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EPA Docket Center Environmental Protection Agency Mailcode 2822T 1200 Pennsylvania Ave., NW Washington, DC 20460

RE: Docket ID No. EPA-HQ-OAR-2002-0058, National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters (76 Federal Register 80598, December 23, 2011)

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 National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and process heaters regulation. RMA members own and operate 56 major source boilers, at 17 facilities in 13 states¹ that are impacted by the proposed rule. We believe the Boiler MACT standards in the proposal are far more stringent than needed to assure protection of health and the environment from industrial boiler HAP emissions.

RMA offers the following comments which focus on the light and heavy liquid fuel subcategories in the proposed rule. In addition to these comments, we also support the comments offered by the American Forrest and Paper Association and a number of other industry trade associations including RMA.

#### I. Overview

Boilers at RMA member facilities combust either natural gas or a combination of natural gas and liquid fuel oils. Although boilers at RMA member facilities mainly burn natural gas, these boilers may also burn more than 10% liquid fuel in a given year and therefore would be

<sup>&</sup>lt;sup>1</sup> Major source boilers at RMA member tire manufacturing facilities are located in the following states: Alabama, Arkansas, Illinois, Indiana, Kansas, Kentucky, Mississippi, North Carolina, Ohio, Oklahoma, South Carolina, Tennessee and Virginia.

classified as either light or heavy fuel boilers. We believe the emission limits for light and heavy fuel boilers remain unachievable.

It is evident that major capital investments in add-on control technology will be required for continued use of liquid fuel in RMA member boilers. RMA members may choose fuel switching to natural gas as a compliance option. Because fuel costs are one of the top three costs of doing business, RMA members would like to maintain the option to burn more than 10% liquid fuel per year. The stringent emission limits EPA has proposed for light and heavy liquid fuel boilers would create a competitive disadvantage for tire manufacturing facilities located in the United States.

The U.S. tire manufacturing industry faces a withering economic slump and fierce competition from overseas manufacturers. In the face of such existing economic pressure, the proposed rules would make matters far worse by imposing large costs on U.S. tire manufacturers. We believe that EPA still has a lot of work to do in tailoring the rule so that it protects health and the environment without imposing unnecessary control requirements and corresponding costs.

### II. RMA supports the subcategorization of Liquid Boilers into Heavy and Light Liquids

EPA has proposed to divide the liquid subcategory into light and heavy liquid subcategories for PM and CO. From an equipment design and operations standpoint as well as an emissions standpoint, there is a clear distinction between boilers and process heaters firing light liquids versus those that fire heavy liquids. Based on a review of the top performing liquid boilers, however, those that are correctly categorized as liquid boilers are typically firing light liquids such as distillate oil (which is equivalent to home heating oil), which indicates a difference in emissions from heavy versus light liquid boilers. For these reasons, and because not all boilers will be able to fuel switch due to fuel availability, EPA has appropriately subcategorized heavy and light liquid boilers.

Residual fuel oils typically contain higher levels of ash and somewhat higher levels of metals than do distillate fuel oils. The combination of these characteristics means that residual fuel oil-fired boilers and process heaters have higher emissions of metal HAPs and PM than boilers and process heaters burning distillate fuel oils (light liquid fuels).

Residual fuel oils also have significantly different firing properties than do distillate fuel oils. The combustion characteristics of light and heavy liquids are different, because these fuels have very different flow/viscosity and atomization characteristics and different energy contents. As a result of these property differences, at a minimum, heavy fuel oil firing requires different burner tips than are needed when firing lighter fuel oils. The heating value and flame height differences between these fuels may also impose unit design and operating constraints.

In addition, residual fuel-fired boilers must operate a soot blowing cycle on a periodic basis to maintain their heat transfer efficiency, during which opacity and PM levels increase. While the database does not appear to include any data characterizing soot blowing emissions

from liquid-fired units, the proposed emission limits would apply during that time and thus these emissions must be considered. It is, therefore, clear that metal HAP and PM emissions at least, distinguish residual fuel-fired units from distillate-fired units. Indeed, EPA recognized this fact by creating an implicit subcategory for residual-fuel fired units in the rule by requiring in § 63.7525 that residual oil-fired process heaters and boilers (but not distillate units) install a PM CPMS.

Thus, from an equipment design and operations standpoint as well as an emissions standpoint, there is a clear distinction between boilers and process heaters firing light liquids versus those that fire heavy liquids.

### III. RMA has concern about the achievability of the light and heavy liquid fuel emission limits

EPA is proposing a stringent set of emission limits for light and heavy liquid fuel boilers that are, in many cases, not based on the use of any technology. In many cases, light and heavy liquid fuel boilers are achieving low emission rates not due to use of any particular technology, but due to the mix of fuels being fired (which sometimes includes fuels with pollutant contents below the limits of detection) or other unit specific characteristics that are not transferable to other sources. Facilities are limited in the fuels that their boilers can fire by design, cost, permits, and fuel availability. EPA should not set limits for hundreds of liquid fuel boilers based on data from a few boilers in which the specific mechanisms resulting in lower emissions are not fully understood and that are not available to all units in the subcategory.

The suite of limits should be achievable by at least 6 percent of existing boilers in each subcategory and the remaining boilers should be able to comply through their range of normal operating scenarios by applying known control equipment solutions. This expectation is not met for a broad range of units. Based on our review of the available data, less than 6 percent of units in all liquid subcategories can comply with the entire suite of applicable limits. This indicates to us that EPA has not adequately addressed the variability of emissions from units in these subcategories.

### IV. EPA is Using a Biased, Unrepresentative Data Set for Light and Heavy Liquid Fuel Boilers

Clean Air Act § 112(d) requires EPA to set a MACT floor for existing sources that are not less stringent than "the average emission limitation achieved by the best-performing 12 percent of the existing sources (for which the Administrator has emissions information)." See 42 U.S.C. § 7412(d); Nat. Res. Def. Council v. EPA, 489 F.3d 1250, 1254 (D.C. Cir. 2007). The top 12% "best performing" sources are known as "MACT floor units" or "units comprising the MACT floor."

During Phase I of EPA's data gathering effort, it requested and received emissions data from over 2,000 sources across all of the subcategories for PM, CO, NOx, and many HAPs. After sifting the data into fuel-based categories, EPA issued a second section 114 request requiring additional testing. During this second phase, EPA impermissibly targeted only those sources the Agency knew it needed data from to set the MACT floor (e.g., the top performers)

instead of obtaining a sampling of emissions data across the entire population of boilers in a subcategory to assess the variability in performance of boilers in a particular subcategory. In this way, EPA artificially limited the pool of data from which it drew its top 12% "best performing" sources and biased the collection of emissions data. The data are not evenly distributed, but are clustered well below the mean, and since EPA has chosen to select the top 12 percent of boilers for which it has stack test data instead of the top 12 percent of boilers for which it has any emissions information, this has resulted in the proposed MACT floors being based effectively on the top 12 percent of the top 12 percent of boilers. This is patently at odds with section 112(d). In many cases, a large population of boilers is being represented by only a handful of data points. The table below presents information on the number of boilers in the liquid fuel subcategory, the number of boilers for which EPA believes it has data, and the number of boilers on which the MACT floor is based. The only data being used to calculate MACT floors are the data obtained during the ICR and subsequent facility submittals to the docket, even though EPA has available data from other sources (e.g., NEI and TRI data).

If we were sure that the available data were statistically representative of the entire subcategory (such that calculating the MACT floor with fewer sources would result in approximately the same value as the MACT floor using data from the entire subcategory), then the lack of data likely would not significantly skew the results. However, the proposed rule and supporting documentation provide no assurance that where limited available data are available that they are representative of the entire source category. As a result, we believe that the lack of available data will produce MACT floors that are not reflective of the subcategory as a whole. While it is true that the statute allows EPA to determine the MACT floor based on sources "for which the Administrator has emissions information," this provision does not excuse EPA from using its resources and legal authority to obtain as much information as it reasonably can prior to setting MACT standards. In this case, EPA has had 20 years to gather the needed information. The fact that, at this point, data on only a small subset of sources in each subcategory is available represents an abdication of EPA's responsibility and renders the resulting standards arbitrary and capricious.

In some cases, EPA has augmented available stack test data with calculated emission factors in order to increase the number of sources on which the MACT floor is based (e.g., liquid fired boilers for which fuel data or stack test data from an identical boiler at the site are available). EPA should expand this approach by obtaining emissions data from all boilers in the liquid subcategories, whether by obtaining additional fuel data, additional stack test data, or estimating emissions for these boilers based on available emission factors. In fact, EPA has estimated emissions for all of the boilers being regulated under the MACT in order to quantify the expected emissions reductions. Therefore, EPA should be using the top 12 percent of the total number of boilers in each subcategory in order to set limits. EPA is using this approach in the CISWI rule.

The following table demonstrates the amount of data currently being used to set standards and the actual percentage of boilers in light and heavy liquid fuel subcategories that are being represented by each floor (assumes EPA has properly subcategorized units). EPA has not used 12 percent of the number of existing sources to set floors in the light or heavy fuel subcategories.

Subcategory	Parameter	СО	PM
Heavy Liquid	Number of sources in subcategory	320	320
	Number of sources EPA is using to set limits	17	32
	Number of sources in EPA floor	3 (0.9%)	4 (1.3%)
	Number of sources that represent 12% of subcategory	39	39
Light Liquid	Number of sources in subcategory	581	581
	Number of sources EPA is using to set limits	59	24
	Number of sources in EPA floor	8 (1.4%)	3 (0.5%)
	Number of sources that represent 12% of subcategory	70	70

# V. <u>EPA Is Justified In Using Emissions Data From Five Sources To Determine The Existing Source MACT Floor For Subcategories With More Than 30 Sources Where Emissions Information On Less Than 30 Sources Are Available</u>

The above table points out that EPA is using less than 5 sources to set the majority of the MACT floors for the light and heavy fuel subcategories. EPA has explained that it is using the top 12 percent of sources where there are more than 30 sources in a subcategory. EPA should use no fewer than 5 sources in setting the MACT floor for any source category – regardless of the number of sources in the category or subcategory. Congress clearly expected enough emissions information to be available for larger source categories to generally cause more than 5 sources to constitute the top 12%. It makes no sense for Congress to specify a minimum number of sources for source categories with few sources, but then to create a rule that would allow for standards to be set using data from fewer than 5 sources in larger source categories. Using no less than 5 sources would give effect to the clear intention of Congress.

We also note that the word "sources" as used in the last clause of §§ 112(d)(3)(A) and (B) is ambiguous and, therefore, susceptible to reasonable interpretation by the Agency. As EPA explains in the preamble, the word "sources" might be construed to refer to all sources in the given category or subcategory. However, the word "sources" in the first clause of §§ 112(d)(3)(A) and (B) clearly refers to the sources for which EPA has emissions information. Notably, the second use of the word "sources" in § 112(d)(3)(A) also clearly is a reference to sources for which EPA has emissions information. So, it is reasonable to conclude that Congress intended the word "sources" to have a consistent meaning for all purposes under these provisions. In other words, the reference "30 or more sources" at the end of § 112(d)(3)(A) and "fewer than 30 sources" at the end of § 112(d)(3)(B) reasonably should be construed as a reference to sources for which EPA has emissions information. This interpretation allows for EPA to naturally reconcile the application of §§ 112(d)(2)(A) and (B) such that the number of sources for which EPA has emissions information in a given category or subcategory dictates whether § 112(d)(2)(A) or (B) should apply.

#### VI. Some Units Should be Removed from Liquid Floors

During our examination of the units in the liquid fuel subcategories, we discovered several of the units that were considered are either no longer in operation or are no longer permitted to burn liquid fuels. Among these are:

- ORGeorgiaPacificWauna-EU 33 (fuel oil has been removed as a permitted fuel for this unit in the facilities Title V permit),
- SCGPChemRussellville-FOBoiler (This facility is no longer in operation and the unit is being dismantled), and
- NCDomtar-66-25-2050 (The No. 1 Package Boiler is no longer in operation and has been removed from the NC site).

These units should not be used in liquid unit floor calculations.

### VII. RMA supports the inclusion of a Total Select Metals (TSM) Alternative Limits for PM for Light and Heavy Fuel Boilers

The proposed rule provided a TSM alternative for several subcategories. However, EPA did not set a TSM standard for liquid units as they were unable to draw a correlation between the PM and the TSM floor data. TSM floor data for liquid fired units primarily consists of fuel analysis data while the PM floor data was derived from source test results. RMA recommends that EPA set an alternative TSM limit utilizing the TSM results associated with the best performing units in the PM subcategories.

We support EPA's efforts to collect additional data to establish TSM limits for liquid subcategory units. There is no compelling reason to establish TSM limits for solid and gas 2 boilers and not for liquid boilers. If the limited amount of data available makes the MACT floor based on the top 12 percent of units for which data are available unrepresentative of what the true top performing units should be achieving, then EPA could set TSM emission limits based on the top performing units in the PM subcategories. Having an option to comply with a TSM limit is a valuable alternative for liquid units.

## VIII. RMA Recommends that EPA set separate limits for HCl and Hg for Light and Heavy Fuel Boilers

Although EPA set separate emission limits for PM and CO for the light and heavy fuel subcategories, EPA did not set separate limits for Hg and HCl. Hg and HCl are fuel based pollutants. Light liquid fuels include distillate oil, biodiesel and vegetable oil. Heavy liquids include all other liquid fuels that are combusted in boilers, including byproduct liquid fuels generated at industrial facilities and residual oil. Because emissions of Hg and HCl are based on the type of fuel that is combusted, RMA recommends that EPA set separate emission limits for Hg and HCl for the light and heavy fuel subcategories.

# IX. <u>Facilities Should not Have to Conduct Monthly Fuel Analysis if no New Shipments</u> Have Been Received Since the Last Fuel Analysis was Conducted

Section 63.7515(f) requires monthly fuel analysis if a facility is complying with numeric emission limits using fuel analysis rather than stack testing:

"If you demonstrate compliance with the mercury, hydrogen chloride, or total selected metals based on fuel analysis, you must conduct a monthly fuel analysis according to  $\S$  63.7521 for each type of fuel burned that is subject to an emission limit in Table 1 or 2 to this subpart."

RMA member facilities may burn a percentage of light or heavy fuel oil subject to numeric emission standards only part of the year, and burn natural gas at other times. These facilities should not have to conduct monthly fuel analysis if they have not received additional fuel shipments since the last fuel analysis was performed.

#### X. Conclusion

RMA again thanks EPA for this opportunity to comment on the proposed regulation. Please contact me at (202) 682-4836 if you have questions or require additional information.

Respectfully Submitted,

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