



Northeast¹ End-Markets for Used Tires

September 2019

Background

According to the latest assessment of the U.S. scrap tire markets by the U.S. Tire Manufacturers Association (USTMA), scrap tire stockpiles have steadily declined throughout the past few decades. The Association's "2017 U.S. Scrap Tire Management Summary"² concludes that more tires are being recycled and used by various end markets, and historic stockpiles are declining.

According to this Report, tire-derived fuel (TDF) continues to be the largest end market for recycled scrap tires. USTMA reports that about 43 percent of scrap tires were recycled for TDF use in 2017, while ground rubber (also called crumb rubber) serves as the second largest end market (25 percent). Sixteen (16) percent of scrap tires generated in 2017 were landfilled and 13 percent had other uses, including civil engineering. Although TDF serves as the largest end market for scrap tires, TDF demand has been declining in recent years.

Until 2013, many of the tires generated in southern New England were incinerated as TDF in a plant in Sterling, Connecticut that consumed about 10 million tires per year. That plant suspended operations in the fall of 2013. Since the closure of the Sterling facility, there has been increased interest in the region in expanding recycling of waste tires.

During the development of the FY 2020 workplan for the NERC-NEWMOA Joint Strategic Action Plan, it was decided that creation of a summary report on the status of tire end-markets in the region would be a useful resource as a foundation to understanding current circumstances and inform steps to explore further opportunities and actions.

Definitions

Tire-derived fuel (TDF)³ is composed of shredded or whole scrap tires. They may be mixed with other fuels, such as wood or chemical wastes, to be burned in concrete kilns, power plants, or paper mills. Tires are added as a supplemental fuel to increase boiler efficiency, decrease air emissions, and lower costs. An EPA⁴ test program concluded that, with the exception of zinc emissions, potential emissions from TDF should not be very different from conventional fossil fuels, as long as combustion occurs in a well-designed, well-operated, and well-maintained combustion device.

Cement manufacturing was the largest user of TDF, at 46 percent; pulp and paper manufacturing used 29 percent; and electric utilities used 25 percent.

¹ Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island and Vermont

² https://www.ustires.org/system/files/USTMA_scrap_tire_summ_2017_072018.pdf. Statistics reported are from this document.

³ https://en.wikipedia.org/wiki/Tire-derived_fuel

⁴ http://www.epa.gov/ttnecatc1/dir1/tire_eng.pdf

Ground rubber (i.e., crumb rubber) is produced from scrap tires. During the recycling process, steel and tire cord (fluff) are removed, leaving tire rubber with a granular consistency. Continued processing reduces the size of the particles appropriate for specific applications. Crumb rubber is often used in artificial turf as cushioning.

Tire Markets in the Northeast

The following table summarizes available information on tire outlets in the northeast. It covers the companies, processing as TDF or crumb rubber, collection services, and service area. Information on processing capacity is not available.

Tire Outlets

Company Name with URL Hyperlink	Tire Derived Fuel (TDF)	Volume Reduction (Shredding/Crumb Rubber & Other Products)	Hauling Services	Region Served (All = 11 states)
A2Z Environmental Group		X	x	Maryland, Delaware, Pennsylvania & New Jersey
Auston Transfer & Processing		X	x	Maryland, Delaware & Pennsylvania
BDS Waste Disposal		X	x	New England
Blairsville Environmental Rubber, LLC		X	x	Pennsylvania
Bob's Tire	X	X	x	New England & New York
Burgmeier's Tire Shredding		X	x	Pennsylvania
Casing Inc.	X	X	x	All of the northeast
Crumb Rubber Mfg.		x		All of the northeast
Earth First Recycling, LLC	X	X	x	Pennsylvania
Edge Rubber Recycling LLC		x		Pennsylvania
Emanuel Tire Company	X	X	x	Pennsylvania, New Jersey, Delaware, New York & Maryland
Evergreen Recycling Solutions, LLC,	X	X		Western, Central, Southeast New Jersey
F & B Rubberized		X	x	New England
FBS Tire Recycling, Inc.		X	x	New England & New York
Geiter Done of WNY, Inc.		x	x	New York & Pennsylvania
Go Green Hoosick, NY		X	x	New York & western Vermont
Junk in the Trunk NJ		X	x	New Jersey
K & K Tires		X	x	Within 175 miles of Linthicum, Maryland
Lafarge Cement	X	X		Pennsylvania
Lakin Tire	X	X	x	All of the northeast
Liberty Tire Recycling	x	X	x	Most states
Mahantango Enterprises		X	x	Pennsylvania
Mazza & Sons, Inc.		X		Northeast
New Bedford Tire Reduction Corp.	x	X	x	New England
Omni Recycling of Babylon	x	x	x	New York, New Jersey & Pennsylvania

Penn Turf, Inc.		X	x	Pennsylvania, New York, & Maryland
Recycling Technologies International LLC/Ecore International		x		Pennsylvania
Richie's Tire Service	x	x		New Jersey, Pennsylvania, upstate New York
Riverside Recycling		X		Maine & open to public
Rubbercycle LLC		x		New York, New Jersey & Pennsylvania
Surfacing Systems		x	x	Northeast
Tire Recycling	X	X	x	New York & New Jersey
Tire Recycling - Seneca Meadows, Inc.		X		New York, Pennsylvania, Massachusetts, Connecticut, Vermont, & Rhode Island
Wheelabrator Baltimore LP (BRESKO)	X			Requires scrap tires hauler license before will accept. No geographic limitation.

Acknowledgements

We would like to thank the Rubber Manufacturers Association, Rick Watson of the Delaware Solid Waste Authority and David Mrgich of the Maryland Department of the Environment for their assistance with this document.