

# REPORT OF SOLID WASTE LANDFILLED IN MICHIGAN

October 1, 2018 - September 30, 2019

Prepared By: Michigan Department of Environment, Great Lakes, and Energy Materials Management Division Solid Waste Section P.O. Box 30241 Lansing, Michigan 48909-7741 517-284-6551

February 14, 2020

#### TABLE OF CONTENTS

	I	PAGE
INTRODUCTION		1
WASTE DISPOSAL	SUMMARY INFORMATION	2
TABLE 1	SOLID WASTE DISPOSED IN MICHIGAN LANDFILLS	4
TABLE 2	SOLID WASTE DISPOSED IN MICHIGAN LANDFILLS BY PERCENTAGE	4
FIGURE 1	OUT-OF-STATE WASTE AS PERCENTAGE OF TOTAL DISPOSAL IN MICHIGAN LANDFILLS	5
FIGURE 2	MICHIGAN AND OUT-OF-STATE WASTE AS PERCENTAGE OF TOTAL DISPOSAL IN MICHIGAN LANDFILLS	5
TABLE 3	SOLID WASTE DISPOSAL SOURCE SUMMARY	6
TABLE 3A	INDUSTRIAL WASTE DISPOSAL SOURCE SUMMARY	7
TABLE 3B	ALTERNATIVE DAILY COVER WASTE DISPOSAL SOURCE	CE
	SUMMARY	7
WASTE IMPORTS		8
TABLE 4	IMPORTED WASTE BY ORIGIN	8
FIGURE 3	IMPORTED WASTE BY ORIGIN	9
TABLE 5	IMPORTED WASTE BY COUNTY AND PLACE OF ORIGIN	9
TABLE 6	TOTAL WASTE DISPOSED IN MICHIGAN LANDFILLS FROM EACH COUNTY	10
TABLE 6A	TOTAL WASTE DISPOSED BY COUNTY	13
FACILITY INFORMA	TION	14
TABLE 7	TOTAL WASTE DISPOSAL BY FACILITY	14
TABLE 8	MCW DISPOSAL BY FACILITY	17
TABLE 9	IW AND C&D DISPOSAL BY FACILITY	19
CAPACITY INFORM	ATION	22
TABLE 10	FACILITY CAPACITY AND YEARS REMAINING FOR NONCAPTIVE FACILITIES	23
APPENDIX A – WAS		
APPENDIX B – LAN	DFILL DISPOSAL BY WASTE ORIGIN AND TYPE	

#### **INTRODUCTION**

Section 11507a(1) of Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, requires all landfills in Michigan to "annually submit a report to the state and the county and municipality in which the landfill is located that contains information on the amount of solid waste received by the landfill during the year itemized, to the extent possible, by county, state, or country of origin and the amount of remaining disposal capacity at the landfill." Section 11507a(2) of Part 115 states, "By January 31 of each year, the department shall submit to the legislature a report summarizing the information obtained under subsection (1)." This report covers the period from October 1, 2018 - September 30, 2019, and is the twenty fourth annual Report of Solid Waste Landfilled in Michigan as compiled from the information submitted by the individual landfills.

It is recognized by the Department of Environment, Great Lakes, and Energy (EGLE) that the data may include estimates as to remaining capacity, volume, and point of origin of the waste stream reported by each landfill. Additionally, use of both standard and waste-specific conversion factors between tons and cubic yards<sup>1</sup> may further alter the data's accuracy.

Landfills report the waste received by category using the Combined Solid Waste Landfill Waste Receipt Report (Combined Report) form. For purposes of this report, MCW means municipal and commercial waste and is typically residential-like waste; IW means industrial waste and technologically enhanced naturally occurring radioactive material (TENORM); C&D means construction and demolition waste; ADC means alternate daily cover; and CS means contaminated soils not used as ADC. For additional information on the waste types that fall within each of these categories, see the Waste Type Key found in Appendix A. Certain IW types are accounted for specifically in the Combined Report forms, primarily to calculate the financial assurance applicable to those types of wastes. These specially accounted wastes are: (1) foundry

<sup>&</sup>lt;sup>1</sup> Please note that Michigan uses the unit of measure of cubic yards to be reported by landfills. To aid in comparing other states' waste to Michigan's, a simple conversion of 3 cubic yards equals 1 ton of waste has been applied and is referenced in footnotes in this report.

sand; (2) coal or wood ash; (3) wastewater treatment sludges; and (4) sludges from wood processing or paper manufacturing. If these wastes are placed in segregated cells or otherwise separated from other wastes in a landfill, they are labeled in this report as "IW – Segregated" (if each specially accounted waste is disposed separately) or "IW – Mixed" (if the specially accounted wastes are mixed together). For additional information on these wastes, see Sections 11525(3) and (4) of Part 115.

It should be noted that this report addresses waste disposed in Michigan landfills from in-state and out-of-state locations. It does not address waste originating in Michigan that is transported to locations outside Michigan for disposal. Additionally, this report covers only waste landfilled in Michigan and does not attempt to determine the amount of waste removed from the overall waste stream prior to final disposal by such means as waste reduction and recycling. Incineration in Michigan is also not addressed, except for the final landfilling of ash from municipal incinerators.

#### WASTE DISPOSAL SUMMARY INFORMATION

Total waste disposal in Michigan landfills was reported at 55,704,644 cubic yards, an increase of 3,259,429 cubic yards or 6.2 percent over the fiscal year (FY) 2018 report data. Waste generated in Michigan increased from 39,932,328 cubic yards in the previous reporting period to 43,324,503 cubic yards, an increase of about 8.5 percent. Total imports of waste into Michigan landfills decreased from the previous reporting period from 12,512,887 cubic yards to 12,380,141 cubic yards, a decrease of about 1.1 percent. The largest source of waste imports to Michigan continues to be from Canada, with total reported imports to landfills of 9,534,163 cubic yards, down 236,222 cubic yards or about 2.4 percent from the FY 2018 report data. Canadian waste imports equal about 17.1 percent of all waste disposed in Michigan landfills with waste reported from other states and Canada totaling about 22.2 percent of all solid waste disposed in Michigan landfills. Imported waste comprised 23.9 percent of solid waste disposed in Michigan landfills in the previous year. Further, the data that follow outline the out-of-state imports to Michigan over the past twenty-four FYs. Imports from other states increased to 2,845,978 cubic yards from 2,742,502 cubic yards, an increase of about 3.8 percent. This information is presented in Tables 1 and 2 and

2

Figures 1 and 2, and it shows only the past ten years' data. Previous years' data can be found online by clicking the following hyperlink: Annual Reports of Solid Waste Landfilled in Michigan.

Audits are performed by EGLE to reconcile quantities reported by the landfills to ensure proper surcharge payments and Perpetual Care Fund (PCF) deposits. Therefore, please note that the quantities and percentages shown for previous years may reflect corrections submitted by the landfills since the last annual report was published. Consequently, Tables 1 and 2 and Figures 1 and 2 may differ from previous reports.

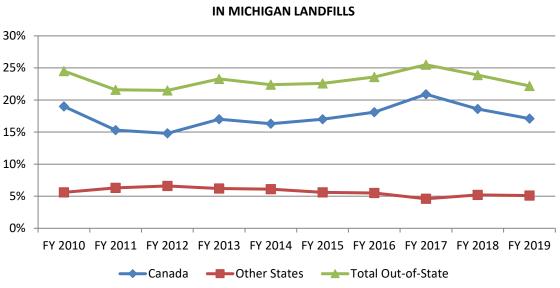
Recognizing that the solid waste data presented in this report are used to project revenues from solid waste surcharges specified in Section 11525a of Part 115, only the solid waste volumes reported at noncaptive<sup>2</sup> disposal facilities should be used for the calculation of the 12 cents per cubic yard surcharge. For FY 2019 that amount was 54,038,558 cubic yards. The remaining waste was received at captive facilities, which are subject to a flat fee of \$500 to \$3,000 based upon the volume of waste received. Note that the volumes in this report may not agree with the volumes also reported by the landfills in their quarterly surcharge reports.

<sup>&</sup>lt;sup>2</sup> Part 115 recognizes two types of facilities, captive and noncaptive, for the purposes of the payment of the surcharge assessed under Section 11525a. Section 11525a(5) states, in pertinent part, " 'captive facility' means a landfill that accepts for disposal only nonhazardous industrial waste generated only by the owner of the landfill or a nonhazardous industrial waste landfill that is specified in section 11525(3)."

TABLE 1 SOLID WASTE DISPOSED IN MICHIGAN LANDFILLS (All Figures in Cubic Yards)				
Fiscal Year	Michigan	Canada	Other States	Totals
FY 2010	34,802,866	8,757,014	2,563,056	46,122,936
FY 2011	35,857,919	6,983,127	2,886,955	45,728,001
FY 2012	34,485,534	6,512,223	2,912,750	43,910,507
FY 2013	34,233,158	7,594,716	2,785,700	44,613,574
FY 2014	36,281,718	7,639,167	2,830,235	46,751,120
FY 2015	36,862,512	8,090,942	2,672,899	47,626,353
FY 2016	37,488,887	8,883,958	2,690,793	49,063,638
FY 2017	37,723,925	10,572,922	2,307,845	50,604,692
FY 2018	39,932,328	9,770,385	2,742,502	52,445,215
FY 2019	43,324,503 <sup>3</sup>	9,534,163 4	2,845,978 5	55,704,644 <sup>6</sup>

TABLE 2 SOLID WASTE DISPOSED IN MICHIGAN LANDFILLS BY PERCENTAGE						
Fiscal Year	Fiscal Year Michigan Canada Other States					
FY 2010	75.5%	19%	5.6%			
FY 2011	78.4%	15.3%	6.3%			
FY 2012	78.5%	14.8%	6.6%			
FY 2013	76.7%	17%	6.2%			
FY 2014	77.6%	16.3%	6.1%			
FY 2015	77.4%	17%	5.6%			
FY 2016	76.4%	18.1%	5.5%			
FY 2017	74.5%	20.9%	4.6%			
FY 2018	76.1%	18.6%	5.2%			
FY 2019	77.8%	17.1%	5.1%			

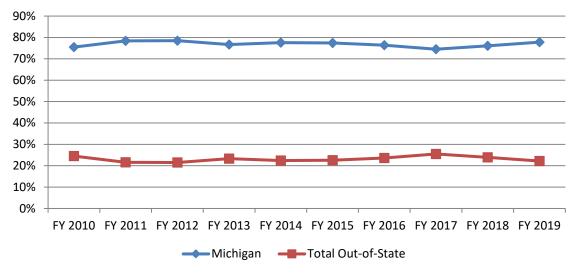
<sup>&</sup>lt;sup>3</sup> MICHIGAN WASTE: 14,441,500 tons <sup>4</sup> CANADIAN WASTE: 3,178,054 tons <sup>5</sup> OTHER STATES WASTE: 948,659 tons <sup>6</sup> TOTAL WASTE DISPOSED IN MICHIGAN LANDFILLS: 18,568,210 tons



**OUT-OF-STATE WASTE AS PERCENTAGE OF TOTAL DISPOSAL** 

FIGURE 1





The following provides details concerning the volumes of waste disposed in Michigan landfills and provides a breakdown of the waste imported into Michigan for disposal for all landfills that reported this information. Table 3 displays waste disposal summary information for both in-state and imported waste. Some facilities may have reported data from an unknown origin. All unknown waste is reported as in-state waste, however, it is expected that some of the unassigned waste is from out-of-state sources.

TABLE 3 SOLID WASTE DISPOSAL SOURCE SUMMARY (Volume in Cubic Yards)						
WASTE TYPE	WASTE TYPE IN-STATE IMPORTED TOTAL					
MCW	25,840,848	9,804,473	35,645,321			
MCW – MSW* INCINERATOR ASH	42,239	0	42,239			
SUBTOTAL MCW	25,883,087	9,804,473	35,687,560			
IW	5,068,255	1,002,158	6,070,413			
IW – SEGREGATED	1,162,503	0	1,162,503			
IW – SEGREGATED MIXED	425,696	0	425,696			
SUBTOTAL IW	6,656,454	1,002,158	7,658,612			
C&D	6,739,659	918,343	7,658,002			
ADC	1,588,585	584,370	2,172,955			
CS	2,456,718	70,797	2,527,515			
GRAND TOTAL	<b>GRAND TOTAL</b> 43,324,50312,380,14155,704,644					

\*Municipal Solid Waste

Table 3A displays the IW disposal summary for both in-state and imported waste. Landfills are only required to report to EGLE, to the extent possible; therefore, some landfills may not have broken down the materials disposed to the level of detail as shown below and, thus, have categorized all their industrial waste as "IW – General." The "IW – Alternative Daily Cover" category is other material that is approved by EGLE for use as alternative daily cover at an operating landfill. The "IW – Other" category refers to other industrial waste types that are not identified on the Combined Report form and includes contaminated soils.

TABLE 3A INDUSTRIAL WASTE DISPOSAL SOURCE SUMMARY (Volume in Cubic Yards)						
WASTE TYPE	WASTE TYPE IN-STATE IMPORTED TOTAL					
IW - Foundry Sand	199,902	39,702	239,604			
IW - Wastewater Sludges	416,039	45,734	461,773			
IW-Wood/Paper Sediment	51,430	0	51,430			
IW - Coal Ash	1,160,870	24,068	1,184,938			
IW - Wood Ash	68,224	0	68,224			
IW - Wood/Paper Sludges	83,344	7,770	91,114			
IW - Other	4,056,821	883,144	4,939,965			
IW - Other Sludges	266,075	1,740	267,815			
IW - Cement Kiln Dust	343,296	0	343,296			
IW-TENORM	10,453	0	10,453			
GRAND TOTAL   6,656,454   1,002,158   7,658,612						

TABLE 3B
ALTERNATIVE DAILY COVER WASTE DISPOSAL SOURCE SUMMARY
(Volume in Cubic Yards)

WASTE TYPE	IN-STATE	IMPORTED	TOTAL
ADC-Foundry Sand	55,366	0	55,366
ADC-Coal or Wood Ash	25,362	0	25,362
ADC-Other	870,919	0	870,919
ADC-Chipped Tires	32,903	200	33,103
ADC-Auto Shredder Residuals	535,105	583,430	1,118,535
ADC-Sludges	47,100	0	47,100
ADC-Contaminated Soils	21,830	740	22,570
GRAND TOTAL	1,588,585	584,370	2,172,955

#### WASTE IMPORTS

Based on the reported information for FY 2019, the solid waste industry in Michigan imported solid waste from 12 other states and from Canada for disposal in Michigan landfills. Table 4 indicates the volume of MCW, IW, C&D, ADC and CS imported and the state or country of origin of the waste. Figure 3 indicates the total volume of waste imported by state or country of origin of the waste.

TABLE 4 IMPORTED WASTE BY ORIGIN - FY 2019 (Volume in Cubic Yards)						
WASTE ORIGIN	MCW	IW	C&D	ADC	CS	TOTAL WASTE
CANADA	8,628,921	239,100	666,142	0	0	9,534,163
CONNECTICUT	0	125,747	0	0	0	125,747
ILLINOIS	0	0	25	200	0	225
INDIANA	424,876	68,787	70,569	740	32	565,004
KENTUCKY	0	0	6	0	0	6
MASSACHUSETTS	0	0	12	0	0	12
MISSOURI	0	0	12	0	0	12
NEW JERSEY	0	6,119	0	0	0	6,119
OHIO	531,692	537,337	177,663	583,430	69,275	1,899,397
OREGON	0	0	3	0	0	3
TENNESSEE	0	100	0	0	0	100
WEST VIRGINIA	0	0	20	0	0	20
WISCONSIN	218,984	24,968	3,891	0	1,490	249,333

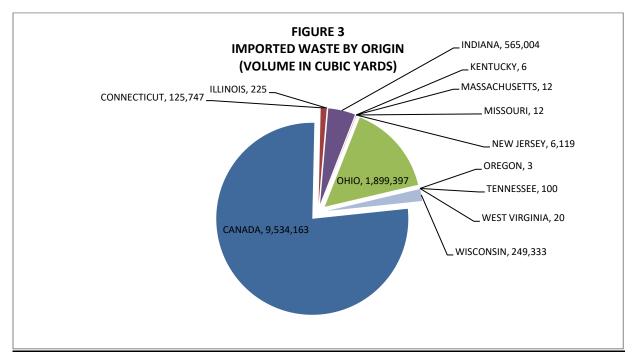


Table 5 shows the total amount of waste imported into each county from all out-of-state	
sources.	

TABLE 5 IMPORTED WASTE BY COUNTY AND PLACE OF ORIGIN - FY 2019 (Volume in Cubic Yards)			
COUNTY	WASTE ORIGIN	WASTE VOLUME	
ALGER	WISCONSIN	3,167	
BERRIEN	ILLINOIS	200	
BERRIEN	INDIANA	415,473	
CHIPPEWA	CANADA	52,258	
DICKINSON	WISCONSIN	150	
GENESEE	CANADA	186,560	
GENESEE	CONNECTICUT	125,747	
GENESEE	INDIANA	20	
GENESEE	NEW JERSEY	6,119	
GENESEE	OHIO	24,039	
HURON	CANADA	65	
JACKSON	OHIO	112,208	
МАСОМВ	CANADA	4,942,364	
МАСОМВ	OHIO	3,347	
MENOMINEE	WISCONSIN	110,832	
MONROE	INDIANA	2	
MONROE	OHIO	1,452,760	
OAKLAND	OHIO	2,910	

TABLE 5 IMPORTED WASTE BY COUNTY AND PLACE OF ORIGIN - FY 2019 (Volume in Cubic Yards)			
COUNTY	WASTE ORIGIN	WASTE VOLUME	
ONTONAGON	WISCONSIN	135,107	
PRESQUE ISLE	CANADA	33,840	
ST CLAIR	CANADA	242,190	
ST JOSEPH	INDIANA	141,417	
WASHTENAW	OHIO	19,090	
WAYNE	CANADA	4,076,886	
WAYNE	INDIANA	8,080	
WAYNE	MASSACHUSETTS	12	
WAYNE	OHIO	285,029	
WAYNE	TENNESSEE	100	
WAYNE	WEST VIRGINIA	20	
WEXFORD	ILLINOIS	25	
WEXFORD	INDIANA	12	
WEXFORD	KENTUCKY	6	
WEXFORD	MISSOURI	12	
WEXFORD	OHIO	14	
WEXFORD	OREGON	3	
WEXFORD	WISCONSIN	77	

Table 6 shows the total amount of waste disposed in Michigan landfills from each

Michigan county.

TABLE 6TOTAL WASTE DISPOSED IN MICHIGAN LANDFILLS FROM EACH COUNTY - FY 2019 (Volume in Cubic Yards)		
COUNTY	WASTE VOLUME	
ALCONA	13,473	
ALGER	29,428	
ALLEGAN	474,492	
ALPENA	442,009	
ANTRIM	16,937	
ARENAC	43,114	
BARAGA	38,208	
BARRY	97,481	
BAY	732,275	

TABLE 6   TOTAL WASTE DISPOSED IN MICHIGAN LANDFILLS FROM EACH COUNTY - FY 2019   (Volume in Cubic Yards)		
COUNTY	WASTE VOLUME	
BENZIE	22,371	
BERRIEN	995,581	
BRANCH	184,425	
CALHOUN	577,524	
CASS	173,792	
CHARLEVOIX	104,245	
CHEBOYGAN	107,441	
CHIPPEWA	112,474	
CLARE	105,912	
CLINTON	230,936	
CRAWFORD	87,477	
DELTA	169,186	
DICKINSON	242,831	
EATON	308,371	
EMMET	107,890	
GENESEE	1,527,520	
GLADWIN	66,692	
GOGEBIC	20,644	
GRAND TRAVERSE	387,696	
GRATIOT	139,267	
HILLSDALE	70,632	
HOUGHTON	76,715	
HURON	141,683	
INGHAM	1,054,060	
IONIA	150,865	
IOSCO	117,622	
IRON	12,081	
ISABELLA	130,348	
JACKSON	533,082	
KALAMAZOO	1,234,091	
KALKASKA	120,023	
KENT	2,157,882	
KEWEENAW	2,983	
LAKE	21,697	
LAPEER	266,652	
LEELANAU	23,714	
LENAWEE	131,786	

TABLE 6TOTAL WASTE DISPOSED IN MICHIGAN LANDFILLS FROM EACH COUNTY - FY 2019 (Volume in Cubic Yards)		
COUNTY	WASTE VOLUME	
LIVINGSTON	331,251	
LUCE	14,840	
MACKINAC	23,512	
МАСОМВ	2,467,835	
MANISTEE	290,576	
MARQUETTE	199,633	
MASON	117,917	
MECOSTA	74,378	
MENOMINEE	66,522	
MIDLAND	442,014	
MISSAUKEE	68,057	
MONROE	1,026,941	
MONTCALM	152,750	
MONTMORENCY	37,303	
MUSKEGON	794,229	
NEWAYGO	112,809	
OAKLAND	4,180,532	
OCEANA	54,727	
OGEMAW	41,697	
ONTONAGON	10,322	
OSCEOLA	53,854	
OSCODA	22,746	
OTSEGO	85,827	
OTTAWA	1,193,005	
PRESQUE ISLE	43,186	
ROSCOMMON	74,348	
SAGINAW	580,193	
SANILAC	129,719	
SCHOOLCRAFT	118,190	
SHIAWASSEE	231,013	
ST CLAIR	1,005,592	
ST JOSEPH	289,182	
TUSCOLA	105,641	
VAN BUREN	170,196	
WASHTENAW	1,204,225	
WAYNE	13,593,697	
WEXFORD	110,436	

Table 6A shows the total amount of waste disposed by each county that has a landfill. Click here to view an online map that indicates where Michigan's active solid waste landfills are located.

TABLE 6A TOTAL WASTE DISPOSED BY COUNTY - FY 2019 (Volume in Cubic Yards)		
COUNTY	TOTAL WASTE VOLUME	
ALGER	148,480	
ALPENA	335,099	
BARRY	148,878	
BAY	829,922	
BERRIEN	1,986,703	
CALHOUN	1,217,902	
CHARLEVOIX	8,121	
CHIPPEWA	114,022	
CLARE	318,655	
CLINTON	1,737,644	
CRAWFORD	239,592	
DELTA	190,176	
DICKINSON	128,327	
GENESEE	2,382,931	
HURON	191,682	
IONIA	343,716	
JACKSON	512,116	
KENT	1,035,089	
LEELANAU	86,571	
МАСОМВ	8,030,812	
MANISTEE	419,935	
MARQUETTE	198,079	
MENOMINEE	157,485	
MIDLAND	446,886	
MONROE	1,846,106	
MONTCALM	692,152	
MONTMORENCY	197,840	
MUSKEGON	426,120	
OAKLAND	2,347,490	
ONTONAGON	279,129	
OTTAWA	2,675,551	
PRESQUE ISLE	367,730	

TABLE 6A TOTAL WASTE DISPOSED BY COUNTY - FY 2019 (Volume in Cubic Yards)			
COUNTY TOTAL WASTE VOLUME			
SAGINAW	590,735		
SANILAC	85,118		
SCHOOLCRAFT 139,8			
SHIAWASSEE 664,8			
ST CLAIR	1,247,770		
ST JOSEPH 1,077,64			
WASHTENAW 5,662,09			
WAYNE 15,488,81			
WEXFORD	705,357		

### FACILITY INFORMATION

The total of MCW disposed, total of IW, C&D, ADC, and CS disposed, and total volume disposed at each of the 66 reporting facilities is given in Table 7. Tables 8 and 9 list the MCW and the IW, C&D, ADC and CS disposal volumes ranked in order of volume disposed. The highlighted type of waste in each of Tables 8 and 9 corresponds to the focus of that table. However, all waste information is also provided for reference purposes.

TABLE 7 TOTAL WASTE DISPOSAL BY FACILITY - ALPHABETICAL LISTING - FY 2019 (Volume in Cubic Yards)				
FACILITY NAMEMCW DISPOSEDIW, C&D, ADC AND CS DISPOSEDTOTAL WAS DISPOSED				
ADVANCED DISPOSAL SERVICES ARBOR HILLS LANDFILL, INC.	3,320,416	2,341,680	5,662,096	
AUTUMN HILLS RECYCLING AND DISPOSAL FACILITY	479,291	466,639	945,930	
BRENT RUN LANDFILL	643,966	525,481	1,169,447	
C & C EXPANDED SANITARY LANDFILL	810,335	407,567	1,217,902	
CARLETON FARMS LANDFILL	3,921,032	1,834,964	5,755,996	
CENTRAL SANITARY LANDFILL	633,571	58,581	692,152	

TABLE 7 TOTAL WASTE DISPOSAL BY FACILITY - ALPHABETICAL LISTING - FY 2019 (Volume in Cubic Yards)			
FACILITY NAME	MCW DISPOSED	IW, C&D, ADC AND CS DISPOSED	TOTAL WASTE DISPOSED
CITIZENS DISPOSAL, INC.	534,576	678,908	1,213,484
CITY ENVIRONMENTAL SERVICES, INC., OF WATERS	194,877	44,715	239,592
CITY OF LIVONIA LANDFILL	0	5,223	5,223
CITY OF MIDLAND SANITARY LANDFILL	194,446	252,440	446,886
CONSUMERS ENERGY DE KARN	0	18,000	18,000
CONSUMERS ENERGY J H CAMPBELL COMPLEX	0	247,800	247,800
CONSUMERS WEADOCK COMPLEX	0	277,383	277,383
COUNTY OF MUSKEGON - SOLID WASTE LANDFILL	249,487	176,633	426,120
DAFTER SANITARY LANDFILL	110,248	3,774	114,022
DELTA COUNTY LANDFILL	77,775	39,837	117,612
DETROIT EDISON CO RANGE ROAD ASH DISPOSAL	0	276,455	276,455
DETROIT EDISON CO SIBLEY QUARRY	0	70,316	70,316
DTE MONROE POWER PLANT	0	258,827	258,827
EAGLE VALLEY RECYCLE & DISPOSAL FACILITY	1,173,099	392,752	1,565,851
EVER-GREEN LANDFILL AND RECYCLING CENTER, LLC	0	14,137	14,137
GFL NORTH MICHIGAN LANDFILL, LLC	301,322	66,408	367,730
GLENS SANITARY LANDFILL	63,565	23,006	86,571
GRANGER GRAND RIVER LANDFILL	3,876	0	3,876
GRANGER WOOD STREET LANDFILL	1,723,520	10,248	1,733,768
HAYWIRE LANDFILL	0	37,967	37,967
HIAWATHA SHORES LANDFILL, INC.	88,235	13,604	101,839
HURON LANDFILL CORP DBA HURON LANDFILL	116,537	75,145	191,682
K & W LANDFILL	251,257	13,735	264,992
LAFARGE MIDWEST, INC.	0	335,099	335,099
LIBERTY ENVIRONMENTALISTS LANDFILL	172,140	122,562	294,702

TABLE 7 TOTAL WASTE DISPOSAL BY FACILITY - ALPHABETICAL LISTING - FY 2019 (Volume in Cubic Yards)			
FACILITY NAME	MCW DISPOSED	IW, C&D, ADC AND CS DISPOSED	TOTAL WASTE DISPOSED
MANISTEE COUNTY LANDFILL, INC.	201,009	218,926	419,935
MARQUETTE COUNTY LANDFILL	111,743	86,336	198,079
MATLIN ROAD LANDFILL	0	68	68
MCGILL ROAD LANDFILL	164,177	53,237	217,414
MICHIGAN ENVIRONS, INC.	112,127	45,358	157,485
MONTMORENCY-OSCODA-	134,527	63,313	197,840
ALPENA SWMA	,	,	,
NIAGARA DEVELOPMENT, LLC	0	17,053	17,053
NORTHERN OAKS RECYCLING AND DISPOSAL FACILITY	195,723	122,932	318,655
OAKLAND HEIGHTS DEVELOPMENT, INC.	511,666	269,973	781,639
ORCHARD HILL SANITARY	713,773	0	713,773
OTTAWA COUNTY FARMS LANDFILL	781,644	700,177	1,481,821
PEOPLES LANDFILL, INC.	462,096	114,742	576,838
PINE TREE ACRES, INC.	6,873,200	1,157,612	8,030,812
PITSCH SANITARY LANDFILL	25,902	317,814	343,716
RACER SAGINAW NODULAR INDUSTRIAL LAND	0	13,897	13,897
REPUBLIC SERVICES OF PINCONNING	296,548	237,991	534,539
RIVERVIEW LAND PRESERVE	1,382,564	557,567	1,940,131
SAUK TRAIL HILLS LANDFILL	818,274	874,939	1,693,213
SC HOLDINGS, INC.	131,459	17,419	148,878
SMITHS CREEK LANDFILL	769,537	201,778	971,315
SOUTH KENT LANDFILL	1,033,167	0	1,033,167
SOUTHEAST BERRIEN COUNTY LANDFILL	1,054,350	218,580	1,272,930
SPARTA FOUNDRY WASTE FACILITY	0	1,922	1,922
ST MARYS CEMENT U.S., LLC	0	8,121	8,121
TRI-CITY RECYCLING AND DISPOSAL FACILITY	64,594	20,524	85,118
VENICE PARK RECYCLING & DISPOSAL FACILITY	438,304	226,504	664,808
VERSO ESCANABA, LLC	0	72,564	72,564

TABLE 7 TOTAL WASTE DISPOSAL BY FACILITY - ALPHABETICAL LISTING - FY 2019 (Volume in Cubic Yards)			
FACILITY NAME	MCW DISPOSED	IW, C&D, ADC AND CS DISPOSED	TOTAL WASTE DISPOSED
VERSO QUINNESEC, LLC	0	111,274	111,274
VIENNA JUNCTION INDUSTRIAL PARK SANITARY LANDFILL	605,190	982,021	1,587,211
WE ENERGIES PRESQUE ISLE POWER PLANT	0	1,554	1,554
WESTSIDE RECYCLING & DISPOSAL FACILITY	578,513	499,133	1,077,646
WEXFORD COUNTY LANDFILL, LLC	582,948	122,409	705,357
WOOD ISLAND WASTE MANAGEMENT, INC.	128,273	20,207	148,480
WOODLAND MEADOWS RDF- VAN BUREN	2,452,681	3,571,253	6,023,934

TABLE 8 MCW DISPOSAL BY FACILITY - RANKED BY VOLUME - FY 2019 (Volume in Cubic Yards)			
FACILITY NAME	MCW DISPOSED	IW, C&D, ADC AND CS DISPOSED	TOTAL WASTE DISPOSED
PINE TREE ACRES, INC.	6,873,200	1,157,612	8,030,812
CARLETON FARMS LANDFILL	3,921,032	1,834,964	5,755,996
ADVANCED DISPOSAL SERVICES ARBOR HILLS LANDFILL, INC.	3,320,416	2,341,680	5,662,096
WOODLAND MEADOWS RDF- VAN BUREN	2,452,681	3,571,253	6,023,934
GRANGER WOOD STREET LANDFILL	1,723,520	10,248	1,733,768
RIVERVIEW LAND PRESERVE	1,382,564	557,567	1,940,131
EAGLE VALLEY RECYCLE & DISPOSAL FACILITY	1,173,099	392,752	1,565,851
SOUTHEAST BERRIEN COUNTY LANDFILL	1,054,350	218,580	1,272,930
SOUTH KENT LANDFILL	1,033,167	0	1,033,167
SAUK TRAIL HILLS LANDFILL	818,274	874,939	1,693,213
C & C EXPANDED SANITARY LANDFILL	810,335	407,567	1,217,902
OTTAWA COUNTY FARMS LANDFILL	781,644	700,177	1,481,821

TABLE 8 MCW DISPOSAL BY FACILITY - RANKED BY VOLUME - FY 2019 (Volume in Cubic Yards)			
FACILITY NAME	MCW DISPOSED	IW, C&D, ADC AND CS DISPOSED	TOTAL WASTE DISPOSED
SMITHS CREEK LANDFILL	769,537	201,778	971,315
ORCHARD HILL SANITARY	713,773	0	713,773
BRENT RUN LANDFILL	643,966	525,481	1,169,447
CENTRAL SANITARY LANDFILL	633,571	58,581	692,152
VIENNA JUNCTION INDUSTRIAL PARK SANITARY LANDFILL	605,190	982,021	1,587,211
WEXFORD COUNTY LANDFILL, LLC	582,948	122,409	705,357
WESTSIDE RECYCLING & DISPOSAL FACILITY	578,513	499,133	1,077,646
CITIZENS DISPOSAL, INC.	534,576	678,908	1,213,484
OAKLAND HEIGHTS DEVELOPMENT, INC.	511,666	269,973	781,639
AUTUMN HILLS RECYCLING AND DISPOSAL FACILITY	479,291	466,639	945,930
PEOPLES LANDFILL, INC.	462,096	114,742	576,838
VENICE PARK RECYCLING & DISPOSAL FACILITY	438,304	226,504	664,808
GFL NORTH MICHIGAN LANDFILL, LLC	301,322	66,408	367,730
REPUBLIC SERVICES OF PINCONNING	296,548	237,991	534,539
K & W LANDFILL	251,257	13,735	264,992
COUNTY OF MUSKEGON - SOLID WASTE LANDFILL	249,487	176,633	426,120
MANISTEE COUNTY LANDFILL, INC.	201,009	218,926	419,935
NORTHERN OAKS RECYCLING AND DISPOSAL FACILITY	195,723	122,932	318,655
CITY ENVIRONMENTAL SERVICES, INC. OF WATERS	194,877	44,715	239,592
CITY OF MIDLAND SANITARY LANDFILL	194,446	252,440	446,886
LIBERTY ENVIRONMENTALISTS LANDFILL	172,140	122,562	294,702
MCGILL ROAD LANDFILL	164,177	53,237	217,414
MONTMORENCY-OSCODA- ALPENA SWMA	134,527	63,313	197,840
SC HOLDINGS, INC.	131,459	17,419	148,878

TABLE 8 MCW DISPOSAL BY FACILITY - RANKED BY VOLUME - FY 2019 (Volume in Cubic Yards)				
FACILITY NAME	MCW DISPOSED	IW, C&D, ADC AND CS DISPOSED	TOTAL WASTE DISPOSED	
WOOD ISLAND WASTE MANAGEMENT, INC.	128,273	20,207	148,480	
HURON LANDFILL CORP DBA HURON LANDFILL	116,537	75,145	191,682	
MICHIGAN ENVIRONS, INC.	112,127	45,358	157,485	
MARQUETTE COUNTY LANDFILL	111,743	86,336	198,079	
DAFTER SANITARY LANDFILL	110,248	3,774	114,022	
HIAWATHA SHORES LANDFILL, INC.	88,235	13,604	101,839	
DELTA COUNTY LANDFILL	77,775	39,837	117,612	
TRI-CITY RECYCLING AND DISPOSAL FACILITY	64,594	20,524	85,118	
GLENS SANITARY LANDFILL	63,565	23,006	86,571	
PITSCH SANITARY LANDFILL	25,902	317,814	343,716	
GRANGER GRAND RIVER LANDFILL	3,876	0	3,876	

TABLE 9 IW AND C&D DISPOSAL BY FACILITY - RANKED BY VOLUME - FY 2019 (Volume in Cubic Yards)				
FACILITY NAME	MCW DISPOSED	IW, C&D, ADC AND CS DISPOSED	TOTAL WASTE DISPOSED	
WOODLAND MEADOWS RDF- VAN BUREN	2,452,681	3,571,253	6,023,934	
ADVANCED DISPOSAL SERVICES ARBOR HILLS LANDFILL, INC.	3,320,416	2,341,680	5,662,096	
CARLETON FARMS LANDFILL	3,921,032	1,834,964	5,755,996	
PINE TREE ACRES, INC.	6,873,200	1,157,612	8,030,812	
VIENNA JUNCTION INDUSTRIAL PARK SANITARY LANDFILL	605,190	982,021	1,587,211	
SAUK TRAIL HILLS LANDFILL	818,274	874,939	1,693,213	
OTTAWA COUNTY FARMS LANDFILL	781,644	700,177	1,481,821	
CITIZENS DISPOSAL, INC.	534,576	678,908	1,213,484	
RIVERVIEW LAND PRESERVE	1,382,564	557,567	1,940,131	
BRENT RUN LANDFILL	643,966	525,481	1,169,447	

TABLE 9 IW AND C&D DISPOSAL BY FACILITY - RANKED BY VOLUME - FY 2019 (Volume in Cubic Yards)						
FACILITY NAME	MCW DISPOSED	IW, C&D, ADC AND CS DISPOSED	TOTAL WASTE DISPOSED			
WESTSIDE RECYCLING & DISPOSAL FACILITY	578,513	499,133	1,077,646			
AUTUMN HILLS RECYCLING AND DISPOSAL FACILITY	479,291	466,639	945,930			
C & C EXPANDED SANITARY LANDFILL	810,335	407,567	1,217,902			
EAGLE VALLEY RECYCLE & DISPOSAL FACILITY	1,173,099	392,752	1,565,851			
LAFARGE MIDWEST, INC.	0	335,099	335,099			
PITSCH SANITARY LANDFILL	25,902	317,814	343,716			
CONSUMERS WEADOCK COMPLEX	0	277,383	277,383			
DETROIT EDISON CO RANGE ROAD ASH DISPOSAL	0	276,455	276,455			
OAKLAND HEIGHTS DEVELOPMENT, INC.	511,666	269,973	781,639			
DTE MONROE POWER PLANT	0	258,827	258,827			
CITY OF MIDLAND SANITARY	194,446	252,440	446,886			
CONSUMERS ENERGY J H CAMPBELL COMPLEX	0	247,800	247,800			
REPUBLIC SERVICES OF PINCONNING	296,548	237,991	534,539			
VENICE PARK RECYCLING & DISPOSAL FACILITY	438,304	226,504	664,808			
MANISTEE COUNTY LANDFILL, INC.	201,009	218,926	419,935			
SOUTHEAST BERRIEN COUNTY LANDFILL	1,054,350	218,580	1,272,930			
SMITHS CREEK LANDFILL	769,537	201,778	971,315			
COUNTY OF MUSKEGON - SOLID WASTE LANDFILL	249,487	176,633	426,120			
NORTHERN OAKS RECYCLING AND DISPOSAL FACILITY	195,723	122,932	318,655			
LIBERTY ENVIRONMENTALISTS	172,140	122,562	294,702			
WEXFORD COUNTY LANDFILL, LLC	582,948	122,409	705,357			
PEOPLES LANDFILL, INC.	462,096	114,742	576,838			
VERSO QUINNESEC LLC.	0	111,274	111,274			
MARQUETTE COUNTY LANDFILL	111,743	86,336	198,079			

TABLE 9 IW AND C&D DISPOSAL BY FACILITY - RANKED BY VOLUME - FY 2019 (Volume in Cubic Yards)						
FACILITY NAME	MCW DISPOSED	IW, C&D, ADC AND CS DISPOSED	TOTAL WASTE DISPOSED			
HURON LANDFILL CORP DBA HURON LANDFILL	116,537	75,145	191,682			
VERSO ESCANABA, LLC	0	72,564	72,564			
DETROIT EDISON CO SIBLEY QUARRY	0	70,316	70,316			
GFL NORTH MICHIGAN LANDFILL, LLC	301,322	66,408	367,730			
MONTMORENCY-OSCODA- ALPENA SWMA	134,527	63,313	197,840			
CENTRAL SANITARY LANDFILL	633,571	58,581	692,152			
MCGILL ROAD LANDFILL	164,177	53,237	217,414			
MICHIGAN ENVIRONS INC	112,127	45,358	157,485			
CITY ENVIRONMENTAL SERVICES, INC. OF WATERS	194,877	44,715	239,592			
DELTA COUNTY LANDFILL	77,775	39,837	117,612			
HAYWIRE LANDFILL	0	37,967	37,967			
GLENS SANITARY LANDFILL	63,565	23,006	86,571			
TRI-CITY RECYCLING AND DISPOSAL FACILITY	64,594	20,524	85,118			
WOOD ISLAND WASTE MANAGEMENT, INC.	128,273	20,207	148,480			
CONSUMERS ENERGY DE KARN	0	18,000	18,000			
SC HOLDINGS, INC.	131,459	17,419	148,878			
NIAGARA DEVELOPMENT, LLC	0	17,053	17,053			
EVER-GREEN LANDFILL AND RECYCLING CENTER, LLC	0	14,137	14,137			
RACER SAGINAW NODULAR INDUSTRIAL LAND	0	13,897	13,897			
K & W LANDFILL	251,257	13,735	264,992			
HIAWATHA SHORES LANDFILL, INC.	88,235	13,604	101,839			
GRANGER WOOD STREET LANDFILL	1,723,520	10,248	1,733,768			
ST MARYS CEMENT U.S., LLC	0	8,121	8,121			
CITY OF LIVONIA LANDFILL	0	5,223	5,223			
DAFTER SANITARY LANDFILL	110,248	3,774	114,022			
SPARTA FOUNDRY WASTE FACILITY	0	1,922	1,922			
WE ENERGIES PRESQUE ISLE POWER PLANT	0	1,554	1,554			

TABLE 9 IW AND C&D DISPOSAL BY FACILITY - RANKED BY VOLUME - FY 2019 (Volume in Cubic Yards)						
FACILITY NAME MCW DISPOSED IW, C&D, ADC AND CS DISPOSED DISPOSED						
MATLIN ROAD LANDFILL	0	68	68			

#### **CAPACITY INFORMATION**

As defined in Section 11507a(1) of Part 115, "Remaining disposal capacity shall be calculated as the permitted capacity less waste in place for any area that has been constructed and is not yet closed plus the permitted capacity for each area that has a permit for construction under this part but has not yet been constructed." Table 10 presents projected remaining noncaptive disposal capacity, capacity used during the fiscal year, estimated years of remaining capacity (rounded to the nearest year) as reported by each facility, and an EGLE-calculated estimate of years of remaining capacity, for each <u>noncaptive</u> facility, alphabetically. The data presented in Column (C) for each facility are based on site-specific calculations, which may vary among facilities. The data representing capacity used in FY 2019 and estimated years remaining, as calculated by each facility, are presented for informational purposes only. It should also be noted that the amount of waste received at each facility may differ from the capacity used during the FY depending on the type of waste disposed and the degree of compaction.

EGLE used a simplistic formula to calculate estimated years of remaining capacity for each facility, using the data provided by each facility: Column (A) divided by Column (B) equals Column (D). Although, in some cases, the facility-projected years of remaining capacity in Column (C) equals the calculated remaining capacity in Column (D), it must be noted that each facility may have used a different formula to calculate their projected years of remaining capacity and, therefore, may differ from the calculations presented in Column (D).

TABLE 10 FACILITY CAPACITY AND YEARS REMAINING FOR NONCAPTIVE FACILITIES - FY 2019 (Volume in Cubic Yards)					
FACILITY NAME	(A) REMAINING CAPACITY	(B) CAPACITY USED IN FY 2019	(C) PROJECTED YEARS OF REMAINING CAPACITY	(D) CALCULATED YEARS OF REMAINING CAPACITY	
	REPOR	TED BY THE LAN	NDFILL		
ADVANCED DISPOSAL SERVICES ARBOR HILLS LANDFILL, INC.	15,399,850	2,059,350	8	7	
AUTUMN HILLS RECYCLING AND DISPOSAL FACILITY	21,224,600	252,600	68	84	
BRENT RUN LANDFILL	14,790,919	466,055	32	32	
C & C EXPANDED SANITARY LANDFILL	41,279,355	325,442	127	127	
CARLETON FARMS LANDFILL	51,304,003	2,535,419	20	20	
CENTRAL SANITARY LANDFILL	8,437,981	323,647	26	26	
CITIZENS DISPOSAL, INC.	5,610,337	381,671	15	15	
CITY ENVIRONMENTAL SERVICES, INC. OF WATERS	14,867,157	119,796	124	124	
CITY OF MIDLAND SANITARY LANDFILL	6,882,399	88,932	45	77	
COUNTY OF MUSKEGON - SOLID WASTE LANDFILL	438,604	220,506	2	2	
DAFTER SANITARY LANDFILL	3,424,424	46,575	84	74	
DELTA COUNTY LANDFILL	5,888,648	56,710	107	104	
DETROIT EDISON CO SIBLEY QUARRY	17,961,938	70,315	255	255	
EAGLE VALLEY RECYCLE & DISPOSAL FACILITY	9,205,100	604,900	21	15	
EVER-GREEN LANDFILL AND RECYCLING CENTER, LLC	500,292	15,000	33	33	
GFL NORTH MICHIGAN LANDFILL, LLC	1,495,829	140,417	12	11	
GLENS SANITARY LANDFILL	17,834,464	43,284	412	412	
GRANGER GRAND RIVER LANDFILL	5,410,901	1,938	2792	2,792	
GRANGER WOOD STREET LANDFILL	16,416,040	755,396	22	22	
HIAWATHA SHORES LANDFILL, INC.	1,579,396	224,495	7	7	
HURON LANDFILL CORP DBA HURON LANDFILL	284,429	83,645	3	3	
K & W LANDFILL	1,411,145	125,510	18	11	
LIBERTY ENVIRONMENTALISTS LANDFILL	3,017,477	294,702	13	10	
MANISTEE COUNTY LANDFILL, INC.	8,422,475	206,161	38	41	
MARQUETTE COUNTY LANDFILL	5,132,282	104,000	50	49	
MATLIN ROAD LANDFILL	345,466	68	126	5,080	
MCGILL ROAD LANDFILL	387,000	103,100	4	4	
MICHIGAN ENVIRONS, INC.	2,165,566	90,880	33	24	
MONTMORENCY-OSCODA-ALPENA SWMA	2,020,768	96,000	21	21	

TABLE 10 FACILITY CAPACITY AND YEARS REMAINING FOR NONCAPTIVE FACILITIES - FY 2019 (Volume in Cubic Yards)					
FACILITY NAME	(A) REMAINING CAPACITY	(B) CAPACITY USED IN FY 2019	(C) PROJECTED YEARS OF REMAINING CAPACITY	(D) CALCULATED YEARS OF REMAINING CAPACITY	
	REPOR	TED BY THE LAI	NDFILL		
NIAGARA DEVELOPMENT, LLC	1,849,294	17,213	107	107	
NORTHERN OAKS RECYCLING AND DISPOSAL FACILITY	6,413,961	159,327	40	40	
OAKLAND HEIGHTS DEVELOPMENT, INC.	1,251,292	265,271	4	5	
ORCHARD HILL SANITARY LANDFILL	16,283,312	297,405	55	55	
OTTAWA COUNTY FARMS LANDFILL	33,579,790	910,255	49	37	
PEOPLES LANDFILL, INC.	5,199,933	281,879	26	18	
PINE TREE ACRES, INC.	34,182,700	2,856,170	17	12	
PITSCH SANITARY LANDFILL	1,493,354	343,715	19	4	
REPUBLIC SERVICES OF PINCONNING	1,673,980	145,979	10	11	
RIVERVIEW LAND PRESERVE	8,780,680	746,809	12	12	
SAUK TRAIL HILLS LANDFILL	5,704,664	569,754	10	10	
SC HOLDINGS, INC.	1,976,435	69,875	32	28	
SMITHS CREEK LANDFILL	18,038,067	285,037	63	63	
SOUTH KENT LANDFILL	4,625,496	479,271	9	10	
SOUTHEAST BERRIEN COUNTY LANDFILL	4,128,668	363,501	11	11	
TRI-CITY RECYCLING AND DISPOSAL FACILITY	16,731,408	44,742	207	374	
VENICE PARK RECYCLING & DISPOSAL FACILITY	7,724,764	153,339	31	50	
VIENNA JUNCTION INDUSTRIAL PARK SANITARY LANDFILL	4,048,697	434,138	9	9	
WESTSIDE RECYCLING & DISPOSAL FACILITY	35,616,149	502,543	93	71	
WEXFORD COUNTY LANDFILL, LLC	18,529,846	293,445	63	63	
WOOD ISLAND WASTE MANAGEMENT, INC.	2,009,556	135,376	28	15	
WOODLAND MEADOWS RDF-VAN BUREN	9,414,000	2,272,000	4	4	
TOTAL	522,394,891	21,463,558			

Based on current capacity used for FY 2019 (21,463,558 cubic yards) and total remaining capacity at noncaptive facilities (522,394,891 cubic yards), which may include additional capacity permitted<sup>7</sup> during the fiscal year and using the same calculation for deriving the values in Column (D), it is estimated that Michigan noncaptive landfills have approximately 24 years of remaining disposal capacity left. This estimate does not take into consideration any projected increase or decrease in waste disposal rates, waste diversion programs, or any county-imposed restrictions such as volume limitations, any special conditions, or the waste import/export authorizations of each county.

<sup>&</sup>lt;sup>7</sup> Construction permits were issued to the following landfills and were reflected in their Combined Report forms; these permits increased or decreased their disposal capacities and have been reflected in this report: Granger Wood Street Landfill.

## APPENDIX A – WASTE TYPE KEY

	WASTE TYPE KEY	
	Description	Reference
Municipal & Commercial Waste (MCW)	Commercial Waste	R 299.4102(b)
	Garbage	324.11503(20)
Municipal & nmercial We (MCW)	Household Waste	R 299.4103(k)
Mt	Medical Waste (Regulated)	R 299.4104(a) & 324.11504(6)
	Municipal Solid Waste Incinerator Ash	324.11504(15)
	Ashes	324.11502(2)
	Auto Shredder Residue	^^
	Cement Kiln Dust (CKD)	324.11502(12)
	Coal Ash	324.11502(15) & (16)
	Coal Bottom Ash	324.11502(19)
	Flue Gas Desulfurization Material	324.11503(16)
ŝ	Food Processing Residuals	324.11503(17)
I) é	Food Processing Waste	R 299.4103(d)
ste	Foundry Sand Industrial Waste	324.11503(18)
Na	Lime Kiln Dust	324.11504(2) & R 299.4103(n) 324.11504(9)
Industrial Waste (IW)	Low-Hazard Industrial Waste	324.11504(10)
tri	Pulp and Paper Mil Ash	324.11504(22)
Ins	Pulp and Paper Mill Material	324.11504(23)
lnd	Sludge	R 299.4105(e)
	Segregated Waste Types for Purposes of PCF:	324.11525(3)
	Coal Ash; Wood Ash; CKD; Wastewater Sludge;	021111020(0)
	Wood Sediment; Paper Sediment; Foundry Sand;	
	and Other Approved Materials	
	TENORM	324.11104(7)
	Wood Ash	324.11506(13)
n & laste	Asbestos Waste	R 299.4101(k)
structio lition W (C&D)	Construction and Demolition Waste	R 299.4102(f)
Construction Demolition Wá (C&D)	Scrap Wood	324.11505(8)
Cor	Treated Wood	324.11506(8)
	Wood	324.11506(12)
Construction Soils (CS)	Contaminated Soils	***
-		

_	Class B ADC	R 299.4429(2)(b)
ADC)	-Chipped Tires	16901(cc)(v)
cover (ADC)	-Coal or Wood Ash	324.11502(15) & (16)/324.11506(13)
	-Foundry Sand	11503(18)
Daily	-Sludge	R 299.4105(e)
tive	Class C ADC	R 299.429(2)(c)
Alternative	-Contaminated Soils	***
Alto	-Auto Shredder Residue	**
	Other Approved	R 299.429(2)(c)(iv)

**Auto Shredder Residue	means non-metallic waste material remaining after removal of metal scrap from shredded vehicles, household and commercial appliances, or other shredded items; also referenced as auto fluff.
***Contaminated Soils	means any excavated soil or dredge sediment that is contaminated by a hazardous substance that falls below part 201 generic residential soil direct contact cleanup criteria and hazardous substances in leachate from the soil or sediment, using, at the option of the generator, EPA method 1311, 1312, or any other leaching protocol approved by the department, fall below part 201 generic residential health based groundwater drinking water values or criteria, and the soil or sediment would not cause a violation of any surface water quality standard established under Part 31 at the area of placement, disposal, or use.

Link to Part 115, Solid Waste Management, MCL 324.11501 et seq.

Link to Part 115, Solid Waste Management Act Administrative Rules, MAC R 229.4101 *et seq.* 

#### APPENDIX B – LANDFILL DISPOSAL BY WASTE ORIGIN AND TYPE

The Appendix of this report lists alphabetically every reporting landfill and indicates the amount of waste received at the landfill, the type of waste received, and the place of origin of that waste.

## APPENDIX B LANDFILL DISPOSAL BY WASTE ORIGIN AND TYPE – FY 2019 (All Values are in Cubic Yards)

ADVANCED DISPOSAL SERVICES ARBOR HILLS LANDFILL INC (WASHTENAW COUNTY)						
ORIGIN	MCW	IW	C&D	ADC	CS	
GENESEE	108	11	24	0	25	
INGHAM	760	40	240	24	0	
KENT	0	0	1,095	0	0	
LIVINGSTON	34,600	3,115	4,407	113	2,088	
МАСОМВ	112,845	2,027	15,300	816	36,415	
MIDLAND	0	0	8	0	76	
MONROE	324	50	0	24	24	
OAKLAND	1,415,384	20,412	188,210	9,666	42,886	
OHIO	7,184	11,882	24	0	0	
WASHTENAW	521,753	14,474	121,576	21,606	104,842	
WAYNE	1,227,458	170,265	549,923	101,920	918,072	
TOTALS	3,320,416	222,276	880,807	134,169	1,104,428	

# **APPENDIX B** LANDFILL DISPOSAL BY WASTE ORIGIN AND TYPE - FY 2019

(All Values are in Cubic Yards)

AUTUMN HILLS RECYCLING AND DISPOSAL FACILITY (OTTAWA COUNTY)					
ORIGIN	MCW	IW	C&D	ADC	CS
ALLEGAN	35,459	93,580	7,279	0	44,360
BARRY	271	81	43	0	10
BERRIEN	0	50	103	0	55
BRANCH	0	0	2	0	5
CALHOUN	0	40	0	0	10
EATON	20	20	50	0	10
IONIA	5,083	65	2	0	0
KALAMAZOO	28	14,130	1,003	0	431
KENT	80,404	54,170	5,306	2,340	11,436
MASON	0	25	0	0	0
MECOSTA	0	0	0	0	45
MONTCALM	318	135	1	0	300
MUSKEGON	54,905	18,482	3,665	0	60
NEWAYGO	0	0	0	0	30
OTTAWA	301,914	148,658	28,030	26,650	3,005
ST JOSEPH	0	10	17	0	100
VAN BUREN	889	1,710	185	0	950
TOTALS	479,291	331,156	45,686	28,990	60,807

# **APPENDIX B** LANDFILL DISPOSAL BY WASTE ORIGIN AND TYPE - FY 2019

(All Values are in Cubic Yards)

BRENT RUN LANDFILL (GENESEE COUNTY)					
ORIGIN	MCW	IW	C&D	ADC	CS
ALLEGAN	64	57	64	0	0
BAY	11,660	136	10,676	0	0
CANADA	30,531	0	152,112	0	0
CLINTON	53	622	1,294	0	0
CONNECTICUT	0	125,747	0	0	0
EATON	34	0	860	0	0
GENESEE	306,043	24,485	54,021	0	0
GRATIOT	1,602	71	1,124	0	0
INDIANA	0	20	0	0	0
INGHAM	210	0	10,690	0	0
JACKSON	0	0	9	0	0
LAPEER	178,362	86	10,640	0	0
LIVINGSTON	558	186	554	0	0
NEW JERSEY	0	6,119	0	0	0
OAKLAND	5,701	332	9,932	0	0
OHIO	0	24,039	0	0	0
SAGINAW	63,711	1,629	60,131	0	0
SANILAC	6,049	842	282	0	0
SHIAWASSEE	29,857	0	8,243	0	0
TUSCOLA	9,531	92	3,952	0	0
WASHTENAW	0	129	0	0	0
WAYNE	0	16,170	135	0	0
TOTALS	643,966	200,762	324,719	0	0

## APPENDIX B LANDFILL DISPOSAL BY WASTE ORIGIN AND TYPE – FY 2019

(All Values are in Cubic Yards)

Г

٦

C & C EXPANDED SANITARY LANDFILL (CALHOUN COUNTY)						
ORIGIN	мсw	IW	C&D	ADC	CS	
ALLEGAN	0	1,066	0	0	0	
BARRY	0	72	119	0	0	
BERRIEN	85,852	0	11	0	0	
BRANCH	57,680	32,201	59,327	0	0	
CALHOUN	167,497	63,321	100,831	0	0	
CLINTON	0	0	32	0	0	
EATON	37,859	11,348	16,721	0	0	
HILLSDALE	54,789	626	1,540	0	0	
INGHAM	23,422	34,428	24,178	0	0	
IONIA	24	0	3	0	0	
JACKSON	12,795	889	2,766	0	0	
KALAMAZOO	370,374	26,402	27,717	0	0	
MASON	0	0	3	0	0	
ST JOSEPH	43	617	3,349	0	0	
TOTALS	810,335	170,970	236,597	0	0	

## APPENDIX B LANDFILL DISPOSAL BY WASTE ORIGIN AND TYPE - FY 2019

(All Values are in Cubic Yards)

CARLETON FARMS LANDFILL (WAYNE COUNTY)									
ORIGIN	MCW	IW	C&D	ADC	CS				
ALLEGAN	0	180	0	0	345				
BRANCH	0	80	0	0	0				
CANADA	3,093,714	232,580	512,600	0	0				
INDIANA	0	8,080	0	0	0				
JACKSON	0	2	0	0	0				
LENAWEE	62,788	15,510	6,396	0	280				
MACOMB	0	820	32	0	0				
MASSACHUSETTS	0	0	12	0	0				
MONROE	143,918	3,112	39,087	0	3,580				
OAKLAND	4,468	78,469	0	0	0				
OHIO	480	25,822	1,100	164,150	40				
WASHTENAW	7,449	570	4,604	0	1,264				
WAYNE	608,215	347,680	219,205	126,920	42,424				
WEST VIRGINIA	0	0	20	0	0				
TOTALS	3,921,032	712,905	783,056	291,070	47,933				

## APPENDIX B LANDFILL DISPOSAL BY WASTE ORIGIN AND TYPE – FY 2019

(All Values are in Cubic Yards)

CENTRAL SANITARY LANDFILL (MONTCALM COUNTY)								
ORIGIN	MCW	IW	C&D	ADC	CS			
ALLEGAN	0	0	10	0	0			
GRATIOT	16,722	402	260	0	0			
IONIA	23,354	1,191	31	0	0			
ISABELLA	15,550	50	44	1,881	0			
KENT	358,153	15,541	991	11,320	3,461			
LAKE	373	22	2,203	0	0			
MASON	0	0	12	0	0			
MECOSTA	53,299	9	3,585	79	541			
MONTCALM	70,274	2,292	3,834	2,650	51			
NEWAYGO	75,459	1,615	3,747	0	1,264			
OSCEOLA	20,387	177	1,318	0	0			
TOTALS	633,571	21,299	16,035	15,930	5,317			

# APPENDIX B LANDFILL DISPOSAL BY WASTE ORIGIN AND TYPE - FY 2019

(All Values are in Cubic Yards)

CITIZENS DISPOSAL INC (GENESEE COUNTY)							
ORIGIN	MCW	IW	C&D	ADC	CS		
BAY	79	1,198	56	0	0		
CANADA	3,917	0	0	0	0		
EATON	6	78	0	0	0		
GENESEE	368,619	258,160	225,579	0	22,936		
GRATIOT	0	124	0	0	0		
INGHAM	0	227	586	0	0		
JACKSON	0	2	0	0	0		
LAPEER	40,109	180	3,870	0	2,390		
LENAWEE	17	2	0	0	0		
LIVINGSTON	34,223	7,448	25,330	0	10		
OAKLAND	37,117	3,007	23,378	0	24,481		
SAGINAW	7,721	823	2,816	0	27		
SANILAC	28	49,059	77	0	0		
SHIAWASSEE	14,851	0	2,535	0	0		
TUSCOLA	27,773	90	315	0	0		
WASHTENAW	0	263	9,133	0	0		
WAYNE	116	14,533	179	0	16		
TOTALS	534,576	335,194	293,854	0	49,860		

(All Values are in Cubic Yards)

CITY ENVIRONMENTAL SERVICES INC OF WATERS (CRAWFORD COUNTY)						
ORIGIN	MCW	IW	C&D	ADC	CS	
ALCONA	4,714	0	0	0	0	
ALPENA	0	168	15	0	0	
ANTRIM	5,358	7,920	412	0	76	
ARENAC	3,770	0	0	0	0	
CHARLEVOIX	10,252	1,980	367	3,640	580	
CHEBOYGAN	6,378	0	138	0	100	
CRAWFORD	34,621	3,914	2,634	14,160	1,640	
EMMET	0	220	57	0	2	
GRAND TRAVERSE	4,901	250	37	0	40	
IOSCO	41,795	0	1	0	0	
KALKASKA	6,705	257	38	0	84	
MACKINAC	0	20	0	0	0	
OGEMAW	8,927	0	0	0	0	
OTSEGO	65,444	1,270	1,554	1,320	1,090	
PRESQUE ISLE	112	40	24	0	40	
ROSCOMMON	1,900	0	627	0	0	
TOTALS	194,877	16,039	5,904	19,120	3,652	

(All Values are in	Cubic Yards)
--------------------	--------------

CITY OF LIVONIA LANDFILL (WAYNE COUNTY)						
ORIGIN	MCW	IW	C&D	ADC	CS	
WAYNE	0	5,223	0	0	0	
TOTALS	0	5,223	0	0	0	

CITY OF MIDLAND SANITARY LANDFILL (MIDLAND COUNTY)						
ORIGIN	MCW	IW	C&D	ADC	CS	
BAY	0	0	0	7,245	0	
MIDLAND	194,446	44,818	165,440	0	34,937	
TOTALS	194,446	44,818	165,440	7,245	34,937	

CONSUMERS ENERGY DE KARN (BAY COUNTY)							
ORIGIN	MCW	IW	C&D	ADC	CS		
BAY	0	18,000	0	0	0		
TOTALS							

CONSUMERS ENERGY J H CAMPBELL COMPLEX (OTTAWA COUNTY)						
ORIGIN	MCW	IW	C&D	ADC	CS	
OTTAWA	0	247,800	0	0	0	
TOTALS	0	247,800	0	0	0	

#### APPENDIX B LANDFILL DISPOSAL BY WASTE ORIGIN AND TYPE – FY 2019 (All Values are in Cubic Yards)

CONSUMERS WEADOCK COMPLEX (BAY COUNTY)							
ORIGIN	MCW	IW	C&D	ADC	CS		
BAY	0	277,383	0	0	0		
TOTALS							

#### COUNTY OF MUSKEGON - SOLID WASTE LANDFILL (MUSKEGON COUNTY)

ORIGIN	MCW	IW	C&D	ADC	CS
LAKE	957	0	6,735	0	0
MUSKEGON	224,470	1,701	73,129	73,120	0
NEWAYGO	7,434	0	19,616	0	0
OCEANA	12,430	0	1,161	0	0
OTTAWA	4,196	0	1,171	0	0
TOTALS	249,487	1,701	101,812	73,120	0

#### DAFTER SANITARY LANDFILL (CHIPPEWA COUNTY)

ORIGIN	MCW	IW	C&D	ADC	CS
ALGER	1,406	0	0	0	0
CANADA	52,258	0	0	0	0
CHIPPEWA	27,896	991	0	0	1,109
LUCE	7,375	0	0	0	0
MACKINAC	21,073	814	0	0	860
SCHOOLCRAFT	240	0	0	0	0
TOTALS	110,248	1,805	0	0	1,969

(All Values are	in Cubic Yards)
-----------------	-----------------

DELTA COUNTY LANDFILL (DELTA COUNTY)						
ORIGIN	MCW	IW	C&D	ADC	CS	
DELTA	68,730	15,072	8,835	1,141	1,799	
MENOMINEE	5,321	0	0	12,990	0	
SCHOOLCRAFT	3,724	0	0	0	0	
TOTALS	77,775	15,072	8,835	14,131	1,799	

DETROIT EDISON CO RANGE RD ASH DISPOSAL (ST CLAIR COUNTY)						
ORIGIN	MCW	IW	C&D	ADC	CS	
ST CLAIR	0	276,455	0	0	0	
TOTALS	0	276,455	0	0	0	

DETROIT EDISON CO SIBLEY QUARRY (WAYNE COUNTY)						
ORIGIN	MCW	IW	C&D	ADC	CS	
MONROE	0	17,477	0	0	0	
WAYNE	0	52,839	0	0	0	
TOTALS	0	70,316	0	0	0	

DTE MONROE POWER PLANT (MONROE COUNTY)						
ORIGIN	MCW	IW	C&D	ADC	CS	
MONROE	0	258,827	0	0	0	
TOTALS	0	258,827	0	0	0	

(All Values are	in Cubic	Yards)
-----------------	----------	--------

EAGLE VALLEY RECYCLE & DISPOSAL FACILITY (OAKLAND COUNTY)						
ORIGIN	MCW	IW	C&D	ADC	CS	
GENESEE	399	78	0	0	0	
LAPEER	6,891	597	0	0	5	
LIVINGSTON	7,050	66	0	0	0	
MACOMB	77,964	24,214	13,197	0	10,194	
OAKLAND	1,079,463	73,956	36,270	40,202	86,827	
OHIO	0	2,910	0	0	0	
ST JOSEPH	81	0	0	0	0	
WASHTENAW	438	0	0	0	0	
WAYNE	813	4,101	4,359	93,751	2,025	
TOTALS	1,173,099	105,922	53,826	133,953	99,051	

#### **EVER-GREEN LANDFILL AND RECYCLING CENTER, LLC** (ONTONAGON COUNTY)

ORIGIN	MCW	IW	C&D	ADC	CS
BARAGA	0	8,036	0	0	0
MENOMINEE	0	1,558	0	0	0
WISCONSIN	0	4,543	0	0	0
TOTALS	0	14,137	0	0	0

(All Values are in Cubic Yards)

GFL NORTH MICHIGAN LANDFILL LLC (PRESQUE ISLE COUNTY)							
ORIGIN	MCW	IW	C&D	ADC	CS		
ANTRIM	1,930	0	0	0	0		
CANADA	33,840	0	0	0	0		
CHARLEVOIX	0	0	1,128	0	0		
CHEBOYGAN	46,579	0	12,822	39,518	82		
CHIPPEWA	81,260	0	0	0	0		
EMMET	100,463	0	7,140	0	0		
MACKINAC	125	0	620	0	0		
PRESQUE ISLE	37,125	0	5,098	0	0		
TOTALS	301,322	0	26,808	39,518	82		

#### GLENS SANITARY LANDFILL (LEELANAU COUNTY)

ORIGIN	MCW	IW	C&D	ADC	CS
ANTRIM	218	0	404	0	0
BENZIE	323	0	1,322	0	0
GRAND TRAVERSE	46,600	706	12,589	0	119
KALKASKA	326	0	73	0	0
LEELANAU	16,098	60	7,196	0	275
MANISTEE	0	33	74	0	155
TOTALS	63,565	799	21,658	0	549

(All Values are in Cubic Yards)

GRANGER GRAND RIVER LANDFILL (CLINTON COUNTY)						
ORIGIN	MCW	IW	C&D	ADC	CS	
ALLEGAN	6	0	0	0	0	
CALHOUN	294	0	0	0	0	
CLINTON	7	0	0	0	0	
EATON	516	0	0	0	0	
GENESEE	21	0	0	0	0	
GRATIOT	4	0	0	0	0	
INGHAM	2,517	0	0	0	0	
IONIA	10	0	0	0	0	
ISABELLA	44	0	0	0	0	
JACKSON	278	0	0	0	0	
KALAMAZOO	62	0	0	0	0	
LIVINGSTON	1	0	0	0	0	
OAKLAND	23	0	0	0	0	
SAGINAW	4	0	0	0	0	
SHIAWASSEE	72	0	0	0	0	
WASHTENAW	14	0	0	0	0	
WAYNE	3	0	0	0	0	
TOTALS	3,876	0	0	0	0	

(All Values are in Cubic Yards)

GRANGER WOOD STREET LANDFILL (CLINTON COUNTY)						
ORIGIN	MCW	IW	C&D	ADC	CS	
ALLEGAN	194	0	0	0	0	
BARRY	1,430	0	0	0	0	
CALHOUN	22,314	0	0	0	0	
CLINTON	209,203	0	0	0	0	
EATON	205,164	0	0	0	0	
GENESEE	388	0	0	0	0	
GRATIOT	93,067	0	0	0	0	
INGHAM	876,814	10,248	0	0	0	
IONIA	47,676	0	0	0	0	
ISABELLA	36,695	0	0	0	0	
JACKSON	124,905	0	0	0	0	
KALAMAZOO	167	0	0	0	0	
LIVINGSTON	47,020	0	0	0	0	
MONTCALM	26,100	0	0	0	0	
OAKLAND	109	0	0	0	0	
SAGINAW	2,318	0	0	0	0	
SHIAWASSEE	25,614	0	0	0	0	
WASHTENAW	4,317	0	0	0	0	
WAYNE	25	0	0	0	0	
TOTALS	1,723,520	10,248	0	0	0	

HAYWIRE LANDFILL	
(SCHOOLCRAFT COUNTY)	

ORIGIN	MCW	IW	C&D	ADC	CS
LUCE	0	7,207	0	0	0
SCHOOLCRAFT	0	30,760	0	0	0
TOTALS	0	37,967	0	0	0

HIAWATHA SHORES LANDFILL INC (SCHOOLCRAFT COUNTY)						
ORIGIN	MCW	IW	C&D	ADC	CS	
GOGEBIC	18,444	0	0	0	0	
SCHOOLCRAFT	69,791	10,696	2,908	0	0	
TOTALS	88,235	10,696	2,908	0	0	

HURON LANDFILL CORP DBA HURON LANDFILL (HURON COUNTY)						
ORIGIN	MCW	IW	C&D	ADC	CS	
CANADA	65	0	0	0	0	
HURON	63,818	22,688	20,037	14,305	0	
LAPEER	4,519	0	754	0	0	
SANILAC	15,706	0	3,153	0	0	
TUSCOLA	32,429	7,795	6,413	0	0	
TOTALS	116,537	30,483	30,357	14,305	0	

(All Values are	in Cubic Ya	rds)
-----------------	-------------	------

K & W LANDFILL (ONTONAGON COUNTY)						
ORIGIN	MCW	IW	C&D	ADC	CS	
BARAGA	21,474	3,092	0	0	5,606	
GOGEBIC	1,692	123	0	0	385	
HOUGHTON	72,514	377	0	0	3,807	
IRON	11,759	294	0	0	0	
KEWEENAW	2,983	0	0	0	0	
ONTONAGON	10,322	0	0	0	0	
WISCONSIN	130,513	0	0	0	51	
TOTALS	251,257	3,886	0	0	9,849	

LAFARGE MIDWEST INC (ALPENA COUNTY)						
ORIGIN	MCW	IW	C&D	ADC	CS	
ALPENA	0	335,099	0	0	0	
TOTALS	0	335,099	0	0	0	

(All Values are	in Cubic	Yards)
-----------------	----------	--------

LIBERTY ENVIRONMENTALISTS LANDFILL (JACKSON COUNTY)						
ORIGIN	MCW	IW	C&D	ADC	CS	
CALHOUN	4,640	0	0	0	0	
EATON	1,836	0	0	0	0	
HILLSDALE	9,220	0	0	0	0	
INGHAM	2,504	0	0	0	0	
JACKSON	131,504	10,354	0	0	0	
LENAWEE	12,912	0	0	0	0	
OHIO	0	112,208	0	0	0	
WASHTENAW	9,524	0	0	0	0	
TOTALS	172,140	122,562	0	0	0	

MANISTEE COUNTY LANDFILL INC (MANISTEE COUNTY)						
ORIGIN	MCW	IW	C&D	ADC	CS	
BENZIE	14,384	0	1,595	0	0	
GRAND TRAVERSE	729	40	206	0	0	
LAKE	6,158	0	928	0	0	
LEELANAU	85	0	0	0	0	
MANISTEE	84,496	192,734	9,677	0	0	
MASON	86,046	5,836	7,500	0	0	
WEXFORD	9,111	285	125	0	0	
TOTALS	201,009	198,895	20,031	0	0	

r

MARQUETTE COUNTY LANDFILL (MARQUETTE COUNTY)						
ORIGIN	MCW	IW	C&D	ADC	CS	
MARQUETTE	111,743	0	86,336	0	0	
TOTALS	111,743	0	86,336	0	0	

MATLIN ROAD LANDFILL (MONROE COUNTY)						
ORIGIN	MCW	IW	C&D	ADC	CS	
HILLSDALE	0	0	20	0	0	
MONROE	0	0	28	0	0	
WAYNE	0	0	20	0	0	
TOTALS	0	0	68	0	0	

MCGILL ROAD LANDFILL (JACKSON COUNTY)						
ORIGIN	MCW	IW	C&D	ADC	CS	
CALHOUN	3,527	8,545	23	0	160	
CLINTON	58	0	0	0	0	
EATON	3,655	0	0	0	0	
HILLSDALE	1,484	50	1,440	0	0	
JACKSON	150,352	16,412	20,055	0	4,429	
KALAMAZOO	0	60	0	0	20	
LENAWEE	21	1,700	0	0	160	
WASHTENAW	5,074	40	23	0	0	
WAYNE	6	120	0	0	0	
TOTALS	164,177	26,927	21,541	0	4,769	

(All Values are in Cubic Yards)

MICHIGAN ENVIRONS INC (MENOMINEE COUNTY)						
ORIGIN	MCW	IW	C&D	ADC	CS	
MENOMINEE	26,823	16,247	1,963	0	1,620	
WISCONSIN	85,304	20,425	3,664	0	1,439	
TOTALS	112,127	36,672	5,627	0	3,059	

#### MONTMORENCY-OSCODA-ALPENA SWMA (MONTMORENCY COUNTY) ADC ORIGIN MCW IW C&D CS ALCONA 1.253 0 1,132 0 19 69,443 30,265 0 3,981 ALPENA 3,038 ANTRIM 17 10 0 0 0 **CHARLEVOIX** 12 0 0 0 0 **CHEBOYGAN** 614 0 1,197 0 13 **CRAWFORD** 15 0 0 0 0 EMMET 0 0 0 0 8 GRAND 0 0 1 0 0 TRAVERSE IOSCO 20,855 0 1,877 0 18 335 MONTMORENCY 23,533 0 7,575 5,860 OGEMAW 14 0 23 0 0 5,627 OSCODA 16,899 0 0 220 OTSEGO 1,581 1,605 0 0 47 PRESQUE ISLE 261 0 285 0 201 ROSCOMMON 6 0 0 0 0 TOTALS 134,527 49,573 3,038 5,860 4,842

(All Values are in Cubic Yards)

NIAGARA DEVELOPMENT LLC (DICKINSON COUNTY)					
ORIGIN	MCW	IW	C&D	ADC	CS
DICKINSON	0	16,575	328	0	0
WISCONSIN	0	0	150	0	0
TOTALS	0	16,575	478	0	0

Г

NORTHERN OAKS RECYCLING AND DISPOSAL FACILITY (CLARE COUNTY)					
ORIGIN	MCW	IW	C&D	ADC	CS
ALCONA	0	6,320	35	0	0
ARENAC	2,440	0	73	0	145
BAY	0	0	33	0	0
CLARE	54,853	862	34,373	0	1,387
GLADWIN	14,740	140	1,537	0	0
GRATIOT	14,244	2,767	734	0	0
IOSCO	0	0	143	0	0
ISABELLA	52,114	4,233	6,411	0	8,002
KALKASKA	0	0	23	0	0
LAKE	3,756	110	177	0	0
MECOSTA	14,331	830	420	0	20
MISSAUKEE	5,891	17,600	2,263	0	11,534
MONTCALM	0	925	93	0	50
OGEMAW	0	21	272	0	0
OSCEOLA	6,374	8,696	6,112	0	0
ROSCOMMON	21,459	70	5,434	0	150
WEXFORD	5,521	70	867	0	0
TOTALS	195,723	42,644	59,000	0	21,288

(All Values are	in Cubic	Yards)
-----------------	----------	--------

OAKLAND HEIGHTS DEVELOPMENT INC (OAKLAND COUNTY)						
ORIGIN	MCW	IW	C&D	ADC	CS	
GENESEE	0	0	8,181	0	0	
LAPEER	0	56	0	0	0	
LIVINGSTON	0	61	0	0	0	
MACOMB	85,361	549	24,964	0	17,372	
OAKLAND	426,222	11,671	203,558	0	3,445	
WAYNE	83	0	116	0	0	
TOTALS	511,666	12,337	236,819	0	20,817	

ORCHARD HILL SANITARY LANDFILL (BERRIEN COUNTY)						
ORIGIN	MCW	IW	C&D	ADC	CS	
ALLEGAN	4,010	0	0	0	0	
BARRY	208	0	0	0	0	
BERRIEN	186,092	0	0	0	0	
CALHOUN	39	0	0	0	0	
CASS	13,122	0	0	0	0	
INDIANA	204	0	0	0	0	
KALAMAZOO	364,817	0	0	0	0	
ST JOSEPH	1,749	0	0	0	0	
VAN BUREN	143,532	0	0	0	0	
TOTALS	713,773	0	0	0	0	

(All Values are	in Cubic	Yards)
-----------------	----------	--------

OTTAWA COUNTY FARMS LANDFILL (OTTAWA COUNTY)					
ORIGIN	MCW	IW	C&D	ADC	CS
ALLEGAN	181,935	3,187	11,582	0	150
BARRY	22	1,234	0	0	0
BERRIEN	0	9	0	0	0
CALHOUN	30	0	16	0	0
EATON	38	15	63	0	0
GRATIOT	0	26	0	0	0
IONIA	16	2,195	7	0	2
KALAMAZOO	47	20	55	0	0
KENT	120,824	70,677	32,507	103,756	139,273
LAKE	0	0	0	0	7
MASON	144	17,771	58	0	0
MECOSTA	0	79	85	0	0
MONTCALM	44	3,976	303	0	0
MUSKEGON	169,205	57,304	22,787	0	91,501
NEWAYGO	100	83	99	0	3,267
OCEANA	33,099	1,848	5,732	0	452
OSCEOLA	7	0	0	0	0
OTTAWA	265,641	72,504	39,059	6,377	12,063
ST JOSEPH	0	6	0	0	0
VAN BUREN	10,492	24	18	0	0
TOTALS	781,644	230,958	112,371	110,133	246,715

PEOPLES LANDFILL INC (SAGINAW COUNTY)						
ORIGIN	MCW	IW	C&D	ADC	CS	
BAY	139,705	1,606	11,791	0	85	
CLINTON	0	332	0	0	0	
GENESEE	10,061	14,260	5,880	0	160	
GRATIOT	5,296	325	777	0	20	
SAGINAW	302,257	22,889	41,416	0	9,288	
SHIAWASSEE	88	0	0	0	0	
TUSCOLA	4,689	4,075	1,368	0	470	
TOTALS	462,096	43,487	61,232	0	10,023	

PINE TREE ACRES INC
(MACOMB COUNTY)

ORIGIN	MCW	IW	C&D	ADC	CS
CANADA	4,942,364	0	0	0	0
LAPEER	6,153	5	0	0	0
MACOMB	1,444,746	260,004	16,836	201,607	0
OAKLAND	1,263	12,952	0	0	0
OHIO	0	3,347	0	0	0
WASHTENAW	273	0	0	0	0
WAYNE	478,401	280,373	0	382,488	0
TOTALS	6,873,200	556,681	16,836	584,095	0

(All Values are in Cubic Yards)

٦

Γ

PITSCH SANITARY LANDFILL (IONIA COUNTY)					
ORIGIN	MCW	IW	C&D	ADC	CS
ALLEGAN	0	0	1,533	0	0
BARRY	129	0	1,995	0	0
BRANCH	0	0	14,421	0	0
CALHOUN	0	0	1,218	0	0
CASS	0	0	3,156	0	0
CLINTON	60	0	822	0	0
EATON	267	0	345	0	0
INGHAM	12	0	441	0	0
IONIA	5,520	105	29,697	0	0
ISABELLA	756	0	198	0	0
KALAMAZOO	0	0	222	0	0
KENT	10,968	0	224,757	0	0
MASON	0	0	21	0	0
MECOSTA	741	0	177	0	0
MONROE	0	0	21	0	0
MONTCALM	7,449	147	30,024	0	0
MUSKEGON	0	0	3,900	0	0
OSCEOLA	0	0	177	0	0
OTTAWA	0	0	3,474	0	0
SAGINAW	0	0	27	0	0
ST JOSEPH	0	0	393	0	0
VAN BUREN	0	0	543	0	0
TOTALS	25,902	252	317,562	0	0

#### APPENDIX B LANDFILL DISPOSAL BY WASTE ORIGIN AND TYPE – FY 2019 (All Values are in Cubic Yards)

RACER SAGINAW NODULAR INDUSTRIAL LAND (SAGINAW COUNTY)						
ORIGIN	MCW	IW	C&D	ADC	CS	
SAGINAW	0	13,797	100	0	0	
TOTALS						

REPUBLIC SERVICES OF PINCONNING (BAY COUNTY)					
ORIGIN	MCW	IW	C&D	ADC	CS
ANTRIM	118	40	0	0	0
ARENAC	17,473	2,895	14,692	0	1,626
BAY	108,161	31,518	75,485	0	37,250
CLARE	7,851	273	940	0	0
GENESEE	206	0	44	0	13
GLADWIN	35,400	141	10,356	0	4,378
GRAND TRAVERSE	50	0	0	0	0
GRATIOT	112	0	0	0	160
IOSCO	32,646	252	18,687	0	1,348
ISABELLA	3,051	400	811	0	108
MIDLAND	409	1,860	0	0	20
OGEMAW	16,888	171	14,776	0	605
ROSCOMMON	37,187	70	7,445	0	0
SAGINAW	36,985	2,768	4,882	0	3,677
TUSCOLA	11	40	0	0	260
TOTALS	296,548	40,428	148,118	0	49,445

RIVERVIEW LAND PRESERVE (WAYNE COUNTY)							
ORIGIN	MCW	IW	C&D	ADC	CS		
CANADA	230,042	0	1,430	0	0		
KALAMAZOO	0	52	0	0	0		
LENAWEE	4,206	0	0	0	0		
MACOMB	30,948	5,935	13,941	0	0		
MONROE	295,986	898	3,378	0	0		
OAKLAND	12,799	4,723	12	0	0		
WASHTENAW	88	832	884	0	0		
WAYNE	808,495	18,903	506,579	0	0		
TOTALS	1,382,564	31,343	526,224	0	0		

SAUK TRAIL HILLS LANDFILL (WAYNE COUNTY)							
ORIGIN	MCW	IW	C&D	ADC	CS		
JACKSON	0	11	0	0	0		
LENAWEE	226	771	0	0	0		
LIVINGSTON	480	104	792	0	0		
MACOMB	414	5,883	407	0	0		
MONROE	3	9,978	2,137	0	0		
OAKLAND	833	4,855	634	0	0		
OHIO	0	520	0	0	0		
WASHTENAW	40,519	7,365	60,997	0	0		
WAYNE	775,799	122,309	591,429	61,704	5,043		
TOTALS	818,274	151,796	656,396	61,704	5,043		

(All Values are	in Cubic	Yards)
-----------------	----------	--------

SC HOLDINGS, INC. (BARRY COUNTY)							
ORIGIN	MCW	IW	C&D	ADC	CS		
ALLEGAN	1,832	0	0	0	0		
BARRY	58,436	3,224	2,211	0	0		
CALHOUN	55	1,150	25	0	0		
CLINTON	2,027	270	0	0	0		
EATON	22,267	930	0	0	0		
INGHAM	1,024	200	25	0	0		
IONIA	32,556	1,513	128	0	0		
JACKSON	20	0	0	0	0		
KALAMAZOO	33	68	0	0	0		
KENT	13,204	7,283	392	0	0		
MONTCALM	5	0	0	0	0		
TOTALS	131,459	14,638	2,781	0	0		

SMITHS CREEK LANDFILL (ST CLAIR COUNTY)							
ORIGIN	MCW	IW	C&D	ADC	CS		
CANADA	242,190	0	0	0	0		
ST CLAIR	527,347	30,111	129,444	30,700	11,523		
TOTALS	769,537	30,111	129,444	30,700	11,523		

SOUTH KENT LANDFILL (KENT COUNTY)							
ORIGIN	MCW	IW	C&D	ADC	CS		
ALLEGAN	79,088	0	0	0	0		
BARRY	23,693	0	0	0	0		
CALHOUN	27	0	0	0	0		
CLINTON	5	0	0	0	0		
EATON	1,885	0	0	0	0		
GRATIOT	7	0	0	0	0		
IONIA	1,421	0	0	0	0		
KALAMAZOO	6,106	0	0	0	0		
KENT	888,102	0	0	0	0		
MECOSTA	13	0	0	0	0		
MONTCALM	257	0	0	0	0		
NEWAYGO	95	0	0	0	0		
OCEANA	5	0	0	0	0		
OTTAWA	32,463	0	0	0	0		
TOTALS	1,033,167	0	0	0	0		

SOUTHEAST BERRIEN COUNTY LANDFILL (BERRIEN COUNTY)							
ORIGIN	MCW	IW	C&D	ADC	CS		
BERRIEN	682,261	20,594	18,639	30	1,102		
CASS	85,918	4,192	36,587	5,958	2,180		
ILLINOIS	0	0	0	200	0		
INDIANA	286,171	57,830	70,500	740	28		
TOTALS	1,054,350	82,616	125,726	6,928	3,310		

SPARTA FOUNDRY WASTE FACILITY (KENT COUNTY)						
ORIGIN	MCW	IW	C&D	ADC	CS	
KENT	0	1,922	0	0	0	
TOTALS	0	1,922	0	0	0	

ST MARYS CEMENT U.S. LLC (CHARLEVOIX COUNTY)						
ORIGIN	MCW	IW	C&D	ADC	CS	
CHARLEVOIX	0	8,121	0	0	0	
TOTALS	0	8,121	0	0	0	

TRI-CITY RECYCLING AND DISPOSAL FACILITY (SANILAC COUNTY)							
ORIGIN	MCW	IW	C&D	ADC	CS		
HURON	11,390	4,719	1,752	0	2,974		
LAPEER	3,325	0	0	0	0		
MACOMB	85	0	0	0	0		
SANILAC	44,883	4,988	3,578	0	1,074		
ST CLAIR	12	0	0	0	0		
TUSCOLA	4,899	196	1,243	0	0		
TOTALS	64,594	9,903	6,573	0	4,048		

(All Values are in Cubic Yards)

VENICE PARK RECYCLING & DISPOSAL FACIL (SHIAWASSEE COUNTY)							
ORIGIN	MCW	IW	C&D	ADC	CS		
BAY	130	78	0	0	0		
CLINTON	6,995	9,104	7	0	45		
EATON	1,065	3,115	27	0	0		
GENESEE	189,598	23,027	13,763	0	883		
GRATIOT	1,044	360	19	0	0		
INGHAM	52,792	6,358	5,025	0	1,295		
IONIA	16	250	0	0	0		
LAPEER	8,283	125	272	0	30		
LIVINGSTON	101,048	3,825	9	0	58		
MACOMB	0	0	5	0	0		
MONTCALM	3,462	60	0	0	0		
OAKLAND	2,696	105	26	15,018	0		
SAGINAW	2,927	0	0	0	0		
SHIAWASSEE	68,094	74,578	3,334	0	3,747		
WASHTENAW	139	0	6	0	10		
WAYNE	15	5	2	61,933	0		
TOTALS	438,304	120,990	22,495	76,951	6,068		

#### **VERSO ESCANABA LLC** (DELTA COUNTY)

ORIGIN	MCW	IW	C&D	ADC	CS
DELTA	0	72,564	0	0	0
TOTALS	0	72,564	0	0	0

VERSO QUINNESEC LLC. (DICKINSON COUNTY)					
ORIGIN MCW IW C&D ADC CS					
DICKINSON	0	111,274	0	0	0
TOTALS	0	111,274	0	0	0

VIENNA JUNCTION INDUSTRIAL PARK SANITARY LANDFILL (MONROE COUNTY)							
ORIGIN	MCW	IW	C&D	ADC	CS		
INDIANA	0	0	0	0	2		
LENAWEE	20,320	1,682	4,520	0	162		
MONROE	60,807	17,452	11,167	0	4,343		
OHIO	524,028	263,692	176,525	419,280	69,235		
WASHTENAW	0	1	3	0	80		
WAYNE	35	10,283	2	0	3,592		
TOTALS	605,190	293,110	192,217	419,280	77,414		

WE ENERGIES PRESQUE ISLE POWER PLANT (MARQUETTE COUNTY)						
ORIGIN MCW IW C&D ADC CS						
MARQUETTE	0	1,554	0	0	0	
TOTALS	0	1,554	0	0	0	

(All Values are	in Cubic Yards	3)
-----------------	----------------	----

WESTSIDE RECYCLING & DISPOSAL FACILITY (ST JOSEPH COUNTY)						
ORIGIN	MCW	IW	C&D	ADC	CS	
ALLEGAN	1,821	6,690	0	0	0	
BARRY	3,493	810	0	0	0	
BERRIEN	0	20	743	0	20	
BRANCH	18,598	1,702	199	0	210	
CALHOUN	163,384	26,180	14,145	0	53	
CASS	18,466	3,382	805	0	26	
EATON	177	0	0	0	0	
GENESEE	0	330	0	0	0	
HILLSDALE	0	17	1,446	0	0	
INDIANA	138,501	2,857	57	0	2	
KALAMAZOO	104,493	255,610	9,920	0	8,819	
ST JOSEPH	119,040	124,060	3,214	28,718	7,785	
VAN BUREN	10,540	825	348	0	140	
TOTALS	578,513	422,483	30,877	28,718	17,055	

(All Values are in Cubic Yards)

WEXFORD COUNTY LANDFILL, LLC (WEXFORD COUNTY)							
ORIGIN	MCW	IW	C&D	ADC	CS		
ANTRIM	0	0	0	434	0		
BENZIE	629	2,178	1,940	0	0		
CHARLEVOIX	78,095	0	70	0	0		
CLARE	4,870	12	490	0	1		
CRAWFORD	0	0	159	30,319	15		
GRAND TRAVERSE	319,297	13	1,521	108	489		
ILLINOIS	0	0	25	0	0		
INDIANA	0	0	12	0	0		
KALKASKA	91,026	0	517	20,974	0		
KENTUCKY	0	0	6	0	0		
LAKE	65	0	202	0	4		
MANISTEE	716	105	2,255	297	34		
MASON	64	4	433	0	0		
MECOSTA	0	0	0	124	0		
MISSAUKEE	26,078	30	3,924	737	0		
MISSOURI	0	0	12	0	0		
OHIO	0	0	14	0	0		
OREGON	0	0	3	0	0		
OSCEOLA	6,225	2,253	967	1,161	0		
OTSEGO	0	31	20	11,865	0		
WEXFORD	55,883	4,354	22,936	11,016	268		
WISCONSIN	0	0	77	0	0		
TOTALS	582,948	8,980	35,583	77,035	811		

(All Values are	in Cubic	Yards)
-----------------	----------	--------

WOOD ISLAND WASTE MANAGEMENT INC (ALGER COUNTY)						
ORIGIN	MCW	IW	C&D	ADC	CS	
ALGER	16,983	11,039	0	0	0	
CHIPPEWA	1,218	0	0	0	0	
DELTA	1,045	0	0	0	0	
DICKINSON	105,486	9,168	0	0	0	
HOUGHTON	17	0	0	0	0	
IRON	28	0	0	0	0	
LUCE	258	0	0	0	0	
SCHOOLCRAFT	71	0	0	0	0	
WISCONSIN	3,167	0	0	0	0	
TOTALS	128,273	20,207	0	0	0	

(All Values are	in Cubic	Yards)
-----------------	----------	--------

WOODLAND MEADOWS RDF-VAN BUREN (WAYNE COUNTY)							
ORIGIN	MCW	IW	C&D	ADC	CS		
CANADA	0	6,520	0	0	0		
GENESEE	0	164	53	0	0		
JACKSON	57,892	0	407	0	0		
KALAMAZOO	0	43,435	0	0	0		
LENAWEE	93	0	0	0	20		
LIVINGSTON	36,561	21,369	110	0	65		
MACOMB	630	710	35,865	0	27,749		
MONROE	71,785	15,025	61,106	0	6,404		
OAKLAND	248,875	34,935	2,249	0	13,368		
OHIO	0	92,917	0	0	0		
TENNESSEE	0	100	0	0	0		
WASHTENAW	206,940	29,736	4,644	0	24,615		
WAYNE	1,829,905	909,598	1,691,258	0	548,831		
TOTALS	2,452,681	1,154,509	1,795,692	0	621,052		