

Michigan Department of Environment, Great Lakes, and Energy Materials Management Division

SCRAP TIRE PROGRAM Calendar Year 2019 End Use Memo

TO:	Jack Schinderle, Director Materials Management Division
THROUGH:	Elizabeth M. Browne, Assistant Director Materials Management Division
FROM:	Jeff Spencer, Supervisor Sustainable Materials Management Unit, Solid Waste Section
DATE:	April 14, 2020
SUBJECT:	Calendar Year 2019 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 2019. The information in these tables is based on current registrations issued, reported use for calendar year 2019, and staff knowledge of usage based on market contacts.

There remains a consistent decline in the demand for tire derived fuel (TDF). Most tire processors in Michigan built their business around TDF markets. In 2015, TDF usage was 10,797,719 passenger tire equivalents (PTE) or 121,323 tons. In 2019, TDF usage decreased to 6,073,659 PTE or 68,243 tons. The 2019 TDF usage is a 43.75 percent decrease from that used in 2018.

The Scrap Tire Program remains committed to the development of additional markets. Interest remains in molded and tire chip products. The growth of 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 the most promising market sectors.

Attachments

cc: Rhonda Oyer, EGLE Kirsten Clemens, EGLE

	WDS REPORTED USE		NOTES	
REUSE/RETREAD	VVD5	TONS	PTE*	- NOTES
Empire Iron Mine (reuse)	Empire Iron Mining			No additional tires added during
Marquette, MI	Partnership (Marquette) &	0.00	0	calendar year (CY) 2019.
mining tire wind barriers	Tilden Mining Co. (Tilden)			calendar year (CT) 2019.
Detroit Belle Isle (reuse)				No additional tires added during
1900 & 1940 Woodbridge	482765	154.00	13,706	No additional tires added during
Detroit, MI				calendar year 2019.
Alma Tire (retread)				CY 2017: 109,330 PTE
1210 E Superior St	409073			CY 2017: 21,866 SEMI TIRES
Alma, MI				CY 2018: 20,888 SEMI TIRES
Belle Tire/Tredroc (retread)				CY 2017: 362,755 PTE
3500 Enterprise Dr	497615	3748.83	333,646	CY 2017: 72,551 SEMI TIRES
Allen Park, MI			, , , , , , , , , , , , , , , , , , ,	CY 2018: 4,224.88 T COMMODITY
Belleroc/Tredroc (retread)				CY 2017: 190,460 PTE
2505 Thornwood St SW	470773			CY 2017: 38,092 SEMI TIRES
Wyoming, MI				CY 2018: 91,960 SEMI TIRES
Dependable Tire (retread)				CY 2017: DID NOT REPORT
12300 Stephens Rd	418950			CY 2018: 21,488 SEMI TIRES
Warren, MI				
Ginman Tire (retread/used)				CY 2017: DID NOT REPORT
665 W Clay Ave	497295			CY 2018: 4,423 SEMI + 25,480 LBS
Muskegon, MI				BUFFINGS
Conlin Tire LLC (retread)				CY 2017: 16,081 PTE
30003 Van Born Rd	494266	3070.00	273230	CY 2017: 3,216 SEMI TIRES
Romulus, MI				CY 2018: 3,830.62 T COMMODITY
Jerry's Tire (retread)				CY 2017: 110,330 PTE
2085 W Hill Rd	470691			CY 2017: 22,066 SEMI TIRES
Flint, MI				CY 2018: 22,240 SEMI TIRES
Leslie Tire (retread)				CY 2017: DID NOT REPORT
144 NB Gratiot Ave	470951			CY 2018: 15,089 SEMI TIRES
Mt. Clemens, MI				
Meekhof Tire (retread)				CY 2017: 274,080 PTE
1640 Olson St NE	444349			CY 2017: 54,816 SEMI TIRES
Grand Rapids, MI				CY 2018: 63,000 SEMI TIRES
Olson Tire (retread)				CY 2017 : 63,410 PTE
704 E Pickard	471242			CY 2017: 12,682 SEMI TIRES
Mt. Pleasant, MI				CY 2018: 13,487 SEMI TIRES
Schrader Tire & Oil (retread)				CY 2017: 771 PTE
25445 Outer Dr	398265	2277.10	202662.00	CY 2017: 3,855 SEMI TIRES
Melvindale, MI				CY 2018: 2531 T COMMODITY
Union Tire (retread)			\wedge	
308 Jackson Plaza	478987	\sim		No longer retreading
Ann Arbor, MI		$\langle \rangle$		
Wingfoot (Goodyear)			+	CY 2017: DID NOT REPORT
147 Morgan Dr	443291			CY 2018: 36,710 SEMI TIRES
Howell, MI				
Wonderland Tire (retread)				CY 2017: 175,885 PTE
1233 Cutting Industrial	436529			CY 2017: 35,177 SEMI TIRES
Moline, MI	100020			CY 2018: 34,337 SEMI TIRES
	TOTAL	9,249.93	823,244	*1 semi tire = 5 PTE; 89 PTE / T

	14/20	2019		NOTES
LANDFILL	WDS	TONS PTE		
Brent Run Landfill				
Montrose, MI	406671			Approved to use but not using tires.
ADC				
Central Sanitary Landfill				
Cannonsville, MI	416499			Approved in license but has not used
ADC				tires.
City of Midland Sanitary Landfill,				
Midland, MI	470453			Approved in license but has not used
ADC				tires.
Dafter Sanitary Landfill				
Chippewa County, MI	451470			Approved in license but has not used
ADC				tires.
Granger: Wood St. & Grand River				CY 2018 = 65.10 T
Lansing, MI	470523	179.78	16,000	CY 2017 = 654 T
Leachate/Gas Collection	470525	179.70	10,000	CY 2017 = 654 1
K & W Landfill				
	100000			Approved in license but has not used
Ontonagon, MI	408328			tires
ADC				
Marquette County Solid Waste				CY 2018 = 290.36 T
Marquette, MI	451188	180.11	16,030	CY 2017: 138 T
certified end-user; ADC				
Ottawa County Farms Landfill				Approved in license but has not used
Coopersville, MI	403061			tires
ADC				
Peoples Landfill Inc.				Approved in license but has not used
Birch Run, MI	437908			Approved in license but has not used tires
ADC				
Pitsch Sanitary Landfill				
Belding, MI	407345			
Leachate/Gas Collection/ADC				
Riverview Landfill				CY 2018 = NO USAGE REPORTED
Riverview, MI	399054			CY 2017: 12,782 T
ADC				
Sauk Trail Hills				
Canton, MI	410118			Approved in license but has not used
ADC				tires.
Southeast Berrien County Landfill				
Buchanan, MI	458632			
ADC	70002			
Tri-City Recycling & Disposal				
Carsonville, MI	417640			Approved in license but has not used
	417040			tires
Venice Park Recycling & Disposal				
	200405			Approved in license but has not used
Lennon, MI	399185			tires
ADC				
Westside Recycling and Disposal				
Three Rivers, MI	406807			
Leachate/Gas Collection/ADC				
	TOTAL	359.89	32,030	

TIRE DERIVED FUEL (TDF)	ANNUAL PERMITTED	2019		NOTES
	CAPACITY (TONS)	TONS	PTE	
Genesee Power Station				CY 2018 = 2,473 T
WDS: 463635				CY 2017 = 5,610 T
SRN: N3570	7,300	2,800.61	249,254	CY 2016 = 3,286 T
Title V Air Permit				CY 2015 = 2.025 T
Permit No. 259-06				CY 2014 = 3,247 T
Grayling Generating Station				CY 2018 = 2,927 T
WDS: 447905				CY 2017 = 3,952 T
SRN: N2388	16,425	3,986.32	354,782	CY 2016 = 3,299 T
<u>Title V Air Permit</u>				CY 2015 = 2,343 T
Permit No. 882-89E				CY 2014 = 5,811 T
Hillman Power, Hillman				CY 2018 = 6,873 T
WDS: 429049				CY 2017 = 7,385 T
SRN: N1266	20,000	4,297.60	382,486	CY 2016 = 9,126 T
Title V Air Permit				CY 2015 = 9,635 T
Permit No. 687-86G				CY 2014 = 7,936 T
L'Anse Warden Electric Co.				CY 2018 = 4,075 T
WDS: 482982				CY 2017 = 8,935 T
SRN: B4260		2,399.83	213,585	CY 2016 = 7,386 T
Title V Air Permit				CY 2015 = 13,565 T
Permit No. 168-07A-B				CY 2014 = 10,861 T
TES Filer City Station				CY 2018 = 14,615 T
WDS: 450616				CY 2017 = 9,737 T
SRN: N1685	35,040	5,271.90	469,199	CY 2016 = 19,391 T
Title V Air Permit				CY 2015 = 26,813 T
Permit No. 519-87F				CY 2014 = 26,415 T
Verso Escanaba				CY 2018 = 19,483 T
WDS: 395326				CY 2017 = 15,744 T
SRN: A0884		26,277.26	2,338,676	CY 2016 = 17,420 T
Title V Air Permit				CY 2015 = 23,366 T
Permit No. 259-06				CY 2014 = 23,701 T
Viking Energy, Lincoln				CY 2018 = 11,918 T
WDS: 436693				CY 2017 = 11,125 T
SRN: N0890	16,060	12,315.00	1,096,035	CY 2016 = 11,524 T
Title V Air Permit		,		CY 2015 = 11,428 T
Permit No. 290-86C				CY 2014 = 11,140 T
Viking Energy, McBain				CY 2018 = 11,886 T
WDS: 391703				CY 2017 = 10,670 T
SRN: N1160	16,060	10,894.84	969,641	CY 2016 = 11,989 T
Title V Air Permit	,	,	.,-	CY 2015 = 12,798 T
Permit No. 261-86G				CY 2014 = 11,461 T
201000	TOTAL	68,243.36	6,073,659	TOTAL CY 2018 = 74,260.97 T

*self reported data	2019		NOTES
sen reported data	TONS	PTE	NOTES
	37,573.09	3,344,005	Material hauled out of state
	37,573.09	3,344,005	
	*self reported data	*self reported data TONS 37,573.09	*self reported data TONS PTE 37,573.09 3,344,005

	*	2019		NOTES
OTHER PRODUCTS	*self reported data	TONS	PTE	NOTES
CM Rubber Technologies WDS: 477858		8,290.00	737,810	DRAINFIELD: 1312 T GRADE TIRES: 165 T SIDEWALL RINGS: 216 T TDF: 6597 T
Cobalt Holding, LLC WDS: 488250		9,097.25	809,655	CRUMB: 5555.84 T TDA: 2041.41 T MULCH: 1500 T
Deerpath Recyclers WDS: 479633		5,698.00	507,122	CRUMB: 2045 T TIRE WIRE: 622 T TDF/CHIPS: 3031 T
Entech WDS: 470882		\searrow	\searrow	Ceased operations in Michigan March, 2017
Environmental Rubber WDS: 427801		15,323.00	1,363,747	TDF: 15323 T
First Class Tire Shredders WDS: 471626		12,850.98	1,143,737	TDF: 12850.98 T
Great American Env. Serv. WDS: 447424		1,238.00	110,182	SHREDS: 1238 T
Huffman Rubber WDS: 471063		12,109.09	1,077,709	TDF: 668.80 T USED TIRES: 138.50 T SILAGE RINGS: 1481.04 T AGGREGATE: 1771.04 T FEED STOCK: 8049.71 T
Larrys Tire WDS: 471164 Blanchard		\searrow	$\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{$	Relocated to Howard City
Larrys Tire WDS: 490879 Lakeview		$\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{$		Relocated to Howard City
Larrys Tire WDS: TBD Howard City		6,638.90	590,862	NEW LOCATION - CY 2019 LANDFILL: 4338.18 T USED TIRES: 2300.72 T
Silver Lining WDS: 393268		24,892.93	2,215,471	TDF: 23443.17 T STEEL: 58.05 T USED TIRES: 1391.71 T
258 Tire WDS: 496831		340.71	30,323	LANDFILL: 340.71 T
	TOTAL	96,478.86	8,586,618	

	TABLE 1	USE COMPARIS	ON				
	CALENDAR Y	EAR 2019	CALENDAR YEAR 2018				
TOTALS	TONS	PTE	TONS	PTE			
	END USES						
Landfill Usage	359.89	,	355.46	31,642			
TDF	68,243.36	6,073,659	74,260.97	6,609,206			
TDF - Reported to AQD	Not available at ti	ime of report	73,892.60	6,576,441			
TOTAL	68,603.25	6,105,689	74,616	6,640,848			
		DIVERSION					
Reuse/Retread	9,249.93	823,244	28,781.25	2,561,442			
Out of State	37,573.09	3,344,005	70,653.38	6,288,150			
TOTAL	46,823.02	4,167,249	99,435	8,849,592			
	PRODUCTS - REP	ORTED BY SCRAP	P TIRE FACILITIE	S			
AGGREGATE	3,812.45	339,308.05	5,573.99	496,085.11			
BUFFINGS	0.00	0.00	0.00	0.00			
CRUMB	7,600.84	676,474.76	3,757.00	334,373.00			
DRAINFIELD	1,312.00	116,768.00	657.00	58,473.00			
FEED STOCK	8,049.71	716,424.19	2,198.39	195,656.71			
GRANULES	0.00	0.00	1,276.00	113,564.00			
MULCH/GROUND COVER	1,500.00	133,500.00	2,552.26	227,151.14			
SHREDS	5,916.89	526,603.21	6,556.00	583,484.00			
SILAGE/SIDEWALL	1,697.04	151,036.56	1,506.11	134,043.79			
STEEL/TIRE WIRE	680.05	60,524.45	1,450.09	129,058.01			
TDF	61,913.95	5,510,341.55	62,465.82	5,559,457.98			
USED/GRADE TIRES	3,995.93	355,637.77	9,664.04	860,099.56			
OTHER	0.00	0.00	2,686.95	239,138.55			
TOTAL	96,478.86	8,586,619	100,344	8,930,585			
	CY 2019 TON	CY 2019 PTE	CY 2018 TON	CY 2018 PTE			
TOTAL USAGE	211,905.13	18,859,557	285,193	25,382,177			

*This table represents the best estimate of the current usage and capacity of existing and potential scrap tire material endusers. 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.

Glossary

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.

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.

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.