



JOHN ENGLER, Governor

DEPARTMENT OF ENVIRONMENTAL QUALITY

"Better Service for a Better Environment"

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

INTERNET: www.deq.state.mi.us

RUSSELL J. HARDING, Director

August 7, 2000

Mr. Ronald E. Sanders, Chairman
Mason County Board of Commissioners
Court House
304 East Ludington Avenue
Ludington, Michigan 49431

Dear Mr. Sanders:

The Department of Environmental Quality (DEQ) received the locally approved update to the Mason County Solid Waste Management Plan (Plan) on April 20, 2000. Except for the items indicated below, the Plan is approvable. As outlined in the June 1, 2000 letter to Mr. Fabian L. Knizacky, Mason County Administrator, from Mr. Stan Idziak, DEQ, Waste Management Division, and as confirmed in your letter of June 13, 2000, to Mr. Idziak, the DEQ makes certain modifications to the Plan as discussed below.

On page 64, A., Siting Criteria for New Solid Waste Disposal Facilities in Mason County (County), 1. "Long-range (10-year) disposal capacity has not been documented to be available at specific sites." This statement conflicts with the Plan's capacity certification on page 84, which certifies that the County has more than 10 years capacity. In order to avoid confusion, this sentence is modified to read: "Long-range (10-year) disposal capacity has been documented to be available at specific sites."

On page 67, 8., Proposed Disposal Capacity, this item reads: "A potential site shall provide sufficient capacity to meet the disposal needs of the county for the next 20 years. The proposed site will be located on a minimum of 320-acre parcel to be consistent with the Plan. If a decision is made to accept waste from several counties, the required disposal area will increase accordingly." The determination of 20 years capacity and the decision to increase the size of the disposal area, if waste is accepted from other counties in order to maintain 20 years of capacity for Mason County, is a discretionary, subjective judgement. Siting criteria must be objective, specific, and measurable. Therefore, this item is revised to read: "The proposed site shall be located, at a minimum, on a 320-acre parcel to be consistent with the Plan."

On page 67, 9., Local Ordinances, this statement reads: "A potential site shall conform with county and/or local zoning ordinances to the extent they are provided for in this Plan on page 83. A proposed site must be located in an area that is zoned for agricultural or industrial uses." The local zoning ordinances referenced on page 83 concern the daily operations of the disposal area and, as such, are not siting criteria.

This statement is revised to read: "The applicant shall submit a statement indicating that the potential site shall conform with county and/or local zoning ordinances to the extent they are provided for on page 83 of this Plan. A proposed site must be located in an area that is zoned for agricultural or industrial uses."

On page 68, 13., Importation Authorization, this item reads, "Solid waste disposal facilities shall be authorized to import waste from counties specifically mentioned on pages 32 and 33. Solid waste disposal facilities shall not be authorized to import waste from Michigan counties that are not specifically mentioned on pages 32 and 33." This item is not a siting criterion; it is simply a statement of fact and already addressed on pages 32 and 33. Therefore, item 13. is deleted from this section of the Plan.

On page 76, under Transfer facilities, paragraph 7, "The developer must provide a written noise and abatement plan for the proposed transfer facility site." It is not clear whether this statement is a siting requirement and, if so, how it will be evaluated relative to siting the facility. In order to clarify this situation, the statement has been changed to read: "The developer must provide a written noise and abatement plan for the proposed transfer facility site. The noise and abatement plan is for informational purposes only and will not be used to determine consistency with the Plan."

On page 78, paragraph 1 states: "Noise effects on adjacent properties shall be minimized by the utilization of adequately sound proofed equipment and facilities designed to effect such minimization, and by the use of berms, walls, and natural planting screens. The developer must provide a written abatement plan." It is not clear whether this statement is a siting requirement and, if so, how it will be evaluated relative to siting the facility. This paragraph has been revised to read: "Noise effects on adjacent properties shall be minimized by the utilization of adequately sound-proofed equipment and facilities designed to effect such minimization and by the use of berms, walls, and natural planting screens. The developer must provide a written abatement plan for informational purposes only which will not be used to determine consistency with the Plan."

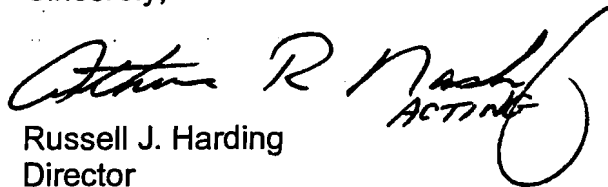
With these modifications, the County's updated Plan is hereby approved, and the County now assumes responsibility for the enforcement and implementation of this Plan. Please ensure that a copy of this letter is included with copies of the approved Plan distributed by the County.

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

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

The DEQ applauds your efforts and commitment in addressing the solid waste management issues in Mason County. If you have any questions, please contact Mr. Seth Phillips, Chief, Solid Waste Management Unit, at 517-373-4750.

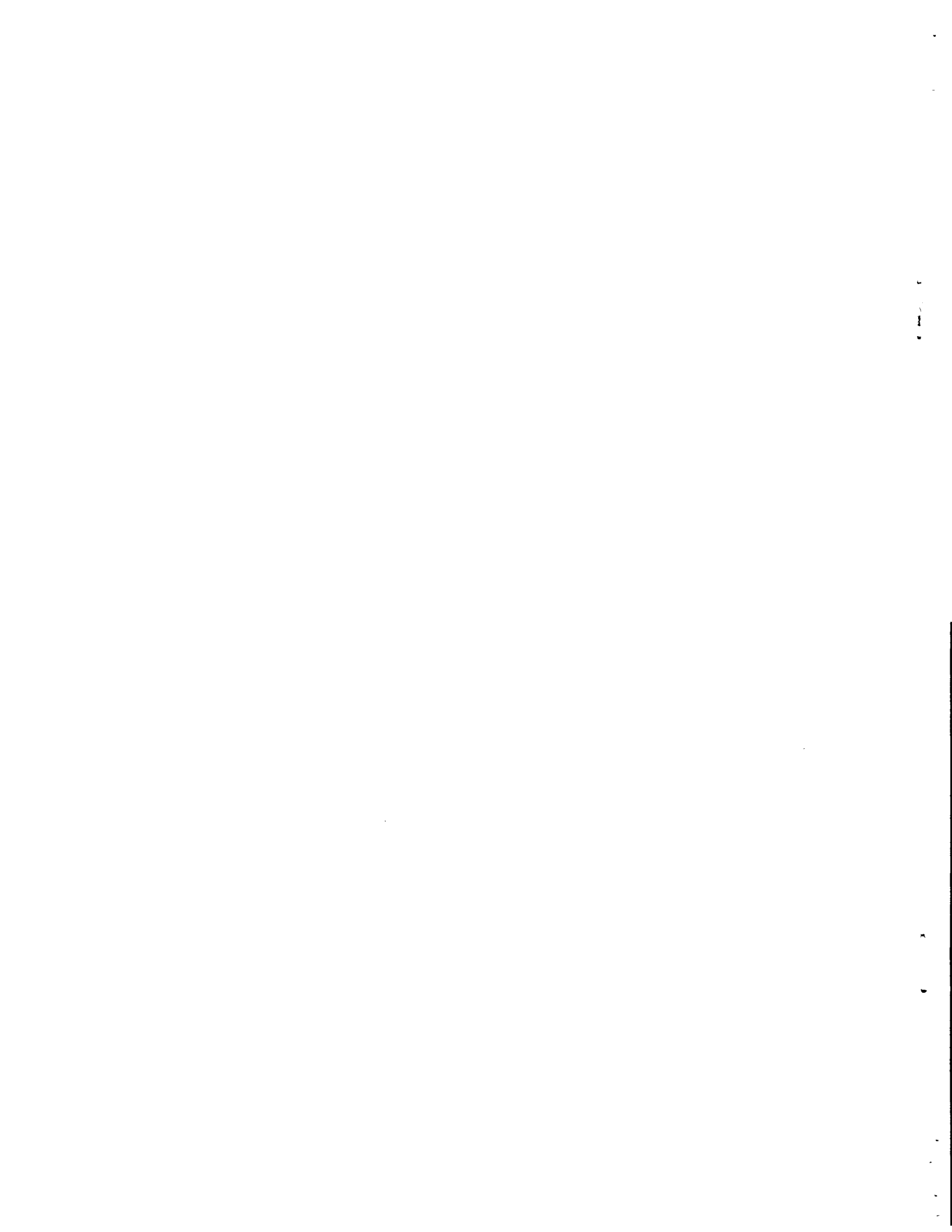
Sincerely,



Russell J. Harding
Director

517-373-7917

- cc: Senator Bill Schuette
- Representative David C. Mead
- Mr. Fabian L. Knizacky, Mason County Administrator
- Mr. Arthur R. Nash Jr., Deputy Director, DEQ
- Mr. Timothy R. Sowton, Legislative Liaison, DEQ
- Mr. Jim Sygo, DEQ
- Ms. Joan Peck, DEQ
- Mr. Philip Roycraft, DEQ - Cadillac
- Mr. Seth Phillips, DEQ
- Mr. Stan Idziak, DEQ
- Mason County File



MASON COUNTY
SOLID WASTE MANAGEMENT PLAN
1998 UPDATE

MASON COUNTY ADMINISTRATOR'S OFFICE

Mason County Designated Planning Agency

Mason County Administrator Fabian L. Knizacky

Administrative Assistant Lori A. Holmes

304 E. Ludington Avenue

Ludington, MI 49431

Telephone: (231) 843-7999

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This Plan assembled December 28, 2000

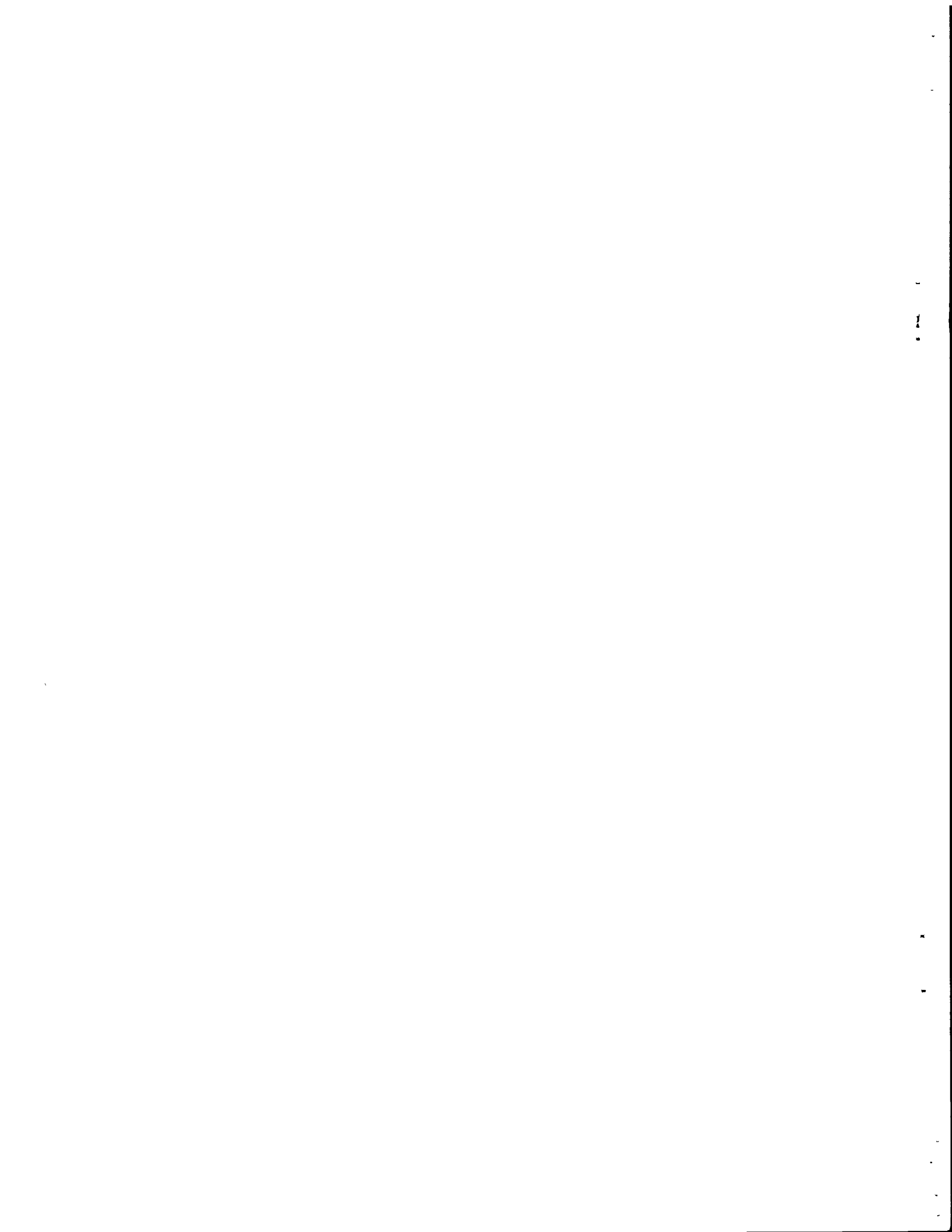


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ACKNOWLEDGMENTS

The completion of the 1998 Updated Mason County Solid Waste Plan is the result of the cooperative effort of many boards, commissions and departments in Mason County. The Designated Planning Agency would like to thank the following parties for their dedicated work that assisted us in the completion of the 1998 Updated Mason County Solid Waste Plan.

MASON COUNTY BOARD OF COMMISSIONERS

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Representing

General Public
General Public
General Public
Regional Solid Waste Planning Agency
Solid Waste Management Industry
Solid Waste Management Industry
Solid Waste Management Industry
Solid Waste Management Industry
Environmental Interest Groups
Environmental Interest Groups
City Governments
Industrial Waste Generators
Township Government
County Government

1997 PLAN UPDATE COVER PAGE

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

DATE SUBMITTED TO THE DEQ: April 6, 2000

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

This Plan includes only the County of Mason.

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

There are no municipalities from outside the County included in the Plan. Additionally there are no municipalities within the County that have been approved to be included in the Plan of another County.

DESIGNATED PLANNING AGENCY PREPARING THIS PLAN UPDATE:

The Mason County Administrator's Office is the Designated Planning Agency preparing this plan update.

CONTACT PERSON: Fabian L. Knizacky

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Mason County Courthouse
304 E. Ludington Avenue
Ludington, MI 49431

PHONE: (231) 843-7999

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E-MAIL: Fabian@Lumanet.org

CENTRAL REPOSITORY LOCATION(S): Mason County Administrator's office is the central repository location. The Mason County Administrator's office is open Monday through Friday 8:00 am to noon and 1:00 p.m. to 5:00 p.m.

EXECUTIVE SUMMARY

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

OVERALL VIEW OF THE COUNTY

| Township or Municipality Name | Population* | % Land Use** | | % of Economic Base*** | | | | |
|---------------------------------------|----------------------|---------------------|--------------------|-----------------------|------------------|-------------------|-------------------|-------------------|
| | | Rural | Urban | Ag | For | Ind | Com | Other |
| Amber Township | 1,684 | 100% | 0% | 7% | 0% | 6% | 57% | 30% |
| Branch Township | 973 | 100% | 0% | 24% | 0% | 0% | 44% | 31% |
| Custer Township | 1,176 | 100% | 0% | 55% | 0% | 0% | 21% | 24% |
| Eden Township | 491 | 100% | 0% | 88% | 0% | 0% | 0% | 12% |
| Free Soil Township | 860 | 100% | 0% | 77% | 0% | 0% | 8% | 15% |
| Grant Township | 749 | 100% | 0% | 18% | 0% | 19% | 10% | 53% |
| Hamlin Township | 2,597 | 100% | 0% | 18% | 0% | 3% | 57% | 22% |
| Logan Township | 203 | 100% | 0% | 67% | 0% | 0% | 20% | 13% |
| Meade Township | 142 | 100% | 0% | 59% | 0% | 0% | 0% | 41% |
| Charter Township of Pere Marquette | 2,065 | 100% | 0% | 1% | 0% | 86% | 6% | 7% |
| Riverton Township | 1,115 | 100% | 0% | 70% | 0% | 12% | 0% | 18% |
| Sheridan Township | 837 | 100% | 0% | 80% | 0% | 0% | 0% | 20% |
| Sherman Township | 952 | 100% | 0% | 53% | 0% | 18% | 8% | 21% |
| Summit Township | 815 | 100% | 0% | 5% | 0% | 92% | 0% | 3% |
| Victory Township | 1,084 | 100% | 0% | 61% | 0% | 0% | 9% | 30% |
| City of Ludington | 8,507 | 0% | 100% | 0% | 0% | 30% | 31% | 39% |
| City of Scottville | 1,287 | 0% | 100% | 0% | 0% | 22% | 34% | 44% |
| Village of Custer | 312 | 0% | 100% | NA | NA | NA | NA | NA |
| Village of Fountain | 165 | 0% | 100% | NA | NA | NA | NA | NA |
| Village of Free Soil | 148 | 0% | 100% | NA | NA | NA | NA | NA |
| Total Population | <u>25,537</u> | <u>98.4%</u> | <u>1.6%</u> | <u>7%</u> | <u>0%</u> | <u>66%</u> | <u>13%</u> | <u>14%</u> |

'Ag = Agriculture; For = Forestry; Ind = Industry; Com = Commercial; Oth = All Other Economic Bases

*Source - 1990 Census

**Source - Mason County Equalization Department

***Source - 1998 Mason County Equalization Report

OVERVIEW OF MASON COUNTY

The County of Mason, Michigan, having over 25 miles of Lake Michigan shoreline, encompasses approximately 540 square miles of flat gently rolling topography with approximately a quarter of its land being devoted to agricultural purposes. The county seat is located in the City of Ludington.

The County operates under a nine member elected Board of Commissioners who are elected from single member districts determined by population on a partisan basis for two year terms. The Board annually elects, from within its ranks, a Chairman and Vice Chairman by majority vote. The Chairman serves as the chief executive of the County. The County provides services to its more than 28,000 residents in areas including law enforcement, administration of justice, community enrichment and development, and human services. The County is divided into fifteen (15) townships and two incorporated cities, Ludington and Scottville. Three incorporated villages, Custer, Fountain and Free Soil also operate as political units.

In 1970, the County had a population of 22,612 residents, with over 9,000 of these living in the City of Ludington. By 1980, the County had a total of 26,365 people, an increase of nearly 17%, which was very strong population growth for the 1970's. However, by 1990 the county's population had declined somewhat, to 25,537 people, a decrease of slightly over 3%. According to population projections published by the West Michigan Shoreline Regional Development Commission, this slight decline was an aberration in a historical trend of upward population growth and increasing suburbanization. The Commission has projected, in the 1995 Mason County Comprehensive Plan, that the population of the County will grow to 27,127 by 2000, 27,922 by 2005, 28,717 by 2010, 29,512 by 2015, 30,307 by 2020 and 31,102 by 2025. These forecasts are based on Census Bureau historical information, as well as data on births and deaths provided by the US Department of Health and Human Services, and other information on migration provided by the US Internal Revenue Service. The County ranked 50th out of 83 Michigan counties for population in 1996.

These figures can then be used to predict other elements which are often associated with population growth, such as the need for additional housing units. For instance, at the 1990 incidence of persons per dwelling unit (1.808, a fairly low figure), by the year 2010 Mason County, with its additional 2,455 persons, will need at least 1,358 dwelling units to be constructed. At least, because according to national figures, the average number of persons per dwelling unit is steadily decreasing, and the proportion of dwelling units used for seasonal occupation only may be on the increase.

Population growth has been the greatest in the more remote rural sections of the County. This growth has been fueled by former urban residents retiring and moving to the County to enjoy a more rural way of life. This presents a future challenge to refuse collection and disposal. While these residents are accustomed to the curb side service provided in their former urban homes, the sparse population does not make it economically viable for private enterprise to provide this service.

There were 9,993 households in the County in 1989, according to the 1990 US Census, which had a median household income of \$21,701. A breakdown of the income for the County's households is as follows:

| <u>Income of Households</u> | <u>Number of Households</u> |
|-----------------------------|-----------------------------|
| Less than \$5,000 | 546 |
| \$5,000 to \$9,999 | 1,511 |
| \$10,000 to \$14,999 | 1,252 |
| \$15,000 to \$24,999 | 2,322 |
| \$25,000 to \$34,999 | 1,656 |
| \$35,000 to \$49,999 | 1,583 |
| \$50,000 to \$74,999 | 820 |
| \$75,000 to \$99,000 | 151 |
| \$100,000 to \$149,999 | 112 |
| \$150,000 or more | 40 |

The per capita income for the County in 1989 was \$10,848.

Age groups for the County's residents, according to the 1990 US Census, are as follows:

| | <u>Percentage</u> |
|----------------|-------------------|
| Under 5 Years | 6.99% |
| 5 to 17 Years | 19.29% |
| 18 to 24 Years | 7.93% |
| 25 to 44 Years | 28.31% |
| 45 to 64 Years | 20.36% |
| Over 65 Years | 17.12% |

The primary and secondary educational needs of the residents are provided by the seven school districts which serve the County. Higher educational opportunities are available to County residents at West Shore Community College, which offers Associate degrees in Arts, Sciences and Applied Arts & Sciences. Additionally, the College grants certificates in 16 one and two-year occupational programs. The College's Tech Center, through a joint partnership with the Mason County Intermediate School District and Public School Districts, provides a single vocational learning center to County residents. The College also operates approximately 8 satellite facilities throughout the County. There were approximately 1,444 full and part-time students enrolled at the College for the 1997 Fall semester.

In addition, higher educational opportunities are available at the following institutions, which are located within driving distance of the County residents:

Baker College of Muskegon (Curriculum available through WSCC)
 Davenport College (Curriculum available through WSCC)
 Muskegon Community College
 Ferris State University

According to the 1990 US Census, the educational characteristics for the County of Mason are as follows:

| <u>Years of School Completed</u> | <u>Persons 25 and Over</u> |
|----------------------------------|----------------------------|
| Less than 9th grade | 9.06% |
| 9th to 12th grade, no diploma | 14.81% |
| High school graduate | 39.94% |
| Some college, no degree | 17.65% |
| Associate degree | 6.70% |
| Bachelor's degree | 7.77% |
| Graduate or professional degree | 4.07% |

Mason County enjoys a healthy, diversified economic mix of tourism, industrial, commercial and agricultural uses within its borders. The major employers in the County are as follows:

| <u>Firm Name</u> | <u>Product/Service</u> | <u>Approximate Number of Employees</u> |
|--------------------------------|-------------------------------------|--|
| Brill Manufacturing Co. | Furniture, Household Wood | 90 |
| City of Ludington | Government | 278* |
| County of Mason | Government | 175 |
| Dow Chemical Company | Industrial Chemicals | 292 |
| Floracraft Corp. | Plastic Foam Products | 140 |
| Great Lakes Casting Co. | Gray Iron Castings | 242 |
| Harbison-Walker Refractories | Dead Burned Magnesite | 95 |
| Harrell Management Corporation | Eating Places | 70 |
| Harrington Tool | Industrial Tungsten Carbide Tooling | 39 |
| House of Flavors | Restaurant & Ice Cream producer | 54 |
| Kaines West Michigan Wire | Wire Products, Fabricated - Misc. | 70 |
| Kmart Corporation | Department Store | 120 |
| LDI, Inc. | Automotive components | 83 |
| Ludington Area Schools | School/Education | 367* |
| Ludington Components | Office Furniture | 220 |
| Ludington Daily News Inc. | Newspapers: Publishing, Printing | 60 |
| Mason/Lake Intermediate School | School/Education | 75 |
| Mason County Fruit Packers | Cherry & Apple Products | 175 |
| Mason County Eastern School | School/Education | 70 |
| Mason County Central School | School/Education | 180* |
| McCormick Sawmill, Inc. | Saw & Planning Mills | 65 |
| Memorial Medical Center | Health Care | 500* |
| Merdel Game Mfg. Co. | Games, Toys, Children's Vehicles | 60 |
| Metalworks, Inc. | Office Furniture | 236 |
| Oakview Medical Care Facility | Health Care | 107 |
| Pandrol Jackson Inc. | Railroad Maintenance Eqpt. | 305 |
| Prevos Family Market, Inc. | Grocery Stores | 90* |
| Stokely, USA | Canned Green Beans | 415* |
| Straits Steel & Wire Company | Fabricated Wire Products | 200 |
| Wal-Mart | Department Store | 150 |
| West Shore Community College | Education | 164* |
| Whitehall Industries Inc. | Aluminum Extruded Products | 140* |

*Includes full and part-time employees

In addition, the County has the following employer and employee relationships:

| <u>Number of Employers</u> | <u>Number of Employees</u> |
|----------------------------|----------------------------|
| 28 | 1 - 25 |
| 4 | 26 - 50 |

The 1990 US Census of Population lists the labor force characteristics for the County of Mason, for employed persons 16 years and over, as follows:

| <u>BY OCCUPATION:</u> | <u>Number of Employees</u> |
|--|----------------------------|
| Executive, administrative and managerial occupations | 893 |
| Professional specialty occupations | 1,169 |
| Technicians and related support occupations | 230 |
| Sales occupations | 1,149 |
| Administrative support occupations, including clerical | 1,398 |
| Private household occupations | 53 |
| Protective service occupations | 138 |
| Service occupations, except protective and household | 1,307 |
| Farming, forestry and fishing occupations | 432 |
| Precision production, craft and repair occupations | 1,453 |
| Machine operators, assemblers, and inspectors | 883 |
| Transportation and material moving occupations | 561 |
| Handlers, equipment cleaners, helpers, and laborers | 578 |
| TOTAL | <u>10,244</u> |

| <u>BY INDUSTRY:</u> | <u>Number of Employees</u> |
|---|----------------------------|
| Agriculture, forestry and fisheries | 517 |
| Mining | 42 |
| Construction | 788 |
| Manufacturing, nondurable goods | 799 |
| Manufacturing, durable goods | 1,477 |
| Transportation | 430 |
| Communications and other public utilities | 207 |
| Wholesale trade | 332 |
| Retail trade | 1,930 |
| Finance, insurance, and real estate | 381 |
| Business and repair services | 306 |
| Personal services | 343 |
| Entertainment and recreation services | 84 |
| Health services | 906 |
| Education services | 822 |
| Other professional and related services | 515 |
| Public administration | 365 |
| TOTAL | <u>10,244</u> |

Retail sales are mainly convenience in nature and are concentrated in the incorporated Cities of Ludington and Scottville, and the Villages of Custer, Fountain and Free Soil. Regional shopping is provided in the Ludington area. An estimate of retail sales for the County of

Mason and the City of Ludington for 1998 as shown by the "Editor and Publisher Market Guide" is as follows:

| | <u>Number of Stores</u> | | <u>Estimate of Sales</u> | |
|---------------------|-------------------------|--------------------------|--------------------------|--------------------------|
| | <u>County of Mason</u> | <u>City of Ludington</u> | <u>County of Mason</u> | <u>City of Ludington</u> |
| | | | (Shown in thousands) | |
| Lumber & Hardware | 13 | 7 | \$25,893 | \$15,311 |
| General Merchandise | 4 | 3 | 42,013 | 24,842 |
| Food | 26 | 11 | 55,643 | 26,556 |
| Auto | 14 | 3 | 39,568 | 2,863 |
| Gasoline | 15 | 8 | 28,606 | 17,183 |
| Apparel | 18 | 13 | 7,900 | 7,551 |
| Furniture | 12 | 7 | 10,530 | 5,619 |
| Eat, Drink | 52 | 27 | 25,706 | 16,972 |
| Drugs | 7 | 5 | 11,551 | 6,830 |

Mason County is easily accessible via US Route 31 which runs North and South through the middle of the County and US Route 10 running East and West through the County. The US Routes connect County residents to the major highway network. Ludington Mass Transportation provides bus service in the Ludington area and the City of Scottville.

Mason County Airport provides accessibility to general aviation of small and intermediate aircraft. The airport also provides charter service to various points throughout the Midwest. During the months May through October, the Lake Michigan CarFerry Service connects Ludington and Manitowoc, Wisconsin. CSX provides railroad transportation to the county industrial base. Currently, two trains per day operate between Grand Rapids and Ludington.

According to the Michigan Employment Security Commission, Research and Statistical Division, the unemployment statistics for the County of Mason during the last three calendar years, and the most recent data available for 1998, are as follows:

| | <u>1998</u> | <u>1997</u> | <u>1996</u> | <u>1995</u> |
|----------------|-------------|-------------|-------------|--------------|
| January | 9.4% | 12.1% | 12.8% | 14.1% |
| February | 9.4 | 10.8 | 12.2 | 13.7 |
| March | 8.3 | 10.8 | 10.4 | 12.5 |
| April | 5.6 | 8.6 | 10.0 | 10.6 |
| May | 5.5 | 6.3 | 8.9 | 9.5 |
| June | 5.5 | 6.2 | 8.7 | 10.1 |
| July | 3.8 | 4.7 | 6.5 | 7.3 |
| August | 3.9 | 4.8 | 6.0 | 7.3 |
| September | 4.3 | 5.0 | 6.5 | 7.3 |
| October | 4.5 | 5.2 | 6.7 | 7.7 |
| November | 6.2 | 7.4 | 9.0 | 10.2 |
| December | <u>6.7</u> | <u>6.9</u> | <u>8.9</u> | <u>10.7</u> |
| Annual Average | <u>6.0%</u> | <u>7.3%</u> | <u>8.8%</u> | <u>10.0%</u> |

According to the 1992 U. S. Census of Agriculture, Mason County had 402 farms in 1992 compared to 426 in 1987, encompassing approximately 73,437 acres. The average farm was approximately 183 acres in size compared to 179 acres in size in 1987.

The value of agricultural products sold in 1992 for Mason County farms amounted to \$20,373,000 compared to \$15,715,000 in 1987 and the average value per farm amounted to \$50,679 in 1992 compared to \$36,889 in 1987.

Farm size (harvested) is as follows:

| | |
|--------------------|--------|
| Under 49 acres | 27.86% |
| 50 to 179 acres | 40.04% |
| 180 to 499 acres | 23.88% |
| 500 acres and over | 8.22% |

64.68% of the farms in the County are owner-operated; 31.09% are operated by part-time owners; and 4.23% by tenants. Of the above, 51.00% devote full time to farming and 49.00% devote part-time to farming. The average age for the farm operator in the County in 1992 was 52.3 years, up from the 51.4 years average in 1987.

There are 14,119 housing units located within the County according to the 1990 US Census of Population and Housing, of which 78.43% are year-round homes; 53.66% are owner-occupied. A breakdown of the dwelling units is as follows:

| | |
|---------------|--------|
| Single Family | 74.90% |
| Multi Family | 11.92% |
| Mobile Homes | 13.18% |

According to the 1990 US Census of Population and Housing, the median value of an owner-occupied residence in the County is \$43,300.

County topography was determined by glacial action. Approximately 70% of the county is a broad and smooth plain with well-drained, sandy soils. Numerous lakes and streams are found throughout the county. A second type of topographic feature found in the county is the moraines. These large rolling hills can exceed 150 feet and cover approximately 25% of the county. The moraines create variation in the landscape and are especially concentrated in northern Summit and Riverton Townships. Due to the elevation above the lakeshore, the moraines provide scenic views and also exhibit capabilities for winter sports activities such as skiing and sledding.

Approximately 5% of the county is covered by dunes. They occur in a narrow band trending along the Lake Michigan shore and range for 1/4 mile wide to over three miles wide north of the City of Ludington. The dunes rise 50 to 100 feet above the lake level and consist of a series of parallel ridges and valleys. The frontal dunes are composed of open, loose sand and back dunes are stabilized with grasses and forest. The dunes are popular recreation areas.

INTRODUCTION

GOALS AND OBJECTIVES

To comply with Part 115 and its requirements, each Plan must be directed toward goals and objectives based on the purposes stated in Part 115, Sections 11538.(I)(a), 11541.(4) and the State Solid Waste Policy adopted pursuant to this Section, and Administrative Rules 71 I(b)(i) and (ii). At a minimum, the goals must reflect two major purposes of Solid Waste Management Plans:

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

This Solid Waste Management Plan works toward the following goals through actions designed to meet the objectives described under the respective goals which they support. This project is assuming funding is available. This Plan does not require government (municipal and county) funding. If funding is not available, that will not be in conflict with this Plan and not pursuing a particular project will not be in conflict with this Plan:

The purpose of this plan is to accomplish the following goals and objectives.:

Goal 1: The primary goal of the Solid Waste Management Plan for the County of Mason is to establish a solid waste system for the entire county that will address the solid waste disposal needs of the general public.

Objective 1a: Identify and collaborate with the potential private, public and non-profit agencies that have a vested interest in the proper management of the solid waste stream.

Goal 2: Develop and promote a plan that protects the natural beauty and resources of Mason County.

Objective 2a: Enforce laws that prohibit the dumping of solid waste in unauthorized areas

Objective 2b: Establish and enforce landfill siting criteria that protect the environmental features of Mason County and avoid conflicts with adjacent uses.

Objective 2c: Establish and enforce rules overseeing the appearance, odor and noise aspects of solid waste disposal facilities.

INTRODUCTION

Goal 3: Support recycling, compost and reuse programs provided to the public.

Objective 3a: Encourage citizens to participate in recycling, compost and reuse programs.

Objective 3b: Encourage developers of privately owned solid waste disposal facilities to provide recycling and composting programs.

Objective 3c: Encourage the state legislature to expand the bottle and can deposit laws.

Objective 3d: Promote the purchasing of products made with recycled products.

Goal 4: Develop a solid waste management plan that is fiscally responsible.

Objective 4a: Encourage the development of privately owned solid waste disposal facilities.

Objective 4b: Identify potential revenues when considering government participation in additional programs.

Objective 4c: Explore and coordinate regional and multiple jurisdictional solutions to solid waste needs.

Objective 4d: Establish siting criteria that encourages the proper development of infrastructure during the construction stage of privately owned solid waste disposal facilities.

Objective 4e: Encourage the State of Michigan to resume its policy of providing funding for solid waste ventures.

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

DATA BASE

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

| COUNTY | WASTE TYPE | CURRENT ANNUAL VOLUME (cubic yards) | FIVE YEAR ANNUAL VOLUME (cubic yards) | TEN YEAR ANNUAL VOLUME (cubic yards) |
|--------|-------------------------|--|--|---|
| Mason | Industrial | 21,523 | 22,169 | 22,834 |
| | Commercial | 32,426 | 33,399 | 34,401 |
| | Residential | 26,352 | 27,957 | 27,956 |
| | Compostibles | 13,747 | 14,160 | 14,584 |
| | Construction/Demolition | <u>4,146</u> | <u>4,271</u> | <u>4,399</u> |
| | Total | <u>98,194</u> | <u>101,141</u> | <u>104,174</u> |

The landfills that have agreed to accept waste from Mason County have ample capacity to meet the county's solid waste disposal needs for the next ten years. Total volumes were compiled from information provided by waste haulers operating in the county. The rate of 14% of total waste generated was used to calculate compostible materials. This is consistent with rates used by the U.S. Environmental Protection Agency (EPA) in their reports characterizing municipal solid waste in the United States.

Listed below are the total quantity of solid waste generated and the total quantity needing disposal. Composting and recycling make up the difference between the two quantities.

TOTAL QUANTITY OF SOLID WASTE GENERATED:
98,194 Cubic Yards in 1999 (identify unit of time)

TOTAL QUANTITY OF SOLID WASTE NEEDING DISPOSAL:
72,965 Cubic Yards in 1999 (identify unit of time)

DATA BASE

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

Type II Landfills to be utilized by the County of Mason.

| <u>Landfill</u> | <u>Location</u> |
|--|------------------|
| Manistee County Landfill Inc. | Manistee County |
| Pitsch Sanitary Landfill | Ionia County |
| Ottawa County Farms Landfill | Ottawa County |
| Autumn Hills Recycling & Disposal Facility | Ottawa County |
| Arbor Hills Landfill | Washtenaw County |
| Central Sanitary Landfill | Montcalm County |

Type B Transfer Stations to be utilized by the residents of the County of Mason.

| <u>Transfer Stations</u> | <u>Location</u> |
|---|-----------------|
| Hamlin Township Transfer Facility | Mason County |
| Summit Township Transfer Facility | Mason County |
| Waste Reduction System (The Transfer Station) | Mason County |

Facility descriptions are on the following pages.

DATA BASE

FACILITY DESCRIPTIONS

Facility Type: Type II Landfill

Facility Name: Manistee County Landfill, Inc., owned by Allied

County: Manistee Location: Town: 21 N. Range: 16 W. Section(s): Stronach Municipa
 Township

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, Inc.

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

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

Asbestos, Foundry Sand

Site Size:

| | | |
|-----------------------------------|------------------|--------------------------------|
| Total area of facility property: | <u>336</u> | acres |
| Total area sited for use: | <u>160</u> | acres |
| Total area permitted: | <u>40</u> | acres |
| Operating: | <u>5</u> | acres |
| Not excavated: | <u>25</u> | acres |
| Current capacity: | <u>1,700,000</u> | tons or <u>yds³</u> |
| Estimated lifetime: | <u>14</u> | years |
| Estimated days open per year: | <u>250</u> | days |
| Estimated yearly disposal volume: | <u>200,000</u> | tons or yds ³ |

(if applicable)

Annual energy production:

| | | |
|---------------------------------|----------|-----------|
| Landfill gas recovery projects: | <u>0</u> | megawatts |
| Waste-to-energy incinerators: | <u>0</u> | megawatts |

FACILITY DESCRIPTIONS

Facility Type: Landfill Type II

Facility Name: Pitsch Sanitary Landfill

County: Ionia Location: Town: 8N Range: 7W Section(s): 7

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: Pitsch Companies

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

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

Street Sweepings, Asbestos

| <u>Site Size:</u> | | Proposed Expansion* 1998 |
|-----------------------------------|---|----------------------------|
| Total area of facility property: | <u>143.5</u> acres | |
| Total area sited for use: | <u>28.36</u> acres | 41.28 acres |
| Total area permitted: | <u>78.44</u> acres | |
| Operating: | <u>9.87</u> acres | |
| Not excavated: | <u>70</u> acres | |
| Current capacity: | <u>415,000</u> (tons) or yds ³ | 4,500,000 yds ³ |
| Estimated lifetime: | <u>5</u> years | 22 years |
| Estimated days open per year: | <u>307</u> days | |
| Estimated yearly disposal volume: | <u>83,000</u> (tons) or yds ³ | |
| (if applicable) | | |
| Annual energy production: | | |
| Landfill gas recovery projects: | <u> </u> megawatts | |
| Waste-to-energy incinerators: | <u> </u> megawatts | |

*Year of planned expansion

FACILITY DESCRIPTIONS

Facility Type: Type II Solid Waste Landfill/Processing Plant

Facility Name: Autumn Hills Recycling & Disposal Facility

County: Ottawa Location: Town: 5N Range: 14W Section(s): 36

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: Autumn Hills RFD - A Division of Waste Management of Michigan, Inc.

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

* Explanation of special wastes, including a specific list and/or conditions: exhausted oak wood trays, minor first aid waste, contaminated pharmaceuticals manufacture, paint booth filters, dewatered waste water treatment sludge, out of spec/out of date food supplements, spent epoxy powder coatings, sand blasting sand, woodchips/dust from production, shot blast, construction and demolition materials, foundry sand, filter press cake, incinerator ash, saw dust, contaminated soils, auto fluff, asbestos, grinding sludge, carwash sand pit/traps, and food materials.

Site Size:

| | | |
|-----------------------------------|------------------|-----------------------------------|
| Total area of facility property: | <u>314</u> | acres |
| Total area sited for use: | <u>197</u> | acres |
| Total area permitted: | <u>99.3</u> | acres |
| Operating: | <u>35.1</u> | acres |
| Not excavated: | <u>64.2</u> | acres |
| Current capacity: | <u>20.75 mil</u> | <u>(tons)</u> or yds ³ |
| Estimated lifetime: | <u>30.2</u> | years |
| Estimated days open per year: | <u>286</u> | days |
| Estimated yearly disposal volume: | <u>500,000</u> | tons or yds ³ |

(if applicable)

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

FACILITY DESCRIPTIONS

Facility Type: Type II Landfill

Facility Name: Ottawa County Farms Landfill

County: Ottawa Location: Town: 8N Range: 14W Section(s): 26 & 27

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 : NA

Public Private Owner: _____

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

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

Site Size:

| | | |
|----------------------------------|------------|-------|
| Total area of facility property: | <u>240</u> | acres |
| Total area sited for use: | <u>197</u> | acres |
| Total area permitted: | <u>240</u> | acres |
| Operating: | <u>37</u> | acres |
| Not excavated: | <u>125</u> | acres |

| | | |
|-----------------------------------|-------------------|----------------------------|
| Current capacity: | <u>16,500,000</u> | (tons) or yds ³ |
| Estimated lifetime: | <u>25-30</u> | years |
| Estimated days open per year: | <u>286</u> | days |
| Estimated yearly disposal volume: | <u>500,000</u> | (tons) or yds ³ |

(if applicable)

| | | |
|---------------------------------|--------------|-----------|
| Annual energy production: | | |
| Landfill gas recovery projects: | <u>4,565</u> | megawatts |
| Waste-to-energy incinerators: | <u>NA</u> | megawatts |

FACILITY DESCRIPTIONS

Facility Type: Sanitary Landfill, Type II

Facility Name: Arbor Hills Landfill

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

Map identifying location included in Attachment Section: Yes No

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

Public Private Owner: BFI Waste Systems of North America, Inc.

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

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

Non-Hazardous Solid and Semi-Solid Wastes, No Hazardous or Liquid Wastes

Site Size:

| | | |
|-----------------------------------|-------------------|---|
| Total area of facility property: | <u>936</u> | acres |
| Total area sited for use: | <u>356</u> | acres |
| Total area permitted: | <u>217</u> | acres |
| Operating: | <u>113</u> | acres |
| Not excavated: | <u>104</u> | acres |
| Current capacity: | <u>30,500,000</u> | tons or <u>yds³</u> Airspace or 61.5 Million |
| Estimated lifetime: | <u>17.6</u> | years cubic yds. of capacity |
| Estimated days open per year: | <u>265</u> | days |
| Estimated yearly disposal volume: | <u>3,500,000</u> | tons or <u>yds³</u> |

(if applicable)

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

DATA BASE

FACILITY DESCRIPTIONS

Facility Type: Type B Transfer Station

Facility Name: Hamlin Township Transfer Facility

County: Mason

Location: Town: 18-19 Range: 18W Section(s): 27

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: Manistee County Landfill, Inc.

Public Private Owner: _____

Operating Status (check)

open
 closed
 licensed
 unlicensed
 construction permit
 open, but closure
 pending

Waste Types Received (check all that apply)

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

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

Site Size:

Total area of facility property: _____

10 acres

Total area sited for use: _____

acres

Total area permitted: _____

acres

Operating: _____

acres

Not excavated: _____

acres

Current capacity: _____

60 tons or yds³

Estimated lifetime: _____

years

Estimated days open per year: _____

130 days

Estimated yearly disposal volume: _____

1600 tons or yds³

(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: Type B Transfer Station

Facility Name: Summit Township Transfer Site

County: Mason Location: Town: 17N Range: 18-17W Section(s): 26

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: Manistee County Landfill Inc.

Public Private Owner: Summit Township

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

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

Site Size:

| | | |
|-----------------------------------|-------------------|--------------------------------|
| Total area of facility property: | <u>2</u> | acres |
| Total area sited for use: | <u>2</u> | acres |
| Total area permitted: | <u>NA</u> | acres |
| Operating: | <u>NA</u> | acres |
| Not excavated: | <u>NA</u> | acres |
| Current capacity: | <u>52</u> | tons or <u>yds³</u> |
| Estimated lifetime: | <u> </u> | years |
| Estimated days open per year: | <u>144</u> | days |
| Estimated yearly disposal volume: | <u>2900</u> | tons or <u>yds³</u> |

(if applicable)

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

DATA BASE

FACILITY DESCRIPTIONS

Facility Type: Type B Transfer Station

Facility Name: Waste Reduction System (The Transfer Station)

County: Mason Location: Town: 19N Range: 17W Section(s): 10

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: Manistee County Landfill

 Public X Private Owner: Ed Jabrocki

Operating Status (check)

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

Waste Types Received (check all that apply)

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

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

Site Size:

Total area of facility property: 10 acres
Total area sited for use: NA acres
Total area permitted: NA acres
Operating: NA acres
Not excavated: NA acres
Current capacity: 200 tons or yds³ per day
Estimated lifetime: NA years
Estimated days open per year: 312 days
Estimated yearly disposal volume: tons or yds³

(if applicable)

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

DATA BASE

FACILITY DESCRIPTIONS

Facility Type: Landfill

Facility Name: Central Sanitary Landfill

County: Montcalm Location: Town: 11 Range: 10 Section(s): 21

Map identifying location included in Attachment Section: Yes No

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

Public Private Owner: Allied Waste

Operating Status (check)

open
 closed
 licensed
 unlicensed
 construction permit
 open, but closure
 pending

Waste Types Received (check all that apply)

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

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

foundry sand, asbestos

Site Size:

| | | |
|-----------------------------------|----------------|--------------------------------|
| Total area of facility property: | <u>315</u> | acres |
| Total area sited for use: | <u>40.32</u> | acres |
| Total area permitted: | <u>18.45</u> | acres |
| Operating: | <u>18.45</u> | acres |
| Not excavated: | <u>5.76</u> | acres |
| Current capacity: | <u>373,428</u> | tons or <u>yds³</u> |
| Estimated lifetime: | <u>2</u> | years |
| Estimated days open per year: | <u>306</u> | days |
| Estimated yearly disposal volume: | <u>100,000</u> | tons or <u>yds³</u> |

(if applicable)

Annual energy production:

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

DATA BASE

SOLID WASTE COLLECTION SERVICES AND TRANSPORTATION INFRASTRUCTURE

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

The county has two companies that provide adequate collection services throughout the county. The City of Ludington, Pere Marquette Charter Township and the City of Scottville contract with a licensed solid waste hauler for curbside pickup, including recycling materials and composting materials, within their municipal jurisdictions for residential solid waste.

Hamlin and Summit Townships provide their residents with transfer facilities for solid waste and recycling materials. These facilities are serviced by one of the licensed solid waste haulers. Residents in the remaining units of government have the option of contracting individually with waste haulers for the pickup of solid waste at their residence, taking their solid waste to the one privately owned transfer facility or to the landfill facilities.

Businesses and industry have the option of contracting with private enterprise for solid waste pickup including recycling materials.

The State Highways in Mason County are designated M-116, US 10 and US 31. There are 214.88 miles of county primary roads. There are 730.43 miles of county local roads that serve as a secondary collection system that feeds the primary and arterial networks. Over 351 miles of the county's primary and secondary system is paved. Most of the secondary system is two lane gravel- surfaced roadway. The state highways within the county are all-season routes. County roads are subject to seasonal load restrictions.

DATA BASE

EVALUATION OF DEFICIENCIES AND PROBLEMS

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

- A. Lack of sufficient landfill facilities and solid waste haulers to foster a competitive market among private solid waste service providers.
- B. Lack of sufficient volume and market discipline to financially sustain government owned solid waste facilities.
- C. Lack of opportunities for rural segments of the county to recycle materials.
- D. Lack of a landfill facility within the county boundaries.
- E. Lack of a local market for recycled materials.

DATA BASE

DEMOGRAPHICS

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

| Mason County | <u>Year</u> | <u>Population</u> |
|--------------|-------------|-------------------|
| | 1995 | 26,332 |
| | 2000 | 27,127 |
| | 2005 | 27,922 |
| | 2010 | 28,717 |
| | 2015 | 29,512 |
| | 2020 | 30,307 |
| | 2025 | 31,102 |

The City of Ludington, City of Scottville, Hamlin Township, Pere Marquette Charter Township and Amber Township are the population centers of the county. These areas represent the major areas of solid waste generation. The majority of the industrial generation is confined to the City of Ludington and industrial parks in both the City of Ludington and Pere Marquette Charter Township. It is projected that this trend will continue during both the five and ten year projections.

Population forecast source: West Michigan Regional Shoreline Development Commission, Mason County Comprehensive Plan

DATA BASE

LAND DEVELOPMENT

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

Current and projected residential development show the majority of growth occurring in Hamlin, Amber, Pere Marquette and Branch Townships. Commercial growth is occurring primarily in the City of Ludington, along the waterfront, and along the US 10 corridor in Amber and Pere Marquette Townships. Industrial growth is situated in the industrial parks in both the City of Ludington and Pere Marquette Charter Township. It is projected that this trend will continue during both the five and ten year projections.

DATA BASE

SOLID WASTE MANAGEMENT ALTERNATIVES (attach additional pages as necessary)

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

Waste Reduction, pollution prevention

Alternative #1 is to continue the current system in which private industry makes decisions on the manufacturing or other processes that best serve their companies needs. The Solid Waste Planning Committee believes that local industry can best develop the functions that reduce the amount of waste created by their manufacturing and other processes. Increasing costs of solid waste disposal, including hazardous materials, will be their incentive to develop these functions.

Hazardous materials generated by general public would continue to be addressed by the Mason County Household Hazardous Materials Collection Day coordinated by AFFEW (A Few Friends for the Environment of the World and their Children) along with Dow Chemical Company, District Health Department No. 10, Mason County Department of Public Works and Michigan State University Extension.

Alternative #2 is to continue the current system in which private industry makes decisions on the manufacturing or other processes that best serve their companies needs. The Solid Waste Planning Committee believes that local industry can best develop the functions that reduce the amount of waste created by their manufacturing and other processes. Increasing costs of solid waste disposal, including hazardous materials, will be their incentive to develop these functions.

Hazardous materials generated by general public would be addressed by providing more frequent collection days for the citizens by contracting with private enterprises.

Alternatives #3 & #4 for Waste Reduction, pollution prevention are the same as Alternative #1.

Resource conservation

Alternative #1 is to request the County Board of Commissioners to spearhead lobbying efforts that would propose state and federal legislation that would decrease the amount of packaging used by private enterprises and to expand the current bottle and can deposit laws to include more items. In addition, educational programs would be implemented that would encourage the public to select products that require less packaging, to reduce the use of items that can't be recycled or reused and to recycle or reuse items whenever possible.

Alternative #2 would be to continue the current system of not addressing these issues directly with the public or state and federal legislators.

Alternatives #3 & #4 for Resource conservation are the same as Alternative #1.

Resource recovery

Alternative #1 would be to continue the current system of source separation of recycling, composting and solid waste materials. These separated materials are then transported to recycling and composting areas by a variety of methods. In more urban parts of the county, private haulers can be used to pick-up the materials at curbside and transport them to recycling and composting areas. In the more rural parts of the county, residents can bring the materials to a centralized location and the materials are then transported to recycling and composting areas, in bulk, by private haulers. Finally, county residents can take the materials directly to the recycling and composting areas.

Alternative #2 would be to develop a multi-county material recovery facility or MRF. The facility would separate the recycling, composting and solid waste materials on site. Processing of the mixed waste stream would include hand sorting, screening, gravity and magnetic separation. This would increase the amount of recycled materials recovered from the solid waste stream.

Alternatives #3 & #4 for Resource recovery are the same as Alternative #1.

Volume reduction

Alternative #1 would be to continue the current system where private haulers and landfill operators use compacting, baling and shredding equipment to reduce the amount of volume going into the landfill. This equipment is also used by private enterprise to decrease their volume of waste going into the waste stream.

Alternative #2 would be centralized the compacting and baling operations at a multi-county material recovery facility or MRF.

Alternative #3 is the same as Alternative #1.

Alternative #4 would be to develop a multi-county incinerator to reduce the volume of materials that would require landfilling.

Sanitary landfill

Alternative #1 would be to allow private operators to haul the counties solid waste to existing operating landfills in other counties that would agree to import waste from Mason County.

Alternative #2 would be to encourage private enterprise to develop, construct and operate a private landfill in Mason County.

Alternative #3 would be for the County of Mason to develop, construct and operate a public landfill in Mason County either by itself or in conjunction with neighboring counties.

Alternative #4 is the same as Alternative #1.

Collection processes and transportation

Alternative #1 would be to continue the current system of local units of governments contracting with private haulers to collect and transport solid waste, composting materials

and recycling materials. Various collection sites are also available for individuals to drop off these materials.

Alternative #2 would be for local units of government to directly provide the collection and transportation process.

Alternative #3 would be for local units of government to allow individuals to directly contract with various private haulers for the collection and transportation of solid waste, composting materials and recycling materials.

Alternative #4 is the same as Alternative #1.

Ultimate disposal area uses

Alternative #1 would be to allow limited access to current county disposal facilities that have been properly closed and maintained. Future private landfills would be encouraged to develop their facilities to the highest and best use that they determine as appropriate.

Alternative #2 would be to develop recreational or other potential uses at all disposal facilities once they have been properly closed and maintained.

Alternatives #3 & #4 are the same as Alternative #1.

Institutional arrangements

Alternative #1 would be to continue the current system of local units of government arranging the necessary agreements and organizational arrangements and structures which provide for public and/or private operation of solid waste collection, processing and disposal within their jurisdictions. The County of Mason would continue to arrange the inter county agreements that allow solid waste material to be imported and exported into and out of Mason County.

Alternative # 2 would be for local units of government to authorize the County of Mason to assume the authority to arrange the necessary agreements and organizational arrangements and structures which provide for public and/or private operation of solid waste collection, processing and disposal within their jurisdictions thereby centralizing solid waste jurisdiction at the county level.

Alternatives #3 & #4 are the same as Alternative #1.

Recycling and composting programs

Alternative #1 would be to continue the current system of local units of government and non profit organizations providing recycling and composting programs to the citizens within their jurisdictions. The County of Mason would encourage programs that provide incentives for recycling. Currently, Lakeshore Enterprises provides a Trash to Cash program in Manistee and Benzie Counties. This program provides an opportunity for student and community groups to conduct paper drives as a community service and to earn money. Teachers are encouraged to integrate the program into their environmental curriculum. The program heightens public and student knowledge about the benefits of recycling. The County will support Lakeshore Enterprises' goal of expanding their program into Mason County. This support will include assisting Lakeshore in bringing the necessary

partners to the table to evaluate the interest in the program and to provide public education assistance.

Alternative #2 would be for the County of Mason to provide recycling and composting programs to the citizens of townships not currently providing these services.

Alternative #3 would be for local units of government to authorize the County of Mason to assume the authority of providing recycling and composting programs to the citizens within their jurisdictions thereby centralizing recycling and composting jurisdiction at the county level.

Alternatives #3 & #4 are the same as Alternative #1

Evaluation and selection of selected system

The Mason County Solid Waste Management Planning Committee discussed the disposal methods currently being employed in Mason County. In developing the solid waste management alternatives, the following areas were considered: waste reduction, pollution prevention, resource conservation, resource recovery, volume reduction, sanitary landfills, collection processes and transportation, ultimate disposal are uses, institutional arrangements, recycling and composting programs. Alternatives were developed for each area considered above essentially, the following general alternatives were developed:

Alternative #1 is the selected system and reflects the use of private landfills and much of the current system. It was selected because the committee felt that the free enterprise system was the most cost effective way to manage the solid waste generated by the residents and businesses of Mason County.

Alternative #2 is a system that would have primarily relied on a multiple county approach with a solid waste material recovery facility to manage the solid waste generated by the residents and businesses of Mason County.

Alternative #3 is a system that would have primarily relied on a county owned landfill to manage the solid waste generated by the residents and businesses of Mason County.

Alternative #4 is a system that would employ an incinerator and/or a waste-to-energy facility to manage the solid waste generated by the residents and businesses of Mason County.

The Mason County Solid Waste Management Planning Committee evaluated the alternatives on the basis of cost impact to the residents of Mason County, the political acceptability of the alternatives and practical considerations.

Based on this evaluation, the Mason County Solid Waste Management Planning Committee chose Alternative #1 as the selected system, with Alternative #3 ranked next, Alternative #2 ranked third and Alternative #4 as the least desired alternative to manage the solid waste generated by the residents and businesses of Mason County.

THE SELECTED SOLID WASTE MANAGEMENT SYSTEM

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

The Selected System for Solid Waste Management in Mason County addresses the proper collection and disposal of solid waste generated by residences, commercial and industrial establishments and agricultural uses. This system uses a combination of public and private initiatives to reduce the risks to public health and to educate the public on the benefits of proper disposal of solid waste, composting, reuse, recycling and reducing waste by selecting items that use minimum packaging. Collection of the solid wastes will be managed by licensed private waste haulers contracted by a combination of local units of government, owners of businesses and industry and on an individual basis by homeowners. These collections will include both curbside collections and drop off sites. Public health, MDEQ, state and county laws and Michigan Department of Transportation regulations will prescribe law enforcement mechanisms for Mason County.

Solid waste will be transported by private licensed solid waste haulers to an approved licensed landfills willing to accept waste from Mason County. Michigan Department of Transportation rules related to the proper maintenance of equipment and correct handling of solid waste on highways will be followed. Primary roads serving any future landfills in Mason County will be paved all-weather, class A roads. Mason County Road Commission will determine the criteria for these roads.

For the near term, these approved licensed landfills will be located outside of the county. The county will establish landfill siting criteria that will encourage the private construction of approved licensed landfills while maintaining public health and environmental integrity. Private investors in solid waste facilities will be encouraged to include recycling, composting and hazardous material collection programs at their facilities.

The continuation of current recycling, composting and hazardous material collection programs will be encouraged and new programs will be explored. Additional education programs will be implemented. MSU Extension and the Mason Lake Conservation District provides county residents with informational pamphlets concerning individual composting and recycling. Thus, Alternative #1 has been selected as the selected system for Mason County.

SELECTED SYSTEM

IMPORT AUTHORIZATION

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

Table 1-A

CURRENT IMPORT VOLUME AUTHORIZATION OF SOLID WASTE

| IMPORTING COUNTY | EXPORTING COUNTY | FACILITY NAME ¹ | AUTHORIZED QUANTITY/ DAILY | AUTHORIZED QUANTITY/ ANNUAL | AUTHORIZED CONDITIONS ² |
|---|------------------|----------------------------|-------------------------------|--------------------------------|------------------------------------|
| Presently no licensed solid waste disposal area is operating within the County. | | | | | |
| _____ | _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ | _____ |

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

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

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

SELECTED SYSTEM

If a new solid waste disposal area is constructed and 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 |
|------------------|------------------|----------------------------|----------------------------|-----------------------------|------------------------------------|
| Mason | Ionia | Any Future Site | 100% | 100% | P |
| Mason | Lake | Any Future Site | 100% | 100% | P |
| Mason | Manistee | Any Future Site | 100% | 100% | P |
| Mason | Newaygo | Any Future Site | 100% | 100% | P |
| Mason | Oceana | Any Future Site | 100% | 100% | P |
| Mason | Ottawa | Any Future Site | 350 yds. ³ | 125,000 yds. ³ | P |
| Mason | Washtenaw | Any Future Site | 350 yds. ³ | 125,000 yds. ³ | C |

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

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

² Authorization indicated by P = Primary Disposal; C = Contingency Disposal; * = Other conditions exist and detailed explanation is included in the Attachment Section. Primary Disposal refers to those facilities within Counties that are authorized to import or export waste with Mason County. Contingency Disposal refers to those facilities within Counties that are authorized to import or export waste with Mason County only when primary disposal facilities do not provide adequate capacity to meet the 66 month capacity requirements.

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 |
|------------------|------------------|----------------------------|-------------------------------|--------------------------------|------------------------------------|
| Mason | Benzie | Any Future Site | 100% | 100% | P |
| Mason | Osceola | Any Future Site | 100% | 100% | P |
| Mason | Montcalm | Any Future Site | 350 yds. | 125,000 yds. | P |
| | | | | | |
| | | | | | |
| | | | | | |

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

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

² Authorization indicated by P = Primary Disposal; C = Contingency Disposal; * = Other conditions exist and detailed explanation is included in the Attachment Section. See page 32 for the definition of Primary Disposal and Contingency Disposal.

SELECTED SYSTEM

EXPORT AUTHORIZATION

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

Table 2-A

CURRENT EXPORT VOLUME AUTHORIZATION OF SOLID WASTE

| EXPORTING COUNTY | IMPORTING COUNTY | FACILITY NAME ¹ | AUTHORIZED QUANTITY/ DAILY | AUTHORIZED QUANTITY/ ANNUAL | AUTHORIZED CONDITIONS ² |
|------------------|------------------|--|----------------------------|-----------------------------|------------------------------------|
| Mason | Ionia | Pitsch Sanitary Landfill | 100% | 100% | P |
| Mason | Manistee | Manistee Co. Landfill | 100% | 100% | P |
| Mason | Ottawa | Autumn Hills Recycling & Disposal Facility | 350 yds. | 125,000 yds. ³ | P |
| Mason | Ottawa | Ottawa Co. Farms Landfill | 350 yds. | 125,000 yds. ³ | P |
| Mason | Washtenaw | Arbor Hills Landfill | 350 yds. | 125,000 yds. ³ | C |
| Mason | Montcalm | Central Sanitary | 350 yds. | 125,000 yds. ³ | P |

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

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

² Authorization indicated by P = Primary Disposal; C = Contingency Disposal; * = Other conditions exist and detailed explanation is included in the Attachment Section. See page 32 for the definition of Primary Disposal and Contingency Disposal.

SELECTED SYSTEM

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

Table 2-B

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

| EXPORTING COUNTY | IMPORTING COUNTY | FACILITY NAME ¹ | AUTHORIZED QUANTITY/ DAILY | AUTHORIZED QUANTITY/ ANNUAL | AUTHORIZED CONDITIONS ² |
|------------------|------------------|----------------------------|----------------------------|-----------------------------|------------------------------------|
| Mason | Lake | Any Future Site | 100% | 100% | P |
| Mason | Newaygo | Any Future Site | 100% | 100% | P |
| Mason | Oceana | Any Future Site | 100% | 100% | P |
| Mason | Benzie | Any Future Site | 100% | 100% | P |
| Mason | Osceola | Any Future Site | 100% | 100% | P |

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

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

² Authorization indicated by P = Primary Disposal; C = Contingency Disposal; * = Other conditions exist and detailed explanation is included in the Attachment Section. See page 32 for the definition of Primary Disposal and Contingency Disposal.

SELECTED SYSTEM

SOLID WASTE DISPOSAL AREAS

The following identifies the names of existing disposal areas which will be utilized to provide the required capacity and management needs for the solid waste generated within the County for the next five years and, if possible, the next ten years. Pages 37 through 45 contain descriptions of the solid waste disposal facilities which are located within the County and the disposal facilities located outside of the County which will be utilized by the County for the planning period. Additional facilities within the County with applicable permits and licenses may be utilized as they are sited by this Plan, or amended into this Plan, and become available for disposal. If this Plan update is amended to identify additional facilities in other counties outside the County, those facilities may only be used if such import is authorized in the receiving County's Plan. Facilities outside of Michigan may also be used if legally available for such use.

Type II Landfill:

Central Sanitary Landfill in
Montcalm County

Manistee County Landfill in
Manistee County

Pitsch Sanitary Landfill in
Ionia County

Autumn Hills Recycling & Disposal
Facility in Ottawa County

Ottawa County Farms Landfill in
Ottawa County

Arbor Hills Landfill in Washtenaw
County

Type III Landfill:

None

Incinerator:

None

Waste-to-Energy Incinerator:

None

Type A Transfer Facility:

None

Type B Transfer Facility:

Waste Reduction System

Hamlin Township, Summit Township

Processing Plant:

None

Waste Piles:

None

Other:

None

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

SELECTED SYSTEM

FACILITY DESCRIPTIONS

Facility Type: Type II Landfill

Facility Name: Manistee County Landfill, Inc., owned by Allied

County: Manistee Location: Town: 21N Range: 16W Section(s): Stronach Municipa
Township

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 Inc.

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

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

Asbestos, Foundry Sand

X Site Size:

| | | |
|-----------------------------------|------------------|--------------------------------|
| Total area of facility property: | <u>336</u> | acres |
| Total area sited for use: | <u>160</u> | acres |
| Total area permitted: | <u>40</u> | acres |
| Operating: | <u>5</u> | acres |
| Not excavated: | <u>25</u> | acres |
| Current capacity: | <u>1,700,000</u> | tons or <u>yds³</u> |
| Estimated lifetime: | <u>14</u> | years |
| Estimated days open per year: | <u>250</u> | days |
| Estimated yearly disposal volume: | <u>200,000</u> | tons or <u>yds³</u> |

(if applicable)

| | | |
|---------------------------------|----------|-----------|
| Annual energy production: | | |
| Landfill gas recovery projects: | <u>0</u> | megawatts |
| Waste-to-energy incinerators: | <u>0</u> | megawatts |

SELECTED SYSTEM

FACILITY DESCRIPTIONS

Facility Type: Landfill Type II

Facility Name: Pitsch Sanitary Landfill

County: Ionia Location: Town: 8N Range: 7W Section(s): 7

Map identifying location included in Attachment Section: Yes No

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

Public Private Owner: Pitsch Companies

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

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

Street Sweepings, Asbestos

| <u>Site Size:</u> | | | Proposed Expansion* 199~ |
|-----------------------------------|----------------|--------------------------|--------------------------|
| Total area of facility property: | <u>143.5</u> | acres | |
| Total area sited for use: | <u>28.36</u> | acres | 41.28 acres |
| Total area permitted: | <u>78.44</u> | acres | |
| Operating: | <u>9.87</u> | acres | |
| Not excavated: | <u>70</u> | acres | |
| Current capacity: | <u>415,000</u> | tons or yds ³ | 4,500,000 yds |
| Estimated lifetime: | <u>5</u> | years | 22 years |
| Estimated days open per year: | <u>307</u> | days | |
| Estimated yearly disposal volume: | <u>83,000</u> | tons or yds ³ | |
| (if applicable) | | | |
| Annual energy production: | | | |
| Landfill gas recovery projects: | _____ | megawatts | |
| Waste-to-energy incinerators: | _____ | megawatts | |

*Year of planned expansion

SELECTED SYSTEM

FACILITY DESCRIPTIONS

Facility Type: Type II Solid Waste Landfill/Processing Plant

Facility Name: Autumn Hills Recycling & Disposal Facility

County: Ottawa Location: Town: 5N Range: 14W Section(s): 36

Map identifying location included in Attachment Section: Yes No

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

Public Private Owner: Autumn Hills RFD - A Division or Waste Management of Michigan, Inc.

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

* Explanation of special wastes, including a specific list and/or conditions: exhausted oak wood trays, minor first aid waste, contaminated pharmaceuticals manufacture, paint booth filters, dewatered waste water treatment sludge, out of spec/out of date food supplements, spent epoxy powder coatings, sand blasting sand, woodchips/dust from production, shot blast, construction and demolition materials, foundry sand, filter press cake, incinerator ash, saw dust, contaminated soils, auto fluff, asbestos, grinding sludge, carwash sand pit/traps, and food materials.

Site Size:
Total area of facility property: 314 acres
Total area sited for use: 197 acres
Total area permitted: 99.3 acres
Operating: 35.1 acres
Not excavated: 64.2 acres
Current capacity: 20.75 mil (tons) or yds³
Estimated lifetime: 30.2 years
Estimated days open per year: 286 days
Estimated yearly disposal volume: 500,000 tons or yds³

(if applicable)

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

SELECTED SYSTEM

FACILITY DESCRIPTIONS

Facility Type: Type II Landfill

Facility Name: Ottawa County Farms Landfill

County: Ottawa Location: Town: 8N Range: 14W Section(s): 26 & 27

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 : NA

Public Private Owner: Allied Waste Systems

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

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

Site Size:

| | | |
|-----------------------------------|-------------------|---------------------------------|
| Total area of facility property: | <u>240</u> | acres |
| Total area sited for use: | <u>197</u> | acres |
| Total area permitted: | <u>240</u> | acres |
| Operating: | <u>37</u> | acres |
| Not excavated: | <u>125</u> | acres |
| Current capacity: | <u>16,500,000</u> | <u>tons</u> or yds ³ |
| Estimated lifetime: | <u>25-30</u> | years |
| Estimated days open per year: | <u>286</u> | days |
| Estimated yearly disposal volume: | <u>500,000</u> | <u>tons</u> or yds ³ |

(if applicable)

| | | |
|---------------------------------|--------------|-----------|
| Annual energy production: | | |
| Landfill gas recovery projects: | <u>4,565</u> | megawatts |
| Waste-to-energy incinerators: | <u>NA</u> | megawatts |

SELECTED SYSTEM

FACILITY DESCRIPTIONS

Facility Type: Sanitary Landfill, Type II

Facility Name: Arbor Hills Landfill

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

Map identifying location included in Attachment Section: Yes No

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

Public Private Owner: BFI Waste Systems of North America, Inc.

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

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

Non-Hazardous Solid and Semi-Solid Wastes, No Hazardous or Liquid Wastes

Site Size:

| | | | |
|-----------------------------------|-------------------|--------------------------------|--------------------------|
| Total area of facility property: | <u>936</u> | acres | |
| Total area sited for use: | <u>356</u> | acres | |
| Total area permitted: | <u>217</u> | acres | |
| Operating: | <u>113</u> | acres | |
| Not excavated: | <u>104</u> | acres | |
| Current capacity: | <u>30,500,000</u> | tons or <u>yds³</u> | Airspace or 61.5 Million |
| Estimated lifetime: | <u>17.6</u> | years | cubic yds. of capacity |
| Estimated days open per year: | <u>265</u> | days | |
| Estimated yearly disposal volume: | <u>3,500,000</u> | tons or <u>yds³</u> | |

(if applicable)

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

SELECTED SYSTEM

FACILITY DESCRIPTIONS

Facility Type: Type B Transfer Station

Facility Name: Hamlin Township Transfer Facility

County: Mason Location: Town: 18-19N Range: 18W Section(s): 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 : Manistee County Landfill, Inc.

X Public Private Owner: Hamlin Township

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

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

Site Size:
Total area of facility property: 10 acres
Total area sited for use: acres
Total area permitted: acres
Operating: acres
Not excavated: acres
Current capacity: 60 tons or yds³
Estimated lifetime: years
Estimated days open per year: 130 days
Estimated yearly disposal volume: 1600 tons or yds³

(if applicable)
Annual energy production:
Landfill gas recovery projects: N/A megawatts
Waste-to-energy incinerators: N/A megawatts

SELECTED SYSTEM

FACILITY DESCRIPTIONS

Facility Type: Type B Transfer Station

Facility Name: Summit Township Transfer Site

County: Mason Location: Town: 17N Range: 18-17W Section(s): 26

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 : Manistee County Landfill Inc.

Public Private Owner: Summit Township

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

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

Site Size:

| | | |
|-----------------------------------|-------------|--------------------------------|
| Total area of facility property: | <u>2</u> | acres |
| Total area sited for use: | <u>2</u> | acres |
| Total area permitted: | <u>NA</u> | acres |
| Operating: | <u>NA</u> | acres |
| Not excavated: | <u>NA</u> | acres |
| Current capacity: | <u>52</u> | tons or <u>yds³</u> |
| Estimated lifetime: | | years |
| Estimated days open per year: | <u>144</u> | days |
| Estimated yearly disposal volume: | <u>2900</u> | tons or <u>yds³</u> |

(if applicable)

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

SELECTED SYSTEM

FACILITY DESCRIPTIONS

Facility Type: Type B Transfer Station

Facility Name: Waste Reduction System (The Transfer Station)

County: Mason Location: Town: 19N Range: 17W Section(s): 10

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 : Manistee County Landfill

Public Private Owner: Ed Jabrocki

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

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

Site Size:

| | | |
|-----------------------------------|------------|----------------------------------|
| Total area of facility property: | <u>10</u> | acres |
| Total area sited for use: | <u>NA</u> | acres |
| Total area permitted: | <u>NA</u> | acres |
| Operating: | <u>NA</u> | acres |
| Not excavated: | <u>NA</u> | acres |
| Current capacity: | <u>200</u> | tons or yds ³ per day |
| Estimated lifetime: | <u>NA</u> | years |
| Estimated days open per year: | <u>312</u> | days |
| Estimated yearly disposal volume: | _____ | tons or yds ³ |

(if applicable)

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

SELECTED SYSTEM

FACILITY DESCRIPTIONS

Facility Type: Landfill

Facility Name: Central Sanitary Landfill

County: Montcalm Location: Town: 11 Range: 10 Section(s): 21

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

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

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

foundry sand, asbestos

Site Size:

| | | |
|-----------------------------------|----------------|--------------------------------|
| Total area of facility property: | <u>315</u> | acres |
| Total area sited for use: | <u>40.32</u> | acres |
| Total area permitted: | <u>18.45</u> | acres |
| Operating: | <u>18.45</u> | acres |
| Not excavated: | <u>5.76</u> | acres |
| Current capacity: | <u>373,428</u> | tons or <u>yds³</u> |
| Estimated lifetime: | <u>2</u> | years |
| Estimated days open per year: | <u>306</u> | days |
| Estimated yearly disposal volume: | <u>100,000</u> | tons or <u>yds³</u> |

(if applicable)

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

SELECTED SYSTEM

SOLID WASTE COLLECTION SERVICES AND TRANSPORTATION:

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

The county has two companies that provide adequate collection services throughout the county. The City of Ludington, Pere Marquette Charter Township and the City of Scottville contract with a licensed solid waste hauler for curbside pickup, including recycling materials and composting materials, within their municipal jurisdictions for residential solid waste.

Hamlin and Summit Townships provide their residents with transfer facilities for solid waste and recycling materials. These facilities are serviced by one of the licensed solid waste haulers. Residents in the remaining units of government have the option of contracting individually with waste haulers for the pickup of solid waste at their residence, taking their solid waste to the one privately owned transfer facility or to the landfill facilities.

Businesses and industry have the option of contracting with private enterprise for solid waste pickup including recycling materials.

The State Highways in Mason County are designated M-116, US 10 and US 31. There are 214.88 miles of county primary roads. There are 730.43 miles of county local roads that serve as a secondary collection system that feeds the primary and arterial networks. Over 351 miles of the county's primary and secondary system is paved. Most of the secondary system is two lane gravel- surfaced roadway. The state highways within the county are all-season routes. County roads are subject to seasonal load restrictions.

SELECTED SYSTEM

RESOURCE CONSERVATION EFFORTS:

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

| Effort Description | Est. Diversion Tons/Yr | | |
|---|------------------------|--------|---------|
| | Current | 5th yr | 10th yr |
| Promote the Reuse of Products | * | * | * |
| Promote the Reduction of Materials used for Packaging | * | * | * |
| Promote the use of Recycled Products | * | * | * |
| Promote the Expansion of Container Deposit Laws | * | * | * |
| Commercial, Drop-off and Curbside Recycling | 1,776 | 1,864 | 1,957 |
| Yard Waste Collection | 500 | 525 | 550 |
| Hazardous Waste Collection | 2.5 | 2.5 | 2.5 |
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| * No Data | | | |
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___ Additional efforts and the above information for those efforts are listed on an attached page.

SELECTED SYSTEM

WASTE REDUCTION, RECYCLING, & COMPOSTING PROGRAMS:

Volume Reduction Techniques

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

| Technique Description | Est. Air Space Conserved Yds ³ /Yr | | |
|---|---|--------|---------|
| | Current | 5th yr | 10th yr |
| Promote City and Township Composting Programs | 1,000 | 1,050 | 1,100 |
| Continue Commercial & Industrial Compaction | | | |
| of Solid Waste | * | * | * |
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| * No Data | | | |
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Additional efforts and the above information for those efforts are listed on an attached page.

SELECTED SYSTEM

Overview of Resource Recovery Programs:

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

An estimate of total waste generated in Mason County was calculated using pounds per person per day (residential) and pounds per employee per day (commercial and industrial) models. This estimate was compared to actual waste generation numbers to arrive at a final generation figure. Projected waste generation was then calculated using population projections for the ten year planning period. The Solid Waste Planning Committee evaluated actual recovery rates for the current system against targeted state recovery goals (15 percent for 2003 and 25 percent for 2008). The Committee then identified recycling and composting programs that private and public entities in Mason County could implement to reach the targeted state recovery goals.

- 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:

Residential Curbside Recycling Collection

Current curbside recycling programs provided by the City of Ludington, Pere Marquette Charter Township and the City of Scottville would be continued. The more densely populated areas of the remaining townships and villages would be encouraged to evaluate the effectiveness and efficiency of adding curbside recycling programs. In municipalities that do not provide government sponsored curbside recycling programs, subscription curbside recycling would be available to residents that were willing to purchase the service directly from area haulers.

Government Sponsored Residential Drop off Recycling Collection

Current residential drop off recycling programs provided by Summit and Hamlin Townships would be continued. Other townships would be encouraged to evaluate the effectiveness and efficiency of adding residential drop off recycling sites in their individual townships or jointly on a multiple entity basis.

Private Recycling Drop-off Collection

The development of privately owned recycling drop-off collection sites will be encouraged. The success of the current network of private recycling enterprises will provide the groundwork for expanded recycling opportunities for Mason County residents in the future.

Commercial Recycling Collection

Businesses will be encouraged to continue their commercial recycling programs. Coordination of collection will be encouraged to promote efficiency and maximize marketing opportunities. Businesses using recycling materials as part of their operations will be encouraged to expand these efforts and to share their successes with other businesses through various advocacy groups within the county. Recycling materials and using materials in their operations that replace virgin raw materials present an opportunity for businesses to reduce costs and reinforce their standings as good stewards of the environment.

Recycling Incentives

The Committee would encourage programs that provide incentives for recycling. Currently, Lakeshore Enterprises provides a Trash to Cash program in Manistee and Benzie Counties. This program provides an opportunity for student and community groups to conduct paper drives as a community service and to earn money. Teachers are encouraged to integrate the program into their environmental curriculum. The program heightens public and student knowledge about the benefits of recycling. The Committee will support Lakeshore Enterprises' goal of expanding their program into Mason County. This support will include assisting Lakeshore in bringing the necessary partners to the table to evaluate the interest in the program and to provide public education assistance.

Marketing of Recyclables

The marketing of recyclables in Mason County will continue to be performed by the private waste haulers.

Waste Oil Recycling

Waste oil recycling and the patronage of establishments that change and recycle oil will be encouraged.

Governmental Funding Opportunities

The county will provide lobbying leadership to encourage the state government to resume funding of their solid waste planning initiatives. Funding of innovative recycling, composting and waste reduction programs must be restored to provide the seed money to create programs that allow for the targeted state recovery goals to be realized. Both local units of government and private businesses should be eligible for funding. The restoration of funding incentives will reestablish the state's commitment to reducing the volume of waste going to landfills. Local units of government will follow the state's renewed commitment and provide local match funding.

Support of Legislation

The county will provide lobbying leadership to encourage the state government to expand the current bottle and can deposit laws to include a larger population of containers. The county will also support legislation that encourages the reduction of excessive packaging materials.

- 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

Continuation of current fall leaf collection will be encouraged. The continuation of current drop off sites will be encouraged. The establishment of fall leaf collection programs and drop off sites will be encouraged in all densely populated villages/townships/cities. Backyard composting would be encouraged through a program providing backyard composting bins at a discounted rate. Plans for the construction of backyard composting bins would be made available. An education program about the benefits of mulching mowers would encourage grass recycling.

- 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:

Household Hazardous Waste Collection Services

Current annual household hazardous waste collection services will be continued. The creation of a collection service for small quantities of agricultural pesticides and herbicides will be encouraged.

Recycling and Composting

The following is a brief analysis of the recycling and composting programs selected for the County in this Plan. Additional information on operation of recycling and composting programs is included in Appendix A. The analysis covers various factors within the County and the impacts of these factors on recycling and composting. Following the written analysis, the tables on pages 53, 54, & 55 list the existing recycling, composting, and source separation of hazardous materials programs that are currently active in the County and which will be continued as part of this Plan. The second group of three tables on pages 56, 57, & 58 list the recycling, composting, and source separation of hazardous materials programs that are proposed in the future for the County. It is not this Plan update's intent to prohibit additional programs or expansions of current programs to be implemented beyond those listed.

The Solid Waste Management Planning Committee has determined that it is feasible for all items, discussed in sections III-15 & III-16, to be implemented.

SELECTED SYSTEM

TABLE III-1

RECYCLING:

| <u>Program Name</u> | <u>Service Area¹</u> | <u>Public or Private</u> | <u>Collection Point³</u> | <u>Collection Frequency⁴</u> | <u>Materials Collected⁵</u> | <u>Program Management Responsibilities²</u> | | |
|---------------------------------|---------------------------------|--------------------------|-------------------------------------|---|--|--|------------------|-------------------|
| | | | | | | <u>Development</u> | <u>Operation</u> | <u>Evaluation</u> |
| City of Ludington | City of Ludington | Public | C | W | ABCDEF | City | Government | |
| Pere Marquette Charter Township | Pere Marquette Charter Township | Public | C | W | ABCDEF | Township | Government | |
| City of Scottville | City of Scottville | Public | C | B | ABCDEF | City | Government | |
| Summit Township | Summit Township | Public | D | W | ABCDEF | Township | Government | |
| Hamlin Township | Hamlin Township | Public | D | W | ABCDEF | Township | Government | |
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Additional programs and the above information for those programs are listed on an attached page.

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

² Identified by 1 = Designated Planning Agency; 2 = County Board of Commissioners; 3 = Department of Public Works; 4 = Environmental Group (Identified on page 24); 5 = Private Owner/Operator; 6 = Other (Identified on page 24).

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

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

⁵ Identified by the materials collected by listing of the letter located by that material type. A = Plastics; B = Newspaper; C = Corrugated Containers; D = Other Paper; E = Glass; F = Metals; P = Pallets; J = Construction/Demolition; K = Tires; L1, L2 etc. = as identified on page 25.

SELECTED SYSTEM

TABLE III-2

COMPOSTING:

| <u>Program Name</u> | <u>Service Area¹</u> | <u>Public or Private</u> | <u>Collection Point³</u> | <u>Collection Frequency⁴</u> | <u>Materials Collected⁵</u> | <u>Program Management Responsibilities²</u> | | |
|----------------------------------|---------------------------------|--------------------------|-------------------------------------|---|--|--|------------------|-------------------|
| | | | | | | <u>Development</u> | <u>Operation</u> | <u>Evaluation</u> |
| City of Ludington Dropoff | City of Ludington | Public | D | D | GLW | City | Government | |
| Annual Christmas Tree Collection | Mason County | 4 | D | WI | W | 4 | 4 | 4 |
| City of Ludington Leaf Pick Up | City of Ludington | Public | C | D, FA | L | City Government | | |
| City of Scottville Leaf Pick Up | City of Scottville | Public | C | D, FA | L | City Government | | |
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Additional programs and the above information for those programs are listed on an attached page.

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

² Identified by 1 = Designated Planning Agency; 2 = County Board of Commissioners; 3 = Department of Public Works; 4 = Environmental Group (Identified on page 24); 5 = Private Owner/Operator; 6 = Other (Identified on page 24).

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

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

⁵ Identified by the materials collected by listing of the letter located by that material type. G = Grass Clippings; L = Leaves; F = Food; W = Wood; P = Paper; S = Municipal Sewage Sludge; A = Animal Waste/Bedding; M = Municipal Solid Waste; L1, L2 etc. = as identified on page 25.

TABLE III-3

SOURCE SEPARATION OF POTENTIALLY HAZARDOUS MATERIALS:

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

| Program Name | Service Area ¹ | Public or Private | Collection Point ³ | Collection Frequency ⁴ | Materials Collected ⁵ | Program Management Responsibilities ² | | |
|---|---------------------------|-------------------|-------------------------------|-----------------------------------|----------------------------------|--|-----------|------------|
| | | | | | | Development | Operation | Evaluation |
| Mason County Household Hazardous Materials Collection Day | Mason County | 3, 4, 6 | D | Su | AE, A, AN C, P, PS | 3, 4, 6 | 3, 4, 6 | 3, 4, 6 |
| Mason County District Library | Mason County | 6 | D | D | B2, OT | 6 | 6 | 6 |
| Padnos Iron & Metal | Mason County | 5 | D | D | B1 | 5 | 5 | 5 |
| Qualify Farm & Fleet | Mason County | 5 | D | D | B1 | 5 | 5 | 5 |
| Briggs True Value | Mason County | 5 | D | D | B2, OT | 5 | 5 | 5 |
| Wal-Mart | Mason County | 5 | D | D | AN, BI, U | 5 | 5 | 5 |
| Nichols Drug Store | Mason County | 5 | D | D | B2, OT | 5 | 5 | 5 |

55

Additional programs and the above information for those programs are listed on an attached page. OT=Empty Printer Cartridges

- ¹ Identified by where the program will be offered. If throughout the planning area, then listed by planning area; if only in specific counties, then listed by county; if only in specific municipalities, then listed by its name and respective county.
- ² Identified by 1 = Designated Planning Agency; 2 = County Board of Commissioners; 3 = Department of Public Works; 4 = Environmental Group (Identified on page 24); 5 = Private Owner/Operator; 6 = Other (Identified on page 24).
- ³ Identified by c = curbside; d = drop-off; o = onsite; and if other, explained.
- ⁴ Identified by d = daily; w = weekly; b = biweekly; m = monthly; and if seasonal service also indicated by Sp = Spring; Su = Summer; Fa = Fall; Wi = Winter.
- ⁵ Identified by the materials collected by listing of the letter located by that material type. AR = Aerosol Cans; A = Automotive Products except Used Oil, Oil Filters & Antifreeze; AN = Antifreeze; B1 = Lead Acid Batteries; B2 = Household Batteries; C = Cleaners and Polishers; H = Hobby and Art Supplies; OF = Used Oil Filters; P = Paints and Solvents; PS = Pesticides and Herbicides; PH = Personal and Health Care Products; U = Used Oil; OT = Other Materials and identified.

SELECTED SYSTEM

TABLE III-4

PROPOSED RECYCLING:

| <u>Program Name</u> (if known) | <u>Service Area</u> ¹ | <u>Public or Private</u> | <u>Collection Point</u> ³ | <u>Collection Frequency</u> ⁴ | <u>Materials Collected</u> ⁵ | <u>Program Management Responsibilities</u> ² | | |
|-----------------------------------|----------------------------------|--------------------------|--------------------------------------|--|---|---|------------------|-------------------|
| | | | | | | <u>Development</u> | <u>Operation</u> | <u>Evaluation</u> |
| Trash to Cash | Mason County | 1 | D | M | B | 6 | 6 | 6 |
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Additional programs and the above information for those programs are listed on an attached page.

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

² Identified by 1 = Designated Planning Agency; 2 = County Board of Commissioners; 3 = Department of Public Works; 4 = Environmental Group (Identified on page 24); 5 = Private Owner/Operator; 6 = Other (Identified on page 24).

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

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

⁵ Identified by the materials collected by listing of the letter located by that material type. A = Plastics; B = Newspaper; C = Corrugated Containers; D = Other Paper; E = Glass; F = Metals; P = Pallets; J = Construction/Demolition; K = Tires; L1, L2 etc. = as identified on page 25.

TABLE III-5

PROPOSED COMPOSTING:

| <u>Program Name,</u> <u>(if known)</u> | <u>Service Area</u> ¹ | <u>Public or</u> <u>Private</u> | <u>Collection</u> <u>Point</u> ³ | <u>Collection</u> <u>Frequency</u> ⁴ | <u>Materials</u> <u>Collected</u> ⁵ | <u>Program Management Responsibilities</u> ² | | |
|---|----------------------------------|------------------------------------|--|--|---|---|------------------|-------------------|
| | | | | | | <u>Development</u> | <u>Operation</u> | <u>Evaluation</u> |
| <u>No Future Proposed</u> | <u>Additional Composting At</u> | <u>This</u> | <u>Time.</u> | | | | | |
| _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
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| _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |

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

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

² Identified by 1 = Designated Planning Agency; 2 = County Board of Commissioners; 3 = Department of Public Works; 4 = Environmental Group (Identified on page 24); 5 = Private Owner/Operator; 6 = Other (Identified on page 24).

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

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

⁵ Identified by the materials collected by listing of the letter located by that material type. G = Grass Clippings; L = Leaves; F = Food; W = Wood; P = Paper; S = Municipal Sewage Sludge; A = Animal Waste/Bedding; M = Municipal Solid Waste; L1, L2 etc. = as identified on page 25.

SELECTED SYSTEM

TABLE III-6

PROPOSED SOURCE SEPARATION OF POTENTIALLY HAZARDOUS MATERIALS:

| <u>Program Name, (if known)</u> | <u>Service Area¹</u> | <u>Public or Private</u> | <u>Collection Point³</u> | <u>Collection Frequency⁴</u> | <u>Materials Collected⁵</u> | <u>Program Management Responsibilities²</u> | | |
|---|---------------------------------|------------------------------|---|---|--|--|------------------|-------------------|
| | | | | | | <u>Development</u> | <u>Operation</u> | <u>Evaluation</u> |
| <u>No Future Proposed Additional Programs At This Time.</u> | | | | | | | | |
| _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |

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

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

² Identified by 1 = Designated Planning Agency; 2 = County Board of Commissioners; 3 = Department of Public Works; 4 = Environmental Group (Identified on page 24); 5 = Private Owner/Operator; 6 = Other (Identified on page 24).

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

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

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

SELECTED SYSTEM

IDENTIFICATION OF RESOURCE RECOVERY MANAGEMENT ENTITIES:

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

Environmental Groups:

AFFEW (A Few Friends for the Environment of the World and their Children) is the only environmental group in Mason County actively involved with recovery or recycling. AFFEW holds an annual tree recycling program for the residents of the Cities of Ludington and Scottville. They also coordinate the Mason County Household Hazardous Materials Collection Day along with Dow Chemical Company, District Health Department No. 10, Mason County Department of Public Works and Michigan State University Extension. AFFEW would continue to provide information in local media about recycling and reuse opportunities.

Other:

City of Ludington contracts with private waste haulers to provide curbside recycling service to city residents.

City of Scottville contracts with private waste haulers to provide curbside recycling service to city residents.

Pere Marquette Charter Township contracts with private waste haulers to provide curbside recycling service to township residents.

Hamlin Township contracts with private waste haulers to provide drop off site recycling service to township residents.

Summit Township contracts with private waste haulers to provide drop off site recycling service to township residents.

Independent haulers are offering curbside recycling throughout the county.

Lakeshore Enterprises will be encouraged to expand their newspaper collection recycling program into Mason County. They will also provide educational programs to county school districts.

MSU Extension and the Mason Lake Conservation District provides county residents with informational pamphlets concerning individual composting and recycling.

Mason County District Library provides a location for the recycling of empty printer cartridges and the collection of household batteries.

COMPOSTING:

The City of Ludington provides a compost area for city residents to use. In addition, the Cities of Ludington and Scottville and Pere Marquette Charter Township pick up compostible materials curbside.

Commercial Groups:

Great Lakes Castings - Internal waste reduction, use of external waste materials in manufacturing process, (scrap steel and used oil), privately owned

Dow Chemical Company - Internal waste reduction, hazardous material program, privately owned

Padnos Iron & Metal - recycling of metals and the collection of lead acid batteries, privately owned

Towns Brothers Construction - reuse of concrete, brick or cement materials

Pallet Recycle, Inc. - recycling of wood pallets, privately owned

Nichols Drug Store - recycling empty printer cartridges and the collection of household batteries, privately owned

Quality Farm & Fleet - collection of lead acid batteries, privately owned

Briggs True Value - recycling empty printer cartridges and the collection of household batteries, privately owned

Wal-Mart - the collection of used oil, antifreeze and lead acid batteries, privately owned

SELECTED SYSTEM

PROJECTED DIVERSION RATES:

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

| <u>Collected Material</u> | <u>Current</u> | <u>5th Year</u> | <u>10th Year</u> |
|---------------------------------|----------------|----------------------------|-----------------------------|
| Residential Plastic, Tin, Glass | 168 Tons | 176 Tons | 185 Tons |
| Residential Mixed Paper\OCC | 540 Tons | 567 Tons | 595 Tons |
| Commercial Mixed Paper\OCC | 1,068 Tons | 1,121 Tons | 1,177 Tons |
| Other Materials | 1,450 Tons | 1,520 Tons | 1,600 Tons |
| Total Wood Waste | 660 Tons | 690 Tons | 725 Tons |
| Food & Food Processing | 1,300 Tons | 1,370 Tons | 1,440 Tons |
| Grass and Leaves | 500 Tons | 525 Tons | 550 Tons |
| Tires | 260 Tons | 270 Tons | 280 Tons |
| Total Metals | 1,100 Tons | 1,160 Tons | 1,210 Tons |

MARKET AVAILABILITY FOR COLLECTED MATERIALS:

| <u>Collected Material</u> | <u>In-State Markets</u> | <u>Out-of-State Markets</u> |
|---------------------------------|-------------------------|-----------------------------|
| Residential Plastic, Tin, Glass | 100% | |
| Residential Mixed Paper\OCC | 100% | |
| Commercial Mixed Paper\OCC | 100% | |
| Other Materials | 100% | |
| Total Wood Waste | 100% | |
| Food & Food Processing | 100% | |
| Grass and Leaves | 100% | |
| Tires | 100% | |
| Total Metals | 100% | |

SELECTED SYSTEM

EDUCATIONAL AND INFORMATIONAL PROGRAMS:

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

| <u>Program Topic¹</u> | <u>Delivery Medium²</u> | <u>Targeted Audience³</u> | <u>Program Provider⁴</u> |
|----------------------------------|------------------------------------|--------------------------------------|--|
| <u>1, 2, 3</u> | <u>N</u> | <u>P</u> | <u>A Few Friends For The Environment of the World and Their Children</u> |
| <u>1</u> | <u>W</u> | <u>S</u> | <u>Lakeshore Enterprises</u> |
| <u>1, 2</u> | <u>F</u> | <u>P</u> | <u>MSU Extension</u> |
| <u>1, 2</u> | <u>F</u> | <u>P</u> | <u>Mason Lake Conservation District</u> |
| <u> </u> | <u> </u> | <u> </u> | <u> </u> |
| <u> </u> | <u> </u> | <u> </u> | <u> </u> |
| <u> </u> | <u> </u> | <u> </u> | <u> </u> |
| <u> </u> | <u> </u> | <u> </u> | <u> </u> |
| <u> </u> | <u> </u> | <u> </u> | <u> </u> |
| <u> </u> | <u> </u> | <u> </u> | <u> </u> |

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

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

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

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

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

SELECTED SYSTEM

TIMETABLE FOR SELECTED SYSTEM IMPLEMENTATION

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

TABLE III-7

| Management Components | Timeline |
|---|-------------|
| Waste Reduction, pollution prevention | On-Going |
| Resource Conservation | On-Going |
| Resource Recovery | On-Going |
| Volume Reduction | On-Going |
| Sanitary Landfill | On-Going |
| Collection processes and transportation | On-Going |
| Ultimate disposal area uses | On-Going |
| Institutional Arrangements | On-Going |
| Recycling and Composting programs - Current | On-Going |
| Recycling and Composting programs - Additional | 2000 - 2001 |
| Educational and Informational Programs - Current | On-Going |
| Educational and Informational Programs - Additional | 2000 - 2001 |
| | |
| | |
| | |
| | |
| | |

SELECTED SYSTEM

SITING REVIEW PROCEDURES

AUTHORIZED DISPOSAL AREA TYPES

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

SITING CRITERIA AND PROCESS

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

A. SITING CRITERIA FOR NEW SOLID WASTE DISPOSAL FACILITIES IN MASON COUNTY

This section presents Mason County's siting criteria for solid waste disposal facilities and explains the process for evaluating proposed sites for consistency with the Solid Waste Management Plan. The criteria are designed to ensure that County solid waste management goals and objectives are achieved. In developing these criteria, several major factors have been considered:

1. Long-range (10-year) disposal capacity has not been documented to be available at specific sites. To meet the long-range planning requirements of Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), these criteria are to be used to determine suitable sites for needed disposal facilities, whether publicly or privately owned and operated.
2. The criteria are intended to provide a reasonable, objective basis of evaluating potential sites so that needed facilities can be developed in a manner which will minimize negative environmental impacts and community disruptions.
3. The criteria are intended to avoid arbitrary or discriminatory actions which would prevent the establishment of needed facilities. Instead, the siting process has been designed to ensure that valid local concerns and special local resources are adequately considered.
4. The criteria do not eliminate the need for site-specific investigations and the preparation of detailed hydrogeological studies and engineering plans which must be approved by the Michigan Department of Environmental Quality in issuing construction permits.
5. Relationship to 66 months disposal capacity requirement: The standards specified in this plan update must be strictly applied to any proposed facility if

the County does not already have 66 months documented disposal capacity. In this case, any proposed facility offering needed capacity must be found consistent with the Plan if it meets the criteria. On the other hand, if the County has 66 months of disposal capacity available for all waste in the County as demonstrated by this Plan when the service area authorized by the Plan is taken into account, then this Plan does not require the construction of any solid waste disposal facility.

If 66 months capacity is already adequately documented, the County may refuse to utilize its siting mechanism until the County is no longer able to demonstrate 66 months of capacity.

Some of Mason County's siting criteria are specified in Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA). Other criteria relate to local concerns and special resources of Mason County. The criteria are divided into two categories: primary criteria and secondary criteria.

Primary criteria represent minimum requirements and cannot be compromised. Secondary criteria require a technical review process before a recommendation on a particular site can be made. The review process is explained later, following descriptions of the intent and nature of the criteria used.

Primary Landfill Siting Criteria

1. Minimum Isolation Distances

- a. The active work area for new sanitary landfills or expansions to existing sanitary landfills shall not be located closer than 500 feet to adjacent road rights-of-way, adjacent property lines, lakes of 5 acres or more, navigable rivers or streams, or existing domiciles.
- b. A sanitary landfill shall not be constructed within 10,000 feet of a runway of an airport licensed by the Michigan Aeronautics commission.
- c. The active fill area shall not be located within 2,000 feet upgradient of any public or private water supply well, or within 1,000 feet downgradient or lateral to a public water supply well, as regulated under 1976 PA 399, the Safe Drinking Water Act; or within 800 feet downgradient or lateral to a private water supply well.

2. Floodplains, Wetlands, Shorelands and Groundwater Recharge Areas

A sanitary landfill shall not be located in the one hundred year floodplain of any watercourse as defined by Rule 323.311 of the administrative rules of Part 31, Water Resources Protection, of Act 451 and wetlands regulated by Part 303, Wetlands Protection, of Act 451. These sensitive sites are not suitable locations for landfills since they are subject to severe wetness and flooding and serve important functions in terms of groundwater recharge, fish and wildlife habitat, and vegetative cover. A facility shall not be located in an environmental area as defined in part 323, Shorelands Protection and Management, of Act 451, or in areas of unique habitat as defined by the Department of Natural Resources, Natural Features Inventory. A facility shall not

be located in an area of groundwater recharge as defined by the United States Geological Survey or in a wellhead protection area as approved by the Michigan Department of Environmental Quality.

3. **Part 361, Farmland and Open Space Preservation, of Act 451 Agricultural Lands**

Siting of proposed landfills on land already enrolled under the Part 361, Farmland and Open Space Preservation, of Act 451, shall be considered inconsistent with the County Plan. Such action would constitute a non-agricultural use of designated Part 361, Farmland and Open Space Preservation, of Act 451 lands and is prohibited by legally binding agreements between the owners and the State.

4. **Historic and Archaeological Areas**

The site shall not be located in a designated historic or archaeological area as defined by the State Historic Preservation officer (SHPO).

5. **Maximum Number of Operating Sanitary Landfills**

a. Only one Type II facility will be allowed to operate in Mason County at one time unless the County has less than 66 months of disposal capacity available under the Plan. Additional disposal facilities may be sited until such time that the aggregate capacity for Mason County of all available primary disposal facilities is 20 years or more. At the time a new site is proposed, remaining capacity shall be determined by the quantity of waste which is accepted under normal conditions from the service area identified in the Solid Waste Management Plan.

b. The condition described in 5a. shall not apply if a landfill with remaining capacity permanently ceases operation for any reason.

6. **Operational requirements**

The facility developer shall submit a statement agreeing to the following operational requirements. If the developer does not agree to these requirements the facility shall not be considered consistent with this Plan.

Provide the following data at least annually to the County Solid Waste Planning Agency:

- a. The area and volume the landfill is expected to occupy when it reaches capacity based on the service area and waste volumes allowed by this Plan;
- b. An estimate of the time it is expected to take to reach capacity based on the waste stream indicated above.
- c. Provide semi-annually the average quantity of waste being received on a daily basis itemized by in-county and out-of-county sources by county; the estimated remaining time for continued landfill operation in terms of quantity of waste, cubic yards of landfill space and years.

7. Accessibility

- a. A potential site must have direct access to an all-weather "class A" road to accommodate heavy truck traffic generated at the site. If a proposal for a disposal facility includes or assumes year-round traffic to off-site sources of cover material, the proposal must include all-season road access provisions for this function. If a solid waste disposal facility proposal includes upgrading a road to all-season status, the design and construction must conform to the current standards of the American Association of State Highways and Transportation Officials (AASHTO), as set forth in Design Guidelines, ASHTO Interim Structural Pavement Design Procedure, Adopted for All Season Roads (revision of January 1989, or a later revision if issued). A proposal will be found consistent with the road access requirement of the Plan if it contains a written statement agreeing to upgrade direct access roads to all-season "class A" standards based on AASHTO specifications as cited here, at no direct charge to county, road commission or local governments. A 66-foot easement recorded on the deed of a land-locked parcel qualifies as having road frontage, but does not negate the necessity for the access road to be of all-season construction. Said upgrade to all-season "class A" standards must be completed prior to the start of construction of the disposal facility. Sites lacking direct access to an all-weather "class A" road to accommodate heavy truck traffic is inconsistent with this Plan.
- b. Access to the site shall not be directly through a residential area for which the roads were constructed primarily for local passenger vehicle traffic. If the only access to the site entrance is by such residential roads the proposal is inconsistent with this Plan.

8 Proposed Disposal Capacity

A potential site shall provide sufficient capacity to meet the disposal needs of the county for the next 20 years. The proposed site will be located on a minimum of 320 acre parcel to be consistent with this Plan. If a decision is made to accept waste from several counties, the required disposal area will increase accordingly.

9. Local Ordinances

A potential site shall conform with county and/or local zoning ordinances to the extent they are provided for in this Plan on page 83. A proposed site must be located in an area that is zoned for agricultural or industrial uses.

10. Compliance with Adopted Master Plans

A potential site shall conform to master land use plans adopted by the host community or county. If no area is specifically planned for waste disposal uses, a proposed site should be located in an area that is planned for agricultural or industrial uses. Master Plans are available from the County of Mason, City of Ludington, City of Scottville, Pere Marquette Charter Township and Amber Township.

11. **Site Landscaping and Screening**

Landscaping, composed of shrubbery and trees, shall be provided and maintained to beautify the view of the landfill. The landscaping must be of sufficient maturity and density to serve as an effective sight barrier. Such barriers shall consist of the following: plantings of evergreen trees, in staggered rows parallel to the boundaries of the property. Evergreens shall be at least two-year transplants at the time of planting, and shall grow to not less than fifteen (15) feet in height, and shall be sufficiently spaced to provide effective sight barriers when fifteen (15) feet in height. Trees and shrubs which die must be replaced according to the previously described standards during the next growing season.

12. **Federal or State of Michigan owned Lands**

Solid waste disposal facilities shall not be located or permitted to expand on land owned by the United States of America or by the State of Michigan. Except as specified here, such sites are inconsistent with this Plan. Disposal areas can be located on State land only if both of the following conditions are met:

- a. Thorough investigation and evaluation of the proposed site by the facility developer indicates to the satisfaction of the DEQ that it is suitable for such use.
- b. The State determines that the land may be released for landfill purposes and the facility developer acquires the property in fee title from the State in accordance with State requirements for such acquisition.

13. **Importation Authorization**

Solid waste disposal facilities shall be authorized to import waste from counties specifically mentioned on pages 32 & 33. Solid waste disposal facilities shall not be authorized to import waste from Michigan counties that are not specifically mentioned on pages 32 & 33.

Secondary Siting Criteria

As previously mentioned, the secondary criteria provide additional standards for evaluating potential landfill sites. The secondary criteria are designed to be used in a site scoring system as a means of objectively evaluating a proposed site. The site scoring system is used to measure how well a potential site meets each of the established criteria. This method involves assigning point values to a proposed site for each of the criteria. The result of this process is a total score for the site. The scoring system is explained in greater detail later in this section. First, the secondary siting criteria are described in general below.

1. **Natural Site Characteristics**

The facility developers are encouraged to use natural clay sites that meet all Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), requirements for a natural site. Site proposals that contain a site that meets all Part 115 requirements for a

natural site will score ten (10) points. Sites that do not meet all Part 115 requirements will score zero (0) points.

2. Isolation from Residential Development

Potential landfill sites should be in areas which allow the establishment of substantial buffer zones between the proposed landfill and adjacent properties and residential dwellings, minimum isolation distances, as specified in Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), have been established in the primary siting criteria. The secondary criteria go further in encouraging the maximum degree of isolation possible. Point values will be assigned based on the number of dwelling units within a one mile radius of the proposed site. The radius shall be measured from the property lines of the site. Site proposals that have less than ten (10) dwelling units within a one (1) mile radius of the site will score fifteen (15) points. Site proposals that have more than nine (9) but less than twenty-five (25) dwelling units within a one (1) mile radius of the site will score ten (10) points. Site proposals that have more than twenty-four (24) but less than fifty (50) dwelling units within a one (1) mile radius of the site will score five (5) points. Site proposals that have more than fifty (50) dwelling units within a one (1) mile radius of the site will score zero (0) points.

3. Isolation of Public Water Supplies

Ideally, a proposed site will be well isolated from public water supplies. In this siting procedure, a site that has a 5000 foot or greater isolation from public water supply wells will score ten (10) points. A site that has a 2500 foot or greater but less than 5000 foot isolation from public water supply wells will score five (5) points. A site that has less than a 2500 foot isolation from public water supply wells will score zero (0) points.

4. Isolation of Private Water Supplies

Ideally, a proposed site will be well isolated from private water supplies. In this siting procedure, a site that has a 2500 foot or greater isolation from private water supply wells will score ten (10) points. A site that has a 1500 foot or greater but less than 2500 foot isolation from private water supply wells will score five (5) points. A site that has less than a 1500 foot isolation from private water supply wells will score zero (0) points. Individual domestic wells are also protected indirectly by a required minimum isolation distance from residences.

5. Adjacent Land Use and Zoning

This Plan seeks to minimize adverse impacts of disposal facility siting on surrounding areas. Zoning and actual use of adjacent parcels are considered in determining the consistency of a proposed facility with this Plan. A site where the land on all of the site's perimeter is zoned either agricultural or industrial will score ten (15) points. A site where the land on seventy-five (75) percent but less than one hundred (100) percent of the site's perimeter is zoned either agricultural or

industrial will score ten (10) points. A site where the land on fifty (50) percent but less than seventy-five (75) percent of the site's perimeter is zoned either agricultural or industrial will score five (5) points. A site where the land on fifty (50) percent or more of the site's perimeter is zoned for uses other than either agricultural or industrial will score zero (0) points.

6. Materials Recovery Provisions

Ideally only those materials which cannot be reused or recycled should be disposed of. A disposal facility that collects materials for recycling is better than one that disposes of materials which could be recycled. A site where recycling will be provided for nine (9) or more material types to be recovered from most waste will score twenty (20) points. A site where recycling will be provided for more than six (6) but less than nine (9) or more material types to be recovered from most waste will score fifteen (15) points. A site where recycling will be provided for more than three (3) but less than six (6) material types to be recovered from most waste will score ten (10) points. A site that provides for one (1) to three (3) material types to be recovered from most waste will score five (5) points. A site that provides no recycling of material types will score zero (0) points. Material types for the purpose of this section include 1) clear glass; 2) colored glass; 3) cardboard; 4) newsprint and glossy magazines; 5) office and computer paper; 6) all household appliances including those with refrigerants; 7) concrete and cement materials; 8) metal; 9) #1 and #2 plastic bottles and jugs; 10) other plastic materials; and 11) polystyrene.

7. Household Hazardous Waste Collection

Although small amounts of hazardous materials discarded by households are legally allowed in Type II landfills, it is better to collect these materials separately and, if no other use can be found for them, to send them to hazardous waste disposal facilities. This criterion gives preference to facilities that provide this service. A site that provides four (4) or more opportunities yearly for the proper disposal of Household Hazardous Waste will score ten (15) points. A site that provides two (2) or three (3) yearly opportunities for the proper disposal of Household Hazardous Waste will score ten (10) points. A site that provides one opportunity yearly for the proper disposal of Household Hazardous Waste will score five (5) points. A site that does not provide for the proper disposal of Household Hazardous Waste will score zero (0) points.

8. Scrap tires

Although tires are legally allowed in Type II landfills, it is better to collect these materials separately and reuse them. A site where the collection and reuse of farm implement, truck, automobile and other motorized vehicle tires will be provided will score ten (10) points. A site where the collection and reuse of truck and automobile tires will be provided will score five (5) points. A site that does not collect tires for reuse will score zero (0) points.

9. Composting

The composting of organic materials reduces the amount of materials going into landfills thus extending the life of a site. A site that provides for the composting of brush, leaves, organic kitchen and garden waste will score ten (10) points. A site that provides for the composting of brush and leaves will score five (5) points. A site that does not provide composting of both brush and leaves will score zero (0) points.

10. Surcharges or royalties

As the host of the proposed site, the County and host municipality will incur certain administrative costs related to the site and its compliance with the County's Solid Waste Management Plan. Tipping surcharges or royalties are appropriate to assist the County and host municipality in paying for these administrative costs. A site that provides the County and host municipality with tipping surcharges or royalties totaling \$.70 per cubic yard received at the site will score fifteen (15) points. A site that provides the County and host municipality with tipping surcharges or royalties totaling \$.50 per cubic yard received at the site will score ten (10) points. A site that provides the County and host municipality with tipping surcharges or royalties totaling \$.30 per cubic yard received at the site will score five (5) points. A site that provides the County and host municipality with tipping surcharges or royalties totaling less than \$.30 per cubic yard received at the site will score zero (0) points. This paragraph refers to tipping surcharges or royalties as proposed by the facility developer in a landfill application. Final tipping surcharges or royalties are subject to negotiation between the facility developer and the County and/or host municipality.

Site Evaluation

As previously mentioned, a site evaluation method has been developed to provide an objective means of evaluating any proposed landfill site. The evaluation uses the secondary siting criteria. Each of the secondary criteria has been assigned a maximum point value ranging from ten to fifteen points with fifteen being the most important. In addition, a site may score less than the maximum point value by implementing different levels of compliance with the criteria. This is based on the concept that the criteria are not equally important, and that the criteria which have the greatest potential impacts on the community should receive the highest point values. For each criterion, a proposed site is assigned a point value according to the level of service being provided. The point values are intended to measure how well a site meets the secondary criteria. After evaluating the site for each of the criteria, a total score is obtained for the site.

Total Site Scores and Interpretation

Based on the site evaluation, the maximum total score for proposed sites is 130 points. For a site to be considered consistent with the County Solid Waste Management Plan, the site must receive a total score of at least 85 points. A site meeting the primary criteria and scoring at least 85 points in secondary criteria scoring is consistent with the Plan.

Negotiations

Although neither Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), nor this siting review process requires negotiations to take place between a disposal facility owner/operator and the community, the Act does not prohibit negotiations from taking place. The Plan encourages or recommends the establishment of discussions between the County and/or host municipality and the owner/operator of a proposed disposal facility. The objective of such discussions will be the development of a mutual agreement with a private owner/operator to address areas of local concern which are not specifically addressed in Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA) or local regulations. These considerations are separate from the criteria for determining whether a proposed facility is consistent with this Plan and do not affect that determination.

As a starting point, the County, the host municipality, and (if private enterprise is involved) the private owner/ operator of a proposed disposal facility should jointly prepare a negotiation plan. The negotiation plan is to serve as an agenda for further discussion, outlining the points of negotiation to be considered. Recommended points of negotiation may include, but are not limited to, the following:

1. Facility design, including greenbelts, landscaping, screening, and fencing.
2. Hours of operation.
3. On-site access roads.
4. Control of noise, litter, dust, odors, and vectors.
5. Operating records and reports.
6. Security.
7. Monitoring of wastes accepted and prohibited.
8. Surcharges or royalties.

The owner/operators of solid waste disposal facilities should recognize the importance of negotiating with the County and/or municipality to ensure that local concerns are adequately addressed and that reasonable efforts are made to mitigate potential negative impacts. The County's Solid Waste Management Planning Committee may request reports on the progress of negotiations and may arrange for public input to the negotiations as it sees fit.

The Site Review Process

This section describes the review process for evaluating proposed disposal facility sites, identifies the bodies responsible for conducting the review, and specifies the information which must be submitted by the applicant:

1. Pre-Application Conference (Recommended)

The applicant for a proposed disposal facility is expected to request a pre-application conference with a representative of the designated solid waste planning agency to informally discuss the County Solid Waste Management Plan, the site review process, and other relevant matters. Success in reaching agreement at this

conference is desirable but is not a prerequisite to being found consistent with this Plan.

2. MDEQ Advisory Analysis

Prior to submitting a proposed site to the County for review, the applicant shall request that an advisory analysis for the site be prepared by the Michigan Department of Environmental Quality, as specified in Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA). The format of the request and required information will be specified by the district staff of the MDEQ Waste Management Division.

3. Submission of Proposed Site for Formal Review

Following the preparation of any advisory analysis, an applicant wishing to proceed with the development of a disposal facility shall submit to the Mason County Solid Waste Management Committee, in care of the Mason County Administrator, a written request for the County to conduct a formal review of the site to determine its consistency with the County Solid Waste Management Plan. The request shall be accompanied by an application package containing the following items:

- a. The MDEQ advisory analysis if available.
- b. The names, addresses, and phone numbers of the applicant and any authorized representative.
- c. A map of the site with the following requirement:
 - i. A scale of not less than one inch equals 100 feet.
 - ii. Date, north point, and scale.
 - iii. The dimensions of all lot and property lines for the subject property and all adjacent parcels.
 - iv. The location of all existing structures on the subject property.
 - v. The location of all existing access roads.
 - vi. The location and right-of-way widths of all abutting roads.
 - vii. Proposed boundaries of solid waste disposal areas.
 - viii. Other information to demonstrate conformance with siting criteria (e.g., location of licensed airports, any proposed road upgrading, etc.)
- d. The locations of all residential dwellings within a one mile radius of the site. The radius shall be measured from the property lines of the site.
- e. The locations of all public drinking water supply wells (serving more than one user) within a 5,000 foot radius of the site, and private water supply wells within a 2,500 foot radius of the site.

- f. The estimated capacity of the site for solid waste disposal.
- g. A non-refundable application fee in an amount of \$25,000 or such greater amount as may be set by the County Board of Commissioners. Any amount of this fee that is not used in the review of the application will be refunded to the applicant.
- h. A description of the proposed construction features and management practices designed to minimize offsite effects of noise and vibration.
- i. A statement of intent to consult with the County and the host municipality before and during development of the facility if requested.
- j. If the facility is a landfill, a statement of intent to consult periodically, over the life of the landfill, with the municipality where the facility is to be located, in order to consider possible steps to help make the post-closure use of the land consistent with the host municipality's land use plans and zoning ordinances, if any.
- k. A written statement that the proposed development is consistent with proven technologies and with Part 115.
- l. A written statement that all haulers will be treated equitably and impartially.
- m. Documentation of the possible source of the waste stream coming to the facility to determine compliance with Primary Siting Criteria Number 13.
- n. Documentation that the facility will meet 20 year capacity criteria.
- o. Documentation of the apparent needs of the service area and how they will be met by the proposed development, including proposed recycling services. This item is for informational purposes only.

The Mason County Solid Waste Management Planning Committee, or its designee, will ascertain whether the application is complete within sixty (60) calendar days after the County Administrator receives it. By the end of the sixty (60) calendar day review period, the Committee will inform the applicant by letter whether the application is complete or incomplete. If the application is found incomplete, the letter will specify the items missing and will offer the opportunity to resubmit the application when those items are provided. If no decision is reached within sixty (60) calendar days, the application will be considered complete and proceeds into the remainder of the review process.

4. Responsibilities for Conducting Review

The body responsible for reviewing any proposed disposal site for plan consistency shall be the Mason County Solid Waste Management Planning Committee (SWMPC). To assist the SWMPC in its review, a technical review committee (TRC) may be established consisting of the following persons or agency representatives:

- a. The County Road Commission Engineer
- b. Mason County Board of Commissioners Member
- c. The County Soil Erosion and Sedimentation Control Agency
- d. The Regional Solid Waste Planning Agency
- e. The local health department
- f. The County Drain Commission Host Government Designee
- g. The chief elected official of the host municipality or his/her designated representative
- h. Any other technical expertise that the SWMPC deems appropriate

The TRC shall conduct an evaluation of the proposed site using the site evaluation criteria described on pages 64-71 in this section. In conducting its evaluation, the TRC may request assistance from other agencies as necessary. Such agencies may include, but not be limited to, the Michigan Department of Environmental Quality and the Soil Conservation Service.

Upon completion of its review, the TRC shall submit its report and recommendations to the SWMPC for concurrence or non-concurrence. Upon acceptance of the TRC recommendation, the SWMPC shall notify the applicant of its findings in writing. If the SWMPC finds that a proposed site is not consistent with the Plan, it shall also notify the applicant, in writing, of the reason(s) for its findings.

The SWMPC/TRC shall have 180 calendar days from the date a complete application package was submitted to the County Administrator in which to issue its consistency determination. Failure to act within the prescribed time frame will result in an automatic determination of plan consistency by the County. The consistency determination is then forwarded to the DEQ, by the Designated Planning Agency, for review as part of a construction permit application, and the DEQ Director makes the final determination of consistency.

5. The Formal Construction Application

A report of the County's determination of consistency/inconsistency with this Plan is required documentation in any Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), construction permit application submitted to the DEQ.

Siting Criteria for Other Solid Waste Facilities

This section is intended to describe the County's siting criteria and review process for major solid waste facilities, other than landfills, which require licensing under Part 115, Solid

Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA). Such major facilities include Type A Transfer Facilities and Solid Waste Material Recovery Facilities.

Transfer facilities

The transfer facility building(s) shall not be located within 300 feet of adjacent property lines, road right-of-way, or lakes and perennial streams. All facilities shall be screened with a suitable barrier at least 8 feet high and with 75% screening to reduce the visibility of the operation.

The transfer facility building(s) shall not be located closer than 300 feet to domiciles existing at the time of permit application, unless the affected property owner had provided a written waiver consenting to activities closer than 300 feet. The waiver shall be knowingly made and separate from a lease or deed unless the lease or deed contains an explicit waiver from the current owner.

The transfer facility shall not be located within the 100-year flood plain as identified on DEQ prepared maps as defined in Part 31 of Act 451 Administrative rules.

The transfer facility shall not be located within 300 feet of a wetland as defined and regulated under Part 303 of Act 451.

The transfer facility shall not be located within 300 feet of any existing public park or recreation area.

A potential transfer facility site must have direct access to an all-weather "class A" road to accommodate heavy truck traffic generated at the site. If a proposal for a transfer facility includes or assumes year-round traffic to off-site sources of cover material, the proposal must include all-season road access provisions for this function. If a transfer facility proposal includes upgrading a road to all-season status, the design and construction must conform to the current standards of the American Association of State Highways and Transportation Officials (AASHTO), as set forth in Design Guidelines, ASHTO Interim Structural Pavement Design Procedure, Adopted for All Season Roads (revision of January 1989, or a later revision if issued). A proposal will be found consistent with the road access requirement of the Plan if it contains a written statement agreeing to upgrade direct access roads to all-season "class A" standards based on AASHTO specifications as cited here, at no direct charge to county, road commission or local governments. A 66-foot easement recorded on the deed of a land-locked parcel qualifies as having road frontage, but does not negate the necessity for the access road to be of all-season construction. Said upgrade to all-season "class A" standards must be completed prior to the start of construction of the transfer facility. Sites lacking direct access to an all-weather "class A" road to accommodate heavy truck traffic is inconsistent with this Plan.

The developer must provide a written noise and vibration abatement plan for the proposed transfer facility site.

Solid Waste Material Recovery Facilities (MRF)

The MRF building(s) shall not be located within 300 feet of adjacent property lines, road right-of-way, or lakes and perennial streams. All facilities shall be screened with a suitable barrier at least 8 feet high and with 75% screening to reduce the visibility of the operation.

The MRF building(s) shall not be located closer than 1,000 feet to domiciles existing at the time of permit application, unless the affected property owner had provided a written waiver consenting to activities closer than 1,000 feet. The waiver shall be knowingly made and separate from a lease or deed unless the lease or deed contains an explicit waiver from the current owner.

The MRF shall not be located within the 100-year flood plain as identified on DEQ prepared maps as defined in Part 31 of Act 451 Administrative rules.

The MRF shall not be located within 300 feet of a wetland as defined and regulated under Part 303 of Act 451.

The MRF shall not be located within 300 feet of any existing public park or recreation area.

A potential MRF site must have direct access to an all-weather "class A" road to accommodate heavy truck traffic generated at the site. If a proposal for a MRF includes or assumes year-round traffic to off-site sources of cover material, the proposal must include all-season road access provisions for this function. If a MRF proposal includes upgrading a road to all-season status, the design and construction must conform to the current standards of the American Association of State Highways and Transportation Officials (AASHTO), as set forth in Design Guidelines, ASHTO Interim Structural Pavement Design Procedure, Adopted for All Season Roads (revision of January 1989, or a later revision if issued). A proposal will be found consistent with the road access requirement of the Plan if it contains a written statement agreeing to upgrade direct access roads to all-season "class A" standards based on AASHTO specifications as cited here, at no direct charge to county, road commission or local governments. A 66-foot easement recorded on the deed of a land-locked parcel qualifies as having road frontage, but does not negate the necessity for the access road to be of all-season construction. Said upgrade to all-season "class A" standards must be completed prior to the start of construction of the MRF. Sites lacking direct access to an all-weather "class A" road to accommodate heavy truck traffic is inconsistent with this Plan.

All MRF's shall be located in an area that has been zoned for industrial or agricultural use.

Landscaping, composed of shrubbery and trees, shall be provided and maintained to beautify the view of the MRF. The landscaping must be of sufficient maturity and density to serve as an effective sight barrier defined as follows. Such barriers shall consist of the following: plantings of evergreen trees, not more than 12 feet apart, or shrubbery not more than 5 feet apart, in staggered rows parallel to the boundaries of the property. Evergreen transplants shall be at least 4 feet in height at the time of planting, and shall grow to not less than 10 feet in height. Trees or shrubs that die must be replaced according to the previously described standards during the next growing season.

Noise effects on adjacent properties shall be minimized by the utilization of adequately sound proofed equipment and facilities designed to effect such minimization, and by the use of berms, walls, and natural planting screens. The developer must provide a written abatement plan.

SELECTED SYSTEM

SOLID WASTE MANAGEMENT COMPONENTS'

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

Department of Environmental Quality (DEQ)

Various sections of the DEQ are charged by law with the regulation, enforcement and review of the conduct of the solid waste management systems in Mason County and all other Michigan counties. The county will be dependent upon the appropriate offices of the DEQ to be informed of changes in the requirements for solid waste management from both federal and state levels. This information from the DEQ will include new solid waste legislation, regulatory rulings, changes in the handling of disposal of all types of solid waste, national or state public information programs, financial aid program from the national or state level available to the county, and technical assistance from DEQ staff.

Enforcement

Any person believing violations of the Solid Waste Disposal Act or any other Enforceable Mechanism as defined in said Act, pursuant to M.C.L.A. 324. 101 et seq., as amended, particularly Parts 5, 17, 31, 55, 89, 91, 111, 115 and 121; 257.1 et seq.; 16.338 et seq.; that have been, are, or will be occurring shall report same to the MDEQ, the MDNR, an health officer, or any other law enforcement officer for appropriate action and relief according to the law. The Mason County Administrator acting on behalf of the County Board of Commissioners is responsible for the implementation and enforcement of the plan. The Administrator has all the technical, administrative, financial and legal power vested in the position by the County Board of Commissioners.

Mason County Board of Commissioners

The County Board is responsible for the overall supervision of the solid waste management system for the county. This responsibility includes the implementation of the 5 year and 10 year plans. It also includes financing, administration and operations of the county solid waste management system, as well as accountability to the public. The County Board shall designate a board responsible for implementing the Solid Waste Management Plan.

Mason County Administrator's office

The Mason County Administrator's office is responsible for the continued planning effort in the solid waste management area for the county. This planning should be done in coordination with other units of government actively involved in solid waste planning and implementation of plans. The Mason County Administrator's office is the "Central Informational Repository" of all solid waste planning Information as it relates to Mason County.

Solid Waste Management Planning Committee (SWMPC)

The Mason County Solid Waste Management Planning Committee (SWMPC) is responsible for working with the Mason County Administrator's office to develop 5 year and 10 year Solid Waste Plans and recommending said plans to the County Board for their approval. The SWMPC is responsible to assist the County Board in the approval process of the plan. The SWMPC is also responsible for reviewing any proposed disposal site for plan consistency.

Technical Review Committee (TRC)

The Technical Review Committee (TRC) shall be responsible for assisting the SWMPC in its review of any proposed disposal site for plan consistency.

Local units of government

The local units of government will continue to keep the County Board informed of the effectiveness of the Solid Waste Management Plan in Mason County. Existing programs in local units of government for waste collection, recycling and yard waste collection will continue to be the responsibility of the local units of government.

Private Enterprises

Private enterprises will continue to manage those activities that are best served by the free market system such as collection and disposal of solid waste and the collection and marketing of recyclable materials. The private sector will be encouraged to develop a landfill site in Mason County. They will continue to perform the majority of source reduction, product reuse and the increasing of material lifetime.

General public

The general public of Mason County will be asked to support the goals and objectives of this solid waste management plan to insure their success. The support will include continued participation in recycling, composting and hazardous materials collection programs.

Environmental Groups

AFFEWS (A Few Friends for the Environment of the World and their Children), Dow Chemical Company, District Health Department No. 10, Mason County Department of Public Works and Michigan State University Extension will continue to coordinate the Mason County Household Hazardous Materials Collection Day and other programs aimed at diverting specific materials from the waste stream.

MSU Extension and the Mason Lake Conservation District

MSU Extension and the Mason Lake Conservation District will continue to provide county residents with informational pamphlets concerning individual composting and recycling.

Components or subcomponents may be added to this table.

SELECTED SYSTEM

IDENTIFICATION OF RESPONSIBLE PARTIES

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

Resource Conservation:

Source or Waste Reduction

Product Reuse

Reduced Material Volume - Mason County Administrator and Solid Waste Management Committee

Increased Product Lifetime

Decreased Consumption

Resource Recovery Programs:

Composting - Cities of Ludington and Scottville and Pere Marquette Charter Township

Recycling - Cities of Ludington and Scottville, Hamlin Township, Summit Township and Pere Marquette Charter Township

Energy Production - not applicable

Volume Reduction Techniques:

Collection Processes:

Private Waste Haulers

SELECTED SYSTEM

Transportation:

Private waste haulers.

Disposal Areas:

Processing Plants

Incineration

Transfer Stations - Hamlin and Summit Townships & Private contractors

Sanitary Landfills - (Siting criteria) Solid Waste Management Planning Committee

Ultimate Disposal Area Uses:

Local Responsibility for Plan Update Monitoring & Enforcement:

Mason County Board of Commissioners, Mason County Administrator & Mason County Solid Waste Management Planning Committee

Educational and Informational Programs:

Mason County Board of Commissioners, Mason County Administrator & Mason County Solid Waste Management Planning Committee MSU Extension and the Mason Lake Conservation District will provide county residents with informational pamphlets concerning individual composting and recycling.

Documentation of acceptance of responsibilities is contained in Appendix D.

LOCAL ORDINANCES AND REGULATIONS AFFECTING SOLID WASTE DISPOSAL

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

- 1. Section 11538 (8) and rule 710 (3) of Part 115 prohibits enforcement of all County and local ordinances and regulations pertaining to solid waste disposal areas unless explicitly included in an approved Solid Waste Management Plan. Local regulations and ordinances intended to be part of this Plan must be specified below and the manner in which they will be applied described.
- 2. This Plan recognizes and incorporates as enforceable the following specific provisions based on existing zoning ordinances:
- 3. This Plan authorizes adoption and implementation of local regulations governing the following subjects by the appropriate units of government without further authorization from or amendment to the Plan.

Regulation 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 include:

- 1. Certain ancillary construction details, such as landscaping and screening;
- 2. Hours of operation;
- 3. Noise, litter, odor and dust control;
- 4. Operating records and reports;
- 5. Facility security;
- 6. Monitoring of wastes accepted and prohibited;
- 7. Composting and recycling.

Once the Plan is approved, any additions to the Plan's list of incorporated local regulations can be made only by formal amendment or update of the Plan.

CAPACITY CERTIFICATIONS

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

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

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

This County has secured space promises from five facilities in four counties included in the Plan. Letters of Commitment are included in Appendix D-1 on pages 144-149. The County needs approximately 78,000 cubic yards of space per year for the next ten years. Four of the five facilities listed in Appendix D-1 have each agreed to accept up to 100% of the County's waste.

The majority of waste generated in the County goes to the Manistee County Landfill that has 12 years capacity including the waste coming from Mason County.

The Autumn Hill Recycling & Disposal Facility in Ottawa County currently disposes of 500,000 - 600,000 tons of solid waste per year. Autumn Hills has a current capacity of 20.75 million tons that gives it approximately 30 years of capacity. The addition of the entire Mason County waste stream would only reduce the years of capacity at Autumn Hills to approximately 27 years.

The Ottawa County Farms Landfill in Ottawa County currently disposes of 500,000 tons of solid waste per year. Ottawa County Farms has a current capacity of 16.50 million tons that gives it approximately 25-30 years of capacity. The addition of the entire Mason County waste stream would only reduce the years of capacity at Ottawa County Farms to approximately 22-27 years.

The Arbor Hills Landfill in Washtenaw County currently has approximately 16.4 years of capacity. The addition of the entire Mason County waste stream would only reduce the years of capacity at Arbor Hills to approximately 16.2 years.

In addition, Pitsch Sanitary Landfill has a pending expansion that is not included in the above mentioned figures.

Based on the calculation above, the Mason County Solid Waste Planning Committee certifies that Mason County has identified more than ten years capacity and thus an annual certification process is not included in this Plan.

APPENDIX

ADDITIONAL INFORMATION

REGARDING THE

SELECTED

SYSTEM

EVALUATION OF RECYCLING

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

Mason County's volume of materials being used and recycled are at the levels they are due to strong programs provided by local units of government that make it easy for their residents to participate in recycling programs. Curbside recycling programs provided by the Cities of Ludington and Scottville and Pere Marquette Charter Township allow their citizens to recycle paper, plastics, corrugated containers, glass and metals with very limited amounts of effort. This ease of participation increases the support by citizens and amounts of materials actually being collected. Drop off sites provided by Hamlin and Summit Township also provide their citizens with a year round recycling program. Citizens in other areas of the county have the ability to take their recycled materials to the Waste Reduction System (The Transfer Station) site in Mason County and the Manistee County Landfill Inc. site in Manistee County.

Private enterprise also aids in the recycling process with Padnos Iron & Metal providing a market for scrap metal, Towns Brothers Construction Company providing a location to recycle concrete, brick and cement materials, Pallet Recycle Inc. providing a location for the recycling of wooden pallets and Nichols Drug Store, Mason County District Library and Briggs True Value all provide a location for the recycling of empty printer cartridges.

Another factor in the amount of materials recycled is the strong desire by county residents to maintain the quality of life that Mason County affords its residents. This desire to maintain the natural beauty and environment spurs the community to a higher level of participation in recycling programs.

The selected system continues all the current programs and strives to add the paper recycling program provided by Lakeshore Enterprises.

DETAILED FEATURES OF RECYCLING AND COMPOSTING PROGRAMS:

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

The Mason County Solid Waste Planning Committee does not know what types and/or volumes of recyclable material are available in the waste stream. The County of Mason has not performed a waste characterization study. Estimates can be made using national averages for rural counties. These estimates do not take into account any industrial or commercial waste generation or recycling. The estimates for the County of Mason are as follows:

| | |
|--------------------|---------------------|
| Paper | 5,572 tons per year |
| Glass | 1,254 tons per year |
| Metal | 1,254 tons per year |
| Plastics | 279 tons per year |
| Rubber and leather | 279 tons per year |
| Textiles | 279 tons per year |
| Wood | 418 tons per year |
| Food Waste | 2,368 tons per year |
| Yard Waste | 1,811 tons per year |
| Misc. organics | 418 tons per year |

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

Equipment Selection - Not applicable

The County of Mason's selected solid waste handling system does not include equipment selection or the location of existing or proposed recycling programs. These locations and the equipment to be used will be selected by the Cities and Townships providing the service to their citizens. In the Townships not providing the service to their citizens, any private hauling or recycling company that offers the service will select their equipment.

Site Availability & Selection Not applicable

The County of Mason's selected solid waste handling system does not include equipment selection or the location of existing or proposed recycling programs. These locations and the equipment to be used will be selected by the Cities and Townships providing the service to their citizens. In the Townships, not providing the service to their citizens, any private hauling or recycling company that offers the service will select their equipment.

Existing Programs:

Proposed Programs:

Composting Operating Parameters:

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

No formal composting programs are included as part of the selected solid waste management system. Existing yard waste management programs are operated on a very limited basis. Product is used locally or for municipal use only.

Existing Programs:

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

Proposed Programs:

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

COORDINATION EFFORTS:

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

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

The selected system would be to continue the current system of local units of government arranging the necessary agreements and organizational arrangements and structures which provide for public and/or private operation of solid waste collection, processing and disposal within their jurisdictions.

The County of Mason would continue to arrange the inter county agreements that allow solid waste material to be imported and exported into and out of Mason County.

The Mason County Solid Waste Management Planning Committee and the Designated Planning Agency would be responsible for the oversight of the landfill siting criteria.

The Mason County Solid Waste Management Planning Committee is responsible for the planning of standards and methods to be considered for the processing and disposal of solid waste. These standards and methods will be presented to the Mason County Board of Commissioners for approval. The Committee will assist local units of government in the planning of their solid waste disposal systems.

The Mason County Board of Commissioners has the ultimate authority for implementing the plan, authorizing solid waste agreements and allocating funds.

COSTS & FUNDING:

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

| <u>System Component'</u> | <u>Estimated Costs</u> | <u>Potential Funding</u> |
|---|------------------------|---|
| <u>Sources</u> | | |
| <u>Resource Conservation Efforts</u> | None | Private Enterprises |
| <u>Resource Recovery Programs</u> | None | Private Enterprises |
| <u>Volume Reduction Techniques</u> | None | Private Enterprises |
| <u>Collection Processes</u> | None | Local units of government & users of the service |
| <u>Transportation</u> | None | Private Enterprises |
| <u>Disposal Areas</u> | None | Private Enterprises |
| <u>Future Disposal Area Uses</u> | None | Private Enterprises |
| <u>Management Arrangements</u> | \$1,000 Annually | Mason County Board of Commissioners |
| <u>Educational & Informational Programs</u> | \$3,000 | Mason County Board of Commissioners, MSU Extension & Mason Lake Conservation District |

These components and their subcomponents may vary with each system.

EVALUATION SUMMARY OF THE SELECTED SYSTEM:

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

Alternative #1 has been chosen as the selected system. The selected system is the system that has been in place since the Mason County Landfill closed in 1997. The general public is in agreement with this system and the manner in which it is operated. The Committee believes that acceptance of this system will continue to be positive. The selected system is not anticipated to have a negative impact during the five year or ten year periods on either public health, economics, environmental conditions, siting considerations, existing disposal areas or energy consumption and production. The County of Mason's experience over the past year indicates that this is the case. It is a technically and financially feasible system for our residents.

Recycling will continue to be offered in the curbside and drop off site venue through contracts between local units of government and private enterprises. Efforts will be made to expand the recycling opportunities by working with Lakeshore Enterprises in their efforts to expand their programs to Mason County. Lakeshore Enterprises could provide an additional educational function to the county's school districts.

Hazardous Material Collection Days will be continued to be offered to county residents through the efforts of non profit organizations, private enterprise and governmental units.

Composting opportunities will be offered by both cities and the charter township on a limited basis.

Landfill siting criteria have been added that will provide public health and environmental safeguards in any future landfill project.

EVALUATION SUMMARY CONTINUED:

Not Applicable

ADVANTAGES AND DISADVANTAGES OF THE SELECTED SYSTEM:

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

ADVANTAGES:

1. Addresses the needs of the residents of Mason County.
2. Offers a household hazardous materials collection.
3. Offers more than one landfill for residents and private haulers to use.
4. Encourages composting.
5. Continues and could improve recycling programs.
6. Is a cost effective system for the county taxpayers.
7. It has a track record of success in the County.
8. It uses the free market system to provide solid waste services.
9. Establishes new landfill siting criteria

DISADVANTAGES:

1. Limited recycling programs in the more rural areas of the County.
2. Lack of markets to reduce the cost of recycling programs.
3. Lack of funds for additional educational programs.
4. Lack of a landfill site within the county.
- 5.
- 6.
- 7.
- 8.

NON-SELECTED SYSTEMS

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

SYSTEM COMPONENTS:

Alternatives #2 and #3 were the non-selected systems. The following briefly describes the various components of the non-selected system.

RESOURCE CONSERVATION EFFORTS:

Alternative #2 would be to continue the current system of not addressing these issues directly with the public or state and federal legislators.

VOLUME REDUCTION TECHNIQUES:

Alternative #2 would be to centralize the compacting and baling operations at a multi-county material recovery facility or MRF.

Alternative #3 would be to develop a multi-county incinerator to reduce the volume of materials that would require landfilling.

RESOURCE RECOVERY PROGRAMS:

Alternative #2 would be to develop a multi-county material recovery facility or MRF. The facility would separate the recycling, composting and solid waste materials on site. Processing of the mixed waste stream would include hand sorting, screening, gravity and magnetic separation. This would increase the amount of recycled materials recovered from the solid waste stream.

COLLECTION PROCESSES AND TRANSPORTATION:

Alternative #2 would be for local units of government to directly provide the collection and transportation process.

Alternative #3 would be for local units of government to allow individuals to directly contract with various private haulers for the collection and transportation of solid waste, composting materials and recycling materials.

DISPOSAL AREAS:

Alternative #2 would be to encourage private enterprise to develop, construct and operate a private landfill in Mason County.

Alternative #3 would be for the County of Mason to develop, construct and operate a public landfill in Mason County either by itself or in conjunction with neighboring counties.

INSTITUTIONAL ARRANGEMENTS:

Alternative # 2 would be for local units of government to authorize the County of Mason to assume the authority to arrange the necessary agreements and organizational arrangements and structures which provide for public and/or private operation of solid waste collection, processing and disposal within their jurisdictions thereby centralizing solid waste jurisdiction at the county level.

EDUCATIONAL AND INFORMATIONAL PROGRAMS:

Alternative #2 would increase the availability of educational and informational programs that would promote recycling, waste reduction and composting.

RECYCLING AND COMPOSTING PROGRAMS:

Alternative #2 would be for the County of Mason to provide recycling and composting programs to the citizens of townships not currently providing these services.

Alternative #3 would be for local units of government to authorize the County of Mason to assume the authority of providing recycling and composting programs to the citizens within their jurisdictions thereby centralizing recycling and composting jurisdiction at the county level.

CAPITAL, OPERATIONAL, AND MAINTENANCE COSTS:

Development costs of a 10 acre landfill site - \$7,902,000, Operation and Maintenance costs of a 10 acre landfill site - \$14,280,000, Post-Closure costs of a 10 acre landfill site - \$1,674,000.

Development costs of a 10,000 tons per year Transfer Station Site - \$335,000, Building and site work costs of a 10,000 tons per year Transfer Station Site - \$928,000, Mobile Equipment and Rolling Stock costs of a 10,000 tons per year Transfer Station Site - \$286,000, Annual Operation and Maintenance costs of a 10,000 tons per year Transfer Station Site - \$291,000.

Estimated costs of expanded education program - \$3,000.

EVALUATION SUMMARY OF NON-SELECTED SYSTEM:

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

Alternatives #2 and #3 would result in a solid waste system that was operated by county government rather than by free market forces. These systems would give the county greater control over the solid waste system and the services provided under the system. This system was tried in the past by the County of Mason and resulted in huge deficits and unfunded post closure costs. A small rural county can not operate a landfill or incinerator in a cost effective manner.

ADVANTAGES AND DISADVANTAGES OF THE NON-SELECTED SYSTEM:

Each solid waste management system has pros and cons relating to its implementation within the County. The following is a summary of the major advantages and disadvantages for this nonselected system.

ADVANTAGES:

1. More educational programs.
2. More competition and solid waste options for the citizens.
3. A landfill located within the county.
4. A more centralized solid waste system.
5. More recycling options for the more rural areas of the county.
- 6.
- 7.
- 8.

DISADVANTAGES:

1. Cost prohibitive to the county tax payers.
2. Disruption of the free market system.
3. Lack of political support from the county government.
- 4.
- 5.
- 6.
- 7.
- 8.

PUBLIC PARTICIPATION AND APPROVAL

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

SOLID WASTE MANAGEMENT PLANNING COMMITTEE APPOINTED:

The Solid Waste Management Planning Committee was appointed by the County Board of Commissioners on several dates in 1997, 1998 and 1999. All of the meetings were public meetings and the public was allowed to comment at all meetings.

PREPARATION OF THE PLAN BY THE SWMPC:

The Solid Waste Management Planning Committee held a total of thirteen public meetings from March 31, 1998 to June 29, 1999, to prepare the draft Plan. At each meeting time was allotted for Public Comment.

PUBLIC REVIEW PERIOD AUTHORIZED BY THE SWMPC:

At a Public meeting held on June 29, 1999, and by a vote of 8 in favor and 0 against, the Solid Waste Management Planning Committee authorized the 90 day public review period to begin on July 2, 1999. Again, time was allotted for Public Comment.

PUBLIC REVIEW PERIOD July 2, 1999 TO September 30, 1999:

A public hearing was conducted on September 30, 1999. Time was allotted for Public Comment.

APPROVAL OF THE PLAN BY THE SWMPC:

At a Public meeting held on December 28, 1999, and by a unanimous roll call vote 12 in favor and 0 against, the Solid Waste Management Planning Committee approved the Plan with the noted corrections at this meeting. Again, time was allotted for Public Comment.

APPROVAL OF THE PLAN BY THE COUNTY BOARD:

At the regular monthly meeting of the Mason County Board of Commissioners on January 12, 2000, the Board of Commissioners approved the Plan by a vote of 9 in favor and 0 against, and authorized the release of the plan to all the other units of government in Mason County for their consideration. Again, time was allotted for Public Comment.

PUBLIC PARTICIPATION

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

The Plan Update was prepared by the Designated Planning Agency (the Mason County Administrator), with assistance from the Mason County Solid Waste Planning Committee, the Administrator's Administrative Assistant and the General Public. A notice of each meeting was sent to the chief elected officer of each local unit of government in Mason County. At each public meeting, time was allocated for Public Comments. A copy of the agenda for each meeting involving the Plan Update is outlined below and attached.

| <u>Date</u> | <u>Type of Meeting</u> |
|--------------------|---|
| March 31, 1998 | Committee organizational meeting |
| April 28, 1998 | Discussion of the update of the Solid Waste Plan |
| May 26, 1998 | Discussion of the update of the Solid Waste Plan |
| June 30, 1998 | Discussion of the update of the Solid Waste Plan |
| July 28, 1998 | Discussion of the update of the Solid Waste Plan |
| August 25, 1998 | Discussion of the update of the Solid Waste Plan |
| September 29, 1998 | Discussion of the update of the Solid Waste Plan |
| October 27, 1998 | Discussion of the update of the Solid Waste Plan |
| November 24, 1998 | Discussion of the update of the Solid Waste Plan |
| February 23, 1999 | Discussion of the update of the Solid Waste Plan |
| April 27, 1999 | Discussion of the update of the Solid Waste Plan |
| May 25, 1999 | Discussion of the update of the Solid Waste Plan |
| June 29, 1999 | Discussion of the update of the Solid Waste Plan |
| September 30, 1999 | Held a Public Hearing on the Solid Waste Plan |
| October 26, 1999 | Discussion of public comments on Solid Waste Plan |
| November 30, 1999 | Discussion of public comments on Solid Waste Plan |
| December 28, 1999 | Approval of the Solid Waste Plan |

PUBLIC NOTICE

The Mason County Solid Waste Management Planning Committee will meet on March 31, 1998 at 1:00 PM in the conference room located on the first floor of the Mason County Service Building.

**MASON COUNTY SOLID WASTE MANAGEMENT
PLANNING COMMITTEE**

AGENDA

MARCH 31, 1998

1:00 PM

1. Roll call
2. Approval of Agenda
3. Election of officers
4. Approval of the Minutes of the September 30, 1997 meeting
5. Reading of correspondence
6. Public Comments
7. Discussion of the plan update
8. Any unfinished business
9. Adjournment

PUBLIC NOTICE

The Mason County Solid Waste Management Planning Committee will meet on April 28, 1998 at 1:00 PM in the conference room located on the first floor of the Mason County Service Building.



Mason County Board of Commissioners

Court House
304 E. Ludington Ave., Ludington, Michigan 49431

Thomas M. Posma
Chairman

Ronald E. Sanders
Vice Chairman

Ivan J. Anthony
County Clerk

Fabian L. Krizacky
Administrator

Harold Madden
District 1

Michael G. Schneider
District 2

John E. Henderson
District 3

James L. Pinkerton
District 4

Jerome Rybicki
District 5

Thomas M. Posma
District 6

Charles Eberbach
District 7

Ronald E. Sanders
District 8

Robert A. Genson
District 9

MASON COUNTY SOLID WASTE MANAGEMENT PLANNING COMMITTEE

AGENDA

APRIL 28, 1998

1:00 PM

1. Roll call
2. Approval of Agenda
3. Approval of the Minutes of the March 31, 1998 meeting
4. Reading of correspondence
5. Public Comments
6. Vacant position update
7. General Discussion of Solid Waste Plan Update
8. Any unfinished business
9. Adjournment

PUBLIC NOTICE

The Mason County Solid Waste Management Planning Committee will meet on May 26 1998 at 1:30 PM in the conference room located on the first floor of the Mason County Service Building.

**MASON COUNTY SOLID WASTE MANAGEMENT
PLANNING COMMITTEE**

AGENDA

MAY 26, 1998

1:30 PM

1. Roll call
2. Approval of Agenda
3. Approval of the Minutes of the April 28, 1998 meeting
4. Reading of correspondence
5. Public Comments
6. Introduction of new member Ralph Hendrick
7. Discussion of the landfill siting criteria
8. Any unfinished business
9. Adjournment

PUBLIC NOTICE

The Mason County Solid Waste Management Planning Committee will meet on June 30, 1998 at 1:30 PM in the conference room located on the first floor of the Mason County Service Building.



Mason County Board of Commissioners

Court House
304 E. Ludington Ave., Ludington, Michigan 49431

Thomas M. Posma
Chairman

Ronald E. Sanders
Vice Chairman

Ivan J. Anthony
County Clerk

Fabian L. Knizacky
Administrator

Harold Madden
District 1

Michael G. Schneider
District 2

John E. Henderson
District 3

James L. Pinkerton
District 4

Jerome Rybicki
District 5

Thomas M. Posma
District 6

Charles Eberbach
District 7

Ronald E. Sanders
District 8

Robert A. Genson
District 9

MASON COUNTY SOLID WASTE MANAGEMENT PLANNING COMMITTEE

AGENDA

JUNE 30, 1998

1:30 PM

1. Roll call
2. Approval of Agenda
3. Approval of the Minutes of the May 26, 1998 meeting
4. Reading of correspondence
5. Public Comments
6. Introduction of new member Ralph Hendrick
7. Review of the draft of the Landfill Siting criteria as submitted by the sub-committee
8. Any unfinished business
9. Adjournment

PUBLIC NOTICE

The Mason County Solid Waste Management Planning Committee will meet on July 28, 1998 at 1:30 PM in the conference room located on the first floor of the Mason County Service Building.

**MASON COUNTY SOLID WASTE MANAGEMENT
PLANNING COMMITTEE**

AGENDA

JULY 28, 1998

1:30 PM

1. Roll call
2. Approval of Agenda
3. Approval of the Minutes of the June 30, 1998 meeting
4. Reading of correspondence
5. Public Comments
6. Discussion of the importation and exportation of solid and the related agreements with other counties at this meeting.
7. Per Diem
8. Any unfinished business
9. Adjournment

PUBLIC NOTICE

The Mason County Solid Waste Management Planning Committee will meet on August 25, 1998 at 1:30 PM in the conference room located on the first floor of the Mason County Service Building.

Posted August 13, 1998 at 8:45 AM.

**MASON COUNTY SOLID WASTE MANAGEMENT
PLANNING COMMITTEE**

AGENDA

AUGUST 25, 1998

1:30 PM

1. Roll call
2. Approval of Agenda
3. Approval of the Minutes of the July 28, 1998 meeting
4. Reading of correspondence
5. Public Comments
6. Discussion of the importation and exportation of solid and the related agreements with other counties at this meeting.
7. Discussion about recycling, reuse, composting, reduction and waste-to-energy.
8. Any unfinished business
9. Adjournment

PUBLIC NOTICE

The Mason County Solid Waste Management Planning Committee will meet on September 29, 1998 at 1:30 PM in the conference room located on the first floor of the Mason County Service Building.

Posted September 10, 1998 at 12:30 PM.

**MASON COUNTY SOLID WASTE MANAGEMENT
PLANNING COMMITTEE**

AGENDA

SEPTEMBER 29, 1998

1:30 PM

1. Roll call
2. Approval of Agenda
3. Approval of the Minutes of the August 25, 1998 meeting
4. Reading of correspondence
5. Public Comments
6. Discussion of the importation and exportation of solid and the related agreements with other counties at this meeting.
7. Discussion about recycling, reuse, composting, reduction and waste-to-energy.
8. Any unfinished business
9. Adjournment

PUBLIC NOTICE

The Mason County Solid Waste Management Planning Committee will meet on October 27, 1998 at 1:30 PM in the conference room located on the first floor of the Mason County Service Building.

**MASON COUNTY SOLID WASTE MANAGEMENT
PLANNING COMMITTEE**

AGENDA

OCTOBER 27, 1998

1:30 PM

1. Roll call
2. Approval of Agenda
3. Approval of the Minutes of the September 29, 1998 meeting
4. Reading of correspondence
5. Public Comments
6. Lakeshore Enterprises presentation
7. Update on the importation and exportation of solid and the related agreements with other counties at this meeting.
8. Discussion about recycling, reuse, composting, reduction and waste-to-energy.
9. Any unfinished business
10. Adjournment

PUBLIC NOTICE

The Mason County Solid Waste Management Planning Committee will meet on November 24, 1998 at 1:30 PM in the conference room located on the first floor of the Mason County Service Building.

**MASON COUNTY SOLID WASTE MANAGEMENT
PLANNING COMMITTEE**

AGENDA

NOVEMBER 24, 1998

1:30 PM

1. Roll call
2. Approval of Agenda
3. Approval of the Minutes of the October 27, 1998 meeting
4. Reading of correspondence
5. Public Comments
6. Update on the importation and exportation of solid and the related agreements with other counties at this meeting.
7. Discussion about recycling, reuse, composting, reduction and waste-to-energy.
8. Discussion about the county overview portion of the plan
9. Any unfinished business
10. Adjournment

PUBLIC NOTICE

The Mason County Solid Waste Management Planning Committee will meet on February 23, 1999 at 1:30 PM in the conference room located on the first floor of the Mason County Service Building.

Posted February 12, 1999 at 1:17 PM.

Fedor Z. Krivak

**MASON COUNTY SOLID WASTE MANAGEMENT
PLANNING COMMITTEE**

AGENDA

FEBRUARY 23, 1999

1:30 PM

1. Roll call
2. Approval of Agenda
3. Approval of the Minutes of the November 24, 1998 meeting
4. Reading of correspondence
5. Public Comments
6. Update on the importation and exportation of solid and the related agreements with other counties at this meeting and consideration of agreements.
7. Review of draft section of the plan update
8. Any unfinished business
9. Adjournment

PUBLIC NOTICE

The Mason County Solid Waste Management Planning Committee will meet on April 27, 1999 at 1:30 PM in the conference room located on the first floor of the Mason County Service Building.

Posted April 16, 1999 at 7:57 AM.

**MASON COUNTY SOLID WASTE MANAGEMENT
PLANNING COMMITTEE**

AGENDA

APRIL 27, 1999

1:30 PM

1. Roll call
2. Approval of Agenda
3. Approval of the Minutes of the February 23, 1999 meeting
4. Reading of correspondence
5. Public Comments
6. Review of plan update draft
7. Any unfinished business
8. Adjournment

PUBLIC NOTICE

The Mason County Solid Waste Management Planning Committee will meet on May 25, 1999 at 1:30 PM in the conference room located on the first floor of the Mason County Service Building.

Posted April 30, 1999 at 3:00 PM.

**MASON COUNTY SOLID WASTE MANAGEMENT
PLANNING COMMITTEE**

AGENDA

MAY 25, 1999

1:30 PM

1. Roll call
2. Approval of Agenda
3. Approval of the Minutes of the April 27, 1999 meeting
4. Reading of correspondence
5. Public Comments
6. Update on reciprocal agreements
7. Review of plan update draft
8. Review of the approval process for plan
9. Any unfinished business
10. Adjournment

PUBLIC NOTICE

The Mason County Solid Waste Management Planning Committee will meet on June 29, 1999 at 1:30 PM in the conference room located on the first floor of the Mason County Service Building.

Posted June 17, 1999 at 5:20 PM.

**MASON COUNTY SOLID WASTE MANAGEMENT
PLANNING COMMITTEE**

AGENDA

JUNE 29, 1999

1:30 PM

1. Roll call
2. Approval of Agenda
3. Approval of the Minutes of the May 25, 1999 meeting
4. Reading of correspondence
5. Public Comments
6. Review of plan update draft
7. Approval of plan update
8. Review of the approval process for plan
9. Any unfinished business
10. Adjournment

STATE OF MICHIGAN

SS

County of Mason

NOTICE OF

PUBLIC REVIEW AND COMMENT PERIOD

for the proposed update of the

MASON COUNTY SOLID WASTE MANAGEMENT PLAN

Notice is Hereby Given pursuant to Part 115 of the Natural Resources and Environmental Protection Act, being Act 451 of 1994, that the Mason County Solid Waste Management Planning Committee does hereby initiate a ninety day public review and comment period regarding a proposed update to the approved Mason County Solid Waste Management Plan.

Notice is Further Given that the proposed amendment will be available for copying and/or review and comment through September 30, 1999 at the office of the Mason County Administrator located at 304 E. Ludington Avenue, Ludington, Michigan weekdays during normal business hours. Written comments concerning the proposed update may be submitted to Fabian L. Knizacky, Mason County Administrator, 304 E. Ludington Avenue, Ludington, Michigan 49431.

Dated at Ludington, Michigan this 2nd day of July, 1999.

Fabian L. Knizacky
Mason County Administrator

Alan H. Nichols being first duly sworn, says that he is the business manager of the Ludington Daily News, a daily newspaper printed and circulated in said county of Mason, and that annexed hereto is a copy of a certain order taken from said newspaper, in which the order was published on the following dates, to wit:

July 2, 1999



(Business Manager)

Subscribed and sworn to before me this

2nd _____ day of July _____

A.D. 19 99



Notary Public for Mason County

Commission Expires _____

**MASON COUNTY SOLID WASTE MANAGEMENT
PLANNING COMMITTEE**

AGENDA

SEPTEMBER 30, 1999

7:30 PM

1. Welcome
2. Opening of Public Hearing
3. Reading of Correspondence
4. Public Comments
5. Closing of Public Hearing
6. Adjournment

Affidavit of Publication

STATE OF MICHIGAN

SS

County of Mason

**NOTICE OF
PUBLIC HEARING AND COMMENT PERIOD
for the proposed update of the
MASON COUNTY SOLID WASTE MANAGEMENT PLAN**

Notice is Hereby Given pursuant to Part 115 of the Natural Resources and Environmental Protection Act, being Act 451 of 1994, that the Mason County Solid Waste Management Planning Committee will hold a Public Hearing for the purpose of receiving comments on the proposed update to the approved Mason County Solid Waste Management Plan on Thursday, September 30, 1999 at the Mason County Courthouse, 304 E. Ludington Avenue, Ludington, Michigan beginning at 7:30 p.m.

Notice is Further Given that the proposed update will continue to be available for copying and/or review and comment through September 30, 1999 at the office of the Mason County Administrator located at 304 E. Ludington Avenue, Ludington, Michigan weekdays during normal business hours. Written comments concerning the proposed update may be submitted to Fabian L. Knizacky, Mason County Administrator, 304 E. Ludington Avenue, Ludington, Michigan 49431.

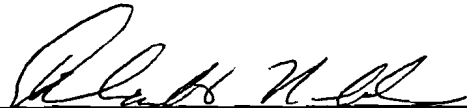
Dated at Ludington, Michigan this 26th day of August, 1999.

**Fabian L. Knizacky
Mason County Administrator**

Alan H. Nichols being first duly sworn, says that he is the business manager of the Ludington Daily News, a daily newspaper printed and circulated in said county of Mason, and that annexed hereto is a copy of a certain order taken from said newspaper, in which the order was published on the following dates, to wit:

August 26, 1999

August 27, 1999

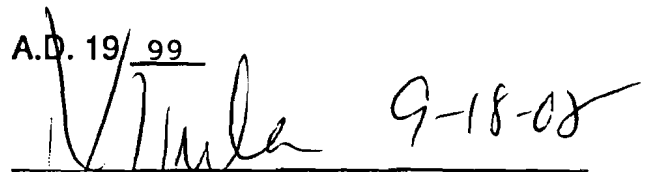


(Business Manager)

Subscribed and sworn to before me this

30th day of August

A.D. 1999



Notary Public for Mason County

Commission Expires _____

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STATE OF MICHIGAN

COUNTY OF MASON

PUBLIC HEARING and COMMENT PERIOD

for the proposed

MASON COUNTY SOLID WASTE MANAGEMENT PLAN

Mason County Courthouse
304 East Ludington Avenue
Ludington, Michigan, 49431

Thursday, September 30, 1999 - 7:30 p.m.

APPEARANCES:

County Administrator
From the Designated
Planning Agency:

Fabian Knizacky

Solid Waste Management
Planning Committee:

Norman Letsinger
John Kreinbrink
Ralph Hendrick
James Riffle
Tom Merchant
Larry Kivela
Jerome Rybicki
Gilbert Larsen

General Public:

Don Jesuale

Reported By:

Ms. Debra Morgan
CSR 5743, CER, RPR
Official Court Reporter
51st Judicial Circuit Ct
304 E. Ludington Avenue
Ludington, MI, 49431
(231) 845-0516

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Ludington, Michigan

(Proceedings convene on Thursday, September 30, 1999
at 7:30 p.m.)

MR. LETSINGER: I just want to welcome everybody. I want to express a few thanks to Mr. Fabian for his support, his timely carrying out the correspondence that we needed done, and bringing the documents together for us. I really appreciate that.

I wanted to thank our vice, chairman of vice, Mr. Riffle, for his kind leadership in my absence at times. And Tom, where is Tom? Tom, you have done a great job as far as acting, I guess you were the secretary, not just acting secretary. We didn't have a treasurer though.

MR. RYBICKI: Didn't trust us with one.

MR. LETSINGER: And I want to thank everybody for your promptness and attendance at our meetings. That really helped. And I really appreciate it.

And I guess it won't take long for opening remarks from the public. And you have some correspondence to share with us?

MR. KNIZACKY: Mr. Chairman, I think it would be in order to ask for a motion to open the public hearing.

MR. RYBICKI: I'll make a motion, Jerome Rybicki, I'll make a motion to go into public hearing.

MR. LETSINGER: Is there a second?

1 MR. MERCHANT: Tom Merchant, second.

2 MR. LETSINGER: Any discussion? All those in favor
3 of us opening our public hearing, let it be known with the
4 word "aye"?

5 MULTIPLE VOICES: Aye.

6 MR. LETSINGER: All right. Now we're official. You
7 have some correspondence for us?

8 MR. KNIZACKY: Yes, Mr. Chairman, I do. The first
9 piece of correspondence is from Pere Marquette Charter
10 Township.

11 "This letter is to advise you that the Pere
12 Marquette Charter Township Planning Commission has
13 reviewed the Draft Update to the Mason County Solid Waste
14 Management Plan and finds that it incorporates each of
15 those sections of this Township's Zoning Ordinance
16 requested in our letter of June 3rd, 1999."

17 "Since these sections address each of the
18 Commission's concerns regarding the siting and operation
19 of solid waste facilities in the Township, the Commission
20 considers the Draft Update submitted to Joanne Kelley for
21 review on July 2nd, 1999 acceptable as written."

22 "The Township appreciates the opportunity to review
23 and comment on the Draft Update. If you have any
24 questions regarding the Township's views or comments on
25 the update, please feel free to call on James Nordlund,

3

1 Jr. who oversaw the Commission's review. He can be
2 reached at 843-3485."

3 "Sincerely, Pere Marquette Charter Township,
4 Planning Commission. John Messer, secretary."

5 Our second piece of correspondence is from Washtenaw
6 County, Public Works Division, Susan Todd.

7 "Please be advised that Washtenaw County has
8 released its Draft Solid Waste Management Plan update for
9 the 90 day public review period. In the spirit of waste
10 prevention, I have included only the executive summary and
11 Import/Export section of the Plan for your review.
12 However, I would be happy to forward a full copy of the
13 Plan upon request."

14 "Written comments on the Draft Plan will be accepted
15 until November 9th, 1999 and should be sent to the
16 following: Washtenaw County Public Works; Attention Susan
17 Todd, Solid Waste Coordinator; P.O. Box 8645, Ann Arbor,
18 Michigan, 48107-8645."

19 "A public hearing is scheduled for Tuesday, October
20 19th, 1999 at seven o'clock p.m. at the Washtenaw
21 Intermediate School District Building, located at 1819
22 South Wagner Road in Ann Arbor. Anyone wishing to provide
23 verbal comments on the Draft Plan will be able to do so at
24 this hearing."

25 "Additional information on the Washtenaw County

1 Solid Waste Planning process can be found on the
2 Committee's web-site at:
3 <http://www.co.washtenaw.mi.us/depts/eis/swpc/eisswpc.htm>."

4 "Please contact me at 734-994-2398 if you have any
5 questions on the enclosed materials. Thank you."

6 And then attached to the letter is the executive
7 summary and the Import/Export section of the Plan, which I
8 will not read but is available for anybody who would like
9 to review it. The pertinent thing to our Plan is they do
10 list Mason County as an Export/Import County in their
11 Plan.

12 Next piece of correspondence is from Muskegon County,
13 Public Works Board.

14 "Muskegon County Solid Waste Planning Committee has
15 completed its Draft of the Muskegon County Solid Waste
16 Plan Update. Attached is the executive summary as well as
17 the pertinent information regarding Import and Export
18 authorizations."

19 "If you have comments or questions on this material
20 or if you desire a complete copy of the Draft Plan, please
21 feel free to contact me at 231-724-6525. Thank you. From
22 Robert Ribbens, the Environmental Planner."

23 Again the executive summary has been attached.
24 Import/Export authorizations is attached. And I'll not
25 read those but they are available for review.

1 The thing that is critical to our Plan is the fact
2 that Muskegon County has authorized Import/Export to Mason
3 County, which we have not done in our Plan at this point.
4 And we may want to consider adding that as we review the
5 public comments that we have received on the Plan.

6 Our next correspondence is from Emmet County Solid
7 Waste, Department of Public Works.

8 "The Emmet County Public Waste Planning Committee
9 has completed the Emmet County Solid Waste Management Plan
10 Update. The Plan has been locally approved and has been
11 submitted to the Michigan Department of Environmental
12 Quality for review. Enclosed please find the executive
13 summary as well as information regarding Import and Export
14 authorizations."

15 "Since Emmet County listed all Michigan Counties
16 under the Future Export Volume Authorization of Solid
17 Waste Contingents on New Facilities Being Sited, I wanted
18 to make sure that you had a copy of the critical elements
19 of our Plan. We have taken many steps towards providing
20 cost effective, comprehensive resource recovery programs
21 and built-in incentives to reduce waste and encourage
22 recycling. We look forward to networking with other
23 Counties who are taking measures to increase solid waste
24 disposal options, resource recovery programs, and other
25 proactive proposals to Solid Waste Management."

1 "If you are interested in receiving a complete copy
2 of Emmet County's Plan or if you have any questions on the
3 enclosed materials, please feel free to contact this
4 office at 231-348-0640. And that is from Elisa Seltzer."

5 And again, Emmet County is not listed in our County's
6 Plan for Import/Export authorizations. And they are
7 listing us in their Plan. And again, we may want to
8 consider adding those, them, to our Plan, excuse me.

9 And then our final piece of correspondence is from
10 Jeffery Woolstrum of the law offices of Honigman, Miller,
11 Schwartz, and Cohn.

12 "We are attorneys representing the Michigan Waste
13 Industries Association, 'MWIA'. MWIA is a Michigan
14 nonprofit corporation representing approximately 50
15 individual Michigan based solid waste companies, some of
16 which operate within Mason County. MWIA submits the
17 enclosed document 'Comments' for inclusion in the
18 administrative record of public comments on Mason County's
19 Solid Waste Management Plan Update, the 'Plan'."

20 "The Comments address MWIA's concerns with certain
21 provisions that may be contained in the Plan that exceed
22 Mason County's authority. Mason County does not have
23 unlimited authority to include provisions in a Solid Waste
24 Management Plan. Rather, Mason County only has such
25 powers that have been granted by the Michigan

1 Legislature."

2 "Although the Legislature authorizes the Mason
3 County to prepare a Solid Waste Management Plan under Part
4 115 of the Natural Resources and Environmental Protection
5 Act, 'Part 115' in parentheses, Mason County may only
6 include in the Plan those provisions that are expressly
7 identified in Part 115 or the administrative rules
8 promulgated by the Michigan Department of Environmental
9 Quality, 'MDEQ' under Part 115, 'the Part 115 Rules'. The
10 provisions discussed in the Comments are not clearly,
11 excuse me, the provisions discussed in the Comments are
12 clearly not authorized under Part 115 or the Part 115
13 Rules."

14 "To the extent the Plan contains any of the
15 provisions discussed in the Comments or incorporate such
16 provisions into the Plan by reference to other documents,
17 MWIA requests that Mason County either: One, revise the
18 Plan to eliminate the offending provisions; or two,
19 provide a written response to MWIA's concerns in the
20 Plan's appendix, as required by Rule 711(g) of Part 115
21 Rules, which sets forth the basis for retaining such
22 provisions in the Plan. Please feel free to call me with
23 any questions regarding MWIA's Comments."

24 And I will not read the Comments since there's
25 approximately 15, 20 pages of Comments. And for the

8

1 record, they are general Comments with no specific
2 references to Mason County's Plan, but general Comments
3 that this organization has sent to all Counties in Mason
4 -- all Counties in Michigan.

5 And that is the end of our correspondence, Mr.
6 Chairman.

7 MR. LETSINGER: Any questions?

8 MR. KREINBRINK: John Kreinbrink. I'm a member of
9 the Solid Waste Planning Committee. The Emmet County Plan
10 authorized Export to all Counties but they only list a few
11 Counties that they authorize Import from.

12 MR. KNIZACKY: Okay, and again that is an item that
13 we can discuss as we go through the public comments at the
14 meeting, to either amend the Plan or submit it to the
15 Board of Commissioners as drafted.

16 MR. KREINBRINK: Okay.

17 MR. LETSINGER: We can do that on the 5th.

18 MR. KNIZACKY: I guess another comment I should make
19 for the record is I got a call from the Michigan
20 Department of Environmental Quality, Mr. Johnson. And he
21 said that DEQ was going to have some written comments
22 related to the Plan that they would not have ready until
23 probably October 7th.

24 And he wanted me to be aware of that, that it was
25 coming up, but they weren't going to be able to meet our

1 September 30th deadline, and asked that we consider those
2 Comments before we made any decisions to approve and send
3 -- approve the Plan and send it forward to the County
4 Board.

5 And so I would recommend that this Committee cancel
6 your October 5th meeting and recommend that we come back
7 and meet on the 26th, which will give us opportunity to
8 have a transcript of this public hearing tonight available
9 to review when we need to decide on the final Plan that we
10 would be submitting to the Board. And then we would also
11 have the DEQ's written comments at that time.

12 So these, these items that have been brought out are
13 things that we, that we could, that we'll review and
14 discuss at the meeting on the 26th, if the Committee
15 agrees to meet on the 26th.

16 MR. MERCHANT: Tom Merchant, Mr. Chairman, I move
17 that we postpone our meeting from October 5th to October
18 26th at 1:30.

19 MR. RIFFLE: Jim Riffle in support.

20 MR. LETSINGER: Any questions or discussions? All
21 those in favor of changing our meeting date to the 26th of
22 October at 1:30 at the County Building --

23 MR. KNIZACKY: Mason County Service Building.

24 MR. LETSINGER: -- Service Building, let it be known
25 with the word "aye"?

1 MULTIPLE VOICES: Aye.

2 MR. LETSINGER: Opposed, same sign? Then we'll meet
3 on the 26th.

4 I hear no public comments.

5 MR. KNIZACKY: I think for the record we should state
6 that there are no members of the public.

7 MR. LETSINGER: Is there any other business that we
8 can take care of tonight or should we -- some of these
9 correspondence that we'd want to talk about, should that
10 wait until our next meeting?

11 MR. KNIZACKY: I'd recommend that we wait until that
12 meeting, yes.

13 MR. LETSINGER: If there's no other comments or
14 questions, I'd entertain a motion that we close the public
15 hearing.

16 MR. KREINBRINK: So moved.

17 MR. LETSINGER: A second?

18 MR. MERCHANT: Merchant, second.

19 MR. LETSINGER: All those in favor let it be known by
20 the word "aye"?

21 MULTIPLE VOICES: Aye.

22 MR. LETSINGER: Opposed, same sign? Motion carries
23 and we are adjourned. Then do I hear a separate motion
24 that we move to adjourn?

25 MR. KIVELA: I move to adjourn.

11

1 MR. LETSINGER: Second? Maybe it will die for lack
2 of a second.

3 MR. HENDRICK: Second.

4 MR. LETSINGER: All those in favor of adjourning let
5 it be known by the word "aye"?

6 MULTIPLE VOICES: Aye.

7 MR. LETSINGER: Motion carries. We do need the
8 signatures of everybody here, I suppose.

9 MR. KNIZACKY: Fabian Knizacky correcting a previous
10 statement; we have one member of the general public
11 present, rather than no general members, and his name is
12 Don Jesuale.

13 (Proceedings concluded at 7:50 p.m.)

14
15 STATE OF MICHIGAN)
16 COUNTY OF MASON)

17
18 I certify that this transcript consisting of 12 pages is a
19 complete, true, and correct transcript of the proceedings
20 taken at the public hearing on September 30, 1999.

21
22 October 14, 1999

Debra Morgan
DEBRA MORGAN, CSR 5743, RPR
Official Court Reporter
51st Judicial Circuit Court
Mason County Courthouse
Ludington, Michigan, 49431
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September 2, 1999

Mr. Fabrian L. Knizacky
Mason County Solid Waste Planning Committee
304 East Ludington Avenue
Ludington, MI 49431

RE: Mason County Solid Waste Management Plan Update

Dear Mr. Knizacky:

We are attorneys representing the Michigan Waste Industries Association ("MWIA"). MWIA is a Michigan nonprofit corporation representing approximately 50 individual Michigan-based solid waste companies, some of which operate within Mason County. MWIA submits the enclosed document ("Comments") for inclusion in the administrative record of public comments on Mason County's draft solid waste management plan update (the "Plan"). The Comments address MWIA's concerns with certain provisions that may be contained in the Plan that exceed Mason County's authority. Mason County does not have unlimited authority to include provisions in a solid waste management plan. Rather, Mason County only has such powers that have been granted by the Michigan Legislature. Although the Legislature authorized Mason County to prepare a solid waste management plan under Part 115 of the Natural Resources and Environmental Protection Act ("Part 115"), Mason County may only include in the Plan those provisions that are expressly identified in Part 115 or the administrative rules promulgated by the Michigan Department of Environmental Quality ("MDEQ") under Part 115 (the "Part 115 Rules"). The provisions discussed in the Comments are clearly not authorized under Part 115 or the Part 115 Rules.

To the extent the Plan contains any of the provisions discussed in the Comments, or incorporates such provisions into the Plan by reference to other documents, MWIA requests that Mason County either: (1) revise the Plan to eliminate the offending provisions; or (2) provide a written response to MWIA's concerns in the Plan's appendix, as required by Rule 711(g) of the Part 115 Rules, which sets forth the basis for retaining such provisions in the Plan. Feel free to call me with any questions regarding MWIA's Comments.

Sincerely,



Jeffrey L. Woolstrum

cc: Mr. Jim Sygo, Chief Waste Management Division, MDEQ
Mr. Terry Guerin, President -- MWIA

DET_BV183799.1

**MICHIGAN WASTE INDUSTRIES ASSOCIATION
GENERAL COMMENTS ON
COUNTY SOLID WASTE MANAGEMENT PLAN UPDATES**

Michigan Waste Industries Association ("MWIA") submits the following general comments on the contents of solid waste management plan updates that are currently being prepared by various counties under the authority of Part 115 of the Natural Resources and Environmental Protection Act ("Part 115") and the administrative rules promulgated thereunder (the "Part 115 Rules"). The discussion contained in this document is divided into two main sections. The first section discusses a county's limited authority to regulate matters in general, and the Legislature's narrow delegation of authority under Part 115 to include provisions in a solid waste management plan. In light of this narrow delegation of authority, the second section reviews eleven provisions that have appeared in one or more of the draft solid waste management plan updates. These eleven provisions generally relate to:

- disposal fees;
- disposal area operating criteria;
- mandated recycling;
- mandated data collection;
- preservation of more than 10 years of disposal capacity;
- disposal area volume caps;
- identification of specific disposal areas that may accept county waste;
- restrictions on special waste importation;
- enforcement activities by uncertified health departments;
- transporter licensing; and
- the severability of unlawful plan provisions without a formal plan amendment.

MWIA contends that these provisions exceed the limited authority that has been delegated to the counties under Part 115. Further, because the Michigan Department of Environmental Quality ("MDEQ") can only approve or disapprove a county solid waste management plan without conditions, MWIA contends that MDEQ cannot approve a plan that contains one or more of these offending provisions.

**I. PERMISSIBLE CONTENTS OF COUNTY
SOLID WASTE MANAGEMENT PLANS**

Although Part 115 authorizes counties, among other government entities, to prepare solid waste management plans, counties do not have carte blanche to include any provision related to solid waste in their plans. To the contrary, counties must work within the narrow confines of the Legislature's delegation of authority under Part 115. Thus, when reviewing a plan submitted by a county for final approval, MDEQ must *not* ask, "does Part 115 *prohibit* this particular provision." Rather, MDEQ must ask whether a specific section of Part 115 or the Part 115 Rules *clearly authorizes* each provision included in a solid waste management plan including each

provision incorporated by reference into the plan. If the answer to that question is not an unqualified "yes," MDEQ must deny approval of the plan.

**A. COUNTIES ONLY POSSESS
DELEGATED POWERS AND CANNOT
REGULATE FOR THE HEALTH AND
SAFETY OF THEIR RESIDENTS**

MWIA's comments on the contents of solid waste management plans are rooted in the fact that Michigan counties have delegated powers only and do not have any inherent power to regulate for purposes of the public's health, safety and general welfare. A "county has only such powers as have been granted to it by the Constitution or the state Legislature." *Alan v. Wayne Co.*, 388 Mich. 210, 245 (1972); *Berrien Co. Probate Judges v. Michigan Am. Fed'n of State, Co. & Mun. Employees Council 25*, 217 Mich. App. 205 (1996). Where counties have been clearly delegated such powers, the Michigan Constitution provides that the powers "shall be liberally construed in [the counties'] favor" and that "[p]owers granted to counties . . . shall include those fairly implied and not prohibited by this constitution." Const. 1963, art. VII, § 34. This constitutionally imposed rule of interpretation, however, is not an independent grant of authority. "As these provisions are not self-executing, the rights which they bestow and the duties which they impose may not be enforced without the aid of legislative enactment." *County Comm'r of Oakland Co. v. Oakland Co. Executive*, 98 Mich. App. 639, 646 (1980). Thus, counties have no inherent authority to include provisions in solid waste management plans without clear authorization by Legislature under Part 115.

The Office of the Attorney General ("AG") has consistently opined that counties are without authority to regulate matters that have not been clearly delegated by the Legislature. For example, the AG most recently opined that a non-charter county does not have authority to regulate the emissions from a municipal waste incinerator. OAG, 1998, No. 6,992 (Aug. 13, 1998). In that opinion, the AG first noted that townships, cities and villages *have* been granted authority by the Michigan Legislature to adopt ordinances for the purpose of protecting the public's health, safety and general welfare. Therefore, the AG opined that a township, city or village *may* adopt an air pollution control ordinance, provided that it is reasonably related to this purpose. For counties, however, the AG noted that, while chartered counties are expressly authorized by statute to adopt ordinances to abate air pollution, *the Legislature "has not seen fit to grant this power to noncharter counties."* *Id.*, slip op. p. 3 (emphasis added). The AG concluded that a "noncharter county is thus not authorized to adopt an air pollution ordinance." *Id.*; *see also*, OAG, 1969-1970, No. 4,696, p. 197 (Nov. 25, 1970) (county could not adopt air pollution control ordinance because no Michigan statute authorized a non-chartered county to abate air pollution and county ordinance would interfere with local affairs of villages and townships). This opinion is particularly significant with respect to solid waste management plans prepared under Part 115 because a municipal waste incinerator is a disposal area that must be consistent with such a plan. *See M.C.L. § 324.11529(4)*.

Other AG opinions express a similar narrow view of a county's authority to regulate in the absence of clear enabling legislation. In OAG, 1989-1990, No. 6,665, p. 401 (Nov. 15, 1990), the AG opined that counties lacked the general authority to regulate the location of cigarette vending machines because such a county ordinance would interfere with the authority of the villages and townships to regulate such matters. In OAG, 1979-1980, No. 5,617, p. 526 (Dec. 28, 1979), the AG opined that a county could not adopt the Michigan Vehicle Code as

an ordinance because “[t]he adoption of the motor vehicle code by a county would not be consistent with the legislative intention [to grant certain exclusive powers to the county road commission], would have the effect of contravening the general laws of the state, and of extending or increasing the powers or jurisdiction of a county board of commissioners.” In OAG, 1977-1978, No. 5,341, p. 556 (July 31, 1978), the AG opined that a county had no authority to operate a spay and neuter clinic for dogs and cats because “[n]o provision of the [Michigan Dog Law] specifically or impliedly authorizes a county to establish and maintain a spay and neuter clinic and cats are not mentioned in either the title or body of the act.” In OAG, 1977-1978, No. 5,304, p. 427 (April 27, 1978), the AG opined that a county board of commissioners could not establish a county police or security force because “the delegation of law enforcement responsibilities to any entity other than the sheriff would contravene general state laws [and] would tend to increase the powers, duties and jurisdiction of the county board of commissioners by transferring a measure of the sheriff’s authority to an organization responsible to the board and not to the sheriff.” Finally, in OAG, 1971-1972, No. 4,741, p. 82 (April 13, 1972), the AG opined that a county was without authority to adopt an ordinance banning the discharge of firearms in the county because there was “no express or implied power in the county which would support the adoption of [such] an ordinance.”

B. PART 115 ESTABLISHES THE SPECIFIC CONTENTS OF A SOLID WASTE MANAGEMENT PLAN AND COUNTIES CANNOT INCLUDE EXTRANEOUS PROVISIONS THAT WOULD EXPAND THEIR LIMITED DELEGATION OF AUTHORITY.

The contents of a solid waste management plan are limited to the provisions that are authorized in Part 115 and the Part 115 Rules, which are summarized below. A solid waste management plan must “encompass all municipalities within the county” and “take into consideration solid waste management plans in contiguous counties and existing local approved solid waste management plans as they relate to the county’s needs.” M.C.L. § 324.11533(2). A solid waste management plan must contain an evaluation of the “best available information” regarding recyclable materials within the planning area, including an evaluation of how the planning entity is meeting the state’s waste reduction and recycling goals, and, based on that analysis, either provide for recycling and composting of such materials or establish that recycling and composting are not necessary or feasible or is only necessary or feasible to a limited extent. M.C.L. § 324.11539(1)(a), (b) and (d). If the solid waste management plan proposes a recycling or composting program, the plan must contain details of the major features of that program, including ordinances or other measures that will ensure collection of the material; however, as discussed below, Part 115 does not operate as enabling legislation for such ordinances. M.C.L. § 324.11539(1)(c). A solid waste management plan must “identify specific sites for solid waste disposal areas for a 5-year period after approval of a plan or plan update,” and either identify specific sites for disposal areas for the remaining portion of the ten-year planning period, or include a process to annually certify the remaining solid waste disposal capacity available to the plan area and an interim siting mechanism¹ that becomes operative when the annual certification

¹An interim siting mechanism shall include both a process and a set of minimum siting criteria, both of which are not subject to interpretation or discretionary acts by the planning entity,

indicates that the available capacity is less than 66 months. M.C.L. § 324.11538(2). The solid waste management plan must “explicitly authorize” another county, state, or country to export solid waste into the county. M.C.L. § 324.11538(6).² In addition, “[w]ith regard to intercounty service within Michigan, the service must also be explicitly authorized in the exporting county’s solid waste management plan.” *Id.*

In addition to the plan content requirements expressly contained in Part 115, Section 11538(1) authorizes MDEQ to promulgate rules “for the development, form, and submission of initial solid waste management plans.” M.C.L. § 324.11538(1). Part 115 directs MDEQ to provide for the following in its administrative rules regarding solid waste management plans:

(a) The establishment of goals and objectives for prevention of adverse effects on the public health and on the environment resulting from improper solid waste collection, processing, or disposal including protection of surface and groundwater quality, air quality, and the land.

(b) An evaluation of waste problems by type and volume, including residential and commercial solid waste, hazardous waste, industrial sludges, pretreatment residues, municipal sewage sludge, air pollution control residue, and other wastes from industrial or municipal sources.

(c) An evaluation and selection of technically and economically feasible solid waste management options, which may include sanitary landfill, resource recovery systems, resource conservation, or a combination of options.

(d) An inventory and description of all existing facilities where solid waste is being treated, processed, or disposed of, including a summary of the deficiencies, if any, of the facilities in meeting current solid waste management needs.

(e) The encouragement and documentation as part of the plan, of all opportunities for participation and involvement of the public, all affected agencies and parties, and the private sector.

and which if met by an applicant submitting a disposal area proposal, will guarantee a finding of consistency with the plan.” M.C.L. § 324.11538(3).

²See also, M.C.L. § 324.11513; Mich. Admin. Code r. 299.4711(e)(iii)(C). In *Fort Gratiot Sanitary Landfill, Inc. v. Department of Natural Resources*, 504 U.S. 353 (1992), the United States Supreme Court invalidated Part 115’s flow control provisions to the extent they regulated the interstate flow of solid waste because such regulation violated the Commerce Clause of the United States Constitution.

(f) That the plan contain enforceable mechanisms for implementing the plan, including identification of the municipalities within the county responsible for the enforcement. This subdivision does not preclude the private sector's participation in providing solid waste management services consistent with the county plan.

(g) Current and projected population densities of each county and identification of population centers and centers of solid waste generation, including industrial wastes.

(h) That the plan area has, and will have during the plan period, access to a sufficient amount of available and suitable land, accessible to transportation media, to accommodate the development and operation of solid waste disposal areas, or resource recovery facilities provided for in the plan.

(i) That the solid waste disposal areas or resource recovery facilities provided for in the plan are capable of being developed and operated in compliance with state law and rules of the department pertaining to protection of the public health and the environment, considering the available land in the plan area, and the technical feasibility of, and economic costs associated with, the facilities.

(j) A timetable or schedule for implementing the county solid waste management plan.

M.C.L. § 324.11538(1)(a)-(j). MDEQ has promulgated such rules in Part 7 of the Part 115 Rules. Mich. Admin. Code r. 299.4701 *et seq.*

Rule 711 of the Part 115 Rules sets forth the general structure and the required contents of a county solid waste management plan. "To comply with the requirements of [Part 115,] . . . county solid waste management plans shall be in compliance with the following general format": (i) executive summary;³ (ii) introduction;⁴ (iii) data base;⁵ (iv) solid waste management system

³The executive summary must include an overview of the plan, the conclusions reached in the plan and the selected solid waste disposal alternatives. Mich. Admin. Code r. 299.4711(a).

⁴The introduction must establish the plan's goals and objectives for protecting the public health and the environment by properly collecting, transporting, processing, or disposing of solid waste, and by reducing the volume of the solid waste stream through resource recovery, including source reduction and source separation. Mich. Admin. Code r. 299.4711(b).

⁵The data base must include: (i) an inventory and description of the existing facilities serving the county's solid waste disposal needs; (ii) an evaluation of existing problems related to solid waste collection, management, processing, treatment, transportation, and disposal, by type and volume of solid waste; (iii) the current and projected population densities, centers of population, and centers of waste generation for five- and twenty-year periods; and (iv) the current and projected land

alternatives; (v) plan selection; (vi) management component; and (vii) documentation of public participation in the preparation of the plan.⁶ Mich. Admin. Code r. 299.4711(a)-(d). Under this general format, the operative portions of a solid waste management plan are contained in the solid waste management system alternatives, plan selection, and management component elements of the plan. The required contents of these three elements are discussed below.

First, each solid waste management system alternative developed in the plan must address the existing problems identified in the plan's data base related to solid waste collection, management, processing, treatment, transportation, and disposal and must address the following components: (i) resource conservation and recovery, including source reduction, source separation, energy savings, and markets for reusable materials; (ii) solid waste volume reduction; (iii) solid waste collection and transportation; (iv) sanitary landfills; (v) ultimate uses for disposal areas following final closure; and (vi) institutional arrangements, such as agreements or other organizational arrangements or structures, that will provide for the necessary solid waste collection, transportation, processing and disposal systems. Mich. Admin. Code r. 299.4711(d)(i)(A)-(H). In addition, the plan must evaluate public health, economic,⁷ environmental, siting, and energy impacts associated with each alternative. Mich. Admin. Code r. 299.4711(d)(ii).

Second, the plan must select the preferred solid waste management system alternative developed and evaluated in the plan. The selection must be based on "[a]n evaluation and ranking of proposed alternative systems" using factors that include: (i) technical and economic feasibility; (ii) access to necessary land and transportation networks; (iii) effects on energy usage, including the impacts of energy shortages; (iv) environmental impacts; and (v) public acceptability. Mich. Admin. Code r. 299.4711(e)(i)(A)-(G). The basis for the selection must be set forth in the plan, including a summary of the evaluation and ranking system. Mich. Admin. Code r. 299.4711(e)(ii)(A). The plan must state the advantages and disadvantages of the selected alternative based on the following factors: (i) public health; (ii) economics; (iii) environmental effects; (iv) energy use; and (v) disposal area siting problems. Mich. Admin. Code r. 299.4711(e)(ii)(B)(1)-(5). The selected alternative must "be capable of being developed and operated in compliance with state laws and rules of the Department pertaining to the protection of the public health and environment," include a timetable for implementing the plan, and be "consistent with and utilize population, waste generation, and other [available] planning information." Mich. Admin. Code r. 299.4711(e)(ii)(C)-(E). With respect to disposal areas, the selected alternative must "identify specific sites for solid waste disposal areas" for a five-year

development patterns and environmental conditions as related to solid waste management systems for five and twenty-year periods. Mich. Admin. Code r. 299.4711(c)(i)-(iv).

⁶The public participation in the preparation of the solid waste management plan must be documented by including in an appendix to the plan a record of attendance at the public hearing and the planning agency's responses to citizens' concerns and questions. Mich. Admin. Code r. 299.4711(g).

⁷The evaluation of the economic impacts must include an estimate of the capital, operational, and maintenance costs for each alternative system. Mich. Admin. Code r. 299.4711(d)(ii).

period following MDEQ approval of the plan and, “[i]f specific sites cannot be identified for the remainder of the 20-year period, the selected alternative shall include specific criteria that guarantee the siting of necessary solid waste disposal areas for the 20-year period subsequent to plan approval.” Mich. Admin. Code r. 299.4711(e)(iii)(A), (B). As of June 9, 1994, however, “a county that has a solid waste management plan that provides for siting of disposal areas to fulfill a 20-year capacity need through use of a siting mechanism, is only required to use its siting mechanisms to site capacity to meet a 10-year capacity need.” M.C.L. § 324.11537a.

Third, the “management component” element of a solid waste management plan must “identif[y] management responsibilities and institutional arrangements necessary for the implementation of technical alternatives.” Mich. Admin. Code r. 299.4711(f). The management component must contain the following: (i) “[a]n identification of the existing structure of persons, municipalities, counties, and state and federal agencies responsible for solid waste management, including planning, implementation, and enforcement”; (ii) an assessment of such persons' and governmental entities' technical, administrative, financial and legal capabilities to fulfill their responsibilities under the plan; (iii) “[a]n identification of gaps and problem areas in the existing management system which must be addressed to permit implementation of the plan”; and (iv) a “recommended management system for plan implementation.”⁸ Mich. Admin. Code r. 299.4711(f)(i)-(iii).

Solid waste management plans that contain provisions that have not been clearly authorized under the specific sections of Part 115 and the Part 115 Rules discussed above are unlawful. A plan containing such unlawful provisions cannot be approved by MDEQ.

II. MWIA'S COMMENTS ON COUNTY PLAN PROVISIONS

With the foregoing limitations on the specific contents of a solid waste management plan in mind, MWIA contends that the following provisions that are either contained expressly in a solid waste management plan, or that are contained elsewhere (*e.g.* ordinances, regulations or resolutions) but are incorporated by reference into a solid waste management plan, clearly exceed a county's authority under Part 115:

⁸The recommended management system must: (i) identify specific persons and governmental entities that are responsible for implementing and enforcing the plan, including the legal, technical, and financial capability of such persons and entities to fulfill their responsibilities; (ii) contain a process for "ensuring the ongoing involvement of and consultation with the regional solid waste management planning agency," and for "ensuring coordination with other related plans and programs within the planning area, including, but not limited to, land use plans, water quality plans, and air quality plans"; (iii) identify "necessary training and educational programs, including public education"; (iv) contain a "strategy for plan implementation, including the acceptance of responsibilities from all entities assigned a role within the management system"; and (v) identify "funding sources for entities assigned responsibilities under the plan." Mich. Admin. Code r. 299.4711(f)(iii)(A)-(F).

DISPOSAL FEES

Nothing in the Part 115 or Part 115 Rule provisions discussed above authorizes a county to *require* the payment or collection of fees as part of a solid waste management plan. At most, Rule 711(f)(iii)(F) authorizes the “management component” of a plan to “*recommend*” a “financial program that identifies funding sources.” Mich. Admin. Code r. 299.4711(f)(iii)(F). The underlying authority for such a funding program, however, cannot arise from the plan itself and must be found in some other enabling legislation.

Although the Michigan Court of Appeals has recently held that that Section 11520(1) of Part 115 authorized Saginaw County to adopt an *ordinance* that imposes a surcharge on the disposal of solid waste within the county, the court did not hold that such an ordinance may be included in a solid waste management plan or that a solid waste management plan may operate as the underlying authority for such a fee. *County of Saginaw v. Peoples Garbage Disposal, Inc.*, 232 Mich. App. 202 (1998). Indeed, the ordinance at issue in *County of Saginaw* was merely mentioned in the plan as a possible source of revenue and was adopted *after* MDEQ had approved the Saginaw County Solid Waste Management Plan. This distinction is significant because a disposal area that operates “contrary” to an approved solid waste management plan may be subject to an enforcement action under Part 115, which may include a cease and desist order. M.C.L. § 324.11519(2). Clearly, nothing in Part 115 indicates that a disposal area could be ordered to cease operations merely because it failed to pay a fee imposed by a local ordinance.

Moreover, the holding in *County of Saginaw* is inapplicable to counties that do not have certified health departments under Part 115. Section 11520(1) of Part 115, which the court relied upon for its holding, provides:

Fees collected by a *health officer* under this part shall be deposited with the city or county treasurer, who shall keep the deposits in a special fund designated for use in implementing this part. If there is an ordinance or charter provision that prohibits a health officer from maintaining a special fund, the fees shall be deposited and used in accordance with the ordinance or charter provision. Fees collected by the department under this part shall be credited to the general fund of the state.

M.C.L. § 324.11520(1) (emphasis added). A *health officer* is expressly defined as in Part 115 as “a full-time administrative officer of a *certified* city, county or district department of health.” M.C.L. § 324.11504(1) (emphasis added). A certified department of health must be “specifically delegated authority by [MDEQ] to perform designated activities prescribed by [Part 115].” M.C.L. § 324.11502(5). Part 2 (Certification of Local Health Departments) of the Part 115 Rules sets forth the specific requirements that a county health department must meet in order to become certified. Mich. Admin. Code r. 299.4201 *et seq.* Part 115 contains absolutely no authority for the collection of fees by a county that does not have a certified health department.

Further, even if Part 115 did authorize the inclusion of a fee provision in the solid waste management plan of a county with a certified health department (which it does not), MDEQ is prohibited from approving such a plan if the fee is really a disguised tax that violates the Headlee Amendment to the Michigan Constitution, which prohibits local units of government from imposing new taxes without voter approval. Mich. Const. art. 9, § 31; *See Bolt v. City of*

Lansing, 459 Mich. 152 (1998) (storm water fee invalidated under Headlee Amendment as disguised tax). MDEQ's act of approving a solid waste management plan is not merely a rubber stamp of a county's independent act. Rather, MDEQ's approval is the final step in establishing a statewide "cohesive scheme of uniform controls" over the disposal of solid waste. *Southeastern Oakland Co. Incinerator Auth. v. Avon Twp.*, 144 Mich. 39, 44 (1986). By approving a solid waste management plan, MDEQ incorporates that plan into the State solid waste management plan, M.C.L. § 324.11544(1), and, thereafter, a person may not "establish a disposal area" or "conduct, manage, maintain, or operate" a disposal area "contrary" to that approved plan. M.C.L. §§ 324.11509(1), .11512(2). Accordingly, MDEQ could not approve a solid waste management plan that imposes a fee on the disposal of solid waste *unless* MDEQ can demonstrate that the amount of any fee imposed will be reasonable related to the services provided to the persons paying the fee, and that the fee will not otherwise constitute a tax that requires voter approval.

MWIA also believes that, because the decision in *County of Saginaw* has been appealed to the Michigan Supreme Court, MDEQ should use its discretion and refrain from approving county solid waste management plans that contain fee provisions until this issue has been fully resolved. In this regard, MWIA notes that the appeals court's analysis of Section 11520(1) is clearly erroneous because it failed to consider the history and development of Part 115. Section 11520(1) was originally enacted as Section 18 of 1978 PA 641. M.C.L. § 299.418 (repealed, now Section 11520(1) of Part 115). In 1978, the only fees expressly contemplated in Act 641 were nominal disposal area operating license and construction permit application fees, which ranged between \$100 and \$700. Further, the language of Section 18 of Act 641 was nearly identical to Section 3(3) of the Garbage and Rubbish Disposal Act of 1965, which imposed similar nominal application fees and imposed very few obligations on counties with respect to the solid waste disposal. M.C.L. § 325.293(3) (repealed by Act 641). The Legislature's intent with respect to Section 11520(1) was to allow certified county health departments to retain and use these application fees solely for the purpose of processing the applications. The Legislature clearly did not intend for Section 11520(1) to operate as enabling legislation for counties to impose fees on the disposal of solid waste in order to fund an extensive county solid waste or recycling program.⁹ Accordingly, the appeals court's interpretation of Part 115 will likely be overturned.

OPERATING CRITERIA

A solid waste management plan may not contain disposal area operating criteria. Nothing in Part 115 or the Part 115 Rule provisions discussed above authorizes a solid waste management plan to regulate the day-to-day operations of a disposal area. To the contrary, Part 115 provides MDEQ with exclusive authority to regulate disposal area operation. Further, Michigan Appellate Court decisions have unanimously interpreted Part 115 as preempting all local regulation of disposal area operation. *County of Saginaw v. Peoples Garbage Disposal, Inc.*, 232 Mich. App. 202 (1998); *Southeastern Oakland County Incineration Authority v. Avon Township*, 144 Mich. App. 39 (1985); *Weber v. Orion Twp. Bldg. Inspector*, 149 Mich. App. 660

⁹ It is also noteworthy that, for the last three years, bills that would authorize county-imposed fees have been proposed in the Michigan Legislature.

(1986) ("all local regulations concerning the operation of a landfill are preempted"); *Dafter Township v. Reid*, 159 Mich. App. 149 (1987). Thus, disposal area operating criteria are not appropriate for a solid waste management plan.

MANDATED RECYCLING

A solid waste management plan may not mandate a quota on the volume of solid waste that is recycled within the planning area. Nothing in Part 115 or the Part 115 Rule provisions discussed above authorizes a county or any another planning agency to mandate such a quota system. Rather, Part 115 only authorizes a county to "propose a recycling or composting program" in a county plan. M.C.L. § 324.11539(1)(b). Such a program may only set recycling goals, rather than require absolute volume reductions. M.C.L. § 324.11539(1)(d). Further, a program that prohibits a disposal area from accepting a particular type of solid waste, such as waste that could be recycled, would directly conflict with Section 11516(5) of Part 115, which states that "[i]ssuance of an operating license by [MDEQ] authorizes the licensee to accept waste for disposal." M.C.L. §§ 324.11533(1), .11516(5) (emphasis added). Thus, any recycling program may, at most, be referenced as a goal.

MANDATED DATA COLLECTION

A solid waste management plan may not require the owner or operator of a disposal area to collect and report data concerning the volume of solid waste that is recycled or disposed of. Nothing in Part 115 or the Part 115 Rule provisions discussed above authorizes a county to impose such an on-going duty on disposal area owners and operators. Rather, Part 115 only requires that, at the time a plan is prepared, a county evaluate "how the planning entity is meeting the state's waste reduction goals." M.C.L. § 324.11539(1)(d).¹⁰ Further, Part 115 expressly delegates the authority to impose such data-collection duties solely to MDEQ and not to the counties. M.C.L. § 324.11507a. Thus, data collection requirements imposed in a solid waste management plan exceed the authority delegated under Part 115.

PRESERVATION OF MORE THAN 10 YEARS OF CAPACITY

A solid waste management plan should provide for the free flow of solid waste to the extent the plan otherwise demonstrates 10 years of disposal capacity. A county has no duty or obligation under Part 115 to demonstrate more than 10 years of disposal capacity. M.C.L. § 324.11538(2). Therefore, a county has no legitimate interest in preserving additional disposal capacity by restricting or prohibiting the importation of out-of-county waste. While the preservation of disposal capacity beyond the legitimate needs of a county may ultimately benefit county residents, the cost of providing that benefit is imposed solely on the disposal area owners and operators doing business within the county. Such a restriction on the use of a disposal area's air space constitutes a taking without compensation that violates the federal and Michigan constitutions.

¹⁰ A bill that would authorize such mandated data collection regarding recycled material was proposed in the Michigan Legislature last year.

VOLUME RESTRICTIONS

A solid waste management plan cannot restrict the volume of solid waste that may be accepted for disposal at a disposal area during any given time period. Such a restriction is not authorized by that Part 115 Part 115 Rule provisions discussed above and directly conflicts with Section 11516(5) of Part 115, which states that "[i]ssuance of an operating license by [MDEQ] authorizes the licensee to accept waste for disposal," without limitation. M.C.L. §§ 324.11533(1), .11516(5) (emphasis added). Such a volume cap would also constitute local regulation of disposal area operating criteria, which, as discussed above, is preempted by Part 115. *Southeastern Oakland County Incineration Authority v. Avon Township*, 144 Mich. App. 39 (1985); *Weber v. Orion Twp. Bldg. Inspector*, 149 Mich. App. 660 (1986) ("all local regulations concerning the operation of a landfill are preempted"); *Dafter Township v. Reid*, 159 Mich. App. 149 (1987). Moreover, such a restriction is an unconstitutional taking of property because it temporarily prevents the use of air space at the disposal area without compensating the owner or operator.

IDENTIFICATION OF SPECIFIC DISPOSAL AREAS

While a solid waste management plan may identify specific disposal areas that are available and willing to accept a county's waste in order to demonstrate that a county has 10 years of disposal capacity and that the plan does not require an interim siting mechanism under Section 11538(2) of Part 115, nothing in Part 115 authorizes a county to restrict the disposal of its solid waste to those specifically identified facilities. Rather, Sections 11513 and 11538(6) of Part 115 require that a plan authorize the "acceptance" of out-of-county waste and the disposal "service" provided either by or for another Michigan county; however, these sections do not require that such acceptance or service be limited to specifically identified disposal areas. M.C.L. §§ 324.11513, .11538(6). At most, a solid waste management plan may limit the disposal of a county's solid waste to specific *counties* that are explicitly authorized in the plan to accept the waste and to serve the county's disposal needs. Furthermore, to the extent that Rule 711(e)(iii)(C) of the Part 115 Rules can be interpreted as requiring the identification of specific disposal areas in solid waste management plans, MWIA contends that such a requirement exceeds MDEQ's authority under Part 115 and is unenforceable.

RESTRICTIONS ON SPECIAL WASTE

A solid waste management plan may not restrict the importation of specific types of solid waste. With the possible exception of municipal solid waste incinerator ash, nothing in Part 115 authorizes a solid waste management plan to distinguish between different types of solid waste. See M.C.L. §§ 324.11513, 11538(6). Therefore, to the extent a solid waste management plan authorizes solid waste to be imported from or exported to other counties, such authorization must extend to all forms of solid waste, as that term is defined in Part 115.

ENFORCEMENT BY UNCERTIFIED HEALTH DEPARTMENT

Part 115 and the Part 115 Rules only grant enforcement powers to county health departments that have been certified by MDEQ. For example, Part 115 expressly provides that a health officer of a certified health department may inspect a licensed disposal area at any reasonable time and may issue a cease and desist order, establish a schedule of closure or remedial action, or enter into a consent agreement with an owner or operator of a disposal area that violates the provisions of Part 115 or the Part 115 Rules. M.C.L. § 324.11516(3); Mich. Admin. Code r. 299.4203. In addition, a health officer of a certified health department may inspect a solid waste transporting unit that is being used to transport solid waste along a public road or is being used for the overnight storage of solid waste and may order the unit out of service if it does not comply with the requirements of Part 115 or the Part 115 Rules. M.C.L. §§ 324.11525, .11528(3); Mich. Admin. Code r. 299.4205. None of these enforcement and inspection powers, however, has been delegated to a county that does *not* have a certified health department. Therefore, to the extent a county does not have a certified health department, any enforcement and inspection provisions contained in a solid waste management plan are unlawful.

It should also be noted that several counties without certified health departments are attempting incorporating ordinances into their solid waste management plans under the guise of “enforceable mechanisms,” which regulate matters that have been delegated solely to a counties that have certified health departments. For example, at least one such ordinance includes a provision that would authorize a county without a certified health department to issue a “stop order” that prohibits the operation of a disposal area in violation of any provision of the ordinance. As discussed above, this authority has been delegated solely to counties with certified health departments. M.C.L. § 324.11516(3). Further, such a “stop order” would operate as a suspension of a license issued under Part 115 without any of the procedural protections provided under the Michigan Administrative Procedures Act. M.C.L. § 24.101 *et seq.*

It should also be noted that, although a solid waste management plan must include a “program and process” to assure that solid waste is properly collected and disposed of, Part 115’s planning provisions are not enabling legislation for county ordinances. M.C.L. § 324.11533(1). The “program and process” included in a solid waste management plan is only “enforceable” to the extent the plan incorporates “enforceable mechanisms” that are specifically authorized under enabling statutes other than Part 115. M.C.L. § 324.11538(1)(f). Although the Legislature contemplated that “enforceable mechanisms” may include ordinances,¹¹ Part 115 expressly states that it does not “validate or invalidate an ordinance adopted by a county” for purposes of assuring solid waste collection and disposal. M.C.L. § 324.11531(2). Thus, it is clear that the Legislature intended that Part 115 would not operate as enabling legislation for the adoption of such enforceable mechanisms. Such authority, if any, must be specifically delegated to counties in some other enabling legislation. Accordingly, to the extent a solid waste management plan incorporates a county ordinance that provides enforcement powers to a county, MDEQ may not approve such a

¹¹Part 115 defines the term “enforceable mechanism” as “a legal method whereby the state, a county, a municipality, or a person is authorized to take legal action to guarantee compliance with an approved county solid waste management plan. Enforceable mechanisms include contracts, intergovernmental agreements, laws, ordinances, rules and regulations.” M.C.L. § 324.11503(5).

plan until MDEQ has reviewed each provision of that ordinance and determined that it has been authorized by some enabling legislation and does not exceed a county's delegated authority under that legislation.

TRANSPORTER LICENSING

A solid waste management plan may not impose a licensing requirement on solid waste transporting units. Nothing in the Part 115 or Part 115 Rule provisions discussed above authorizes a county to implement such a licensing program. Rather, Part 115 imposes certain minimum requirements on solid waste transporting units. See M.C.L. § 324.11528(1); Mich. Admin. Code r. 299.4601(1). While MDEQ, a health officer of a certified health department, or a law enforcement officer may order a solid waste transporting unit out of service if it does not comply with these minimum requirements, Part 115 is expressly "intended to encourage the continuation of the private sector in the solid waste . . . transportation business *when in compliance with the minimum requirements of this part.*" M.C.L. §§ 324.11528(3), .11548(2) (emphasis added). Moreover, as discussed in the previous section, Part 115's planning provisions do not operate as enabling legislation for counties to adopt ordinances regulating the transportation of solid waste. It should be noted that the Legislature repealed Part 115's licensing requirement for solid waste transporting units in 1979. See 1979 Public Act 10. Therefore, licensing requirements applicable to solid waste transporting units exceed a county's authority and a solid waste management plan containing such requirements (or incorporating an ordinance containing such requirements) may not be approved by MDEQ.

SERVERABILITY CLAUSE

The provisions of a solid waste management plan are not severable. Part 115 does not authorize such piecemeal revisions to a solid waste management plan without following the specific plan amendment procedures set forth in Part 115 and the Part 115 Rules. *Michigan Waste Systems, Inc. v. Department of Natural Resources*, 157 Mich. App. 746 (1987). Rather, an amendment to a solid waste management plan to remove an unlawful provision must proceed through a specific five-step approval process. M.C.L. § 324.11535; Mich. Admin. Code r. 299.4708, .4709. To the extent any portion of a plan is declared unlawful or invalid and the county does not properly amend its plan to remove the offending provision, MDEQ must withdraw its approval of the entire plan and establish a schedule for the county to amend the plan in order to comply with Part 115. M.C.L. § 324.11537(2). Therefore, counties and MDEQ should make every effort at this time to ensure that each plan fully complies with Part 115.

DET_B172131.1



Mason County Board of Commissioners

Court House
304 E. Ludington Ave., Ludington, Michigan 49431
(231) 843-7999 • Fax (231) 843-1972

Thomas M. Posma
Chairman

October 28, 1999

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Vice Chairman

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County Clerk

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Charles Eberbach
District 7

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District 8

Robert A. Genson
District 9

Mr. Jeffrey L. Woolstrum
Honigman Miller Schwartz and Cohn
2290 First National Building
660 Woodward Avenue
Detroit, MI 48226-3583

Dear Mr. Woolstrum:

Thank you for your September 2 letter concerning the update of the Mason County Solid Waste Management Plan. We appreciate the time that was taken in reviewing our plan. Your letter does not make any reference to any particular section of our plan that you would like to see changed. Instead it refers to comments about solid waste management plans in general.

We would invite you to provide us with written comments that identify particular sections of the Mason County Solid Waste Management Plan that you would like to see addressed. That would allow us to give you a respond to sections that you find objectionable.

Thank you again for your assistance and input. Please feel free to contact me; if you have any questions concerning this letter.

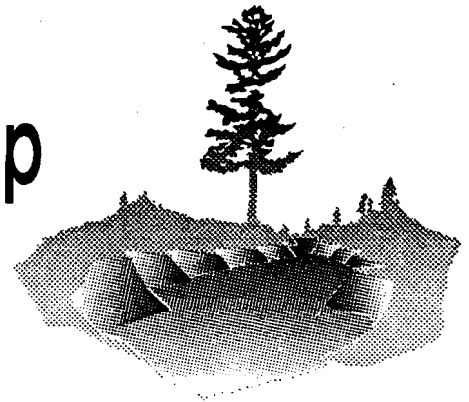
Sincerely,

Fabian L. Knizacky
Mason County Administrator

Cc: Solid Waste Management Planning Committee

Pere Marquette Charter Township

1699 South Pere Marquette Hwy. Ludington, Michigan 49431
(616) 845-1277 Fax (616) 843-3330



September 24, 1999

PC99-042

Fabian L. Knizacky
Mason County Administrator
Mason County Board of Commissioners
Court House
304 E. Ludington Ave.
Ludington, MI 49431

Dear Mr. Knizacky:

This letter is to advise you that the Pere Marquette Charter Township Planning Commission has reviewed the draft update to the Mason County Solid Waste Management Plan and finds that it incorporates each of those sections of this Township's Zoning Ordinance requested in our letter of June 3, 1999. Since these sections address each of the Commission's concerns regarding the siting and operation of solid waste facilities in the Township, the Commission considers the draft update submitted to Joanne Kelley for review on July 2, 1999 acceptable as written.

The Township appreciates the opportunity to review and comment on the draft update. If you have any questions regarding the Township's views or comments on the update, please feel free to call on James Nordlund, Jr. who oversaw the Commission's review. He can be reached at 843-3485.

Sincerely,
PERE MARQUETTE CHARTER TOWNSHIP
PLANNING COMMISSION


John Messer
Secretary

cc: J. Kelley
J. Nordlund, Jr.



Mason County Board of Commissioners

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304 E. Ludington Ave., Ludington, Michigan 49431
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October 28, 1999

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District 7

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Robert A. Genson
District 9

Mr. John Messer, Secretary
Pere Marquette Charter Township
Planning Commission
1699 South Pere Marquette Highway
Ludington, MI 49431

Dear Mr. Messer:

Thank you for your September 24 letter concerning the update of the Mason County Solid Waste Management Plan. We appreciate the time that was taken in reviewing our plan. Your participation in the process has enabled us to develop a better plan for the management of solid waste in Mason County.

We have also received written comments from the Michigan Department of Environmental Quality (DEQ). It was noted by DEQ that we only referenced the local ordinances instead of including them in their entirety. In a meeting with DEQ, we discussed the possibility of their reviewing the local ordinances to determine if they meet the DEQ's criteria for inclusion in an approvable plan. If the DEQ determines that any of the ordinances do not satisfy their criteria, than the County will either have to remove those ordinances from the plan or the DEQ will not approve the plan. The DEQ would then write a plan for Mason County. The Committee remains committed to including any of the local ordinances that will not compromise the approval of their plan.

Thank you again for your assistance and input. Please feel free to contact me, at (231) 843-7999, if you have any questions concerning this letter.

Sincerely,

Fabian L. Knizacky
Mason County Administrator

Cc: Commissioner Sanders
Larry Kivela



JOHN ENGLER, Governor

DEPARTMENT OF ENVIRONMENTAL QUALITY

"Better Service for a Better Environment"

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

INTERNET: www.deq.state.mi.us

RUSSELL J. HARDING, Director

REPLY TO:

WASTE MANAGEMENT DIVISION
PO BOX 30241
LANSING MI 48909-7741

October 7, 1999

Mr. Fabian Knizacky, Mason County Administrator
Mason County Administrators Office
304 East Ludington Avenue
Ludington, Michigan 49431

Dear Mr. Knizacky:

SUBJECT: Draft Mason County Solid Waste Management Plan Update

On July 6, 1999, the Department of Environmental Quality (DEQ) received a copy of the draft Mason County (County) Solid Waste Management Plan Update (Plan). Our review of the Plan has now been completed. I will address our comments in the same order as the topics appear in the Plan. In my opinion, this Plan is not approvable as written. The following areas of the County's Plan may be of cause for concern and may require revision or additional information:

| | |
|-------------------|--|
| Table of Contents | Please use only one page numbering system for the entire Plan. The use of both numbering systems listed here can be confusing. |
| Page 1 | Please be sure to indicate the date when the final Plan is submitted to the DEQ for approval. If different versions of the Plan are prepared during the update process, listing the date can ensure that discussions between the DEQ and the County are referring to the correct document. |
| Page 2 | What information is presented in the right column? There is no heading for that column. |
| Page 17 | The location information on this facility has not been provided. Is a map provided for this facility? This comment applies to Page 41 also. |
| Page 26 | The narrative states that the manner of evaluation and ranking of alternatives is described (as required by R 299.4711(e)(i)), but no such description occurs in this section. |
| Page 27 | Does alternative number three propose both a multi-county incinerator and a landfill owned by Mason County? |
| Page 30 | Was alternative number one chosen to be the selected system? It is not specified here. |

- Page 32 Although the Plan Format uses the terms "primary" and "contingency" as examples of authorized conditions, neither Part 115, Solid Waste Management (Part 115), of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA) or the promulgated rules, define these terms. If the County intends to use these terms, definitions of the terms should be included in the Plan.
- Page 36 The narrative at the top of the page refers to facility descriptions on Pages III-7-1 through III-7-5 but these are actually on Pages 37 through 45. (Also numbered III-7 through III-11(d)).
- Page 48 Most of the programs that were included on this page are not volume reduction techniques. Volume reduction involves the use of a process to reduce the physical size of the waste, such as, incineration. Other methods, such as compaction, baling, or shredding could also be used to reduce the waste volume. It is that type of process that should be listed on this page. If any parties such as haulers, industries, or transfer facilities use volume reduction techniques, that information should be listed here.
- Page 53 The narrative states that tables on Pages III-18, 19, 20, and on Pages III-21, 22, and 23 show data on recycling, composting, and source separation of hazardous materials, but that may not be the case if the numerical page numbering system is used for the Plan. If the pages of the Plan are numbered numerically, the reference should be to Pages 53 through 58.
- Page 64 The Plan has no authority over Type I hazardous waste landfills. This statement should be deleted.
- Item A.1. The planning period is 10 years, not 20, although the County may plan for 20 years if it desires. This also applies to Item A.5. This paragraph also refers to the Solid Waste Management Act, Act 641. References to Act 641 should be changed to Part 115 as Act 641 was repealed and recodified into the NREPA.
- Page 65 Part 115 allows the County to not use the siting mechanism as long as 66 months of capacity remains, however, if the Plan sets this threshold at twenty years, the siting process will be operable if capacity falls below that threshold instead of the 66 months threshold in Part 115.
- The reference to Act 641 in the third paragraph needs to be changed to Part 115.
- In item number two under the Primary Landfill Siting Criteria heading, references should be to a 100-year floodplain as defined by Rule 323.311 of the administrative rules of Part 31, Water Resources Protection, of Act 451 and wetlands regulated by Part 303, Wetlands Protection, of Act 451.
- Despite the fact that it was used in the example siting language in the Standard Plan Format, we have found that the term "sensitive environmental area" is not defined in Section 32301 of the NREPA. The language in that section defines only the term "environmental area." We suggest that the Plan refer to an "environmental area as defined in Part 323... ."

Page 66 References to a wellhead protection area should specify an area approved for the DEQ, not as defined by the Environmental Protection Agency. If available, a map of groundwater recharge areas should be included in the Plan.

Item three should refer to Part 361, Farmland and Open Space Preservation, of Act 451.

Item five refers to 20-year capacity, which the County may but is not required to do, as discussed above.

In item six, the Plan cannot require that the developer sign an agreement for the listed operational requirements as the County could stop a development arbitrarily by refusing to sign an agreement. However, the Plan can require a signed statement from the developer regarding compliance with the operational requirements.

Page 67 What is "sufficient capacity and suitable conditions" and who will decide? These terms should be deleted.

A minimum site size of 320 acres seems prohibitively large. How did the County derive this number and what is the justification for that large of a size requirement? This might be better dealt with in the secondary criteria.

Item nine could be interpreted as approval of all local ordinances and their applicability to solid waste disposal areas, including requiring special use permits. It is exactly this type of local control that the law intended not to allow. The last sentence is approvable. Except for the last sentence, the language in this item must be deleted.

We are unable to evaluate the effect of the requirements in item ten on the siting of landfills. The areas within the County for waste disposal uses that are specifically included in currently adopted master land use plans should be indicated on a map included as a part of the Plan.

Page 68 The references to Act 641 in items one and two of the secondary siting criteria need to be changed to Part 115. What will be the score of a site that meets some but not all of the conditions for a natural site? Zero?

Page 71 The references to Act 641 need to be changed to Part 115.

The point threshold for the secondary siting criteria seems prohibitively high to allow facilities to be sited. The only way for an applicant to meet it is to engage in activities that may exceed the scope of the disposal business, greatly exceed the required isolation distances, or to pay surcharges.

Page 72 The reference to Act 641 in item two under the Site Review Process heading needs to be changed to Part 115.

Page 73 In item a, inclusion of the DEQ's advisory analysis cannot be a requirement as the DEQ is not required to prepare an advisory analysis and may not do so for all proposed sites. In item g. the application fee of \$25,000.00 seems unreasonably high. The fees also appear to be open-ended and discretionary. This fee statement could allow the Board to assess any unreasonable fee and, thereby,

prohibit the siting of a new facility. A reasonable fee should either be established in the Plan or by the Board of Commissioners before any applications are received. The Plan should include a statement that any portion of the fee not used by the County in the site review process will be returned to the applicant.

Page 74 What is the purpose of items m through o? There is no specific criteria for these items. If these submittals are for informational purposes only, the Plan should state so.

The role of the TRC seems vague. The paragraph at the bottom of the page says the TRC will use "site evaluation methods described elsewhere in this section." In my review of the Plan, I could find no specific methods to be used by the TRC. The TRC's process should be completely specified. The Plan should also include statements limiting all review decisions of the TRC to the Plan's specific criteria.

Page 75 Who in the County is responsible for transmitting the County's decision to the DEQ?

Item five refers to the DEQ's permitting process and should be deleted.

The reference to Act 641 in item two under the Siting Criteria for Other Solid Waste Facilities heading needs to be changed to Part 115.

Recycling centers that accept only source separated materials are not solid waste facilities and are not subject to solid waste planning or the provisions of this Plan.

The reference to primary siting criteria at the bottom of the page needs to refer to the correct page numbers. Some of the landfill siting criteria seem far too strict for other types of facilities such as processing plants and transfer stations.

Page 76 The Plan should require a signed statement from the developer instead of an agreement regarding reporting of waste received.

The second paragraph needs to be rewritten as specific criteria. The "factors shall be considered" portion is subjective and not approvable.

The reference to page numbers under the Secondary Siting Criteria heading needs to refer to the correct page numbers. Use of the secondary criteria and point threshold for these disposal area types is inappropriate and probably will prohibit siting.

Pages 77
and 78

Section B is not necessary and is confusing. It should be deleted. If the County wants to allow some facilities without going through the siting process, the Plan should just say so. References to Act 641 on this page need to be changed to Part 115.

Page 79

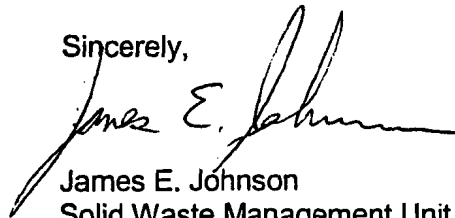
The Enforcement heading is supposed to contain a description of how the County will enforce the Plan. The Plan must identify some local authority that has the power to enforce the Plan, including the power to identify and bring suit for violations of the Plan.

- Page 83 In Item two, I am not sure how the listed ordinances affect solid waste disposal areas. Any local ordinance included in this section must be specifically identified and the language of the ordinance included. A description of how the ordinance applies to the Plan must also be included.
- Page 84 The Plan states that more than ten years of capacity has been identified, however, I could not find any calculation or specific demonstration of disposal capacity in the Plan to confirm that over ten years of capacity exists. Although the Plan includes documentation from several landfills to that effect, a calculation of available landfill capacity should be shown in relation to the County's solid waste production and total disposal needs.
- Page 130 What group, company, or governmental entity does each person on the Solid Waste Planning Committee (SWPC) represent? Only their names are listed.
- Page 132 These are not resolutions from a board of commissioners approving one municipality to be included in an adjacent county's Plan as the first paragraph states. Rather, they seem to concern entering into reciprocal agreements with other counties for waste flows. It is not necessary to include these resolutions in the Plan.

Neither Part 115 nor the Rules require establishment of reciprocal agreements. Requiring reciprocal agreements is strictly a local decision. I am not sure if the County requires signed reciprocal agreements as a condition to the import or export of waste from Mason County or not. The Plan should clearly state the County's position. If the County is going to require reciprocal agreements for export, the landfill capacity in other counties may not be counted until an agreement is signed.

I appreciate the efforts that you have shown in the development of the Plan and the degree to which the Plan Format has been utilized. This makes the document much easier to review. I hope that these comments are useful to Mason County as you attempt to develop an approvable Plan. If you have any further questions or comments, please feel free to contact me by telephone, or by e-mail, at johnsoj1@state.mi.us.

Sincerely,



James E. Johnson
Solid Waste Management Unit
Waste Management Division
517-373-4738

cc: Mr. Seth Phillips, DEQ
Mason County File



Mason County Board of Commissioners

Court House
304 E. Ludington Ave., Ludington, Michigan 49431
(231) 843-7999 • Fax (231) 843-1972

Thomas M. Posma
Chairman

December 22, 1999

Ronald E. Sanders
Vice Chairman

Ivan J. Anthony
County Clerk

Fabian L. Knizacky
Administrator

Harold Madden
District 1

Michael G. Schneider
District 2

John E. Henderson
District 3

James L. Pinkerton
District 4

Jerome Rybicki
District 5

Thomas M. Posma
District 6

Charles Eberbach
District 7

Ronald E. Sanders
District 8

Robert A. Genson
District 9

Mr. Stan Idziak
Solid Waste Management Unit
Solid Waste Program Section
Waste Management Division
Department of Environmental Quality
PO Box 30473
Lansing, MI 48909-7973

Dear Mr. Idziak:

Thank you for agreeing to review the responses of the Mason County Solid Waste Planning Committee to DEQ's comments on the draft of our Solid Waste Plan update. We have responded to those comments in the same order that they were provided:

The Table of Contents has been changed to include only a numerical numbering system for the entire Plan. (See Attached New Page)

Page 1 will reflect the date when the final Plan is submitted to the DEQ for approval.

Page 2 has been corrected to reflect a heading for the right column. (See Attached New Page)

Pages 17 and Page 41 have been changed to provide location information on this facility. (See Attached New Pages)

Page 26 has been changed to include the manner of evaluation and ranking of the alternatives. (See Attached New Page)

Page 27 has been changed to reflect that a multi-county incinerator was Alternative #4. (See Attached New Page)

Page 30 has been changed to specify that Alternative #1 is the selected system. (See Attached New Page)

Page 32 has been changed to provide a definition of the terms "primary" and "contingency: disposal. (See Attached New Page)

Page 2 - Mr. Stan Idziak

Page 36 has been changed to refer to pages 37 through 45. (See Attached New Page)

Page 48 has been changed to reflect only volume reduction techniques. (See Attached New Page)

Page 52 has been changed to refer to pages 53 through 58. (See Attached New Page)

Page 64 has been changed to eliminate references to Type I hazardous waste landfills. Item A.1 has been changed to reflect a ten year planning period and references to Act 641 have been changed Part 115. (See Attached New Page)

Page 65 has been changed to reflect the 66 months threshold for siting a landfill. References to Act 641 have been changed to Part 115, references related to floodplains and wetlands have been changed to the appropriate Rules. We have eliminated the word "sensitive" from the references to environmental areas. (See Attached New Page)

Page 66 has been changed to reflect that the wellhead protection area should specify as area approved by the DEQ not as defined by the EPA. Item three was changed to refer to Part 361, Farmland and Open Space Preservation, of 451. Item five was changed to a 66 months capacity. Item six was changed to require a signed statement from the developer regarding compliance with the operational requirements. (See Attached New Page)

Page 67 has been changed to reflect the deletion of the terms sufficient capacity and suitable conditions. Based on our conversations, on October 26 we left the minimum site size of 320 acres. Items nine and ten were changed to reflect the concerns expressed. (See Attached New Page)

Page 68 has been changed to include a zero score for facilities that do not meet all the conditions for a natural site. References to Act 641 have been changed to Part 115. (See Attached New Page)

Page 71 has been changed to increase the total point threshold from 110 points to 130 points making it easier for a site to be sited. This was accomplished by changing the scoring for secondary criteria numbers 2, 5, 6 and 7. References to Act 641 have been changed to Part 115. (See Attached New Pages)

Page 72 has been changed to reflect that references to Act 641 have been changed to Part 115. (See Attached New Page)

Page 73 item a. has been changed to state that an advisory analysis is required if available, item g. was changed to include a statement that any portion of the fee not used by the County in the site review process will be returned to the applicant. (See Attached New Page)

Page 74 has been changed to reflect our conversations on October 26 about items m through o and the TRC. (See Attached New Page)

Page 75 has been changed to reflect that the Designated Planning Agency is responsible for transmitting the County's decision to the DEQ. We agreed on October 26 that item five was for informational purposes and could remain. We have deleted recycling centers from the solid waste planning or the provisions of this Plan. The reference to primary siting criteria at the bottom of the page was changed to reflect the correct pages. We included new siting criteria for processing plants and transfer stations. References to Act 641 have been changed to Part 115. (See Attached New Page)

Page 76 has been changed to require a signed statement from the developer instead of an agreement regarding reporting of waste received. The second paragraph has been rewritten to delete the words "factors shall be considered" portion. The reference to page numbers under the Secondary Siting criteria heading has been changed to refer to the correct page numbers. The use of secondary criteria and point threshold has been eliminated from this section. (See Attached New Page)

Pages 77 and 78 have been changed as Section B has been deleted. (See Attached New Page)

Page 79 has been changed to reflect that the County Administrator will enforce the Plan. (See Attached New Page)

Page 83, item two, has been changed by deleting the reference to local ordinances. (See Attached New Page)

Page 84 has been changed to include a narrative on how the ten years of capacity has been identified. (See Attached New Page)

Page 130 has been changed to reflect the group, company or governmental entity that each person represents. (See Attached New Page)

Page 132 has been changed to eliminate resolutions relating to reciprocal agreements. (See Attached New Page)

Thank you again for your assistance. Please feel free to contact me, at (231) 843-7999, if you have any questions concerning this request.

Sincerely,



Fabian L. Knizacky
Mason County Administrator

PUBLIC NOTICE

The Mason County Solid Waste Management Planning Committee will meet on October 26, 1999 at 1:30 PM in the conference room located on the first floor of the Mason County Service Building.

**MASON COUNTY SOLID WASTE MANAGEMENT
PLANNING COMMITTEE**

AGENDA

OCTOBER 26, 1999

1:30 PM

1. Roll Call
2. Approval of Agenda
3. Approval of the June 29, 1999 minutes
4. Reading of correspondence
5. Public Comments
6. Consideration of comments received at the public hearing and during the comment period
7. Approval of the Mason County Solid Waste Management Plan and forwarding it to the County Board of Commissioners
8. Any other unfinished business
9. Adjournment

PUBLIC NOTICE

The Mason County Solid Waste Management Planning Committee will meet on November 30, 1999 at 1:30 PM in the conference room located on the first floor of the Mason County Service Building.

Posted November 19, 1999 at 1:35 PM.

**MASON COUNTY SOLID WASTE MANAGEMENT
PLANNING COMMITTEE**

AGENDA

NOVEMBER 30, 1999

1:30 PM

1. Roll Call
2. Approval of Agenda
3. Approval of the October 26, 1999 minutes
4. Reading of correspondence
5. Public Comments
6. Consideration of changes made to the Mason County Solid Waste Management Plan as a result of comments received at the public hearing and during the comment period
7. Approval of the Mason County Solid Waste Management Plan and forwarding it to the County Board of Commissioners
8. Any other unfinished business
9. Adjournment

PUBLIC NOTICE

The Mason County Solid Waste Management Planning Committee will meet on December 28, 1999 at 1:30 PM in the conference room located on the first floor of the Mason County Service Building.

Posted December 15, 1999 at 3:49 PM.

**MASON COUNTY SOLID WASTE MANAGEMENT
PLANNING COMMITTEE**

AGENDA

DECEMBER 28, 1999

1:30 PM

1. Roll Call
2. Approval of Agenda
3. Approval of the November 30, 1999 minutes
4. Reading of correspondence
5. Public Comments
6. Approval of the Mason County Solid Waste Management Plan and forwarding it to the County Board of Commissioners
7. Any other unfinished business
8. Adjournment

PUBLIC PARTICIPATION

PLANNING COMMITTEE APPOINTMENT PROCEDURE:

A notice was published in the Ludington Daily News advertising vacancies on a number of county boards and committees including the Mason County Solid Waste Committee for candidates. Current members of the Solid Waste Committee were also contacted to determine interest for re-appointment. The appointments of all fourteen members were made at the December 10, 1997 meeting of the Mason County Board of Commissioners.

After the resignation of one general public representative, the vacancy was filled at the May 13, 1998 meeting of the Mason County Board of Commissioners.

One general public representative Steve McVicker was replaced by Donald Jesuale at the December 8, 1999 meeting of the Mason County Board of Commissioners effective on January 1, 2000.

All of the appointments were made at public meetings and the general public was allowed to comment at both meetings.

PUBLIC NOTICE

A CHANCE TO GET INVOLVED

The Board of Commissioners, of the County of Mason are seeking Mason County residents who are interested in serving the community by being appointed to one of the Commissions or Boards listed below:

| Number of Openings | Commission or Board | Term Beginning | Term Ending |
|-----------------------|--|-------------------|----------------|
| () 2 | Cooperative Extension Board | 1-1-98 | 12-31-00 |
| () 1 | Mason County Planning Commission | 1-1-98 | 12-31-00 |
| () 1 | Mason County Zoning Commission | 1-1-98 | 12-31-00 |
| () 1 | Mason County Zoning Board of Appeals | 1-1-98 | 12-31-00 |
| () 2 | Parks and Recreation Commission | 1-1-98 | 12-31-00 |
| () 3 | Mason County Solid Waste Planning Com. | 1-1-98 | 12-31-99 |
| () 1 | Mason County Department of Public Works | 1-1-98 | 12-31-00 |
| () 1 | Mason County Economic Development Corporation Board | 1-1-98 | 12-31-03 |
| () 2 | Mason County Building Authority | 1-1-98 | 04-30-01 |
| () 1 | Mason County District Library | 1-1-98 | 12-31-99 |
| () 2 | Mason County District Library | 1-1-98 | 12-31-01 |

If you are interested in serving on one of these Board or Commissions, mark in the appropriate box, clip this ad and enclose your letter of application indicating which committee you wish to serve on. These appointments will be made between now and January 1st.

Please mail to the office of Fabian L. Knizacky, Mason County Administrator, 304 E. Ludington Avenue, Ludington, MI. 490431 before November 13, 1997.

Fabian L. Knizacky
Mason County Administrator

PUBLIC PARTICIPATION

PLANNING COMMITTEE

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

Four representatives of the solid waste management industry:

1. Todd Harland representing Manistee County Landfill
2. Wesley Hasenbank representing Mason County Department of Public Works
3. Edward Jabrocki representing Waste Reduction Systems
4. John Kreinbrink representing Mason County Department of Public Works

One representative from an industrial waste generator:

1. Tom Merchant representing Great Lakes Casting Corporation.

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

1. Larry Kivela representing AFFEW (A Few Friends for the Environment of the World and their Children)
2. Norm Letsinger representing Windy Hill Farms Composting.

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

1. Jerome Rybicki is a Mason County Commissioner.

One representative from township government:

1. Jim Riffle is the Custer Township Supervisor.

One representative from city government:

1. Gilbert Larsen is a member of the Ludington City Council.

One representative from the regional solid waste planning agency:

1. Charles Eberbach is a member of the West Michigan Shoreline Regional Commission.

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

1. Laude Hartrum is a Mason County resident.
2. Duane Jorgensen (Resigned) and Ralph Hendricks (appointed May 13, 1998) are Mason County residents.
3. Steve McVicker (Replaced) and Donald Jesuale (appointed December 8, 1999 for a term beginning January 1, 2000) are Mason County residents.

ATTACHMENTS

APPENDIX D

Plan Implementation Strategy

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

The County of Mason will utilize current recycling, composting and solid waste facilities. The Mason County Solid Waste Management Committee and the Designated Planning Agency will oversee the review and implementation of this Plan. The Mason County Solid Waste Management Committee and the Designated Planning Agency will enforce the siting criteria.

ATTACHMENTS

Attachment D-2 is not applicable.

D-2

ATTACHMENTS

Listed Capacity

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

Manistee

County Landfill

May 6, 1999

Mr. Fabian Knizacky
Mason County Board of Commissioners
304 E. Ludington Ave.
Ludington, MI 49431

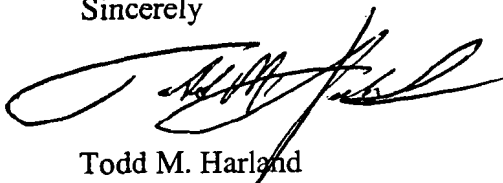
Dear Mr. Knizacky

Mason County is updating the Mason County *Solid Waste Plan*. In this *Plan* the DEQ requires all landfills listed in the *Plan* to provide a letter of available capacity and the landfill's willingness to service Mason County's solid waste disposal needs. The following statement would be adequate to meet the DEQ requirements:

The Manistee County Landfill, Inc., currently has 12 years capacity and is willing to service Mason County's solid waste disposal needs.

Thank you for your time and efforts in this matter.

Sincerely



Todd M. Harland
General Manager

lv

- Demolition Engineers
- Asbestos Abatement
- Salvaged Building Materials
- Excavating & Underground Services
- Concrete Recycling



- Landfill Operation
- Dumpster Service
- Commercial & Residential Waste Service
- Portable Toilet Service
- Land Development

June 2, 1999

Andrew C. Vredenburg
General Counsel

Mr. Fabian L. Knizacky
Mason County Administrator
Mason County Board of Commissioners
304 East Ludington Avenue
Ludington, Michigan 49431

Dear Knizacky:

I am writing in response to your May 3, 1999 letter to Mr. Doug Carson, Pitsch Companies Sanitary Division. Mr. Carson is no longer employed with Pitsch Companies. I have been asked to respond to your letter in his absence.

The purpose of this letter is document that Mason County has access to the Pitsch Sanitary Landfill. Currently Pitsch Sanitary Landfill has capacity to accept some waste from Mason County and further, Pitsch Sanitary Landfill is in the process of obtaining a construction permit to construct a ten (10) acre cell which will provide enough capacity to accept waste from Mason County.

If there is additional information you would like from Pitsch Sanitary Landfill, please do not hesitate to contact me at (616) 363-4895 or at the address below in Grand Rapids, Michigan.

Very truly yours,

A handwritten signature in black ink, appearing to read "Andrew C. Vredenburg", is written over the typed name below.

Andrew C. Vredenburg

ACV:rd

HOME OFFICE:
675 Richmond, N.W., Grand Rapids, MI 49504
Telephone: (616) 363-4895
FAX: (616) 363-5585

181

SANITARY DIVISION:
7905 Johnson Rd., Belding, MI 48809
Telephone: (616) 794-3050
FAX: (616) 794-1769



AUTUMN HILLS RECYCLING & DISPOSAL FACILITY
A WASTE MANAGEMENT COMPANY

700 56th Avenue
Zeeland, MI 49464
(616) 688-5777
(616) 688-5781 Fax

May 19, 1999

Fabian L. Knizacky
Mason County Administrator
304 E. Ludington Ave.
Ludington, MI 49431

Dear Mr. Knizacky;

This letter is follow-up to your request dated 5-3-99 concerning Autumn Hills RDF.

Two items should be noted. First, the Ottawa County Solid Waste Plan does include Mason County. Secondly, Autumn Hills RDF can and will accept waste from Mason County. Autumn Hills currently disposes of approximately 600,000 tons of solid waste per year. At that current rate Autumn Hills has capacity in excess of 20 years.

We look forward to serving Mason County.

Sincerely,

A handwritten signature in black ink, appearing to read 'Randy Dozeman'. The signature is written over a large, empty oval shape that serves as a placeholder for a stamp or seal. The signature is written in a cursive style with some loops and a long horizontal stroke at the end.

Randy Dozeman
District Manager

Ottawa County Farms Landfill

May 25, 1999

To Whom It May Concern:

The Ottawa County Farms Landfill will accept 100% of Mason County's Type II/III Waste for disposal.

Sincerely,

OTTAWA COUNTY FARMS LANDFILL



Robert L. Carr
General Manager

RLC/ddm



May 21, 1999

Mr. Fabian L. Knizacky
Mason County Administrator
Court House
304 E. Ludington Ave.
Ludington, MI 49431

RE: County Solid Waste Management Plan

Dear Mr. Knizacky:

This letter is being sent to you in response to your correspondence dated May 3, 1999. In your letter, you requested that BFI Arbor Hills provide a letter to document available capacity to provide disposal services for waste generated by Mason County.

At this time, BFI Arbor Hills Landfill has 16.4 years of disposal capacity remaining. Mason county is identified on the MDEQ's Import/Export Authorization List as a county that Washtenaw County is agreeable to accepting waste from. As such, BFI is comfortable providing you with this letter stating that we would be able to allow access to our Arbor Hills Landfill should Mason County require out-of-county disposal.

You will also find enclosed a copy of our most current landfill license as issued by the MDEQ. Please feel free to contact me should you have any comments or concerns with regard to this response.

Sincerely,

A handwritten signature in black ink, appearing to read "Kathleen A. Klein".

Kathleen A. Klein
Public Sector Representative

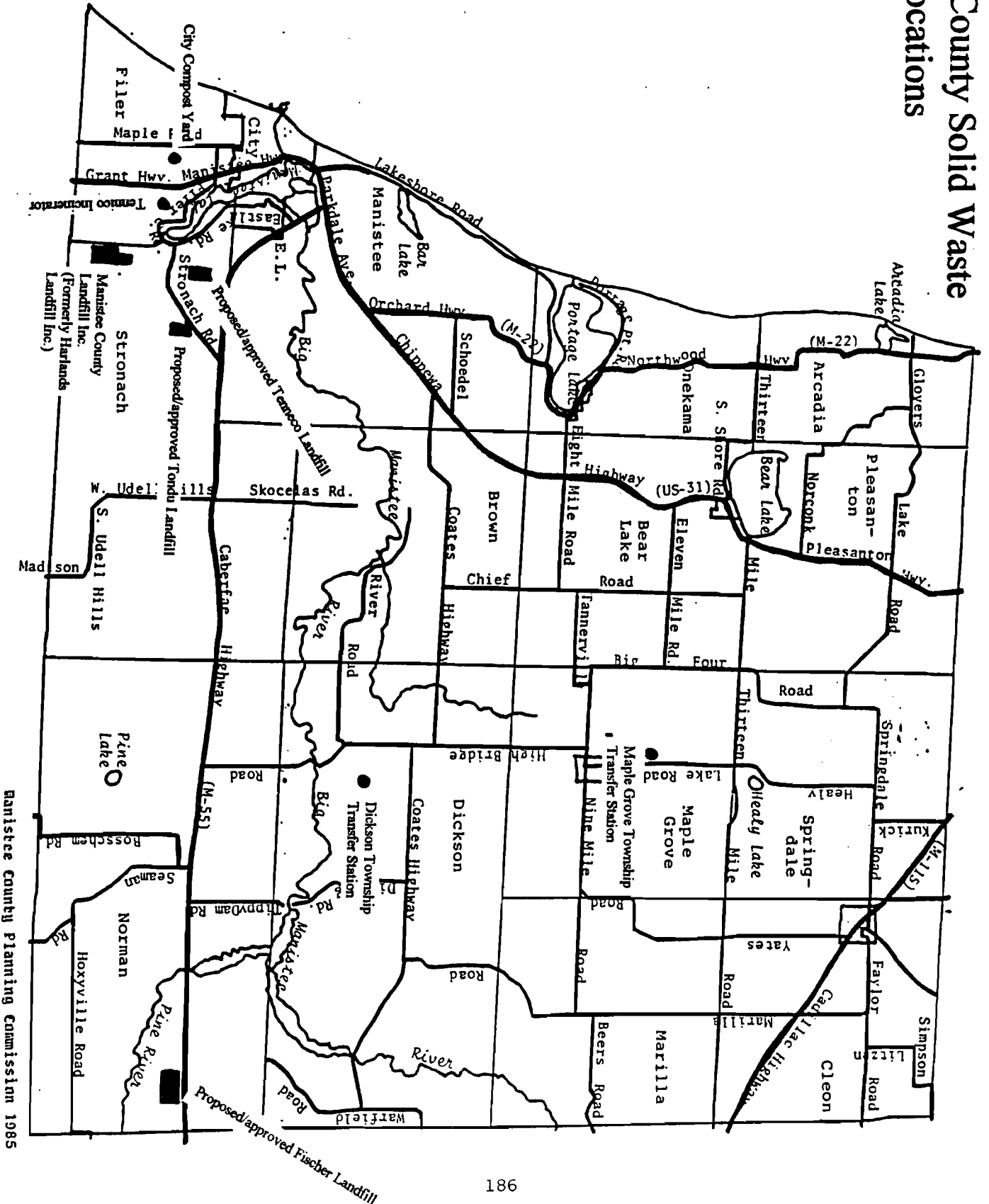
cc: John Myers, D.V.P.

ATTACHMENTS

Maps

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

Manistee County Solid Waste Facility Locations



Manistee County Planning Commission 1985



Michigan Department of Environmental Quality
Waste Management Division

SOLID WASTE DISPOSAL AREA OPERATING LICENSE

This license is issued under the provisions of Part 115 Solid Waste Management of the Natural Resources and Environmental Protection Act, 1994 PA 451, MCL 324.11501 et seq. (Part 115), to authorize the operation of the solid waste disposal area (Facility) in the State of Michigan. This license does not obviate the necessity of obtaining other clearances and permits as may be required by state law.

FACILITY NAME: Pitsch Sanitary Landfill

GRANTED TO: Pitsch Sanitary Landfill, Inc.

TYPE OF FACILITY: Type II Landfill

FACILITY ID: 34-000016

COUNTY: Ionia

LICENSE NO. 8456

ISSUE DATE: May 22, 1997

EXPIRATION DATE: May 22, 1999

FACILITY DESCRIPTION: The Pitsch Sanitary Landfill consists of 78.44 acres located in the N 1/2 of the NE 1/4 of Section 7, T8N, R7W, Orleans Township, Ionia County, Michigan, as identified in Attachment A and fully described in this license.

AREA AUTHORIZED FOR DISPOSAL OF SOLID WASTE: Phases III and IV

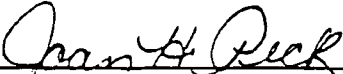
RESPONSIBLE PARTY TO CONTACT: Mr. Gary Pitsch, Vice President
Pitsch Sanitary Landfill, Inc.
675 Richmond, N.W.
Grand Rapids, Michigan 49504
616-363-4895

FIRST OPERATING LICENSE: This License No. 8456 is the first license issued for Phase IV.

RENEWAL OPERATING LICENSE: This License No. 8456 supersedes and replaces Solid Waste Disposal Area License No. 8061 issued to Pitsch Wrecking Company on April 12, 1993, as it pertains to Phases I through III

This license is subject to revocation by the Director of the Michigan Department of Environmental Quality (Director) if the Director finds that the disposal area is not being constructed or operated in accordance with the approved plans, the conditions of a permit or license, this act, or the rules promulgated under this act. Failure to comply with the terms and provisions of this license may result in legal action leading to civil and/or criminal penalties as stipulated in Part 115. This license shall be available through the licensee during the entire effective date and remains the property of the Director.

THIS LICENSE IS NOT TRANSFERABLE.


Joan H. Peck, Acting Chief, Solid Waste Program Section
Waste Management Division



RESOURCE RECOVERY PROJECT OF IONIA COUNTY

Minutes: Site Review Board -- Pitsch Landfill Expansion

November 20, 1997, 3:30 PM

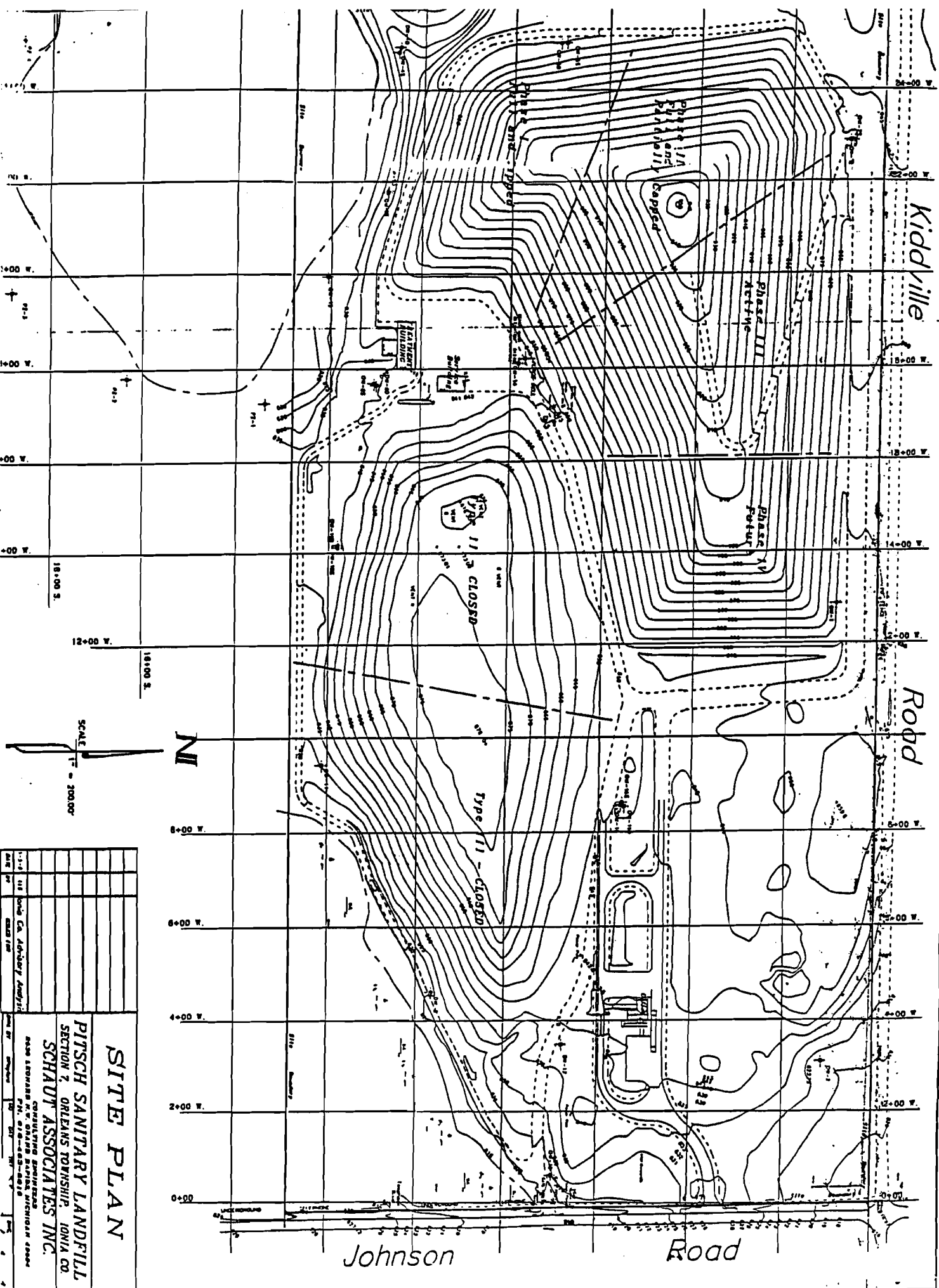
Members Present: Robert Dunton, Gary Pitsch, Paul Lewis, Joel Noe, Ray Greene

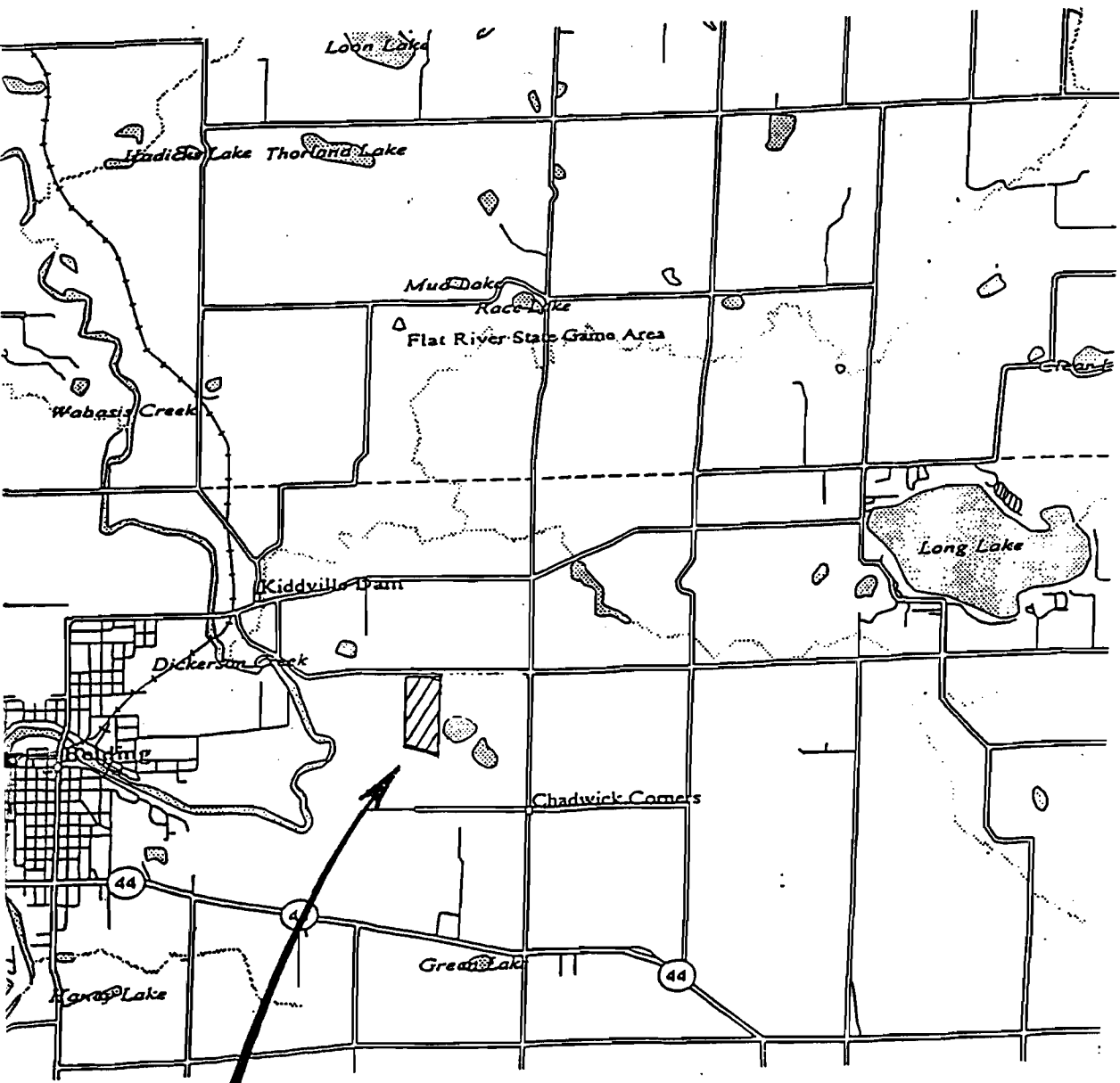
Members Absent: Phil Wilson

Others Present: Don Lehman, Solid Waste Coordinator

1. Gary Pitsch gave the SRB a 40 minute tour of the landfill facility in Orleans Township.
2. The Board returned to the conference room at the landfill office and reviewed the Pitsch expansion proposal and the County's SWMP siting criteria.
3. The following issues of concern were discussed.
 - Trees along Johnson (especially on east side) are a concern when Johnson is upgraded to all-season capacity. The preservation of these trees should be a very high priority.
 - Concerns about Pitsch owned ponds on the east side of Johnson Road. Possibility of posting and/or fencing due to safety concerns was discussed.
 - Private wells and contaminates.
 - How is waste monitored that is disposed of in the landfill. (Regional DEQ office, 1-2 times per month) Only non-hazardous waste and non-hazardous soils are permitted to be disposed of in the landfill.
4. After comparing the Pitsch proposal and the siting criteria, the SRB voted 4-0 that the proposal is consistent with the SWMP's criteria.

Meeting adjourned at 5:50 PM.

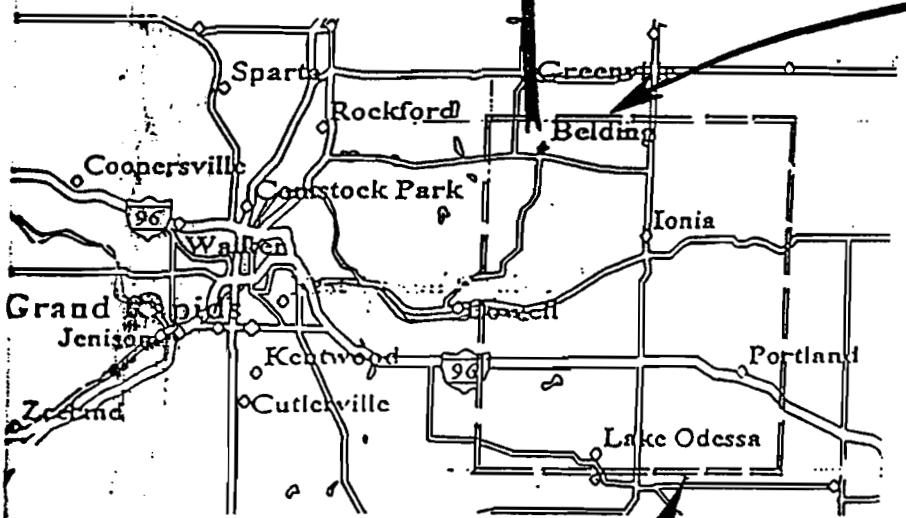
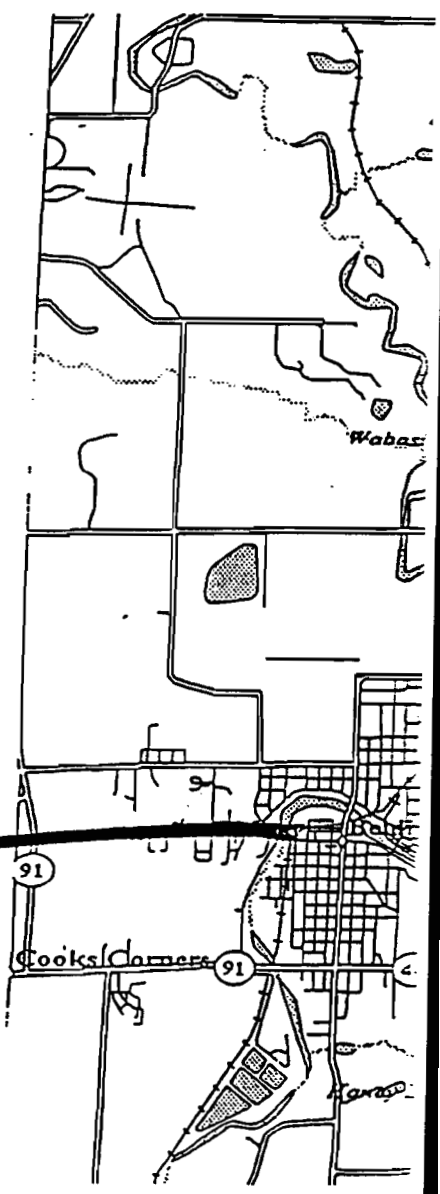
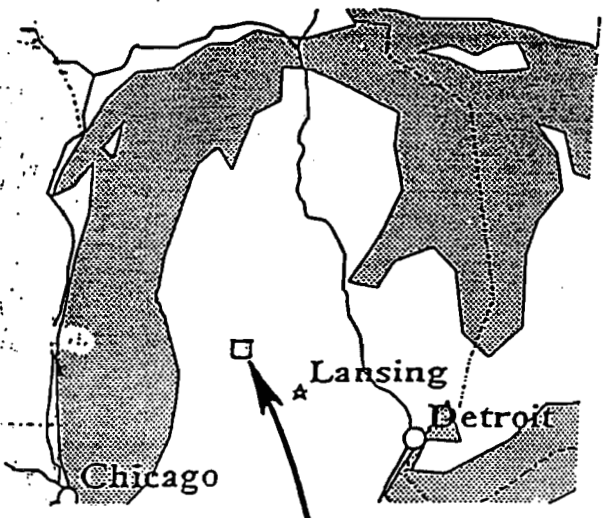




Sanitary Landfill

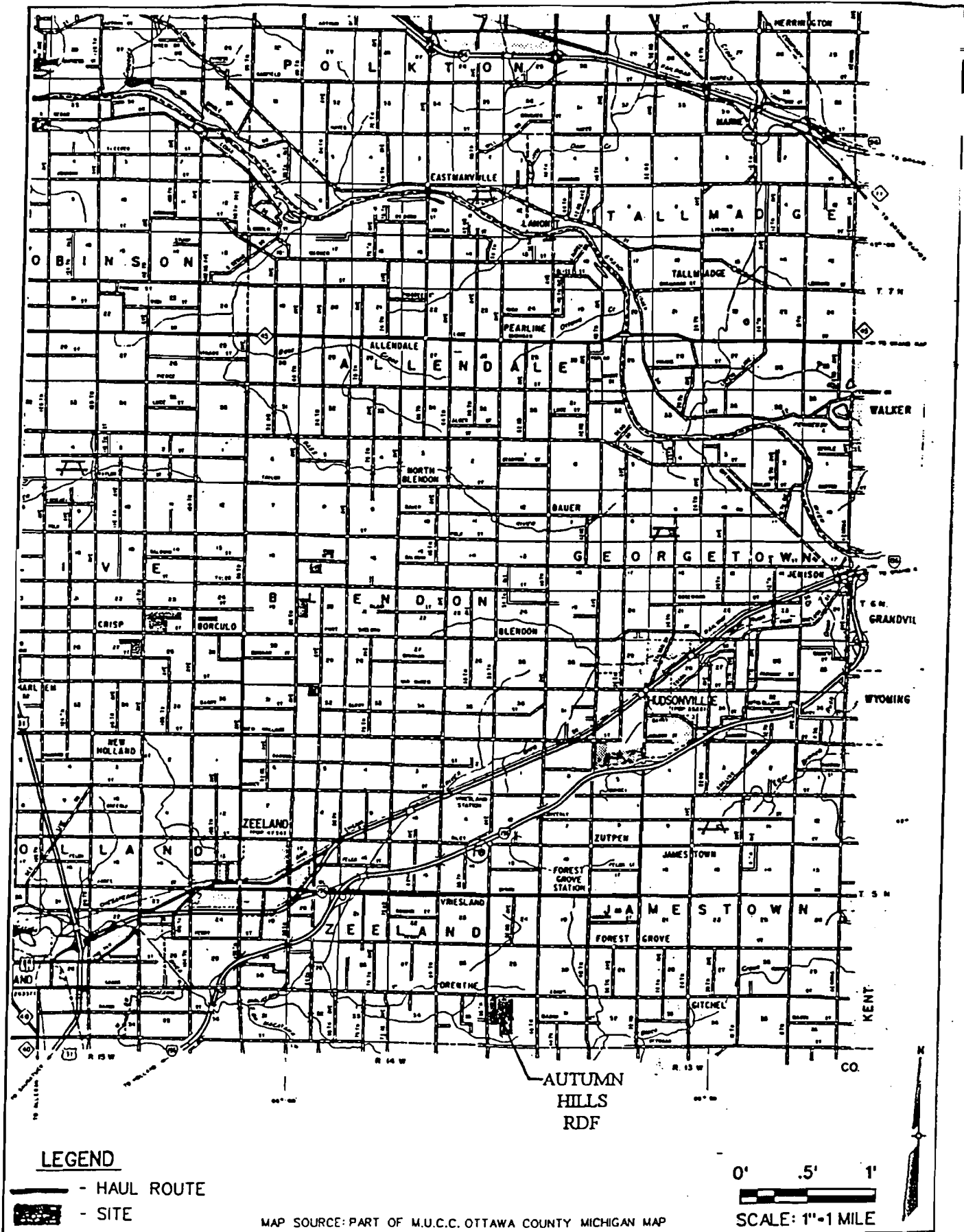
Figure 1

| |
|--|
| Regional Location Map |
| Pitsch Sanitary Landfill Kiddville Road Ionia County Bellevue, Michigan |
| Aqua-Tech Consultants, Inc. 1336 Scribner NW Grand Rapids, MI 49504 |



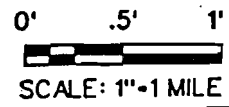
Pitsch Sanitar

Ionia County



LEGEND

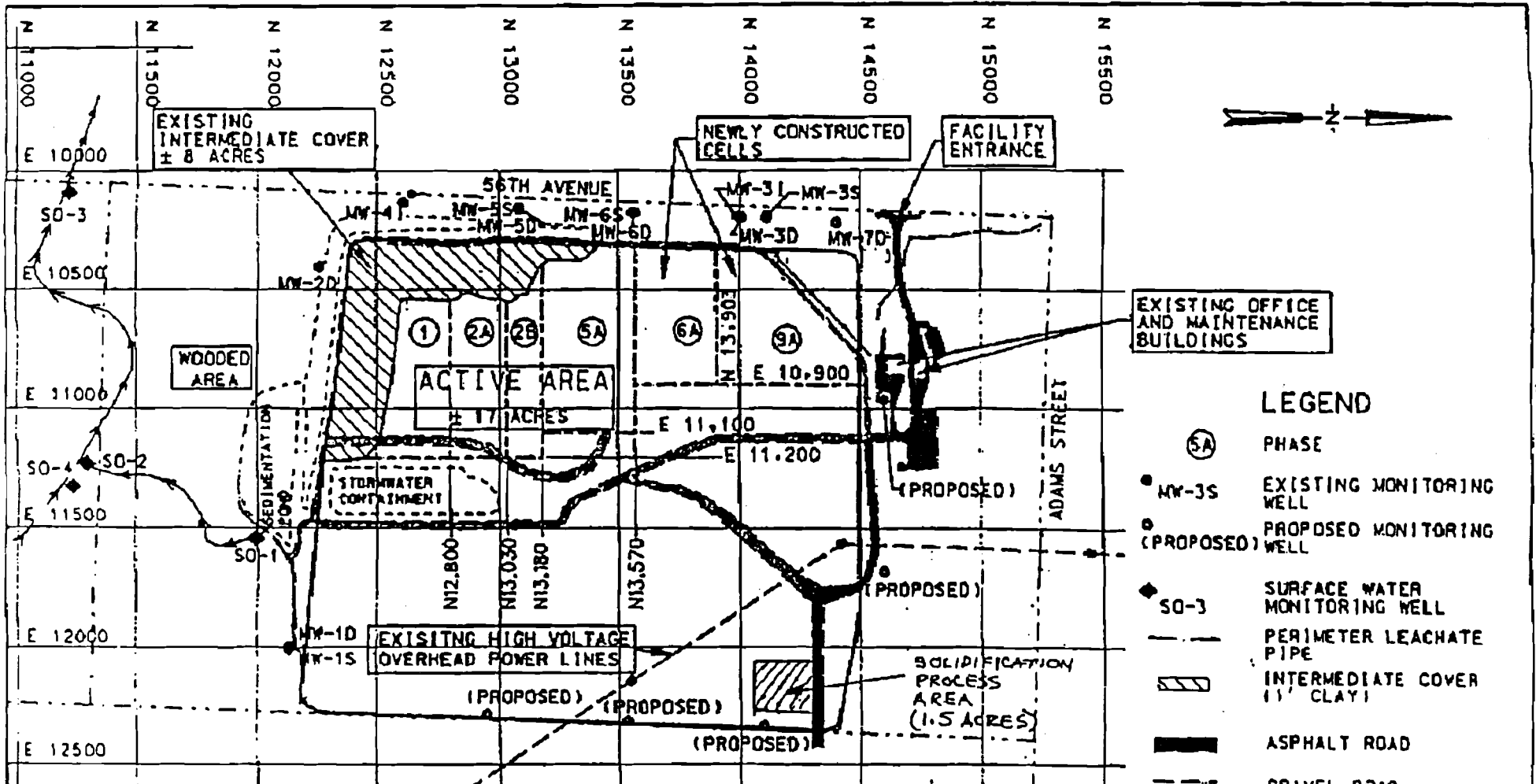
- HAUL ROUTE
- SITE



MAP SOURCE: PART OF M.U.C.C. OTTAWA COUNTY MICHIGAN MAP

RUST ENVIRONMENT & INFRASTRUCTURE

| | |
|---|--------------|
| PROJECT: AUTUMN HILLS RECYCLING AND DISPOSAL FACILITY | |
| PROJECT NO: 74525.100 | FIGURE 2 - 1 |
| ENVIRONMENTAL ASSESSMENT REPORT PERMIT MODIFICATIONS | |
| SITE LOCATION MAP | |



EXISTING OFFICE AND MAINTENANCE BUILDINGS

LEGEND

- ⑤A PHASE
- MW-3S EXISTING MONITORING WELL
- (PROPOSED) MONITORING WELL
- ◆ SO-3 SURFACE WATER MONITORING WELL
- PERIMETER LEACHATE PIPE
- ▨ INTERMEDIATE COVER (1' CLAY)
- ASPHALT ROAD
- GRAVEL ROAD
- CELL SEPARATION LIMIT
- PROPERTY LINE

| PHASE | NO. OF ACRES | YEAR CONSTRUCTED |
|-------|--------------|------------------|
| POND | 2.6 | 1992 |
| 1 | 9.5 | 1992 |
| 2A | 4.8 | 1993 |
| 2B | 3.2 | 1994 |
| 5A | 7.5 | 1995 |
| 6A | 4.5 | 1996 |
| 9A | 5.6 | 1996 |

SCALE: 1" = 600'

RUST ENVIRONMENT & INFRASTRUCTURE

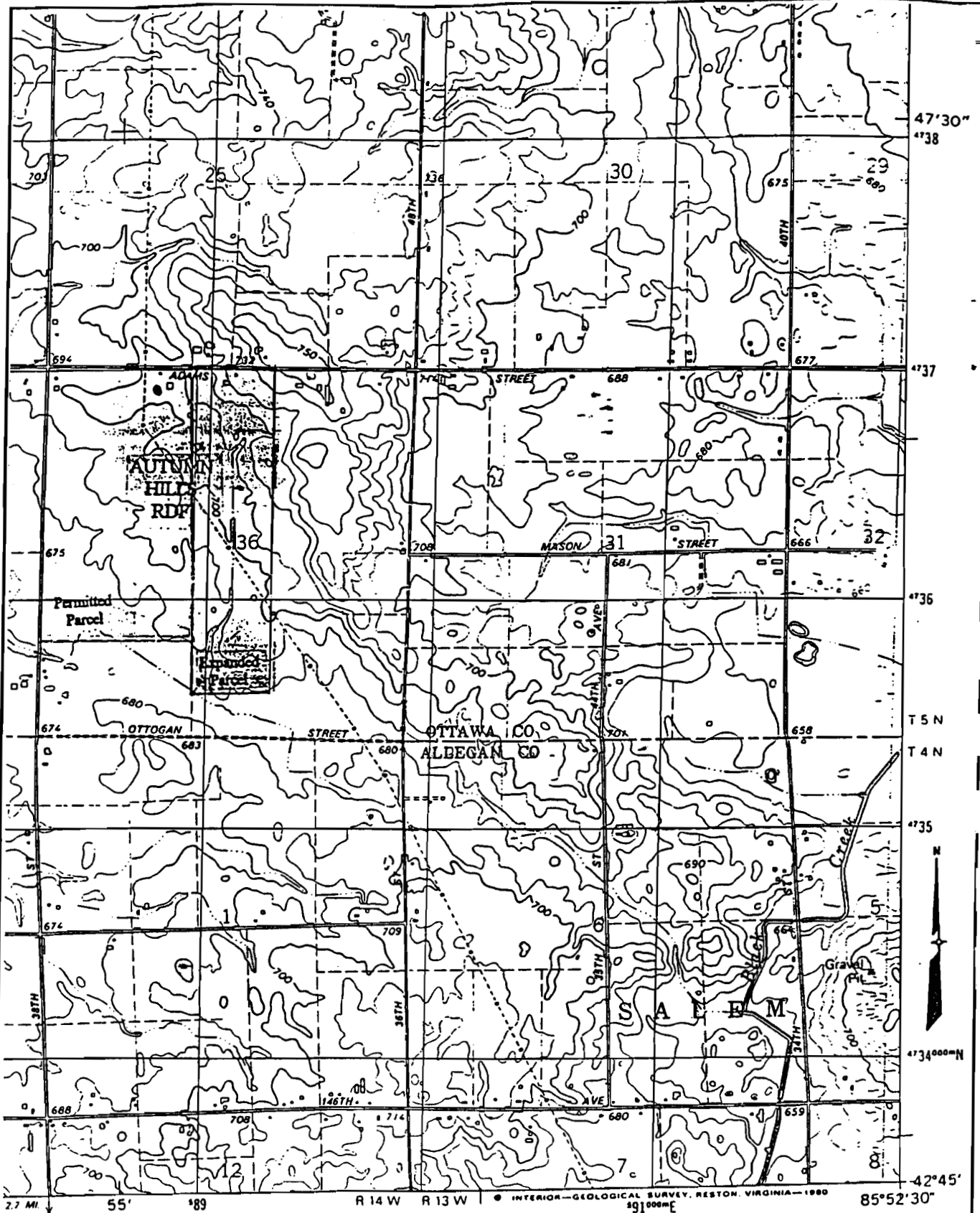
PROJECT NO: 70184.100
 CADD PRODUCED DRAWING
 0184502.DCW L13/24/96

PROJECT: AUTUMN HILLS RECYCLING AND DISPOSAL FACILITY
 OTTAWA COUNTY, MICHIGAN
 SHEET TITLE: EXISTING FACILITY LAYOUT AND MONITORING PLAN

SHEET 1 OF 1
 DRAWING NO. 1

193

ATTACHMENT A



LEGEND
 - SITE
 MAP SOURCE: PART OF U.S.G.S. HUDSONVILLE WEST QUADRANGLE MAP
 SCALE: 1"=2000'
 0' 5' 1'
 27 MI. 55' 89' R 14 W R 13 W INTERIOR—GEOLOGICAL SURVEY, RESTON, VIRGINIA—1980 85°52'30"

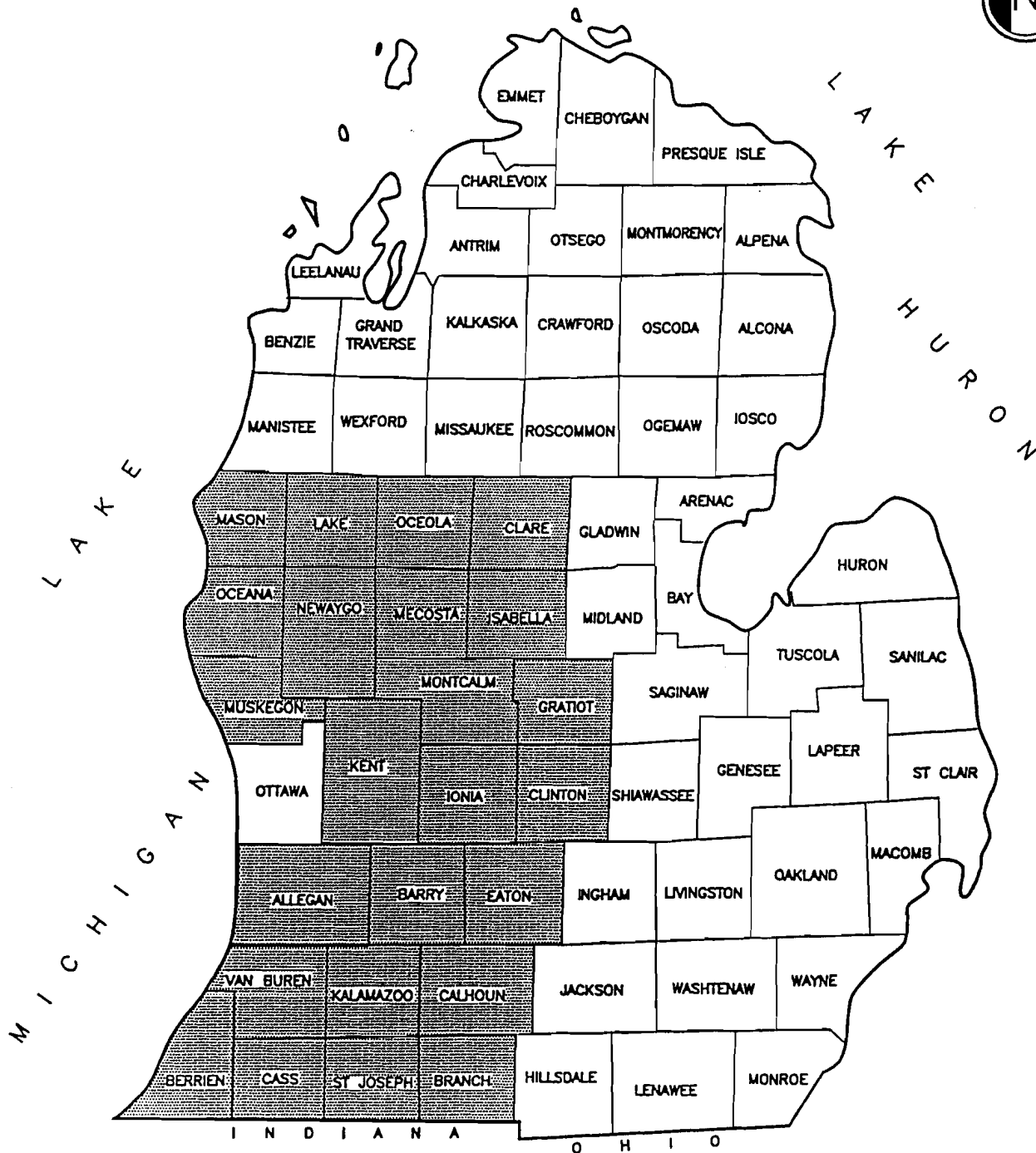
| | | |
|------------------------|---|--------------|
| | PROJECT: AUTUMN HILLS RECYCLING AND DISPOSAL FACILITY | |
| | PROJECT NO.: 74525.100 | FIGURE 2 - 2 |
| | ENVIRONMENTAL ASSESSMENT REPORT PERMIT MODIFICATIONS | |
| SITE TOPOGRAPHY | | |

RUST ENVIRONMENT & INFRASTRUCTURE
 1001 WEST 10TH AVENUE
 DENVER, CO 80202

Autumn Hills - Ottawa County

Ottawa
Allegan
Kent
Muskegon
Montcalm
Oceana *
Newago *
Ionia *
Barry *
Kalamazoo *
St. Joseph *
Van Buren *
Calhoun *
Berrien *
Branch *
Cass *
Clare *
Clinton *
Eaton *
Osceola *
Gratiot *
Isabella *
Lake *
Mason *
Mecosta *

* Counties approved for Special Waste only.



WESTSHORE
CONSULTING
 Engineers ■ Scientists ■ Surveyors ■ Planners

2534 Black Creek Road
 Muskegon, MI 49444
 (616) 777-3447
 Fax: (616) 773-3453

375 River St., Suite 201
 Manistee, MI 49660
 (616) 723-2202
 Fax: (616) 723-2291

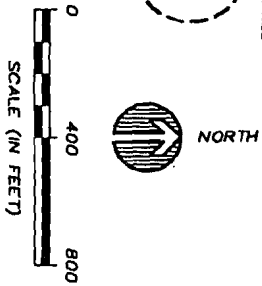
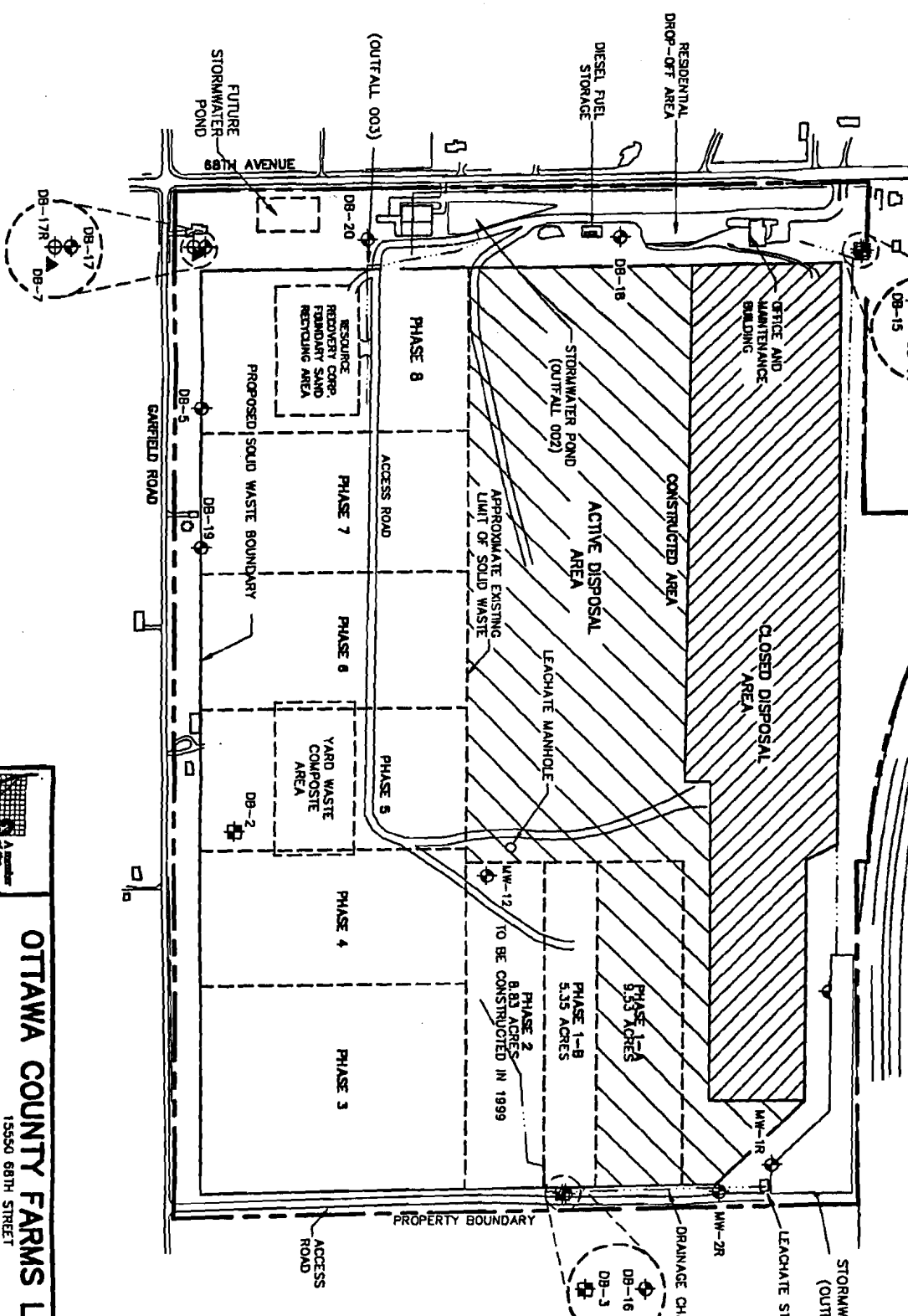
OTTAWA COUNTY
SOLID WASTE PLAN

SOLID AND SPECIAL WASTE
IMPORT & EXPORT MAP

Checked: SRM
 Date: 04/06/98
 Drawn by: BJ
 Date: 04/06/98
 File No.: 914-4

Figure:
III-1

SITE MAP



WI804-01.DWG 5/12/1998 8:21 AM
REVISION TO BE MADE ON THE CAD FILE ONLY

| | | | |
|---|---|--|----------------------|
| <p>ERM A member of the ERM Group</p> | <p>OTTAWA COUNTY FARMS LANDFILL</p> <p>15550 68TH STREET COOPERSVILLE, MICHIGAN</p> | | <p>CHK'D BAL</p> |
| | <p>Dell Engineering, Inc. Civil Engineering & Environmental Consulting 3882 128th Avenue, Holland, MI 49424-9283</p> | | |
| <p>FIGURE 2</p> | | | |

SOLID WASTE DISPOSAL AREA OPERATING LICENSE

This license is issued under the provisions of Part 115 Solid Waste Management of the Natural Resources and Environmental Protection Act, 1994 PA 451, MCL 324.11501 et seq. (Part 115), to authorize the operation of the solid waste disposal area (Facility) in the State of Michigan. This license does not obviate the necessity of obtaining other clearances and permits as may be required by state law.

FACILITY NAME: Arbor Hills West Expanded Sanitary Landfill

GRANTED TO: BFI Waste Systems of North America, Inc.

TYPE OF FACILITY: Type II Landfill

FACILITY ID: 81-000015

COUNTY: Washtenaw

LICENSE NUMBER: 8510

ISSUE DATE: February 13, 1998

EXPIRATION DATE: February 13, 2000

FACILITY DESCRIPTION: The Arbor Hills West Expanded Sanitary Landfill consists of 337.24 acres located in Section 13, T1S, R7E, Salem Township, Washtenaw County, Michigan, as identified in Attachment A and fully described in this license.

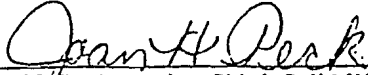
AREA AUTHORIZED FOR DISPOSAL OF SOLID WASTE: Cell 1, portions of Cells 2 and 3A, Cell 3B, and Cell 3C

RESPONSIBLE PARTY TO CONTACT: Mr. John C. Myers, P.E., District Vice President
BFI Waste Systems of North America, Inc.
10690 West Six Mile Road
Northville, Michigan 48167
248-349-7230

RENEWAL OPERATING LICENSE: This License Number 8510 supersedes and replaces Solid Waste Disposal Area License Number 8432 issued to Browning-Ferris Industries of Southeastern Michigan, Inc. on February 4, 1997.

This license is subject to revocation by the Director of the Michigan Department of Environmental Quality (Director) if the Director finds that the disposal area is not being constructed or operated in accordance with the approved plans, the conditions of a permit or license, this act, or the rules promulgated under this act. Failure to comply with the terms and provisions of this license may result in legal action leading to civil and/or criminal penalties as stipulated in Part 115. This license shall be available through the licensee during the entire effective date and remains the property of the Director.

THIS LICENSE IS NOT TRANSFERABLE.


Joan H. Peck, Acting Chief, Solid Waste Program Section
Waste Management Division

Applicant: BFI Waste Systems of North America, Inc.
Facility Name: Arbor Hills West Expanded Sanitary Landfill
Operating License Number: 8510
February 1998

The licensee shall comply with all terms of this license and the provisions of Part 115 and its rules. This license includes the license application and any attachments to this license.

1. The licensee shall operate the Facility in a manner that will prevent violations of any state or federal law.
2. The following portions of the Facility are authorized to receive solid waste by this license:
 - a. **EXISTING UNITS OR PORTIONS OF AN EXISTING UNIT:** The cells identified as Cell 1 (36.69 acres) and a portion of Cell 2 (21.32 acres) received solid waste as of October 9, 1993. The total area is 58.01 acres.
 - b. **LATERAL EXTENSIONS OF AN EXISTING UNIT:** The cells identified as a portion of Cell 3A (14.44 acres), Cell 3B (24.17 acres), and Cell 3C1 (10.10 acres) were not licensed to receive waste as of October 9, 1993, but are authorized to receive solid waste by this license. The total area is 48.71 acres.
 - c. **NEW UNIT(S):** N/A
3. The following portions of the Facility will be authorized to receive solid waste by this license:
 - a. Unconstructed and uncertified Cell 3C2/5A has been bonded in accordance with the financial requirements of Section 11523(a). This disposal area shall be authorized to receive waste, as part of this license, if acceptable certification is submitted to the Department as per Section 11516(5) of Part 115 and determined to be consistent with Part 115 and the administrative rules by the Department. The certification shall verify that the Cell 3C2/5A construction was in accordance with Construction Permit Number 0302 issued on July 1, 1994 and subsequent amendments to the permit, and Part 115 and the administrative rules.
4. The following portions of the Facility are NOT authorized to receive solid waste by this license:
 - a. **CLOSED UNIT OR A CLOSED PORTION OF A UNIT:** The following units are closed:
 - i. **PRE-EXISTING UNIT:** The unit identified as Arbor Hills East Sanitary Landfill had final closure certified on November 15, 1990. This unit was permitted and licensed separately from Arbor Hills West.
 - ii. **EXISTING UNIT(S):** The units identified as portions of Cell 2 (5.11 acres) and portions of Cell 3A (1.46 acres) had final closure certified on February 21, 1996. The total area is 6.57 acres.
 - b. **UNCLOSED CELL(S):** N/A
 - c. **UNCONSTRUCTED CELL(S):** The cells identified as Cell 4 (30.60 acres), Cell 5B/C (29.35 acres), and Cell 6 (23.43 acres), are NOT authorized to receive waste by this license. The total area is 83.38 acres.

Applicant: BFI Waste Systems of North America, Inc.
 Facility Name: Arbor Hills West Expanded Sanitary Landfill
 Operating License Number: 8510
 February 1998

5. The attached map (Attachment A) shows the facility, the area permitted for construction, monitoring points detention pond, leachate storage tanks, co-generation facility, flare, site roads, and related appurtenances.
6. Issuance of this license is based on the assumption that the information submitted in the Application for Solid Waste Disposal Area License (Application) received by the Michigan Department of Environmental Quality (Department) on November 19, 1997, and any subsequent amendments is accurate. Any material or intentional inaccuracies found in this information may be grounds for the revocation or modification of this license or other enforcement action. The licensee shall inform the Department's Waste Management Division, Jackson District Supervisor, of any known material or intentional inaccuracies in the information of the Application which would affect the licensee's ability to comply with the applicable rules or license conditions.
7. This license is issued based on the Department's review of the Application for the Arbor Hills West Expanded Sanitary Landfill dated November 19, 1997. The Application consists of the following:
 - a. Application, Form EQP-5507.
 - b. Fee in the amount of \$15,000.00.
 - c. Drawing "Attachment A" by Midwestern Consulting Inc., indicating compliance with horizontal limits of constructed portions of landfill and site acreage.
 - d. Construction Documentation Report for BFI-Arbor Hills West Expanded Sanitary Landfill, Cell 3C1, dated November 17, 1997, prepared by STS Consultants, Ltd.
 - e. Restrictive Covenant.
 - i. **NO RESTRICTIVE COVENANT:** A restrictive covenant was not included with this application as it has been filed with the county register of deeds and a copy is already on file with the Department.
 - ii. **RESTRICTIVE COVENANT:** N/A
 - f. The financial assurance documents are listed below:

| <u>Type</u> | <u>Number</u> | <u>Amount</u> | <u>Expiration Date</u> |
|---------------------|---------------------|----------------|------------------------|
| Surety Bond | 8145-52-51 | \$9,994,406.00 | November 18, 1998 |
| Perpetual Care Fund | Trust Number 404342 | \$1,186,842.00 | N/A |

- i. **FINANCIAL ASSURANCE REQUIRED BY SECTION 11523(1)(a):** The cells identified as Cell 1, Cell 2, Cell 3A, Cell 3B, Cell 3C1, and Cell 3C2/5A have a financial assurance mechanism that is in accordance with the financial assurance requirements of Section 11523(1)(a). Financial assurance required, based on the application calculation worksheet entitled "Form A Financial Assurance Required," is equal to \$11,181,248. This has been provided as indicated above.

Applicant: BFI Waste Systems of North America, Inc.
Facility Name: Arbor Hills West Expanded Sanitary Landfill
Operating License Number: 8510
February 1998

- ii. Perpetual Care Fund Trust Agreement signed by Mr. John C. Myers, District Vice President, BFI Waste Systems of North America, Inc., and the Department on May 28, 1997.
- g. **WASTE CHARACTERIZATION:** Petition to reclassify municipal incinerator ash dated December 20, 1993. The licensee is approved to take reclassified municipal incinerator ash generated by the Grosse-Pointes Clinton Refuse Disposal Authority, as approved in the letter from the Department dated February 10, 1995, as long as the conditions described in the approval letter are met.
- 8. The following documents approved with Construction Permit Numbers 0222 and 0302 issued to Browning-Ferris Industries of Southeastern Michigan, Inc. on August 23, 1990 and July 1, 1994, are incorporated in this license by reference (if the documents have been amended and approved, the latest date of revision is listed):
 - a. Engineering Report titled, "Arbor Hills West Expanded Sanitary Landfill, Washtenaw County, Michigan, Act 641 Type II Construction Permit Application, Volumes 1, 2, and 3, BFI," prepared by Midwestern Consultants, Inc., Groundwater Associates, Inc., STS Consultants, Ltd., Applied Science and Technology, Inc. (ASTI) and Geosyntec Consultants, dated October 1993, and revised as noted throughout Item 8.
 - b. Engineering Plans titled, "Arbor Hills West Expanded Sanitary Landfill, Browning Ferris Industries of Southeastern Michigan, Inc.," prepared by Midwestern Consulting, Inc. and revised September 1, 1994.
 - c. Operation Plans titled, "Operation Plans per Rule 911," contained in Volume 1, Section 7, of the Engineering Report, prepared by Midwestern Consulting, Inc., dated October 1993, and revised June 22, 1994.
 - d. Construction Quality Assurance Program titled, "Construction QA Plans per Rule 916," contained in Volume 1, Section 8, of the Engineering Report prepared by STS Consultants, Ltd., dated October 1993, and revised June 23, 1994.
 - e. "Engineering Evaluation of Landfill Slope Stability and Foundation Performance," prepared by Geosyntec Consultants, dated October 13, 1993, and revised June 16, 1994 and June 23, 1994, contained in Volume 3 of the Engineering Report.
 - f. Topographic Maps prepared by Midwestern Consulting, Inc., contained in the Engineering Plans, revised June 24, 1994.
 - g. Environmental Assessment titled, "Environmental Assessment Arbor Hills West Expanded Sanitary Landfill," prepared by Applied Science and Technology, Inc. (ASTI), dated October 9, 1993, revised on June 9, 1994, and June 22, 1994, and contained in Volume 1, Section 2, of the Engineering Report.
 - h. Hydrogeological Report titled, "Hydrogeological Investigation Arbor Hills West Expanded Sanitary Landfill," prepared by Groundwater Associates, Inc., Westerville, Ohio, dated October 1993, and contained in Volume 2 of the document described in Item 8.a.
 - i. Surface Water Monitoring Plan contained in the report titled, "Hydrogeological Monitoring Plan," prepared by Groundwater Associates, Inc., Westerville, Ohio and revised June 16, 1994 and June 24, 1994.

Applicant: BFI Waste Systems of North America, Inc.
Facility Name: Arbor Hills West Expanded Sanitary Landfill
Operating License Number: 8510
February 1998

- j. Hydrogeological Monitoring plan titled, "Proposed Hydrogeological Monitoring Plan," prepared by Groundwater Associates, Inc., Westerville, Ohio, dated January 1994, and revised June 16, 1994.
 - k. Subsurface Drain Monitoring Plan included in the Groundwater Monitoring Plan which is a component of the "Hydrogeological Monitoring Plan," prepared by Groundwater Associates, Inc., dated January 1994 and revised June 16, 1994.
 - l. Remedial Action Plan titled, "BFI-Arbor Hills East Remedial Action Plan," prepared by Browning-Ferris Industries of Southeastern Michigan, Inc., and dated June 24, 1994.
 - m. Explosive Gas Control and Monitoring Plan titled, "Explosive Gas Monitoring Plan," a component of the Hydrogeological Monitoring Plan prepared by Groundwater Associates, Inc., dated January 1994 and revised June 16, 1994.
9. The following additional documents, approved since the issuance of the construction permits referenced in Item 8, are incorporated in this license by reference:
- a. "Design Summary Leachate Storage Facility for Arbor Hills Sanitary Landfill," dated July 1991, and approved October 30, 1991.
 - b. "Construction Documentation Report, 1995 Final Cover Construction Arbor Hills West Expanded Sanitary Landfill Northville, Michigan" dated February 21, 1996.
 - c. Hydrogeological Monitoring Plan, dated January 1994 and revised June 16, 1994, June 24, 1994, and January 31, 1997.
10. **CONSENT ORDER:** Number 641-07-245-07-89-91A entered on August 22, 1989 and altered on May 23, 1991, is incorporated into this license by reference.
11. The licensee shall repair any portion of the certified liner or leachate collection system which is found to be deficient or damaged during the term of this license unless determined otherwise by the Department; or unless the placement of waste consistent with normal operating practices makes it impractical.
12. The licensee shall have repairs to any portion of the certified liner or leachate collection system recertified by a registered professional engineer and approved by the Department before receiving waste in that portion of the certified liner or leachate collection system in accordance with R 299.4921. The licensee shall submit the recertification to the Department's Waste Management Division, Jackson District Supervisor, for review and approval.
13. Hydrogeological Monitoring
- a. **HYDROGEOLOGICAL MONITORING PLAN IS APPROVED AND IN COMPLIANCE:** The licensee shall conduct hydrogeological monitoring in accordance with the approved hydrogeological monitoring plan, dated January 1994 and revised June 16, 1994, June 24, 1994, and January 31, 1997.

Applicant: BFI Waste Systems of North America, Inc.
Facility Name: Arbor Hills West Expanded Sanitary Landfill
Operating License Number: 8510
February 1998

The sampling analytical results shall be submitted to the Department's Waste Management Division, Jackson District Office.

14. Secondary Collection System

- a. ACTION FLOW RATE FOR A SCS: The active portions of the units authorized to receive waste by this license contain a secondary collection system. The action flow rate is 110 gallons/acre/day.
- b. ACTION FLOW RATE FOR A SCS USED AS A LEAK DETECTION SYSTEM: N/A
- c. BASELINE CONCENTRATION: N/A
- d. A SECONDARY COLLECTION SYSTEM IS NOT REQUIRED. N/A

15. VARIANCES: None

16. SPECIAL CONDITIONS:

- a. The licensee has been granted alternate daily cover approvals to place geosynthetic covers, contaminated soils, and off-specification compost, and paper mill sludge in accordance with R 229.4429 and the General Operating Stipulations approved on April 7, 1994 and July 10, 1995.
 - b. Prior to constructing Cell 4, the licensee shall construct the entire gravity drainline shown on the engineering plans as described in Item 8b and submit a report to the Jackson District, Waste Management Division, documenting that the isolation distance to the groundwater has been maintained. If the Department determines that the extent of dewatering by the gravity drain is inadequate, the permittee shall implement an approved plan for additional dewatering of the upper aquifer.
17. This license shall remain in effect until its expiration date, unless revoked or continued in effect, as provided by 1969 PA 306, as amended, or unless superseded by the issuance of a subsequent license.

END OF LICENSE

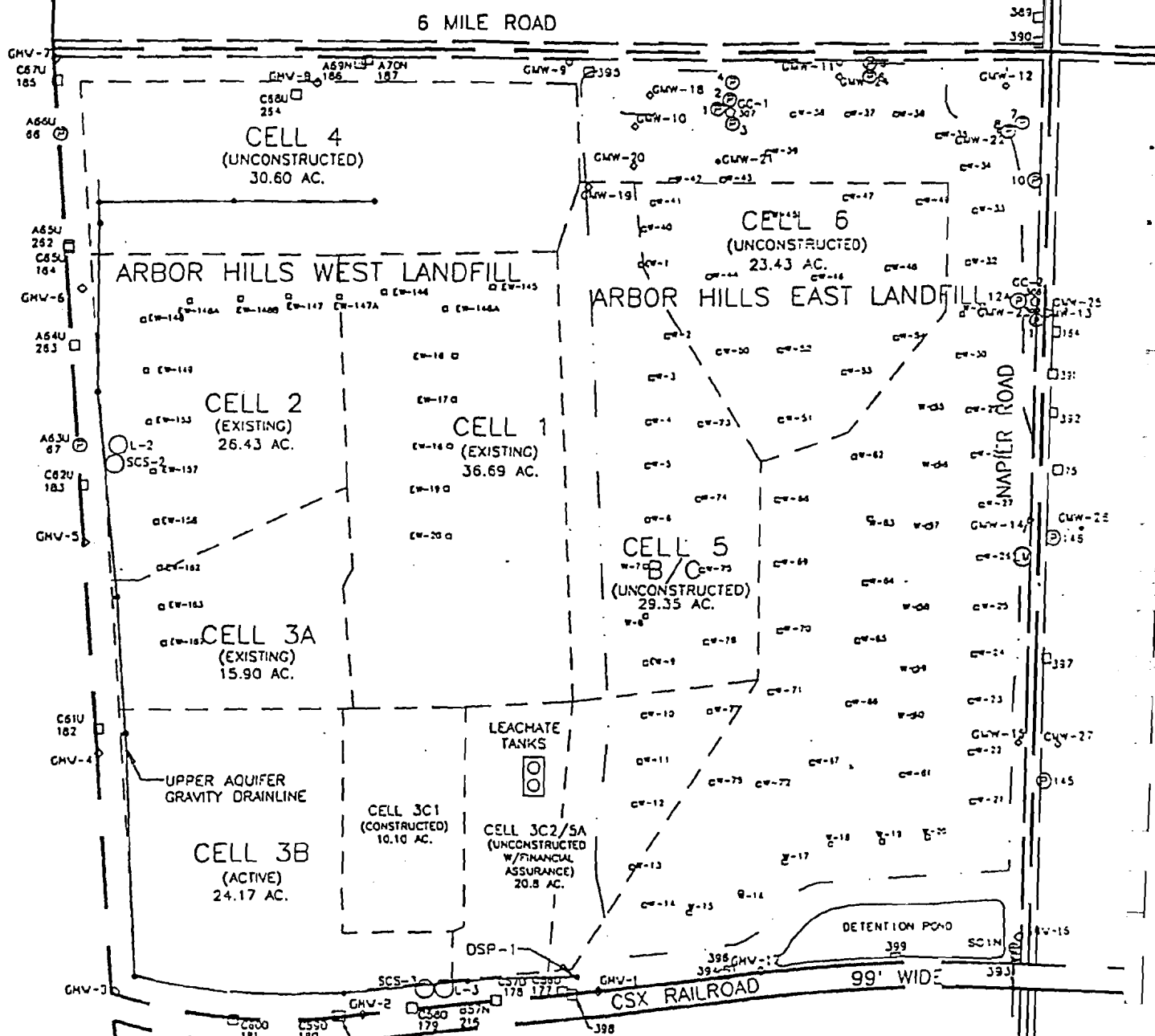
ARBOR HILLS WEST EXPANDED SANITARY LANDFILL

MONITORING LOCATIONS

ATTACHMENT A

PAGE 1 OF 3

6 MILE ROAD



| LEGEND | |
|---------|---|
| □ 89-13 | = MONR WELL NO. |
| □ 237 | = MASTER PLAN BORING NO. |
| CC-1 | GRADIENT CONTROL WELL |
| GW-156 | GAS EXTRACTION WELL |
| W-70 | |
| ⊙ | PIEZOMETER |
| ⊙ | LEACHATE MANHOLE |
| ⊙ | SCS |
| ⊙ | LEACHATE SAMPLING POINT |
| ⊙ | SO1M |
| ⊙ | SURFACE WATER SAMPLING POINT |
| ⊙ | GW-9 |
| ⊙ | GAS PROBE LOCATIONS |
| DSP-1 | DRAIN SAMPLING POINT |
| --- | APPROXIMATE ARBOR HILLS EAST WASTE LIMITS |



1" = 600'

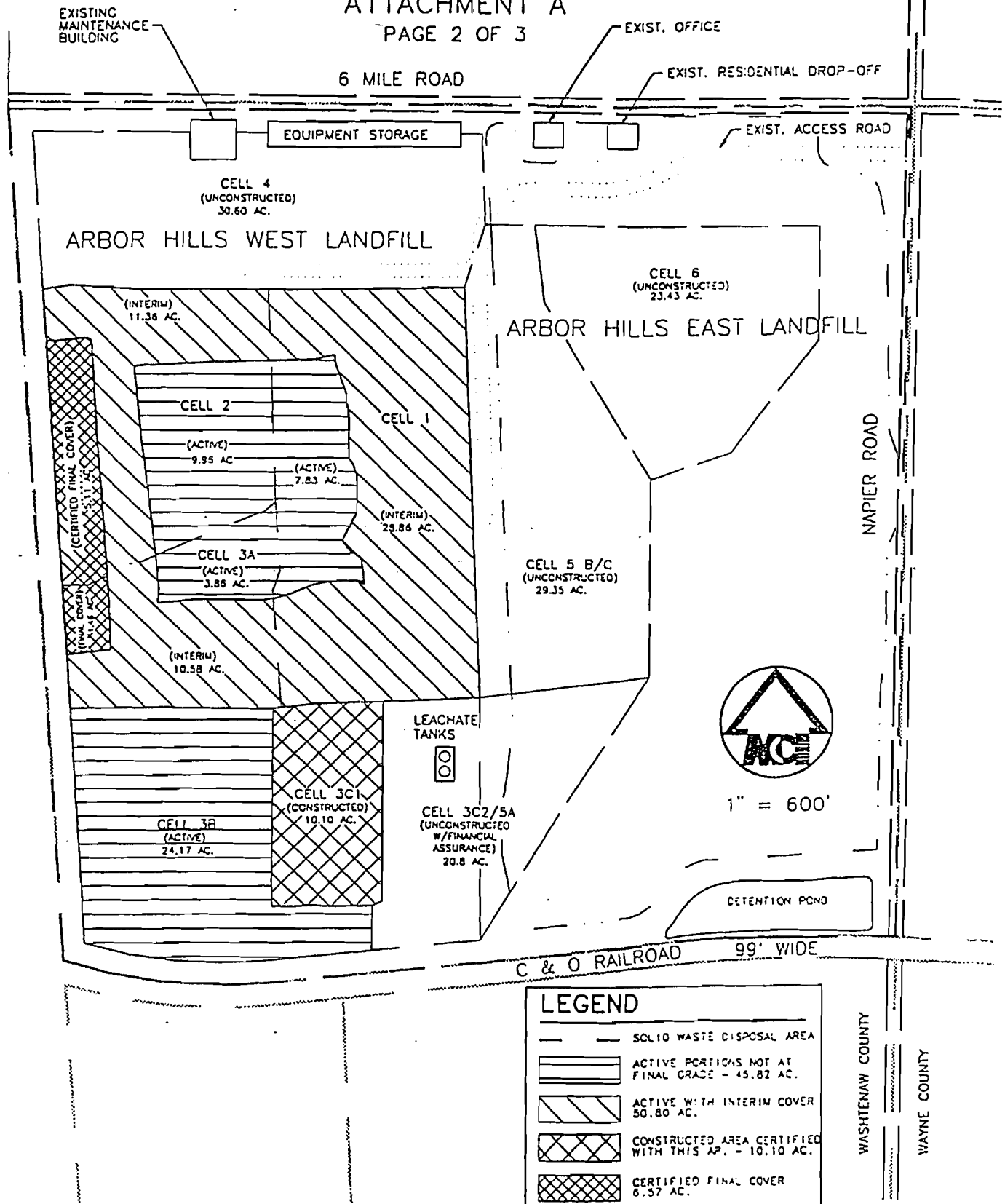
MIDWESTERN CONSULTING

ACI Civil Engineers 3615 Plaza Drive
Environmental Engineers 400 Arbor, Michigan 48104
Planning Services 313.983.2200 Fax 313.983.2004

11/10/97
FILE: 971021-1.DWG

ARBOR HILLS WEST EXPANDED SANITARY LANDFILL CONSTRUCTION SCHEMATIC ATTACHMENT A

PAGE 2 OF 3



1" = 600'

| LEGEND | |
|--------|--|
| | SOLID WASTE DISPOSAL AREA |
| | ACTIVE PORTIONS NOT AT FINAL GRADE - 45.82 AC. |
| | ACTIVE WITH INTERIM COVER 50.80 AC. |
| | CONSTRUCTED AREA CERTIFIED WITH THIS AP. - 10.10 AC. |
| | CERTIFIED FINAL COVER 8.37 AC. |
| | APPROXIMATE ARBOR HILLS EAST WASTE LIMITS |

MIDWESTERN CONSULTING
Civil Engineers 3015 Plaza Drive
Environmental Engineers Ann Arbor, Michigan 48108
Professional Surveyors 313.NG.2003 For 313.NG.2003

11/10/97
FILE: 97102A.dwg

ARBOR HILLS WEST EXPANDED SANITARY LANDFILL

OVERALL SITE FACILITIES

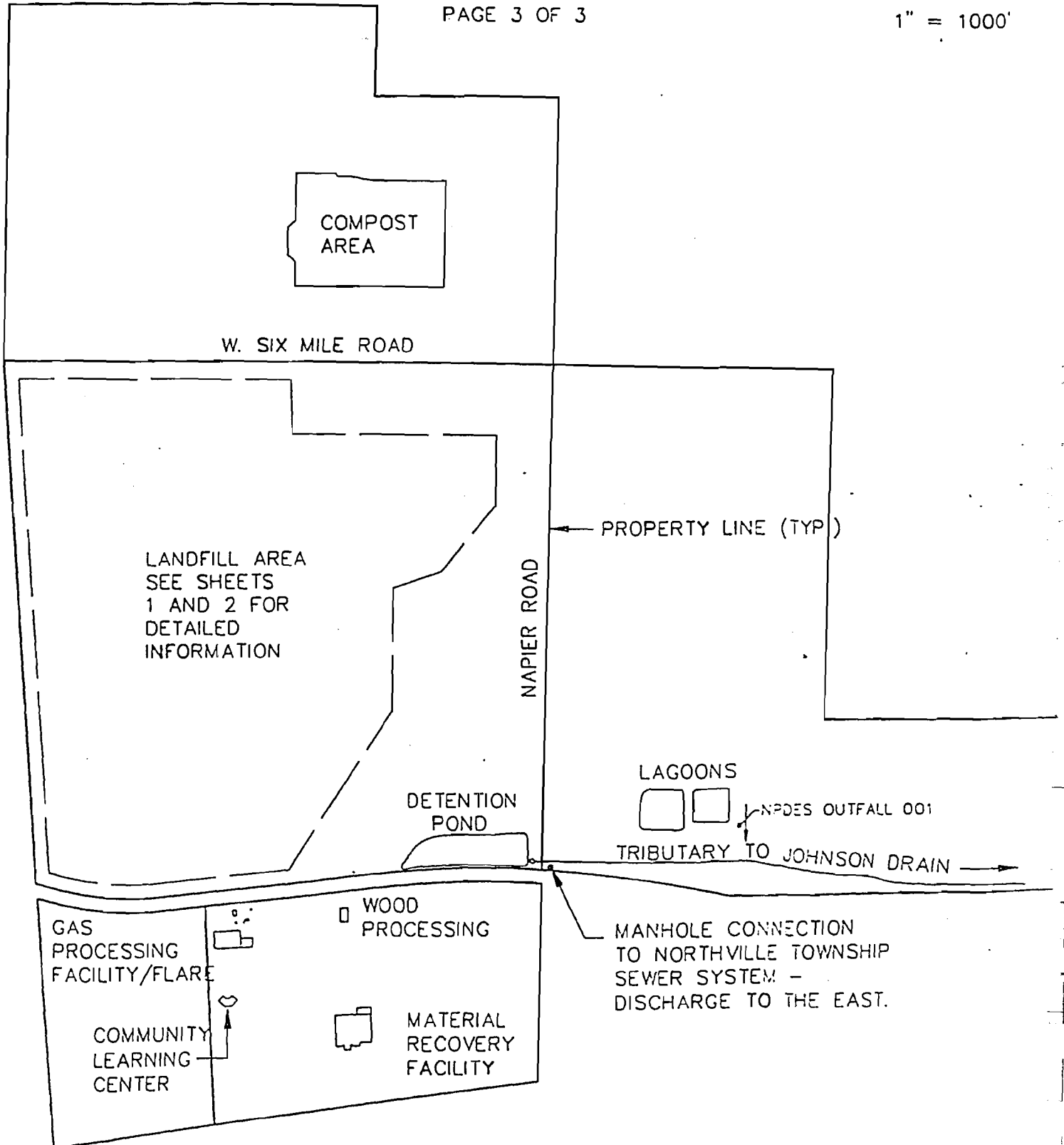
(FOR INFORMATION ONLY - NOT PART OF ARBOR HILLS
WEST EXPANDED SANITARY LANDFILL LICENSE APPLICATION)



ATTACHMENT A

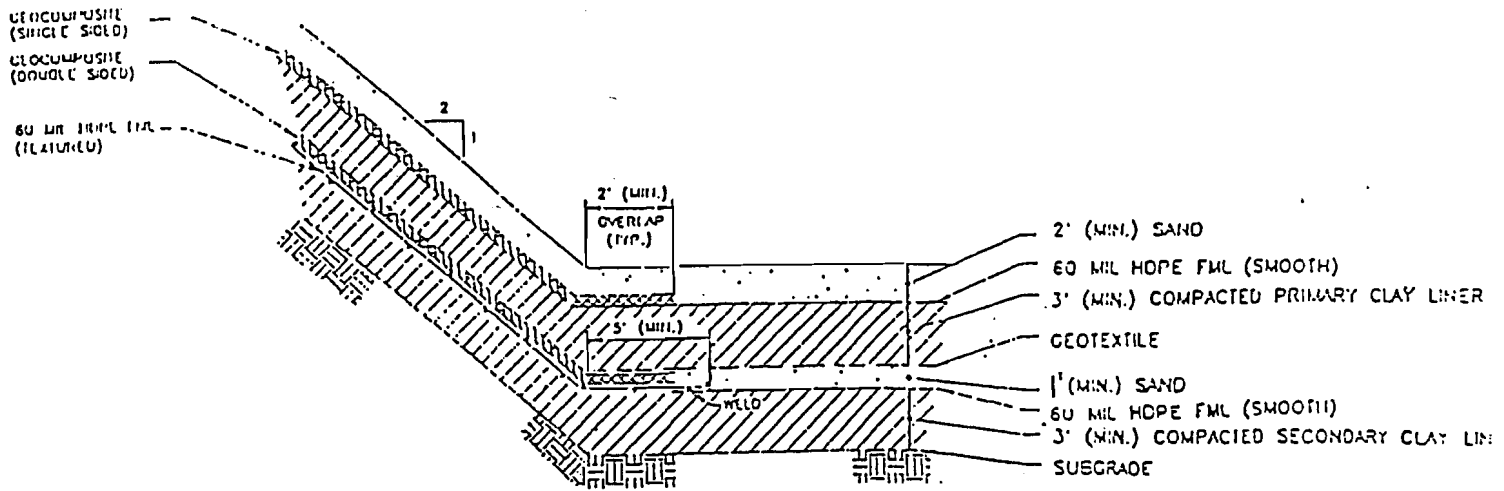
PAGE 3 OF 3

1" = 1000'

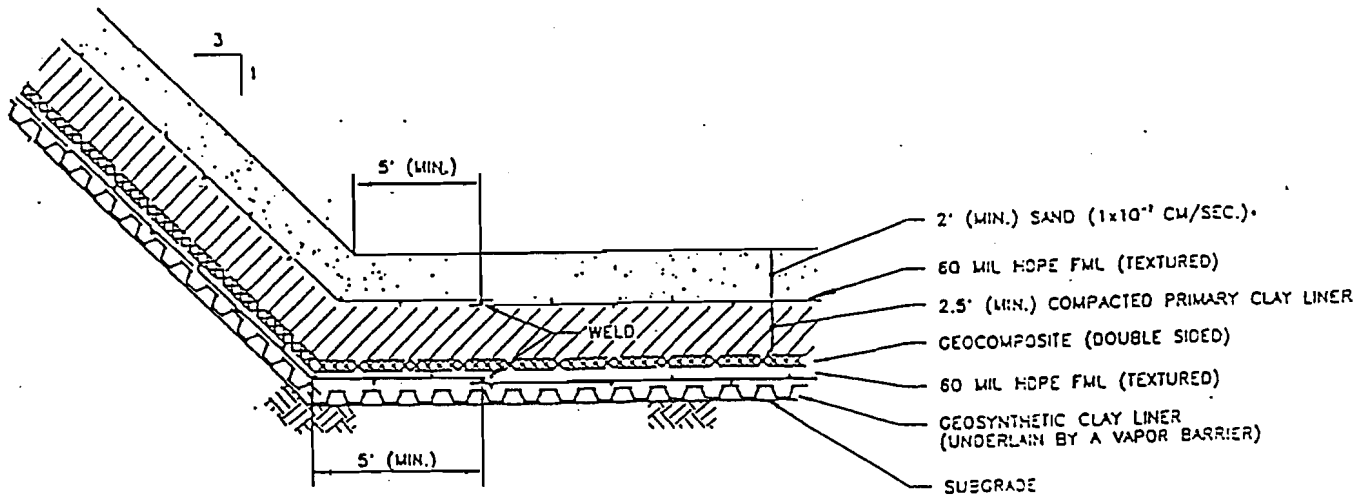


11/10/97
FILE: 971110

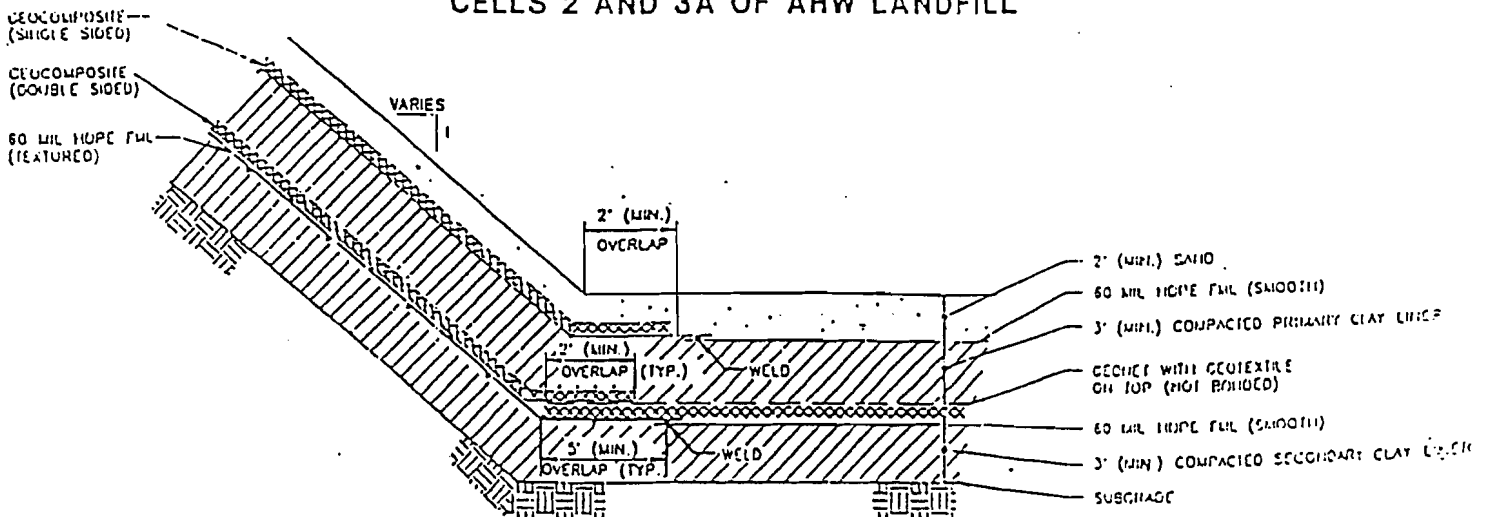
LINER SYSTEM OVER NATURAL GROUND
CELL 1 OF AHW LANDFILL



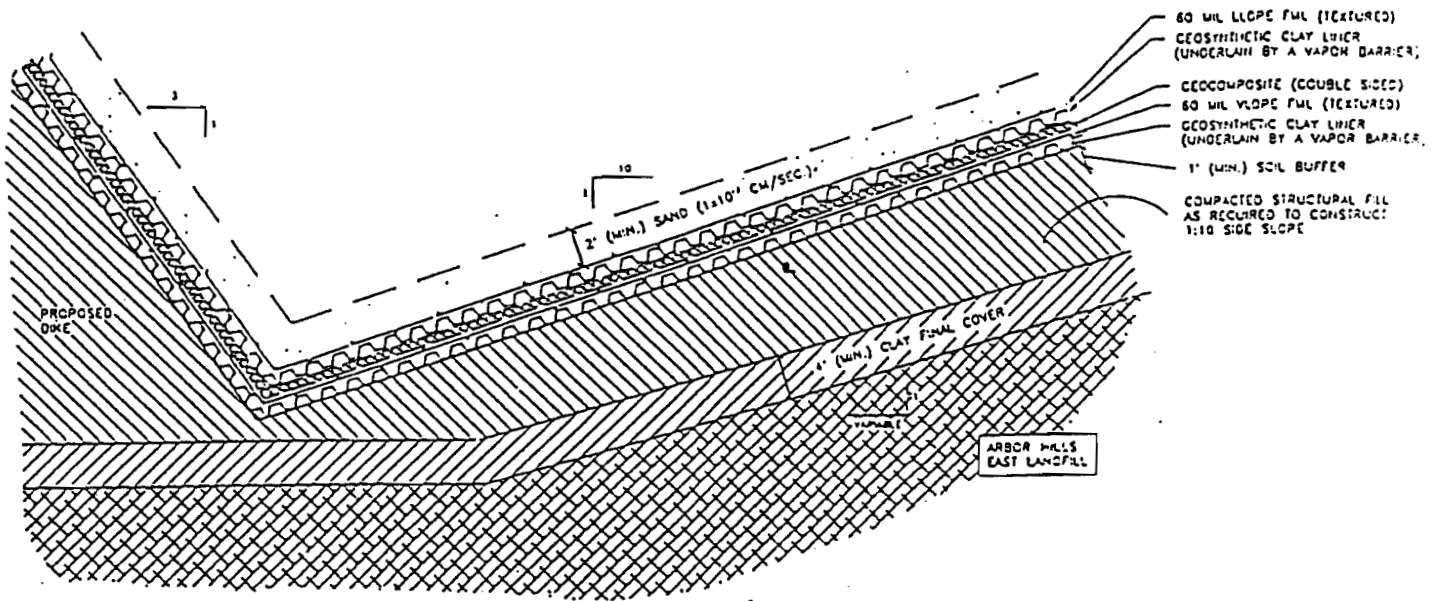
LINER SYSTEM OVER NATURAL GROUND
CELLS 3B, 3C AND 4



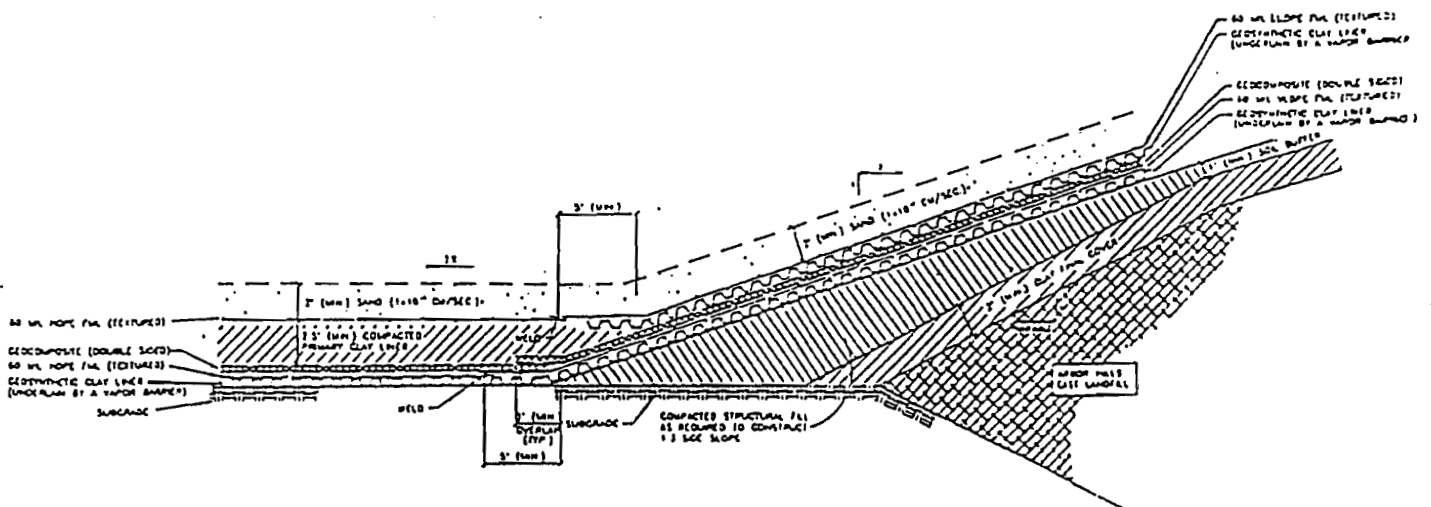
LINER SYSTEM OVER NATURAL GROUND
CELLS 2 AND 3A OF AHW LANDFILL



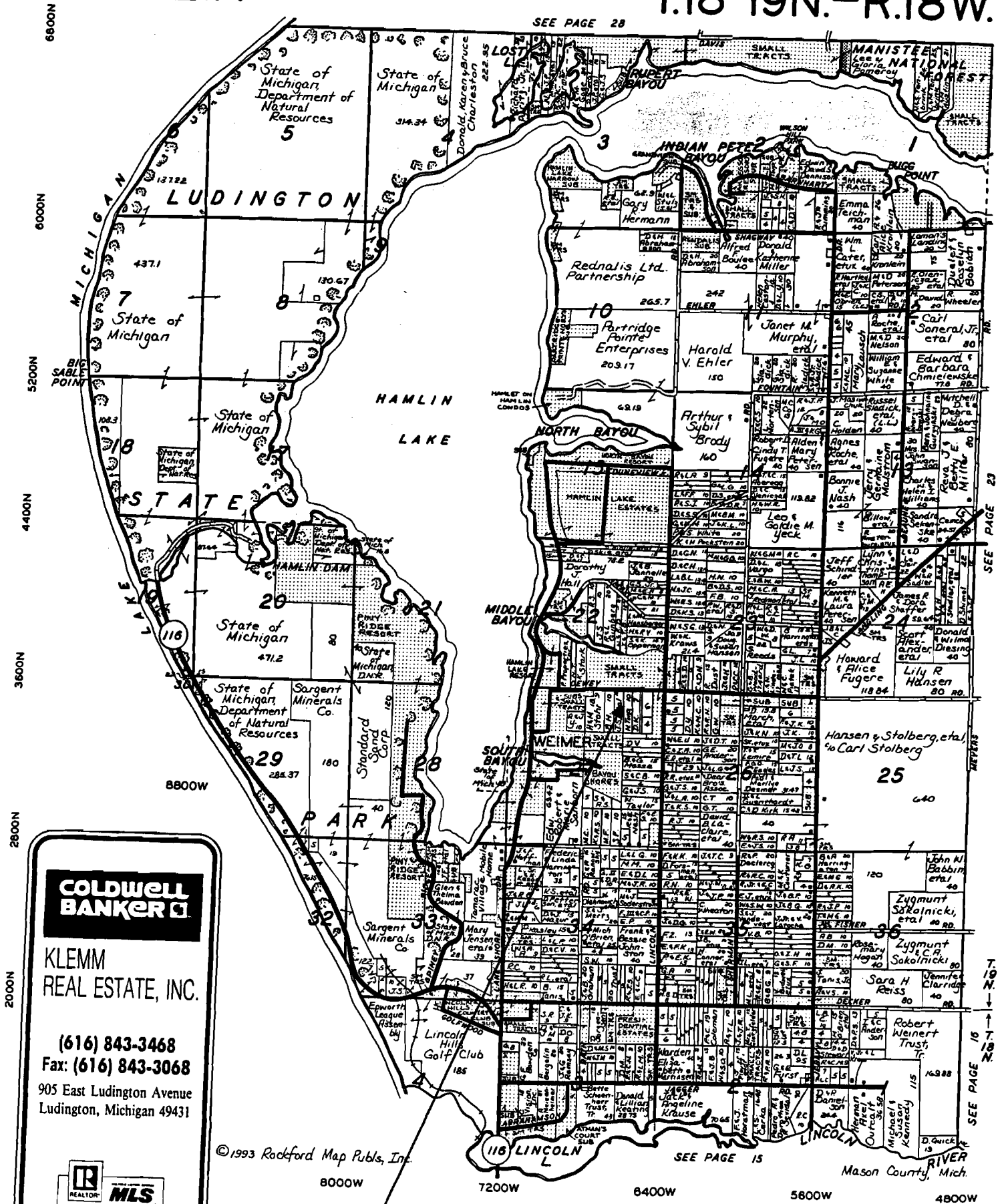
LINER SYSTEM OVER NATURAL GROUND CELL 6



LINER SYSTEM OVER NATURAL GROUND CELL 5



SEE PAGE 28



COLDWELL BANKER

KLEMM REAL ESTATE, INC.

(616) 843-3468
 Fax: (616) 843-3068
 905 East Ludington Avenue
 Ludington, Michigan 49431



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P.O. Box 416
215 Hancock

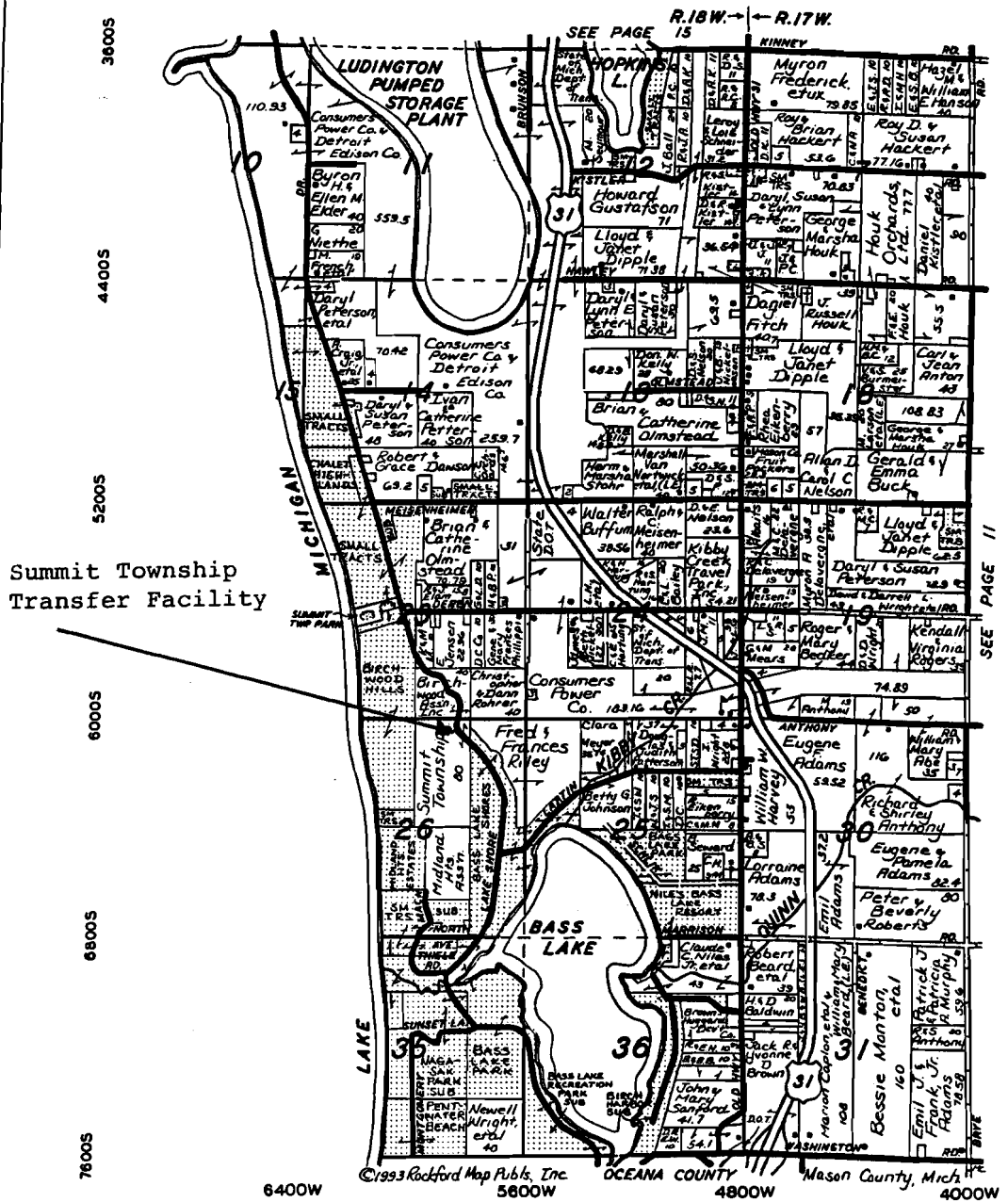
Pentwater, Michigan 49449

or (616) 873-3400

218 Washington
Hart, Michigan 49420

Lila Free: Steven Bruce:
(616) 869-4165 (616) 873-5449

Ginny McClennan:
(616) 873-3111



Summit Township
Transfer Facility

6400W

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5600W

OCEANA COUNTY

4800W

Mason County, Mich

4000W



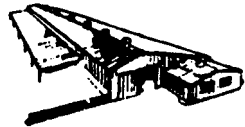
WILLIAMS REALTY
ROBERTA WILLIAMS, Broker

OFFICE:

(616) 869-5706 or (616) 869-4080
112 Hancock; Pentwater, Michigan 49449



Buildings Plus



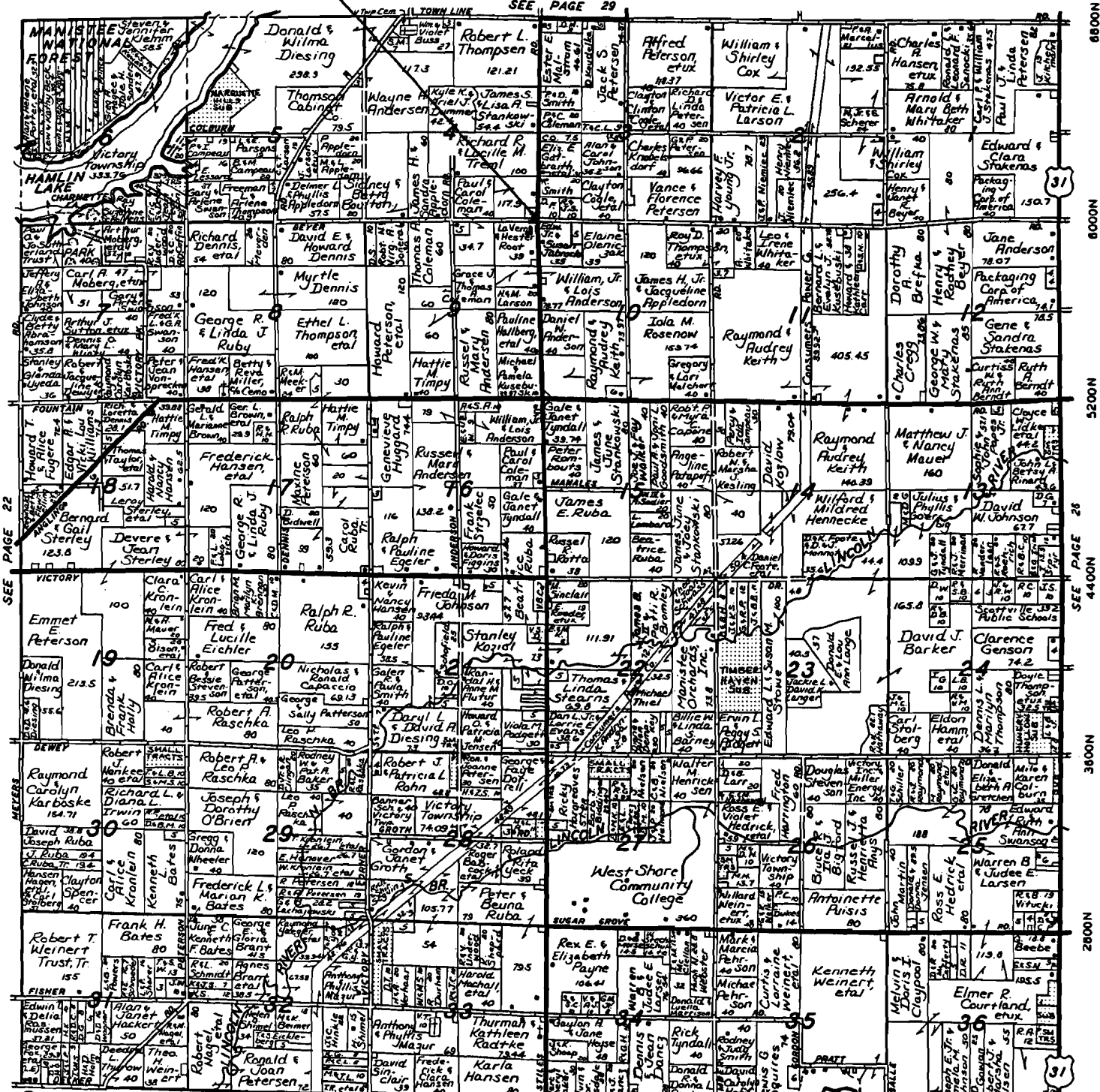
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VICTORY

Waste Reduction System
(The Transfer Station)

T.19N.-R.17W.

SEE PAGE 29



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4800W 4000W

SEE PAGE 16
2400W

1600W

800W Mason County, Mich.
BASE LINE



Above the Crowd!

845-0355

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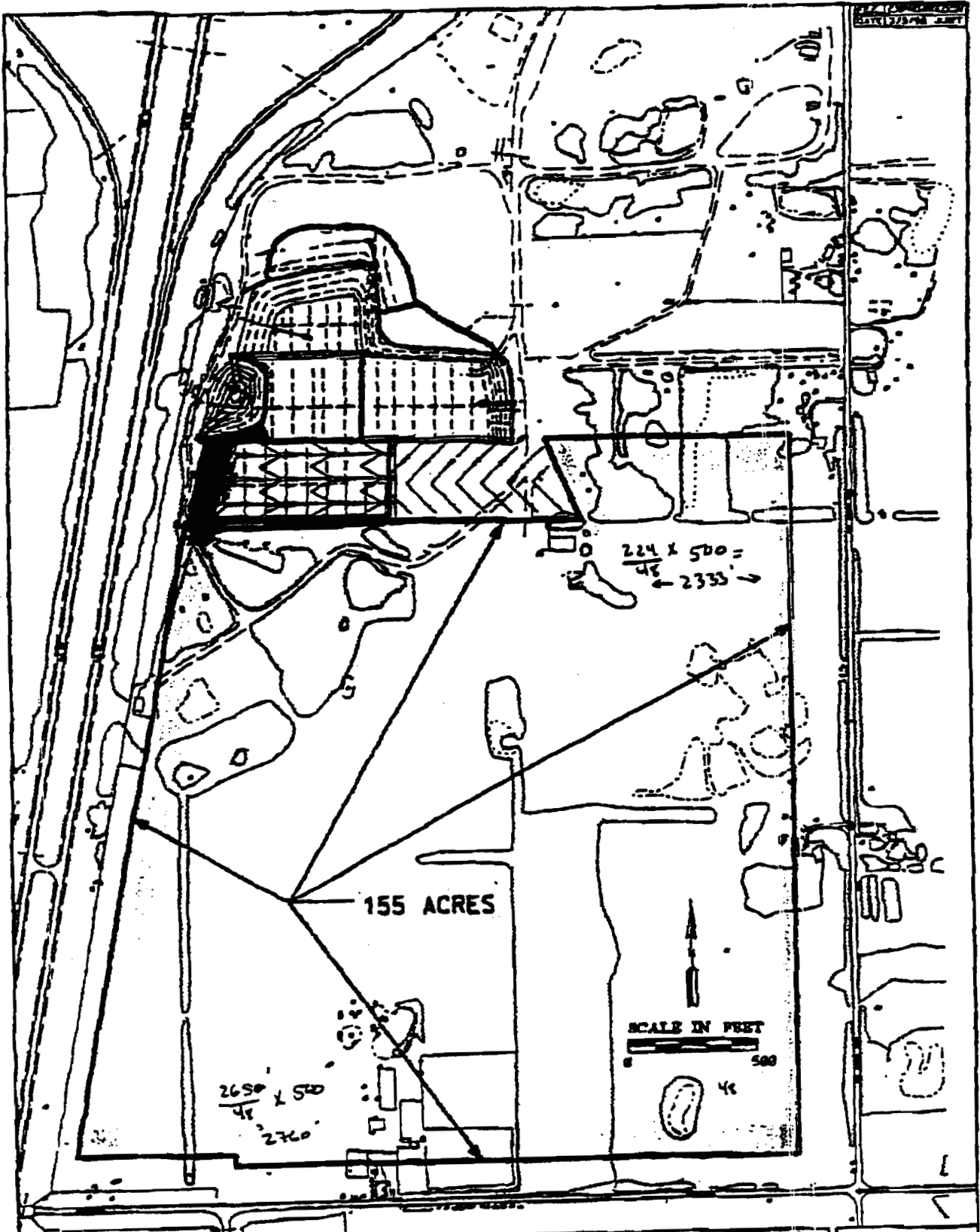
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Office: (616) 845-0355
Fax: (616) 843-8445





ALLIED WASTE - CSL

Total Developable Area

Wenck
 Wenck Associates, Inc.
 Environmental Engineers
 1000 Foster Creek Center
 Maple Plain, MN 55359

FEB. 1998

Figure 1

ATTACHMENTS

Inter-County Agreements

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

Copies of Inter-County agreements that the County of Mason has with other counties are attached.

**MANISTEE AND MASON COUNTIES
MEMORANDUM OF UNDERSTANDING FOR A
RECIPROCAL AGREEMENT ON SOLID WASTE
FOR DAY-TO-DAY FLOW OF SOLID WASTE**

Both Manistee County and Mason County are responsible for the collection and disposal of their own respective solid waste, and both are Michigan counties subject to the regulations and planning requirements of part 115 of P.A. 451 of 1994, as amended, being the Solid Waste Management Part of the Michigan Natural Resources and Environmental Protection Act, M.C.L. 324.11501 *et. seq.* (formerly P.A. 641 of 1978, as amended, (M.C.L. 299.401 *et. seq.*, the Solid Waste Management Act)), hereafter the "Act".

The Act, and administrative rules promulgated pursuant to the Act, requires both the receiving and sending county's solid waste management plan include statements as to where solid waste will be sent to and/or received from, before wastes can be transported between counties.

The *Manistee County Solid Waste Plan* of 1998/9, page 59 provides for a mechanism to enter into reciprocal agreements such as this one:

The *Mason County Solid Waste Plan* of 1998/9, page ____ provides for a mechanism to enter into reciprocal agreements such as this one:

- A. Manistee County will agree to accept solid waste from Mason County, for primary day-to-day and/or standby backup disposal in solid waste facilities in Manistee County so long as:
 - 1. The solid waste facility(ies) is(are) open to the public; and
 - 2. Users are not to be subject to discrimination in service or tipping fee published price structure (which can include volume discount and special handling).
- B. Mason County will agree to accept solid waste from Manistee County for primary day-to-day and/or standby backup disposal in solid waste facilities in Mason County so long as:
 - 1. The solid waste facility(ies) is(are) open to the public; and
 - 2. Users are not to be subject to discrimination in service or tipping fee published price structure (which can include volume discount and special handling).
- C. Mason County may negotiate with Manistee County Landfill, Inc., (owned by Allied Waste Systems, Inc.) for certain capacity guarantee, so long as the result of the negotiation does not reduce the available disposal capacity for Manistee County (excluding solid waste from Tondu Energy Systems, Inc. (40,000 tons per year) and Tenneco Packaging Inc. (58,000 to 127,200 tons per year)) below 25,000 tons per year at the current plan approved Manistee County Landfill, Inc., until year 2086.

This agreement may be terminated by either county upon receipt of a mutually agreeable notice adequate to provide time for another method of primary (permanent) disposal and/or standby disposal. If adequate notice is not mutually agreed to, then adequate notice shall be two years.

Both counties agree to assume their own and separate liability, and assume financial responsibility for payment of any damages, fines, etc., at their own cost, as would exist if this agreement had never been entered into.


FOR MANISTEE COUNTY

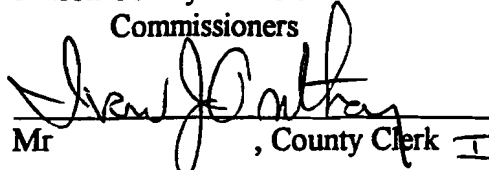
Mrs. Sharlene Wild, Chair
Manistee County Board of
Commissioners

Mrs. Marilyn Kliber, County Clerk

Date: _____

FOR MASON COUNTY


Mr Thomas M. Poole, Chair
Mason County Board of
Commissioners


Mr _____, County Clerk *Ivan J Anthony*

Date: 3-9-99

SOLID WASTE RECIPROCAL AGREEMENT

WHEREAS, all counties within the State of Michigan are subject to the regulations and planning requirements of Section 11539a of Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act of 1994, P.A. 451, as amended ("The Act"); and

WHEREAS, Mason County and Oceana County are both State of Michigan Counties, are subject to The Act and are therefore responsible for the collection and disposal of their own respective solid waste; and

WHEREAS, The Act requires that both the importing and exporting county's solid waste management plan include statements as to where the solid waste will be transported and that the receiving county will accept the solid waste before waste material may be transported between counties.

NOW, THEREFORE BE IT RESOLVED: That Oceana County will accept solid waste from Mason County for both primary and contingency disposal, and will identify Mason County in its future import authorization category for the disposal of solid waste if and when a solid waste facility is sited within Oceana County so long as these facilities are open to the public and that Mason County solid waste will not be subject to discrimination in services or tipping fee price structure.

BE IT FURTHER RESOLVED: That Mason County will agree to accept the import of solid waste from Oceana County for both primary and contingency disposal in solid waste facilities within Mason County so long as these facilities are open to the public and that Oceana County solid waste will not be subject to discrimination in services or tipping fee price structure.

BE IT FURTHER RESOLVED: That this agreement may be terminated by either Mason County or Oceana County upon receipt of a mutually agreed upon notice that is adequate to provide for the necessary time to identify and procure another primary solid waste disposal site. If adequate notice is not mutually agreeable to either county, then adequate notice shall be determined as two years.

BE IT FINALLY RESOLVED: That both Counties agree to assume their own and separate liability and that both Counties agree to assume their own financial responsibility for any payments for assessed damages, fines or penalties at their own cost as would exist if this agreement had never been entered into.

FOR OCEANA COUNTY

Raphael L. Malburg
Chairperson, Board of Commissioners

Date: 10-8-98

FOR MASON COUNTY

Thomas M. Jones
Chairperson, Board of Commissioners

Date: 3-9-99

SOLID WASTE RECIPROCAL AGREEMENT

WHEREAS, all counties within the State of Michigan are subject to the regulations and planning requirements of Section 11539a of Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act of 1994, P.A. 451, as amended ("The Act"); and

WHEREAS, Mason County and Newaygo County are both State of Michigan Counties, are subject to "The Act" and are therefore responsible for the collection and disposal of their own respective solid waste; and

WHEREAS, "The Act" requires that both the importing and exporting county's solid waste management plan include statements as to where the solid waste will be transported and that the receiving county will accept the solid waste before waste material may be transported between counties.

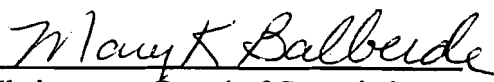
NOW, THEREFORE BE IT RESOLVED: That Newaygo County will accept solid waste from Mason County for both primary and contingency disposal, and will identify Mason County in its future import authorization category for the disposal of solid waste if and when a solid waste facility is sited within Newaygo County so long as these facilities are open to the public and that Mason County solid waste will not be subject to discrimination in services or tipping fee price structure.

BE IT FURTHER RESOLVED: That Mason County will agree to accept the import of solid waste from Newaygo County for both primary and contingency disposal in solid waste facilities within Mason County so long as these facilities are open to the public and that Newaygo County solid waste will not be subject to discrimination in services or tipping fee price structure.

BE IT FURTHER RESOLVED: That this agreement may be terminated by either Mason County or Newaygo County upon receipt of a mutually agreed upon notice that is adequate to provide for the necessary time to identify and procure another primary solid waste disposal site. If adequate notice is not mutually agreeable to either county, then adequate notice shall be determined as two years.

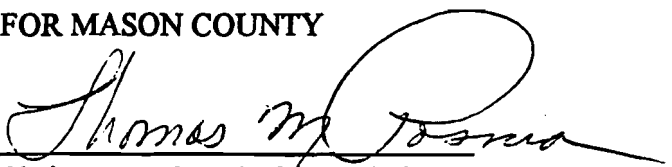
BE IT FINALLY RESOLVED: That both Counties agree to assume their own and separate liability and that both Counties agree to assume their own financial responsibility for any payments for assessed damages, fines or penalties at their own cost as would exist if this agreement had never been entered into.

FOR NEWAYGO COUNTY


Chairperson, Board of Commissioners

Date: January 6, 1999

FOR MASON COUNTY


Chairperson, Board of Commissioners

Date: 3-9-99

SOLID WASTE RECIPROCAL RESOLUTION/AGREEMENT

WHEREAS, Lake County and Mason County are responsible for the collection and disposal of their own respective solid waste, and both are Michigan counties subject to the regulations and planning requirements of Section 11539a of Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act 1994 P.A. 451 as amended; and

WHEREAS, the Act requires that both the receiving and sending county's solid waste management plan include statements as to where solid waste will be sent to and/or will be received from, before waste can be transported between counties.

THEREFORE, BE IT RESOLVED, Lake County will agree to accept solid waste from Mason County for primary and/or standby backup disposal in solid waste facilities within its borders so long as they are open to the public and users will not be subject to discrimination in services or tipping fee price structure.

BE IT FURTHER RESOLVED that Mason County will agree to accept solid waste from Lake County for primary and/or standby backup disposal in solid waste facilities within its borders so long as they are open to the public and users will not be subject to discrimination in services or tipping fee price structure.

BE IT FURTHER RESOLVED that this agreement may be terminated by either County upon receipt of a mutually agreeable notice adequate to provide time for another method of primary disposal. If adequate notice is not mutually agreed to, then adequate notice shall be two years.

BE IT FURTHER RESOLVED that both Counties agree to assume their own and separate liability, and assume financial responsibility for payment of any damages, fines, etc., at their own cost, as would exist if this agreement had never been entered into.

BE IT FURTHER RESOLVED that each County's solid waste management plan shall authorize the terms of this Resolution/Agreement.

FOR LAKE COUNTY

Charles Young
Chairman, Board of Commissioners

Date: 1/6/1999

FOR MASON COUNTY

Thomas M. Thomas
Chairman, Board of Commissioners

Date: 3-9-99



County of Ottawa

Health Department

Environmental Health Division

12251 James Street Suite 200 Holland, MI 49424-9675

(616) 393-5645
Fax (616) 393-5643

April 22, 1999

Mr. Fabian L. Knizacky, Administrator
Mason County Court House
304 E. Ludington Avenue
Ludington MI 49431

Dear Mr. Knizacky

I am in receipt of your letter dated April 19, 1999, requesting that Ottawa County enter into a reciprocal agreement with Mason County for disposal of solid waste. An Agreement was included with your letter.

The Ottawa County Solid Waste Management Plan Update, February- 1999, will recognize 24 counties for import/export authorization. The Plan groups these 24 counties together in a market region and authorizes the import of a combined total of up to 1,500,000 tons per year. Ottawa County will also authorize the export of up to 100 percent of its waste stream to these 24 counties who authorize the acceptance of solid waste from Ottawa County. Mason County is included in the Ottawa County SWMP Update.

Ottawa County does not intend to enter into any formal agreements with other counties beyond the requirements of PA 451, Part 115. Thus, I am returning to you the unsigned originals of the Solid Waste Reciprocal Resolution/Agreement. If you have any questions, please feel free to call me at 616/393-5638.

Sincerely,

Darwin J. Baas
Solid Waste Management Coordinator

enclosure

III.4 Import Authorization

In order to account for current and projected rates of growth in population, commercial development, and the overall increase of the industrial base, Ottawa County has developed long-term disposal capacity reserves at existing Type II landfill facilities to ensure the proper management of the solid waste stream generated within the County.

The primary use of these licensed disposal facilities and the reserve capacity is designed for the disposal of solid wastes generated in Ottawa County. In consideration of existing markets within the waste management industry and the movement of solid waste among counties, the Plan recognizes certain counties in Michigan and therefore authorizes waste transfers to allow for the effective, environmentally sound, and competitive management of the solid waste stream. By designating those counties from which Ottawa County landfills can accept wastes, the County is maintaining a proactive role in ensuring that its waste disposal needs are met and the long-term solid waste management goals of the County are realized through the implementation of this Plan. The Ottawa County Farms Landfill is authorized under an agreement with the County to receive 750,000 tons of Type II and Type III solid waste per year and the Autumn Hills Recycling and Disposal Facility is authorized under an agreement with the County to receive 750,000 tons of Type II and Type III solid waste per year. Copies of these agreements are provided in Attachment D-2.

The counties listed in Table 3-A are authorized by Ottawa County to dispose of a combined total of 1,500,000 tons per year of Type II and Type III solid wastes in licensed facilities in Ottawa County, if authorized by the exporting County's Solid Waste Management Plan. This allows the private sector waste management companies to be competitive and to service clients based upon market demand. Figure III-1 shows the counties that import solid and special waste into Ottawa County. Table 1-A shows the current import authorization volume. Table 1-B is the same as Table 1-A because Ottawa County does not intend to site any new facilities.

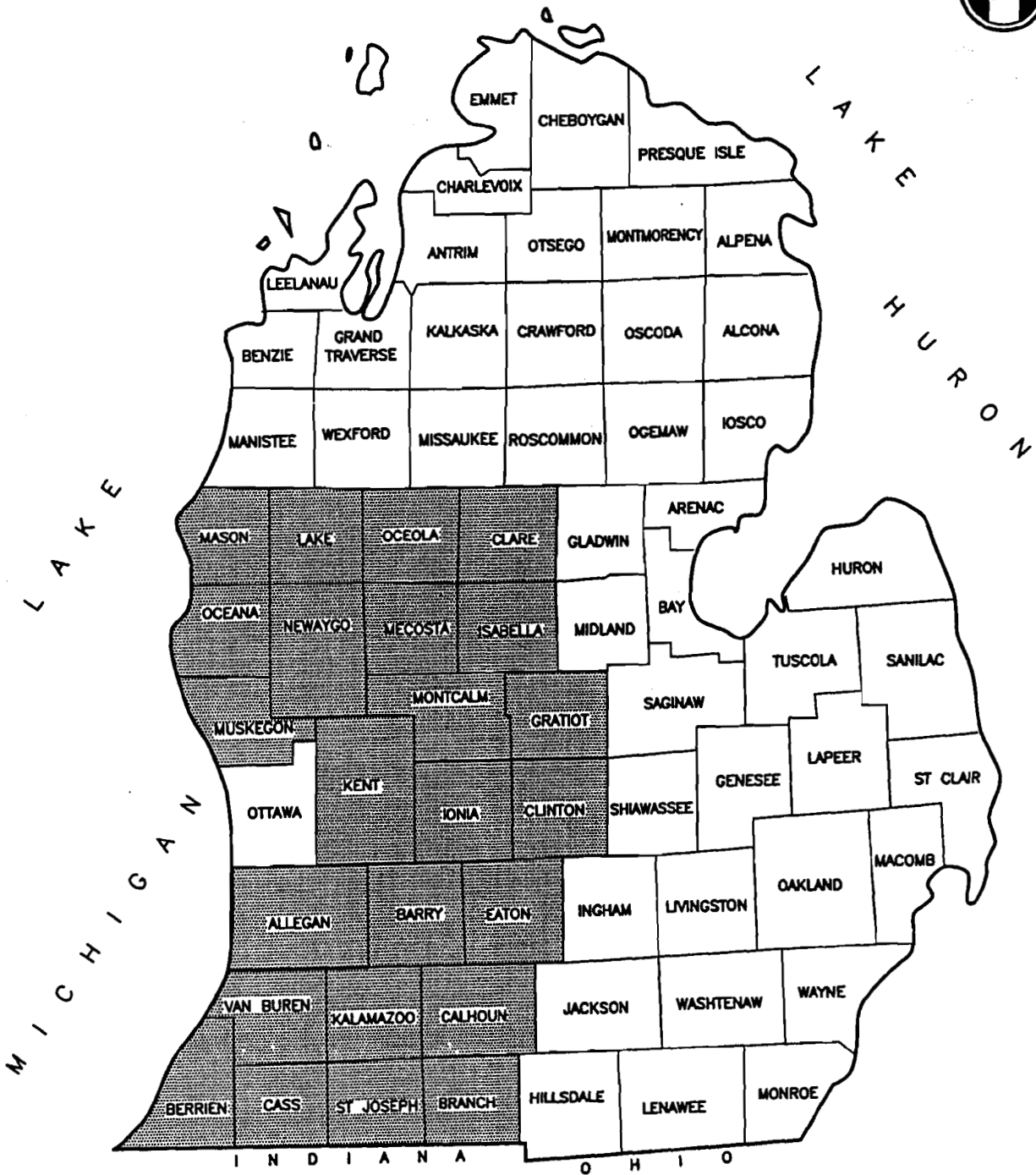
Counties that import solid wastes from or export solid wastes to Ottawa County are to provide a copy of the county's approved Solid Waste Management Plan to the Ottawa County Environmental Health Division when completed.

These arrangements are to be effective for five years or until this Plan is amended or updated. The implementation of these arrangements will be through the reports prepared every six months by the operators of the landfills in Ottawa County. The Ottawa County Environmental Health Division will monitor the quantities and the county of origin for these wastes based upon these reports.

| Table 3-A List of Counties for Import/Export of Solid Waste | | | | |
|--|---------|----------|------------|-----------|
| Ottawa | Allegan | Barry | Berrien | Branch |
| Calhoun | Cass | Clare | Clinton | Eaton |
| Gratiot | Ionia | Isabella | Kalamazoo | Kent |
| Lake | Mason | Mecosta | Muskegon | Montcalm |
| Newaygo | Oceana | Osceola | St. Joseph | Van Buren |

III.5 Export Authorization

Ottawa County authorizes the exportation of up to 100 percent of Ottawa County's solid waste to be exported to any of the counties listed below whose Solid Waste Management Plan specifically authorizes the importation of Ottawa County Waste. Figure III-1 shows the counties that currently accept wastes from Ottawa County. Table 2-A shows the current export authorization volume. Table 2-B is the same as Table 2-A because Ottawa County's export volume is not dependent upon new facilities being sited in any of the importing communities.



WESTSHORE CONSULTING

Engineers ■ Scientists ■ Surveyors ■ Planners

2534 Block Creek Road
Muskegon, MI 49444
(616) 777-3447
Fax: (616) 773-3453

375 River ST., Suite 201
Manistee, MI 49660
(616) 723-2202
Fax: (616) 723-2291

**OTTAWA COUNTY
SOLID WASTE PLAN**

**SOLID AND SPECIAL WASTE
IMPORT & EXPORT MAP**

Checked: SRM
Date: 04/06/98
Drawn by: BJ
Date: 04/06/98
File No.: 914-4

Figure:

III-1

SOLID WASTE RECIPROCAL RESOLUTION/AGREEMENT

WHEREAS, Ottawa County and Mason County are responsible for the collection and disposal of their own respective solid waste, and both are Michigan counties subject to the regulations and planning requirements of Section II 5 3 9a of Part II 5, Solid Waste Management, of the Natural Resources and Environmental Protection Act 1994 P.A. 451 as amended; and

WHEREAS, the Act requires that both the receiving and sending county's solid waste management plan include statements as to where solid waste will be sent to and/or will be received from, before waste can be transported between counties.

THEREFORE, BE IT RESOLVED, Ottawa County will agree to accept solid waste from Mason County for primary and/or standby backup disposal in solid waste facilities within its borders so long as they are open to the public and users will not be subject to discrimination in services or tipping fee price structure. It is further agreed that Mason County is authorized to export up to 125,000 yards of waste per year to Ottawa County.

BE IT FURTHER RESOLVED, that Mason County will agree to accept solid waste from Ottawa County for primary and/or standby backup disposal in solid waste facilities within its borders so long as they are open to the public and users will not be subject to discrimination in services or tipping fee price structure. It is further agreed that Ottawa County is authorized to export up to 125,000 yards of waste per year to Mason County.

BE IT FURTHER RESOLVED, that this agreement may be terminated by either County upon receipt of a mutually agreeable notice adequate to provide time for another method of primary disposal. If adequate notice is not mutually agreed to, then adequate notice shall be two years.

BE IT FURTHER RESOLVED, that both Counties agree to assume their own and separate liability, and assume financial responsibility for payment of any damages, fines, etc., at their own cost, as would exist if this agreement had never been entered into.

BE IT FURTHER RESOLVED, that each County's solid waste management plan shall authorize the terms of this Resolution/Agreement.

FOR OTTAWA COUNTY

Chairman, Board of Commissioners

Date: _____

FOR MASON COUNTY


Chairman, Board of Commissioners

Date: 3-9-99

SOLID WASTE RECIPROCAL RESOLUTION/AGREEMENT

WHEREAS, Ionia County and Mason County are responsible for the collection and disposal of their own respective solid waste, and both are Michigan counties subject to the regulations and planning requirements of Section II 5 3 9a of Part II 5, Solid Waste Management, of the Natural Resources and Environmental Protection Act 1994 P.A. 451 as amended; and

WHEREAS, the Act requires that both the receiving and sending county's solid waste management plan include statements as to where solid waste will be sent to and/or will be received from, before waste can be transported between counties.

THEREFORE, BE IT RESOLVED, Ionia County will agree to accept solid waste from Mason County for primary and/or standby backup disposal in solid waste facilities within its borders so long as they are open to the public and users will not be subject to discrimination in services or tipping fee price structure. It is further agreed that Mason County is authorized to export up to 125,000 yards of waste per year to Ionia County.

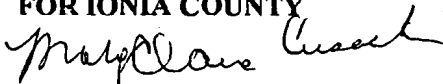
BE IT FURTHER RESOLVED, that Mason County will agree to accept solid waste from Ionia County for primary and/or standby backup disposal in solid waste facilities within its borders so long as they are open to the public and users will not be subject to discrimination in services or tipping fee price structure. It is further agreed that Ionia County is authorized to export up to 125,000 yards of waste per year to Mason County.

BE IT FURTHER RESOLVED, that this agreement may be terminated by either County upon receipt of a mutually agreeable notice adequate to provide time for another method of primary disposal. If adequate notice is not mutually agreed to, then adequate notice shall be two years.

BE IT FURTHER RESOLVED, that both Counties agree to assume their own and separate liability, and assume financial responsibility for payment of any damages, fines, etc., at their own cost, as would exist if this agreement had never been entered into.

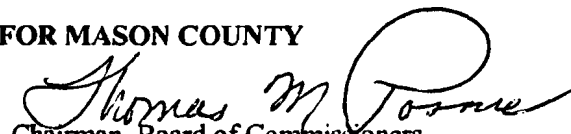
BE IT FURTHER RESOLVED, that each County's solid waste management plan shall authorize the terms of this Resolution/Agreement.

FOR IONIA COUNTY


Chairman, Board of Commissioners

Date: 5-6-99

FOR MASON COUNTY


Chairman, Board of Commissioners

Date: 3-999

SOLID WASTE RECIPROCAL RESOLUTION/AGREEMENT

WHEREAS, Washtenaw County and Mason County are responsible for the collection and disposal of their own respective solid waste, and both are Michigan counties subject to the regulations and planning requirements of Section II 5 3 9a of Part II 5, Solid Waste Management, of the Natural Resources and Environmental Protection Act 1994 P.A. 451 as amended; and

WHEREAS, the Act requires that both the receiving and sending county's solid waste management plan include statements as to where solid waste will be sent to and/or will be received from, before waste can be transported between counties.

THEREFORE, BE IT RESOLVED, Washtenaw County will agree to accept solid waste from Mason County for contingency disposal in solid waste facilities within its borders so long as they are open to the public and users will not be subject to discrimination in services or tipping fee price structure. It is further agreed that Mason County is authorized to export up to 125,000 yards of waste per year to Washtenaw County.

BE IT FURTHER RESOLVED, that Mason County will agree to accept solid waste from Washtenaw County for contingency disposal in solid waste facilities within its borders so long as they are open to the public and users will not be subject to discrimination in services or tipping fee price structure. It is further agreed that Washtenaw County is authorized to export up to 125,000 yards of waste per year to Mason County.

BE IT FURTHER RESOLVED, that this agreement may be terminated by either County upon receipt of a mutually agreeable notice adequate to provide time for another method of primary disposal. If adequate notice is not mutually agreed to, then adequate notice shall be two years.

BE IT FURTHER RESOLVED, that both Counties agree to assume their own and separate liability, and assume financial responsibility for payment of any damages, fines, etc., at their own cost, as would exist if this agreement had never been entered into.

BE IT FURTHER RESOLVED, that each County's solid waste management plan shall authorize the terms of this Resolution/Agreement.

FOR WASHTENAW COUNTY

Chairman, Board of Commissioners

Date: _____

FOR MASON COUNTY


Chairman, Board of Commissioners

Date: 3-9-99

SOLID WASTE RECIPROCAL RESOLUTION/AGREEMENT

WHEREAS, Benzie County and Mason County are responsible for the collection and disposal of their own respective solid waste, and both are Michigan counties subject to the regulations and planning requirements of Section II 5 3 9a of Part II 5, Solid Waste Management, of the Natural Resources and Environmental Protection Act 1994 P.A. 451 as amended; and

WHEREAS, the Act requires that both the receiving and sending county's solid waste management plan include statements as to where solid waste will be sent to and/or will be received from, before waste can be transported between counties.

THEREFORE, BE IT RESOLVED, Benzie County will agree to accept solid waste from Mason County for primary and/or standby backup disposal in solid waste facilities within its borders so long as they are open to the public and users will not be subject to discrimination in services or tipping fee price structure.

BE IT FURTHER RESOLVED, that Mason County will agree to accept solid waste from Benzie County for primary and/or standby backup disposal in solid waste facilities within its borders so long as they are open to the public and users will not be subject to discrimination in services or tipping fee price structure.

BE IT FURTHER RESOLVED, that this agreement may be terminated by either County upon receipt of a mutually agreeable notice adequate to provide time for another method of primary disposal. If adequate notice is not mutually agreed to, then adequate notice shall be two years.

BE IT FURTHER RESOLVED, that both Counties agree to assume their own and separate liability, and assume financial responsibility for payment of any damages, fines, etc., at their own cost, as would exist if this agreement had never been entered into.

BE IT FURTHER RESOLVED, that each County's solid waste management plan shall authorize the terms of this Resolution/Agreement.

FOR BENZIE COUNTY

Chairman, Board of Commissioners

Date: _____

FOR MASON COUNTY


Chairman, Board of Commissioners

Date: 5-13-99

SOLID WASTE RECIPROCAL AGREEMENT

WHEREAS, Osceola County and Mason County are responsible for the collection and disposal of their own respective solid waste, and both are Michigan counties subject to the regulations and planning requirements of Section 11539a of Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act 1994 P.A. 451 as amended, and;

WHEREAS, The Act requires that both the receiving and sending county's solid waste management plan include statements as to where solid waste will be sent to and/or will be received from, before wastes can be transported between counties.

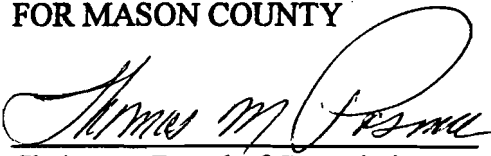
THEREFORE, BE IT RESOLVED, Osceola County will agree to accept solid waste from Mason County for primary and/or standby backup disposal in solid waste facilities within its borders so long as they are open to the public and users will not be subject to discrimination in services or tipping fee price structure.

BE IT FURTHER RESOLVED, THAT Mason County will agree to accept solid waste from Osceola County for primary and/or standby backup disposal in solid waste facilities within its borders so long as they are open to the public and users will not be subject to discrimination in services or tipping fee price structure.

BE IT FURTHER RESOLVED, THAT This agreement may be terminated by either County upon receipt of a mutually agreeable notice adequate to provide time for another method of primary disposal. If adequate notice is not mutually agreed to, then adequate notice shall be two years.

BE IT FURTHER RESOLVED, THAT both Counties agree to assume their own and separate liability, and assume financial responsibility for payment of any damages, fines, etc., at their own cost, as would exist if this agreement had never been entered into.

FOR MASON COUNTY


Chairman, Board of Commissioners

Date: 5-13-99

FOR OSCEOLA COUNTY


Chairperson, Board of Commissioners

Date: 7-30-98

SOLID WASTE RECIPROCAL RESOLUTION/AGREEMENT

WHEREAS, Montcalm County and Mason County are responsible for the collection and disposal of their own respective solid waste, and both are Michigan counties subject to the regulations and planning requirements of Section II 5 3 9a of Part II 5, Solid Waste Management, of the Natural Resources and Environmental Protection Act 1994 P.A. 451 as amended; and

WHEREAS, the Act requires that both the receiving and sending county's solid waste management plan include statements as to where solid waste will be sent to and/or will be received from, before waste can be transported between counties.

THEREFORE, BE IT RESOLVED, Montcalm County will agree to accept solid waste from Mason County for primary and/or standby backup disposal in solid waste facilities within its borders so long as they are open to the public and users will not be subject to discrimination in services or tipping fee price structure. It is further agreed that Mason County is authorized to export up to 125,000 yards of waste per year to Montcalm County.

BE IT FURTHER RESOLVED, that Mason County will agree to accept solid waste from Montcalm County for primary and/or standby backup disposal in solid waste facilities within its borders so long as they are open to the public and users will not be subject to discrimination in services or tipping fee price structure. It is further agreed that Montcalm County is authorized to export up to 125,000 yards of waste per year to Mason County.

BE IT FURTHER RESOLVED, that this agreement may be terminated by either County upon receipt of a mutually agreeable notice adequate to provide time for another method of primary disposal. If adequate notice is not mutually agreed to, then adequate notice shall be two years.

BE IT FURTHER RESOLVED, that both Counties agree to assume their own and separate liability, and assume financial responsibility for payment of any damages, fines, etc., at their own cost, as would exist if this agreement had never been entered into.

BE IT FURTHER RESOLVED, that each County's solid waste management plan shall authorize the terms of this Resolution/Agreement.


FOR MONTCALM COUNTY


Chairman, Board of Commissioners

Date:

6/16/99

FOR MASON COUNTY


Chairman, Board of Commissioners

Date:

5-27-99

ATTACHMENTS

Special Conditions

Special conditions affecting import or export of solid waste.

Mason County has limited the amount of waste that can be imported/exported between Mason County and Ottawa, Montcalm or Washtenaw Counties to a maximum of 125,000 yards per year.

LOCAL UNITS OF GOVERNMENT RESOLUTIONS OF SUPPORT

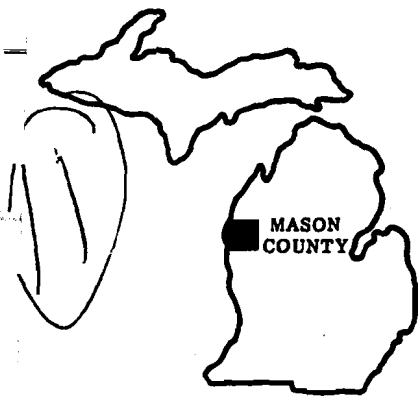
The following Mason County local units of Government passed resolutions approving the Mason County Solid Waste Management Plan Update:

1. Mason County Board of Commissioners
2. Amber Township Board
3. Branch Township Board
4. Custer Township Board
5. Village of Custer Council
6. Eden Township Board
7. Free Soil Township Board
8. Village of Free Soil Council
9. Village of Fountain Council
10. Grant Township Board
11. Hamlin Township Board
12. Logan Township Board
13. Ludington City Commission
14. Meade Township Board
15. Pere Marquette Charter Township Board
16. Riverton Township Board
17. Scottville City Commission
18. Sheridan Township Board
19. Sherman Township Board
20. Summit Township Board
21. Victory Township Board

The following Mason County local units of Government passed resolutions disapproving the Mason County Solid Waste Management Plan Update:

None.

Copies of the resolutions passed by each local unit of government in Mason County are attached.



Mason County Board of Commissioners

Court House
304 E. Ludington Ave., Ludington, Michigan 49431
(231) 843-7999 • Fax (231) 843-1972

Thomas M. Posma
Chairman

Ronald E. Sanders
Vice Chairman

Ivan J. Anthony
County Clerk

Fabian L. Knizacky
Administrator

Harold Madden
District 1

Michael G. Schneider
District 2

John E. Henderson
District 3

James L. Pinkerton
District 4

Jerome Flybicki
District 5

Thomas M. Posma
District 6

Charles Eberbach
District 7

Ronald E. Sanders
District 8

Robert A. Genson
District 9

APPROVAL OF UPDATE TO THE MASON COUNTY SOLID WASTE MANAGEMENT PLAN

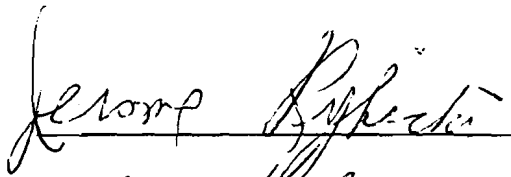
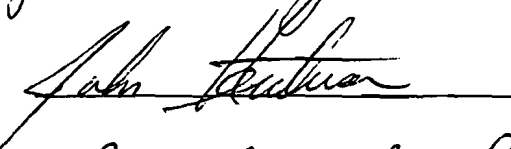

WHEREAS, the Mason County Board of Commissioners designated the Mason County Administrator's office to be the Designated Planning Agency to prepare the update to the Mason County Solid Waste Management Plan under the provisions of Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended; and

WHEREAS, the Mason County Administrator's office and the Mason County Solid Waste Management Planning Committee have prepared the Plan; and

WHEREAS, the Mason County Solid Waste Management Planning Committee did approve the Plan at a meeting held on December 28, 1999 and is recommending that the Board of Commissioners approve the Plan and forward it to the various municipalities within the County for their approval.

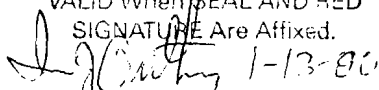
THEREFORE BE IT RESOLVED, that the Board of Commissioners of the County of Mason approves the update to the Mason County Solid Waste Management Plan and directs that the Plan be forwarded by the County Administrator to the various municipalities within the County for their approval.

Moved for approval.

I HEREBY CERTIFY this to be a true and correct copy of the record on file with the Mason County Clerk.

This Certified Copy Only
VALID When SEAL AND RED
SIGNATURE Are Affixed.


IVAN J. ANTHONY
MASON COUNTY CLERK

**RESOLUTION FOR THE APPROVAL OF THE
MASON COUNTY SOLID WASTE MANAGEMENT PLAN**

By action of the Board/Commission/Council of Amber
(City/Township/Village)

It is hereby resolved that we Approved the Mason County Solid Waste
(Approved/Disproved)
Management Plan, prepared pursuant to the Natural Resources and Environmental
Protection Act, 1994 PA 451, as amended (NREPA), Part 115, Solid Waste Management,
and its Administrative Rules.

Darryl P. Donovan
Appropriate Local Representative

Brenda J. Day
Witnessed by

January 31, 2008
Dated

**RESOLUTION FOR THE APPROVAL OF THE
MASON COUNTY SOLID WASTE MANAGEMENT PLAN**

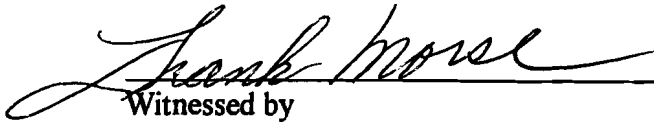
By action of the Board/Commission/Council of BRANCH Township
(City/Township/Village)

It is hereby resolved that we approved the Mason County Solid Waste
(Approved/Disproved)

Management Plan, prepared pursuant to the Natural Resources and Environmental
Protection Act, 1994 PA 451, as amended (NREPA), Part 115, Solid Waste Management,
and its Administrative Rules.



Appropriate Local Representative



Witnessed by

March 9, 2000
Dated

**RESOLUTION FOR THE APPROVAL OF THE
MASON COUNTY SOLID WASTE MANAGEMENT PLAN**

By action of the Board/Commission/Council of Custer
(City/Township/Village)

It is hereby resolved that we Approved the Mason County Solid Waste
(Approved/Disproved)

Management Plan, prepared pursuant to the Natural Resources and Environmental
Protection Act, 1994 PA 451, as amended (NREPA), Part 115, Solid Waste Management,
and its Administrative Rules.

Emily D. Purton

Appropriate Local Representative

Susan Kense

Witnessed by

2/1/2000
Dated

**RESOLUTION FOR THE APPROVAL OF THE
MASON COUNTY SOLID WASTE MANAGEMENT PLAN**

By action of the Board/Commission/Council of Village of Crestler
(City/Township/Village)

It is hereby resolved that we approve the Mason County Solid Waste
(Approved/Disproved)

Management Plan, prepared pursuant to the Natural Resources and Environmental
Protection Act, 1994 PA 451, as amended (NREPA), Part 115, Solid Waste Management,
and its Administrative Rules.

John Chikara pres
Appropriate Local Representative

Margaret Griswold Clerk
Witnessed by

2-1-2000
Dated

**RESOLUTION FOR THE APPROVAL OF THE
MASON COUNTY SOLID WASTE MANAGEMENT PLAN**

By action of the Board/Commission/Council of Eden
(City/Township/Village)

It is hereby resolved that we Eden twp Bd Member the Mason County Solid Waste
(Approved/Disproved)

Management Plan, prepared pursuant to the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), Part 115, Solid Waste Management, and its Administrative Rules.

Bonnie Rathbone Clerk
Appropriate Local Representative

Vic Baker - Supervisor
Witnessed by

2/19-00
Dated

**RESOLUTION FOR THE APPROVAL OF THE
MASON COUNTY SOLID WASTE MANAGEMENT PLAN**

By action of the Board/Commission/Council of Freesoil Township
(City/Township/Village)

It is hereby resolved that we Approve the Mason County Solid Waste
(Approved/Disproved)

Management Plan, prepared pursuant to the Natural Resources and Environmental
Protection Act, 1994 PA 451, as amended (NREPA), Part 115, Solid Waste Management,
and its Administrative Rules.

Dorey Quirma Temp. Supervisor
Appropriate Local Representative

Anne Hasenbank, clerk
Witnessed by

2/21/2000
Dated

**RESOLUTION FOR THE APPROVAL OF THE
MASON COUNTY SOLID WASTE MANAGEMENT PLAN**

By action of the Board/Commission/Council of Village of Free Soil
(City/Township/Village)

It is hereby resolved that we Approved the Mason County Solid Waste
(Approved/Disproved)

Management Plan, prepared pursuant to the Natural Resources and Environmental
Protection Act, 1994 PA 451, as amended (NREPA), Part 115, Solid Waste Management,
and its Administrative Rules.

Sandra M. Leppner
Appropriate Local Representative

David Morley
Witnessed by

March 15, 2000
Dated

RECEIVED
MAR 27 2000
MASON COUNTY
DEPT OF PUBLIC WORKS

RESOLUTION FOR THE APPROVAL/DISAPPROVAL
OF AMENDMENT 97-1 TO THE
MASON COUNTY SOLID WASTE MANAGEMENT PLAN

By action of the Board/Council of Fountain
Township/Village/City

It is hereby resolved that we Approved
Approve/Disapprove Amendment 97-1

to the Mason County Solid Waste Management Plan, prepared pursuant
to Part 115 of the Natural Resources and Environmental Protection Act,
being Public Act 451 of 1994, as amended, and the rules promulgated
thereunder, for Mason County.

Rabah Brown - Clerk
Appropriate Local Authority

Shirley Chappelle -
Witnessed by

2-7-2000
Dated

**RESOLUTION FOR THE APPROVAL OF THE
MASON COUNTY SOLID WASTE MANAGEMENT PLAN**

By action of the Board/Commission/Council of Grant Township
(City/Township/Village)

It is hereby resolved that we Approve the Mason County Solid Waste
(Approved/Disproved)

Management Plan, prepared pursuant to the Natural Resources and Environmental
Protection Act, 1994 PA 451, as amended (NREPA), Part 115, Solid Waste Management,
and its Administrative Rules.

John Helmerick
Appropriate Local Representative

Mary Jo Janowiak
Witnessed by

March 1, 2000
Dated

**RESOLUTION FOR THE APPROVAL OF THE
MASON COUNTY SOLID WASTE MANAGEMENT PLAN**

By action of the Board/Commission/Council of Township of Hamlin
(City/Township/Village)

It is hereby resolved that we Approved the Mason County Solid Waste
(Approved/Disproved)

Management Plan, prepared pursuant to the Natural Resources and Environmental
Protection Act, 1994 PA 451, as amended (NREPA), Part 115, Solid Waste Management,
and its Administrative Rules.

Catherine Lewis, Clerk
Appropriate Local Representative

Kathryn Apple
Witnessed by

February 10, 2000
Dated

**RESOLUTION FOR THE APPROVAL OF THE
MASON COUNTY SOLID WASTE MANAGEMENT PLAN**

By action of the Board/Commission/Council of Logan
(City/Township/Village)

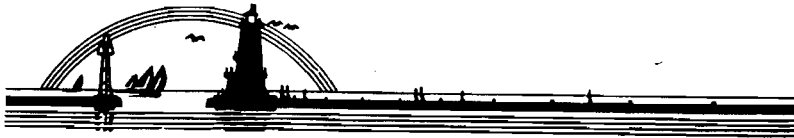
It is hereby resolved that we Approved the Mason County Solid Waste
(Approved/Disproved)

Management Plan, prepared pursuant to the Natural Resources and Environmental
Protection Act, 1994 PA 451, as amended (NREPA), Part 115, Solid Waste Management,
and its Administrative Rules.

Berna Bernke
Appropriate Local Representative

Berna Bernke
Witnessed by

2-24-2000
Dated



CITY OF LUDINGTON

CAROL POMORSKI, MAYOR
JAMES H. MILLER, CITY MANAGER
GERRY PEHRSON KLAFT, CITY CLERK
MARY REEDS-MORTENSEN, CITY TREASURER

201 SOUTH WILLIAM STREET
LUDINGTON, MICHIGAN 49431
PHONE (616) 845-6237
FAX (616) 845-1146

RESOLUTION FOR THE APPROVAL OF THE MASON COUNTY SOLID WASTE MANAGEMENT PLAN

By action of the ~~Board/Commission~~/Council of Ludington
(City/Township/Village)

It is hereby resolved that we approved the Mason County Solid Waste
(Approved/Disproved)

Management Plan, prepared pursuant to the Natural Resources and Environmental
Protection Act, 1994 PA 451, as amended (NREPA), Part 115, Solid Waste Management,
and its Administrative Rules.

Gerry Pehrson Kluft
Appropriate Local Representative *city clerk*

Rachelle D. Erbody
Witnessed by

3/3/00
Dated

**RESOLUTION FOR THE APPROVAL OF THE
MASON COUNTY SOLID WASTE MANAGEMENT PLAN**

By action of the Board/Commission/Council of Meade
(City/Township/Village)

It is hereby resolved that we approved the Mason County Solid Waste
(Approved/Disproved)

Management Plan, prepared pursuant to the Natural Resources and Environmental
Protection Act, 1994 PA 451, as amended (NREPA), Part 115, Solid Waste Management,
and its Administrative Rules.

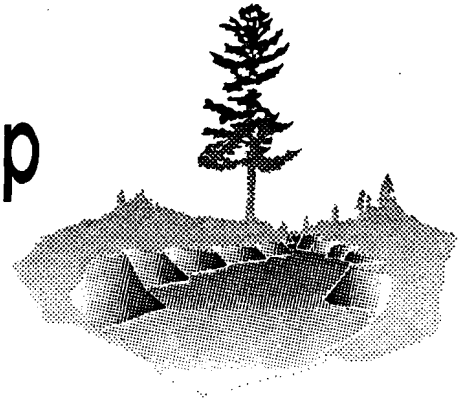
William McLane
Appropriate Local Representative

Sue Hasenbank
Witnessed by

2/14/2000
Dated

Pere Marquette Charter Township

1699 South Pere Marquette Hwy. Ludington, Michigan 49431
(616) 845-1277 Fax (616) 843-3330



March 1, 2000

Fabian L. Knizacky
Mason County Administrator
304 E. Ludington Avenue
Ludington, MI 49431

Dear Fabian:

During a regular meeting of the Pere Marquette Charter Township Board held last evening, the following resolution was adopted concerning the Mason County Solid Waste Management Plan.

"Resolved by Messer, seconded by Jansen to approve the Mason County Solid Waste Management Plan, 1998 Update, draft date December 28, 1999, prepared pursuant to the Natural Resources and Environmental Protection Act, PA 451 of 1994 as amended (NREPA), Part 115, Solid Waste Management, and its Administrative Rules.

Resolution adopted . . . all aye"

Sincerely,

A handwritten signature in cursive script, appearing to read 'Joanne Kelley'.

Joanne Kelley, CMC
Township Clerk

cc PM Planning Commission

**RESOLUTION FOR THE APPROVAL OF THE
MASON COUNTY SOLID WASTE MANAGEMENT PLAN**

By action of the Board/Commission/Council of Twp. of Riverton
(City/Township/Village)

It is hereby resolved that we approved the Mason County Solid Waste
(Approved/Disproved)

Management Plan, prepared pursuant to the Natural Resources and Environmental
Protection Act, 1994 PA 451, as amended (NREPA), Part 115, Solid Waste Management,
and its Administrative Rules.

Rita A. Johnson

Rita A. Johnson, Clerk
Appropriate Local Representative

Mary L. Nichols

Mary L. Nichols, Treasurer
Witnessed by

February 7, 2000
Dated

**RESOLUTION FOR THE APPROVAL OF THE
MASON COUNTY SOLID WASTE MANAGEMENT PLAN**

By action of the Board/Commission/Council of Scottville
(City/Township/Village)

It is hereby resolved that we approved the Mason County Solid Waste
(Approved/Disproved)

Management Plan, prepared pursuant to the Natural Resources and Environmental
Protection Act, 1994 PA 451, as amended (NREPA), Part 115, Solid Waste Management,
and its Administrative Rules.

Amy S. Hansen, City Manager
Appropriate Local Representative

Deborah A Howe
Witnessed by

2/7/00
Dated

**RESOLUTION FOR THE APPROVAL OF THE
MASON COUNTY SOLID WASTE MANAGEMENT PLAN**

By action of the Board/Commission/Council of Sheridan Township
(City/Township/Village)

It is hereby resolved that we approved the Mason County Solid Waste
(Approved/Disproved)

Management Plan, prepared pursuant to the Natural Resources and Environmental
Protection Act, 1994 PA 451, as amended (NREPA), Part 115, Solid Waste Management,
and its Administrative Rules.

Maryann Gulombo
Appropriate Local Representative

Corissa ? Gulombo FT
Witnessed by

2/16/00
Dated

**RESOLUTION FOR THE APPROVAL OF THE
MASON COUNTY SOLID WASTE MANAGEMENT PLAN**

By action of the Board/Commission/Council of SHERMAN TOWNSHIP
(City/Township/Village)

It is hereby resolved that we Approved the Mason County Solid Waste
(Approved/Disproved)

Management Plan, prepared pursuant to the Natural Resources and Environmental
Protection Act, 1994 PA 451, as amended (NREPA), Part 115, Solid Waste Management,
and its Administrative Rules.

Stanley Sava, Twp. Supv.
Appropriate Local Representative

Rita Randle, Twp. Treasurer
Witnessed by

February 15, 2000
Dated

**RESOLUTION FOR THE APPROVAL OF THE
MASON COUNTY SOLID WASTE MANAGEMENT PLAN**

By action of the Board/Commission/Council of Summit Township
(City/Township/Village)

It is hereby resolved that we APPROVED the Mason County Solid Waste
(Approved/Disproved)

Management Plan, prepared pursuant to the Natural Resources and Environmental
Protection Act, 1994 PA 451, as amended (NREPA), Part 115, Solid Waste Management,
and its Administrative Rules.

Edward S. Steen, Supervisor
Appropriate Local Representative

Mary DeLu Clark
Witnessed by

2-07-00
Dated

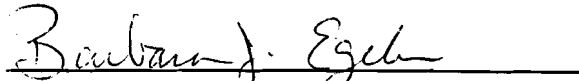
**RESOLUTION FOR THE APPROVAL OF THE
MASON COUNTY SOLID WASTE MANAGEMENT PLAN**

By action of the Board/Commission/Council of VICTORY TOWNSHIP
(City/Township/Village)

It is hereby resolved that we APPROVED the Mason County Solid Waste
(Approved/Disproved)

Management Plan, prepared pursuant to the Natural Resources and Environmental
Protection Act, 1994 PA 451, as amended (NREPA), Part 115, Solid Waste Management,
and its Administrative Rules.


Appropriate Local Representative


Witnessed by

2-7-00
Dated



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