private giving, corporate philanthropy and foundations to build off the good will that private donors are ready to contribute to recycling and the environment. A "friends of Oakland County recycling" should be created to leverage additional private donations from individuals, estates, foundations as well as corporations and other granting agencies that can strengthen the overall program across the County. These efforts will be used to provide support for education and promotion of clean community initiatives, reduce/reuse/recycle programming and capital funds for informational exhibits, displays, educational facilities and school programs. It will also be used as a tool for channeling volunteer time and overall community good-will to assure that funds are available to cover costs of quality programming that is supported by the public.

III-11 IDENTIFICATION OF RESPONSIBLE PARTIES

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

Office of the Oakland County Executive - Solid Waste Division: The Solid Waste Division is part of the Community and Economic Development Department and is responsible for the overall supervision of the solid waste management system for the county, acting as an agent of the Office of the County Executive, which is the DPA, and staff as assigned by the County Executive.

Oakland County Board of Commissioners: The Oakland County Board of Commissioners is the legislative and policy-making body of Oakland County government. The County Board is responsible for approval of the Solid Waste Management Plan.

Solid Waste Management Planning Committee (SWMPC): The Oakland County SWMPC will be responsible for advising the County on updating the County five-year and 10-year Solid Waste Management Plan.

Municipal and Township Governments: The City Councils of the County's 30 cities, the Village Boards of the County's 10 villages and the Board of Supervisors of the County's 21 townships are the legislative and policy-making bodies of Oakland County's 61 municipalities. Local units of government will be responsible for certain solid waste management tasks.

Solid Waste Management Authorities: The Board of Directors of the Southeastern Oakland County Resource Recovery Authority and of the Resource Recovery and Recycling Authority of Southwest Oakland County are the policy making bodies of the existing solid waste authorities.

Private Solid Waste Companies: Private sector waste companies will provide for collection of solid waste unless provided for through municipal services. Private sector entities also will operate various recovery systems.

The following lists which entities within the County that will have management responsibilities over various areas of the Plan:

Resource Conservation:	**Responsible Parties**
Source or Waste Reduction -	Waste generators and product manufacturers
Product Reuse -	Waste generators and product manufacturers
Reduced Material Volume -	Waste generators and product manufacturers
Increased Product Lifetime -	Waste generators and product manufacturers
Decreased Consumption -	Waste generators and product manufacturers

Resource Recovery Programs	**Responsible Parties**
Composting -	Municipalities, authorities and private firms
Recycling -	Municipalities, authorities and private firms
Energy Production -	not applicable
Volume Reduction Techniques:	Municipalities, authorities and private firms

Collection Processes:	Municipalities, authorities and private firms
Transportation:	Municipalities, authorities and private firms
Disposal Areas:	
Processing Plants -	Municipalities, authorities and private firms
Incineration -	not applicable
Transfer Stations -	Municipalities, authorities and private firms
Sanitary Landfills -	Municipalities, authorities and private firms
Ultimate Disposal Area Uses:	Private Firms in cooperation with Host Community
Local Responsibility for Plan:	Office of the County Executive
Update Monitoring & Enforcement:	Office of the County Executive
Educational and Informational Programs:	Municipalities, authorities and private firms

III-12 LOCAL ORDINANCES AND REGULATIONS AFFECTING SOLID WASTE DISPOSAL

____1. Section 11538.(8) and rule 710 (3) of Part 115, prohibits enforcement of all County and local ordinances and regulations pertaining to solid waste disposal areas, unless explicitly included in an approved Solid Waste Management Plan. Local regulations and ordinances intended to be part of this Plan must be specified below and the manner in which they will be applied described.

_____2. This Plan recognizes, and incorporates as enforceable, the following specific provisions based on existing zoning ordinances:

A. Geographic area/Unit of government:
Type of disposal area affected:
Ordinance or other legal basis:
Requirement/restriction:

_X___3. This Plan authorizes adoption and implementation of local regulations governing the following subjects by the indicated units of government without further authorization from or amendment to the Plan.

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

a. Certain ancillary construction details,

b. Hours of operation,

c. Noise, litter, odor and dust controls as well as other site nuisances,

d. Operating records and reports,

e. Facility security and safety,

f. Monitoring requirements for wastes accepted, banned or prohibited, and

g. Volume reduction, recycling and composting requirements.

III-13 CAPACITY CERTIFICATIONS

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

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

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

The table below identifies landfill disposal areas, their expected life, historical usage rates, and supporting analysis that demonstrates that the County will have more than ten years of disposal capacity for the duration of the ten year planning period. These facilities have all been included in the Plan and appropriate export arrangements made.

Identified Disposal Area Capacity	Available Air Space (Bank CY) 1999	Average Annual Gate CY Delivered 1996/1998	Landfill Life (in Yrs) Based on 1996/98 Delivery Rates
Waste Management Inc. Landfills			
- Eagle Valley in Oakland County	25,000,000	1,620,000	29.94
- Pine Tree Acres in Macomb County	21,771,000	1,543,000	27.37
- Woodland Meadows in Wayne County	24,670,000	3,591,000	13.33
- Tri-County in Sanilac County	10,789,000	188,638	110.96
- Pioneer Rock in Lapeer County	2,240,000	85,000	51.12
- Venice Park in Shiawassee County	15,200,000	1,222,109	24.13
- Westside in St. Joseph County	16,919,000	1,193,000	27.51
Allied, Inc. Landfills			
- Sauk Trail Hills in Wayne County	17,628,000	2,417,000	14.15
- Oakland Heights in Oakland County	5,771,000	1,528,000	7.33
- Citizen's Disposal in Genesee County	13,682,000	893,000	29.72
- Vienna Junction in Monroe County	10,400,000	1,000,000	20.18
- Rockwood in Monroe County	21,863,000	500,000	84.83
- Adrian Landfill in Adrian County	1,346,000	298,000	8.76
Republic, Inc. Landfills			
- Carleton Farms in Wayne County	90,648,000	3,374,000	52.12
- Brent Run in Genesee County	41,239,000	828,000	96.62
Superior Sanitation, Inc. Landfills			
- Arbor Hills Landfill in Washtenaw County	31,840,206	3,478,000	17.76
Other Area Landfills			
- Collier Road Landfill in Oakland County	953,000	387,000	4.78
- Cove Landfill in Huron County	1,150,000	100,000	22.31
- Riverview Landfill in Wayne County	14,363,000	1,120,000	24.88
TOTALS See Note #1	367,472,206	25,365,747	28.10

Note #1 All conversions of gate yards to bank yards are made on a standard conversion rate (1.94 gate yards to each bank yard). The calculations of available bank yards do not include additional acreage at each of the identified sites for development of additional landfill

capacity that is already recognized as being consistent with the host County Plans. This additional space will further increase the number of years of available capacity to service the region.

Available air space and delivery rates are based on information provided by landfills either to the State of Michigan or directly to Oakland County and its agents. Where additional calculations of landfill life were completed, it was assumed that 20% of available air space is lost to cover and liner components.

Further documentation of available capacity for Oakland County's primary disposal needs is available in the form of letters from four landfill companies that each operate one or more landfills accessible to Oakland County waste generators. The table below shows how each of these four service providers has more than 15 years of available disposal capacity to service Oakland County's needs with the average of the four being 28.66 years of capacity.

Identified Disposal Area Capacity BY LANDFILL COMPANY	Available Air Space (Bank CY) 1999	Average Annual Gate CY Delivered 1996/1998	Landfill Life (in Yrs) Based on 1996/98 Delivery Rates
Waste Management Inc. Landfills	116,589,000	9,442,747	23.95
Allied, Inc. Landfills	70,690,000	6,636,000	20.67
Republic, Inc. Landfills	131,887,000	4,202,000	60.89
Superior Sanitation, Inc. Landfills	31,840,206	3,478,000	17.76
TOTALS	351,006,206	23,758,747	28.66

Oakland County's Selected Alternative, which relies on regional access to landfill capacity, also includes designation in the Plan Update of a sufficient number of current and potential Transfer Station Disposal Areas located within the County such that cost effective access to a larger regional network of landfill capacity will be possible. Each of the above companies also has the experience in developing transfer station capacity as well as additional landfill capacity as needed in order to make even more capacity available to Oakland County should it be necessary.

Oakland County also is able to access landfill capacity in out-of-state landfills that are owned by either these companies or other firms that have provided Oakland County with expressions of intent to meet Oakland County's disposal needs.

Finally, this Plan Update includes all Michigan Counties as authorized for export from Oakland County. Waste generated in Oakland County is authorized for import in the Plan Updates of Michigan Counties with existing and planned landfill capacity sufficient to accommodate Oakland County's disposal requirements during the 10 year planning period. Following is a chart that shows how landfills located within Oakland County and in Counties within Oakland County's regional waste shed have well over 25 years of available disposal capacity at current import and export rates.

SELECTED SYSTEM

Identified Disposal Area Capacity BY COUNTY IN IMMEDIATE AREA	Available Air Space (Bank CY) 1999	Average Annual Gate CY Delivered 1996/1998	Landfill Life (in Yrs) Based on 1996/98 Delivery Rates
Oakland County	31,724,000	3,535,000	17.41
Genesee County	54,921,000	1,721,000	61.91
Macomb County	21,771,000	1,543,000	27.37
Wayne County	147,309,000	10,502,000	27.21
Washtenaw County	31,840,206	3,478,000	17.76
TOTALS	287,565,206	20,779,000	26.85

This is well divided between each of the available counties, all of which have included Oakland County as an identified exporter to their respective county. The following chart shows how the current and estimated gate yards of disposed waste from Oakland County fits into the allowed export limits (or anticipated annual availability if no export limit exists) provided for in the identified Counties that are in the Oakland County waste shed.

County That is Providing for Acceptance of Oakland County Exported Waste in Their Plan	Anticipated Annual Availability or Export Limit in Updated Plans	Potential Allocation of Oakland County Waste in Year 2003	Potential Allocation of Oakland County Waste in Year 2008
Oakland County	-	690,000	-
Genesee County (Note #1)	2,000,000	920,000	1,440,000
Macomb County	750,000	690,000	720,000
Wayne County	2,000,000	690,000	720,000
Washtenaw County	2,000,000	1,150,000	1,200,000
Other (Note #2)	2,000,000	460,000	720,000
TOTALS	8,750,000	4,600,000	4,800,000
% of Allowed Imports Used		52.57%	54.86%

Note #1: In the Genesee County Plan Update, there is no limit on Oakland County Waste exported to Genesee County. This chart is based on a 2,000,000 annual availability which would be well within the long term capabilities of the landfills located in Genesee County. There is, however, much more available export volume in Genesee County than the 2,000,000 figure used here.

Note #2: This chart is based on a 2,000,000 annual availability to other counties within Michigan as well as landfills in other states within 150 mile radius of Oakland County. There is, however, much more available export volume in these other locations than the 2,000,000 figure used here.

As the chart shows, Oakland County would still be using less that 55% of the allowed import capacity allocated to Oakland County, even without 1) considering the available capacity in other more distant counties that have included Oakland County, 2) considering the ability to export out-of-state, or 3) considering that the host community and Eagle Valley Landfill may agree on allowing more capacity to be developed at this site within Oakland County that is included in the Oakland County Plan Update.

Capacity Certification Process:

As demonstrated above Oakland County will have access to more than a sufficient amount of disposal capacity to meet disposal needs to some point well beyond the Year 2010. This capacity is currently available at facilities located both within Oakland County and at facilities located within other Michigan counties (and later only at facilities located elsewhere) where the host county solid waste management plan has provided for the reception of wastes generated within Oakland County and where the facility operators are willing to receive Oakland County wastes. Therefore, an annual certification process is not included within this plan.

Interim Siting Mechanism Process:

As previously indicated, Oakland County will have access to more than a sufficient amount of disposal capacity to meet disposal needs to some point beyond the Year 2010. Therefore, an interim siting mechanism which contains objective criteria and procedures for the selection of additional disposal area landfills is not included within this plan.