


MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

INTEROFFICE COMMUNICATION

TO: Elizabeth M. Browne, Director
Materials Management Division

FROM: Rhonda Oyer, Manager
Solid Waste Section



DATE: August 16, 2024

SUBJECT: 2023 End Use Memo, Scrap Tire Estimated Usage and Capacity

The attached tables represent the best estimate of usage and capacity for existing and potential scrap tire material end-users for calendar year 2023. The information in these tables is based on current registrations issued, reported use for calendar year 2023, and staff knowledge of usage based on market contacts.

Usage of tire derived fuel (TDF) in Michigan remained fairly consistent for calendar year 2023. However, amendments made by Senate Bill (SB) 271 to the Clean and Renewable Energy and Energy Waste Reduction Act (PA 295 of 2008) will likely eliminate use of TDF in several energy producing facilities. This could result in a significant amount of scrap tires being generated that may not have a recycling option available and will likely be landfilled. EGLE was not asked for input on SB 271 during its development.

The Scrap Tire Program remains committed to the development of additional markets for scrap tires. Interest remains in rubber modified asphalt, rubber modified chip seal projects, and tire derived aggregate for civil engineering projects. The growth of additional markets in Michigan remains difficult to predict and will depend on the ingenuity of scrap tire processors in finding or creating new markets as well as the EGLE Scrap Tire Market Development Grants being directed toward growing the most promising emergent market sectors.

Attachments

cc: Tracy Kecskemeti, EGLE
Julie Staveland, EGLE
Jeff Spencer, EGLE
Phil Roycraft, EGLE
Kirsten Clemens, EGLE

MICHIGAN SCRAP TIRE PROGRAM ANNUAL REPORT CALENDAR YEAR 2023

REUSE/RETREAD	WDS	REPORTED USE CY 2023		NOTES
		TONS	PTE*	
Empire Iron Mine (reuse) Empire Mine mining tire wind barriers	397459	0.00	0	No additional tires added during calendar year (CY) 2022. 23,800 T on site.
Empire Iron Mine (reuse) Tilden Mine mining tire wind barriers	397459	0.00	0	CY 2021: 698 T
Detroit Belle Isle (reuse) 1900/1940 Woodbridge Detroit, MI	482765	0.00	0	No additional tires added during calendar year (CY) 2021. The Grand Prix utilizes 13,700 PTE annually.
Alma Tire (retread) 1210 E Superior St Alma, MI	409073			CY 2021: DID NOT REPORT CY 2022: DID NOT REPORT CY 2023: DID NOT REPORT
Belleroc/Tredroc (retread) 2505 Thornwood St SW Wyoming, MI	470773			CY 2021: DID NOT REPORT CY 2022: DID NOT REPORT CY 2023: DID NOT REPORT
Conlan Tire LLC (retread) 30003 Van Born Rd Romulus, MI	494266	9,938.00	884,482	CY 2020: 34,460 SEMI TIRES CY 2021: 68,680 SEMI TIRES CY 2022: 78,382 SEMI TIRES
Dependable Tire (retread) 12300 Stephens Rd Warren, MI	418950			CY 2021: DID NOT REPORT CY 2022: DID NOT REPORT CY 2023: DID NOT REPORT
Ginman Tire (retread/used) 665 W Clay Ave Muskegon, MI	497295			CY 2021: DID NOT REPORT CY 2022: DID NOT REPORT CY 2023: DID NOT REPORT
Jerry's Tire (retread) 2085 W Hill Rd Flint, MI	470691			CY 2021: DID NOT REPORT CY 2022: DID NOT REPORT CY 2023: DID NOT REPORT
Leslie Tire (retread) 144 NB Gratiot Ave Mt. Clemens, MI	470951			CY 2021: DID NOT REPORT CY 2022: DID NOT REPORT CY 2023: DID NOT REPORT
Meekhof Tire (retread) 1640 Olson St NE Grand Rapids, MI	444349	5,050.40	449,486	CY 2021: DID NOT REPORT CY 2022: DID NOT REPORT CY 2022: 13,409 SEMI TIRES
Olson Tire (retread) 704 E Pickard Mt. Pleasant, MI	471242			CY 2021: DID NOT REPORT CY 2022: DID NOT REPORT CY 2023: DID NOT REPORT
Pomp's Tire Service (retread) 3500 Enterprise Dr Allen Park, MI	497615	2,468.93	219,735	CY 2020: 48,934 SEMI TIRES CY 2021: 53,806 SEMI TIRES CY 2022: 11,270 SEMI TIRES
Shrader Tire & Oil (retread) 25445 Outer Dr Melvindale, MI	398265	3,807.50	338,868	CY 2020: 40,653 SEMI TIRES CY 2021: 47,368 SEMI TIRES CY 2022: 68,315 SEMI TIRES
Wingfoot (Goodyear) 147 Morgan Dr Howell, MI	443291			CY 2021: DID NOT REPORT CY 2022: DID NOT REPORT CY 2023: DID NOT REPORT
Wonderland Tire (retread) 1233 Cutting Industrial Moline, MI	436529			CY 2021: DID NOT REPORT CY 2022: DID NOT REPORT CY 2023: DID NOT REPORT
TOTAL		21,264.83	1,892,571	*1 semi tire = 5 PTE; 89 PTE / T

MICHIGAN SCRAP TIRE PROGRAM ANNUAL REPORT FOR CALENDAR YEAR 2023

LANDFILL	WDS	REPORTED USE CY 2023		NOTES
		TONS	PTE	
Brent Run Landfill Montrose, MI ADC	406671	0.00	0	Approved to use but not using tires.
Central Sanitary Landfill Cannonsville, MI ADC	416499	39.16	3,485	CY 2020: DID NOT REPORT CY 2021: DID NOT REPORT CY 2022: 178.00 T
City of Midland Sanitary Midland, MI ADC	470453	0.00	0	Approved in license but has not used tires.
Dafter Sanitary Landfill Chippewa County, MI ADC	451470	0.00	0	Approved in license but has not used tires.
Delta County Landfill Escanaba, MI ADC	410730	0.00	0	CY 2020: DID NOT REPORT CY 2021: DID NOT REPORT CY 2022: 951.00 T
Granger: Wood St. & Grand Lansing, MI Leachate/Gas Collection	470523	2719.10	242,000	CY 2020: 1,078.65 T CY 2021: 2,584.27 T CY 2022: 617.98 T
K & W Landfill Ontonagon, MI ADC	408328	0.00	0	Approved in license but has not used tires
Marquette Co. Solid Waste Marquette, MI certified end-user; ADC	451188	0.00	0	CY 2020: 551.62 T CY 2021: 488.56 T CY 2022: 50.00 T
Ottawa County Farms Landfill Coopersville, MI ADC	403061	0.00	0	Approved in license but has not used tires
Peoples Landfill Inc. Birch Run, MI ADC	437908	0.00	0	Approved in license but has not used tires
Pitsch Sanitary Landfill Belding, MI Leachate/Gas Col/ADC	407345	0.00	0	Approved in license but has not reported.
Riverview Landfill Riverview, MI ADC	399054	879.93	78,314	CY 2020: DID NOT REPORT CY 2021: 5,078.00 T CY 2022: 15,157.00 T
Sauk Trail Hills Canton, MI ADC	410118	0.00	0	Approved in license but has not reported.
Southeast Berrien County Buchanan, MI ADC	458632	0.00	0	CY 2020: DID NOT REPORT CY 2021: DID NOT REPORT CY 2022: 6,128.00 T
Tri-City Recycling & Disposal Carsonville, MI	417640	0.00	0	Approved in license but has not used tires
Venice Park Recycling & Lennon, MI ADC	399185	0.00	0	Approved in license but has not used tires
Westside Recycling and Three Rivers, MI Leachate/Gas Col/ADC	406807	0.00	0	Approved in license but has not used tires
Wexford County Landfill LLC Manton, MI ADC	407336	0.00	0	CY 2020: DID NOT REPORT CY 2021: 291.00 T CY 2022: 91.00 T
Tires sent to landfill by haulers Reported in ReTrac by Registered Haulers		46,099.38	4,102,845	CY 2021: 73,726.14 T CY 2022: 44,787.66 T
TOTAL USED REPORTED BY LANDFILLS		3,638.19	323,799	Alternative daily cover (ADC), piping protection
TOTAL LANDFILLED BY HAULERS		46,099.38	4,102,845	Tires landfilled in Michigan (CY 2023)
TOTAL LANDFILLED BY COLLECTION SITES		5,063.62	450,662	Tires landfilled in Michigan (CY 2023)
TOTAL LANDFILLED IN MICHIGAN LANDFILLS		54,801.19	4,877,306	Tires landfilled in Michigan (CY 2023)

MICHIGAN SCRAP TIRE PROGRAM ANNUAL REPORT FOR CALENDAR YEAR 2021

TIRE DERIVED FUEL (TDF)	ANNUAL PERMITTED CAPACITY (TONS)	REPORTED USE CY 2023		NOTES
		TONS	PTE	
Genesee Power Station WDS: 463635 *** AQD SRN: N3570 Permit No. 259-06	7,300	4,234.39	376,861	CY 2018 = 2,473 T CY 2019 = 2,801 T CY 2020 = 4,567 T CY 2021 = 4,637 T CY 2022: 4,864 T
Grayling Generating Station WDS: 447905 AQD SRN: N2388 Permit No. 882-89E	16,425	3,313.17	297,872	CY 2018 = 2,927 T CY 2019 = 3,986 T CY 2020 = 1,591 T CY 2021 = 5,700 T CY 2022: 4814 T
Holcim (US) Inc. WDS: 393642 AQD SRN: B1477 Permit No. 83-21	24,719	8,958.88	797,340	
L'Anse Warden Electric Co. WDS: 482982 AQD SRN: B4260 Permit No. 168-07A-B	24,000	7,931.49	705,903	CY 2018 = 4,075 T CY 2019 = 2,400 T CY 2020 = 1,870 T CY 2021 = 380.57 T CY 2022: 5,072 T
National Energy of Lincoln WDS: 436693 AQD SRN: N0890 Permit No. 290-86C	16,060	10,796.77	960,913	CY 2018 = 11,918 T CY 2019 = 12, 315 T CY 2020 = 12,099 T CY 2021 = 7,706 T CY 2022: 7,509 T
National Energy of McBain WDS: 391703 AQD SRN: N1160 Permit No. 261-86G	16,060	7,658.15	681,575	CY 2018 = 11,886 T CY 2019 = 10,895 T CY 2020 = 10,945 T CY 2021 = 7,929 T CY 2022: 6,022 T
Packaging Corp. of America WDS: 393993 AQD SRN: B3692 Permit No. 209-18A	8,760	7,529.30	670,108	NEW SITE CY 2021 CY 2021 = 3,472 T CY 2022: 6,764 T
TES Filer City Station WDS: 450616 AQD SRN: N1685 Permit No. 519-87F	35,040	8,292.26	738,011	CY 2018 = 14,615 T CY 2019 = 5,272 T CY 2020 = 1,136 T CY 2021 = 4,791 T CY 2022: 9,148 T
TOTAL		58,714.41	5,228,583	89 PTE / TON

OUT OF STATE USERS	*self reported data	REPORTED USE CY 2023		NOTES
		TONS	PTE	
Out of State (ReTrac, reported by registered haulers)		45,512.99	4,050,656	Tires reported hauled out of state
TOTAL		45,512.99	4,050,656	

MICHIGAN SCRAP TIRE PROGRAM ANNUAL REPORT FOR CALENDAR YEAR 2021				
PROCESSOR REPORTING	*self reported data	REPORTED USE CY 2023		NOTES
		TONS	PTE	
CM Rubber Technologies WDS: 477858		2,149.31	191,289	DRAINFIELD: 1990.44 T USED/GRADE TIRES: 0 T SIDEWALLS/SILAGE: 0 T TDF: 158.87 T CIVIL ENG: 0 T
Cobalt Holding, LLC WDS: 488250		7,149.90	636,341	CRUMB: 2,374.51 T MULCH: 768.24 T STEEL/TIRE WIRE: 1,158.51 T SHREDS: 2,848.64 T
Environmental Rubber WDS: 427801		8,162.94	726,502	TDF: 8,162.94 T
First Class Tire Shredders WDS: 471626		12,028.52	1,070,538	TDF: 12,028.52 T
Huffman Rubber WDS: 471063		10,964.90	975,876	USED/GRADE TIRES: 299.00 T SIDEWALLS/SILAGE: 927.36 T FEEDSTOCK/OOS: 6,305.68 T AGGREGATE: 3,432.86 T
Larrys Tire WDS: 497570		5,955.33	530,024	USED/GRADE TIRES: 1,897.67 T SHREDS: 3967.77 T TDF: 89.89 T
Mensch Manufacturing WDS: 471180		523.00	46,547	PRODUCT: 523.00 T LANDFILLED: 39.00 T
Silver Lining WDS: 393268		23,931.77	2,129,928	USED/GRADE TIRES: 1,030.72 T FEEDSTOCK OOS: 331.50 T TDF: 22,569.55 T
258 Tire WDS: 496831		12.10	1,077	LANDFILLED: 0 T
TOTAL PROCESSED		70,877.77	6,308,122	INCLUDES ONLY LANDFILL ADC
TOTAL LANDFILLED BY PROCESSORS		39.00	3,471	

MICHIGAN SCRAP TIRE PROGRAM ANNUAL REPORT FOR CALENDAR YEAR 2021				
USE COMPARISON				
TOTALS	CALENDAR YEAR 2023		CALENDAR YEAR 2022	
	TONS	PTE	TONS	PTE
LANDFILLED				
Landfill used (rept by landfills)	3,638.19	323,799	23,172.98	2,062,395
Landfilled (rept by haulers)	46,099.38	4,102,845	44,787.66	3,986,102
Landfilled (rept by collection site)	5,063.62	450,662	255.21	22,714
TOTAL	54,801.19	4,877,306	68,215.85	6,071,211
END USES & DIVERSION				
Reuse/Retread	21,264.83	1,892,571	9,020.01	802,781
Out of State	45,512.99	4,050,656	44,570.01	3,966,731
TDF (utilized in MI)	58,714.41	5,228,583	59,588.20	5,303,349
TDF (produced in MI)	43,008.90	3,827,792	46,605.01	4,147,846
TOTAL	168,501.13	14,999,602	159,783.23	14,220,707
MATERIAL PROCESSED REPORTED BY MICHIGAN SCRAP TIRE FACILITIES				
AGGREGATE/TDA	0.00	0	2,868.58	255,304
BUFFINGS	0.00	0	0.00	0
CIVIL ENGINEERING	0.00	0	69.83	6,215
CRUMB	2,374.51	211,331	2,500.00	222,500
DRAINFIELD	1,990.44	177,149	1,351.01	120,240
FEEDSTOCK/SHRED/OOS	13,453.59	1,197,370	16,014.20	1,425,264
GRANULES	0.00	0	0.00	0
LANDFILL/ADC	0.00	0	217.78	19,382
MULCH/GROUND	768.24	68,373	862.00	76,718
SILAGE/SIDEWALL	927.36	82,535	855.41	76,131
STEEL/TIRE WIRE	1,158.51	103,107	1,221.00	108,669
TDF (produced in MI)	43,009.77	3,827,870	46,605.01	4,147,846
USED/GRADE TIRES	3,227.39	287,238	3,513.96	312,742
OTHER PRODUCTS	523.00	46,547	89.80	7,992
TOTAL	67,432.81	6,001,520	76,168.58	6,779,004
	CY 2023 TON	CY 2023 PTE	CY 2022 TON	CY 2022 PTE
TOTAL USAGE	88,697.64	7,894,090	76,168.58	6,779,004

*This table represents the EGLE Scrap Tire Program best estimate of the current usage and capacity of existing and potential scrap tire material end-users for the previous calendar year. Many end users are not mandated to report tire commodity usage; therefore this table only includes information voluntarily reported to the Department. Additionally, many of the processors report the creation of a commodity that is then reported as used by an end user.

** Calendar Year Michigan Air Emission Reporting System Data is being reviewed at this time and may change.

*** Air Quality Title V Renewable Operating Permits: https://www.egle.state.mi.us/aps/downloads/rop/ROPlist/APS_ROP_Sources_by_Name.pdf

Glossary

AQD: Air Quality Division

CY: Calendar Year (January 1 through December 31)

OOS: Out of State User. Tires were generated in Michigan and taken outside the state for use/disposal.

PTE: Passenger Tire Equivalent based on 1 PTE = 22.5 lbs (Increased to 22.5 lbs in 2012 from 20 lbs)

PTI: Permit to Install. The permit required for new or modified equipment or a change in the method of operation of existing equipment which causes certain increases in emissions.

ROP = Renewable Operating Permit. Old PTIs are voided and the conditions are placed into the ROP. New PTIs are also eventually rolled into the ROP for a major source of air emissions. May also be called Title V Permit.

SRN = State Registration Number, which does not change for a site even when names or numbers change. It is the most certain way to identify correct information for a facility and is used by Air Quality Division to identify a facility.

End-user means any of the following:

(i) A person who possesses a permit to burn tires under part 55.

(ii) The owner or operator of a landfill that is authorized under the landfill's operating license to use scrap tires.

(iii) A person who uses a commodity to make a product that is sold in the market.

(iv) A person who is authorized by this part to accumulate scrap tires, who acquires scrap tires, and who converts scrap tires into a product that is sold in the market or reused in a manner authorized by this part.