



**RUBBER**  
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February 21, 2012

EPA Docket Center (EPA/DC)  
Environmental Protection Agency  
Mailcode 6102T  
1200 Pennsylvania Avenue, N.W.  
Washington, DC 20460

**Re: Non-Hazardous Secondary Materials That Are Solid Waste (EPA-HQ-RCRA-2008-0329) and Commercial and Industrial Solid Waste Incineration Units: Reconsideration and Proposed Amendments (EPA-HQ-OAR-2003-0119)**

The Rubber Manufacturers Association (RMA) is the national trade association representing every major domestic tire manufacturer including: Bridgestone Americas, Inc., Continental Tire the Americas, LLC; Cooper Tire & Rubber Company; The Goodyear Tire & Rubber Company; Michelin North America, Inc.; Pirelli North America; Toyo Tires (U.S.A.) Corporation and Yokohama Tire Corporation. RMA appreciates the opportunity to offer comments on the proposed Non-Hazardous Secondary Materials That Are Solid Waste (EPA-HQ-RCRA-2008-0329) and Commercial and Industrial Solid Waste Incineration Units: Reconsideration and Proposed Amendments (EPA-HQ-OAR-2003-0119).

RMA<sup>1</sup> members are committed to the concept of shared responsibility for tires after they complete their useful lives on vehicles. The success of this commitment is evident in the fact that about 85 percent of annually generated scrap tires in the U.S. go to end use markets. Tire-derived fuel (TDF) is the oldest and most mature market for scrap tires in this country. Industrial facilities across the country, including cement kilns, pulp and paper mills and electric utilities, use TDF as a supplemental fuel to increase boiler efficiency, decrease air emissions and lower costs. RMA has worked to develop the market infrastructure to successfully manage and reuse scrap tires, and is extremely proud of the progress in the area of scrap tire management. RMA strongly supports EPA's determination that scrap tires are not wastes when they are not discarded and are instead managed in tire collection programs and EPA's determination that off-specification tires that have never been placed on an automobile and managed under a contractual relationship are considered non-waste fuel.

RMA offers the following comments in support of EPA's approach to scrap tires in the proposed rule. We also support the comments submitted by the American Forrester and Paper Association on behalf of a number of industry trade associations including RMA. Because the

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<sup>1</sup> RMA's eight tire manufacturer member companies operate 30 manufacturing plants, employ thousands of Americans and ship over 90 percent of the original equipment (OE) tires and 80 percent of the replacement tires sold in the United States.

Non-Hazardous Secondary Materials That Are Solid Waste Rule (NHSM Rule), the Standards of Performance for New Stationary Sources and Emission Guidelines for Existing Sources: Commercial and Industrial Solid Waste Incineration Units Rule (CISWI Rule), and the National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, Institutional Boilers and Process Heaters Rule (Boiler MACT Rule) are interrelated, we are filing these comments in the dockets for each of these three rules.

**I. Tire Derived Fuel Has A Long History of Being Used as Fuel**

The majority of annually generated scrap tires utilized in markets since year 1979 have been utilized as fuel. Today, about 85 percent of the annually generated scrap tires go to end use markets. In 1990, only 11 percent of scrap tires went to end use markets. The remaining tires were legally landfilled or illegally stockpiled. In 1990, there were an estimated one billion scrap tires in legacy stockpiles throughout the United States. Today, scrap tires in stockpiles have been reduced to about 112 million tires, which are concentrated in just a few states. RMA supports EPA's conclusion in the 2011 NHSM final rule that scrap tires meet the legitimacy criteria for fuels and are not discarded when transferred off-site from the generating facility. 76 Fed. Reg. at 80472.

**A. TDF meets the legitimacy criteria for fuels**

To meet the legitimacy criteria under the final NHSM rule, a non-hazardous secondary material must be managed as a valuable commodity, have a meaningful heating value and be used as a fuel in a combustion unit that recovers energy, and contain contaminants at levels comparable to or lower than those in traditional fuels which the combustion unit is designed to burn. RMA supports EPA's determination that TDF meets the legitimacy criteria for fuels. Scrap tires have been managed as a valuable commodity and used as fuel in combustion units for energy since 1979. In addition, TDF has a meaningful heating value and contains contaminants at levels comparable to or lower than those in traditional fuels.

EPA specified in the final NHSM rule that scrap tires meet the requirement for meaningful heating value, required per § 241.3(d)(1)(ii) in that scrap tires have a higher heating value (12,000 Btu/lb to 16,000 Btu/lb) as compared to coal (one of the fuels TDF traditionally replaces). Scrap tires also meet the requirement specified at § 241.3(d)(1)(iii) for the nonhazardous secondary materials to have comparable or lower levels of contaminants as compared to the traditional fuel it is replacing.

The combustion of TDF, whether whole or minimally processed without removal of metal beads and belts, not only provides better fuel value than coal but also results in comparable or even lower emissions than coal combustion. According to EPA data, the metal content in whole tires does not increase emissions when compared to traditional fuels such as coal: "mercury is below detectable levels for TDF, and average 0.11 ppm for coal; barium is also below detectable levels in TDF; cadmium, chromium, lead and manganese levels are comparable; zinc is present in higher concentrations in TDF than in coal." 75 Fed. Reg. 107 at 31878. EPA's emission data indicates that burning TDF in a combustion unit will not pose an

increased threat to human health or the environment than the emissions resulting from the burning of traditional fuels such as coal.

The combustion of TDF also results in lower greenhouse gas (GHG) emissions than the burning of coal, residual oil and distillate oil as fuels. The GHG emissions rate associated with the combustion of scrap tires is approximately 0.065 metric tons of carbon dioxide equivalents (MTCO<sub>2</sub>E) per million metric British thermal units (MMBtu) of scrap tires combusted, while the GHG emission rate for coal is approximately 0.094 MTCO<sub>2</sub>E per MMBtu. EPA recently finalized the Biomass Deferral Rule which recognized that tires contain a percentage of natural rubber which is considered carbon neutral. Recent data collected from RMA members demonstrates that TDF contains approximately 27.47% natural rubber. As a result, GHG emissions associated with the natural rubber fraction of tires are not counted as GHG emissions from the combustion of TDF. Thus, TDF has lower GHG emissions than coal (0.094 MTCO<sub>2</sub>E per MMBtu), residual fuel oil (0.079 MTCO<sub>2</sub>E per MMBtu) and distillate fuel oil (0.073 MTCO<sub>2</sub>E per MMBtu). In addition substituting TDF for coal would also avoid an estimated 0.019 MTCO<sub>2</sub>E per MMBtu of GHGs and 0.246 Lbs/MMBtu of PM associated with the extraction and processing of the coal.

In addition to lower emissions than coal and lower GHG emissions than coal, residual and distillate fuel oils, scrap tires used as fuel also have a number of other environmental, health, and economic benefits. For example, tires used as fuel can greatly reduce the number of tires going to stockpiles and landfills. Reducing the number of tires going to stockpiles and landfills can have a number of health and environmental benefits, because stockpiled tires provide a habitat for disease vectors (such as mosquitoes and rodents), and are at risk of fire. Use of tires as a replacement fuel for fossil fuel may also eliminate the environmental impacts associated with extraction and processing of the traditional fuel. Additionally, combustion of TDF displaces the use of traditional fuels which may impact dependence on foreign fuel sources.

**B. TDF is managed as a valuable commodity and is not discarded when transferred off-site from the generating facility**

RMA supports the non-waste determination EPA granted for scrap tires used as fuels that have been transferred to a third party. Scrap tires managed under established tire collection programs, which includes management through a contractual relationship, do not enter the waste disposal stream and are not considered discarded.

EPA has indicated that an established tire collection program must contain the following components: (1) A comprehensive system that prevents tires from being abandoned when the scrap tires are harvested from vehicles and collected at the various businesses where they are removed; these tires are not considered “discarded in the first instance”; and (2) standards for the scrap tires to be managed as a valuable commodity. In addition, scrap tires collection programs should ensure that storage does not exceed reasonable time frames, the scrap tires are managed in a manner consistent with the analogous fuel (coal), and a system is in place to prevent scrap tires from being discarded prior to combustion. State tire collection programs meet these requirements, and ensure that scrap tires are not discarded en route to the combustor for use as fuel and are handled as a valuable commodity.

Established tire collection programs promote the collection of scrap tires and coordinate with tire dealerships, haulers, processors, and end users. Existing tire collection programs form an established collection infrastructure. These established tire collection programs together with state bans or restrictions on landfilling in many states effectively result in the beneficial reuse of tires (as fuel or used in other scrap tire markets) as the sole end use option for scrap tires in those states.

**II. RMA supports EPA's determination that off-specification tires, including factory scrap tires, that have never been placed on an automobile and are managed under a contractual relationship are considered non-waste fuel**

As with any manufacturing process, off-specification materials are generated in tire manufacturing. Off-specification tires are identified through the use of automated screening technologies and trained personnel. These tires are then removed from the production line and rendered unusable, often times by creating a large gash or hole in or cutting the bead of the off-specification tire. Following identification, off-specification scrap tires are accurately accounted for, stored in secure locations, and then shipped to vendors such as cement kilns or enter state recycling programs.

RMA supports EPA's revised definition of "established tire collection programs" which clarifies that off-specification tires (including factory scrap tires) are not discarded when combusted, in the same way as tires that are removed from vehicles. Factory scrap tires enter the same types of established tire collection programs as do other scrap tires and are indistinguishable from other scrap tires when legitimacy criteria are applied.

**A. RMA Recommends That EPA Specify in the Final Rule that other Rubber Tire Components that are Scrapped During the Tire Manufacturing Process are classified as Non-Waste Fuels When Managed Under A Contractual Relationship**

In addition to off-specification tires, rubber tire components may also be scrapped during the tire manufacturing process. These components are used as fuels and are managed through a direct contractual relationship between RMA member company tire plants and end user combustors. These materials are managed as valuable commodities and have similar heating values and emissions as those associated with off-specification tires. We ask that EPA specify in the final rule that off-specification tires, including other rubber tire components, are considered non-waste fuel when managed under a contractual relationship.

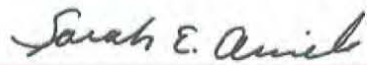
**III. Conclusion**

RMA strongly supports EPA's determination that scrap tires are not wastes when they are never discarded and are instead managed in tire collection programs and EPA's determination that off-specification tires that have never been placed on an automobile and managed under a contractual relationship are considered non-waste fuel. Classification of TDF as a fuel is critical to the future of the TDF market for scrap tires.

Comments by the Rubber Manufacturers Association  
Docket Id Number EPA-HQ-RCRA-2008-0329

Thank you for the opportunity to submit comments on this important rulemaking. If you have any questions or need for clarification of these comments please contact Sarah Amick ([samick@rma.org](mailto:samick@rma.org); 202-682-4836) or Tracey Norberg ([tnorberg@rma.org](mailto:tnorberg@rma.org); 202-682-4839).

Respectfully Submitted,



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