

Comment on Identification of Non-Hazardous Secondary Materials That Are Solid Waste  
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Prepared by  
The Biomass Thermal Energy Council  
1211 Connecticut Ave, NW, Suite 600  
Washington, DC 20036

The Biomass Thermal Energy Council (BTEC) and its membership appreciate the opportunity to submit comments on the U.S. Environmental Protection Agency's (EPA) Proposed Rule for the Identification of Non-Hazardous Secondary Materials that are Solid Waste. BTEC is a nationwide industry association representing the views of biomass feedstock producers, fuel refiners, appliance manufacturers, vendors, non-profits, and end users. BTEC is dedicated to advancing the market for biomass thermal energy and promoting the use of high efficiency products and locally produced renewable biomass.

Biomass thermal energy today is a growing industry that generates and consumes a diversity of biomass fuel products. Roughly one million American businesses, citizens, and institutions use these biomass fuels to meet their space heating, cooling, or process heat needs. BTEC supports EPA in creating an inclusive definition of traditional fuels and tailored legitimacy criteria to ensure the availability of energy rich biomass fuels and prevent increased fossil fuel usage.

BTEC recommends that EPA shape its identification of non-hazardous solid waste to account for the unique properties of biomass feedstocks that often originate as residues from industrial and agricultural processes. These recommendations involve the following four concerns:

- Traditional fuels should be defined in the final rule, and unadulterated wood should fall under this classification;
- As described in the preamble, the Proposed Approach should be embraced over that of the Alternative Approach in determining solid waste designation;
- The legitimacy criteria regarding minimum heating value should be reduced to 4,000 btu/lb to accommodate moisture content characteristics in valuable biomass feedstocks;
- Re-sizing, sorting, and drying should be sufficient treatment to convert unadulterated discarded wood secondary materials into a useful, valued fuel.

The biomass thermal industry has developed technologically advanced combustion equipment that has reduced emissions, improved system efficiencies, and created demand for previously underutilized biomass feedstocks. Common biomass boiler fuels are no longer limited to pellets and cordwood; there are ample sources of clean biomass up and down industrial and agricultural supply chains. Today's static determination of "traditional" fuels will not account for tomorrow's advances in biomass thermal technologies and fuel capabilities. EPA should adopt a more

inclusive definition of traditional biomass boiler fuels that focuses on the unadulterated condition of biomass feedstocks. Doing so will make certain that hazardous air pollutants (HAPs) remain within regulated and safe limits while realizing the breadth of advancing biomass combustion capabilities.

In addition to clarifying the definition of traditional fuel, BTEC believes that EPA should adopt the Proposed Approach for determining waste designation over that of the Alternative Approach. The Proposed Approach—as described in the preamble—provides additional avenues for the recognition of useful biomass fuel than Alternative Approach. For example, a biomass residue or “waste” that is sufficiently processed into a usable fuel would not be a waste under the Proposed Approach, while it would garner a solid waste designation under the latter. Although it has legitimacy criteria issues that deserve revision—as will be discussed below—the Proposed Approach embodies considerations that accommodate everyday waste-to-biomass fuel applications.

Forest, agricultural, and other biomass residues have higher moisture content levels that, under the proposed minimum heating level, would disqualify them from non-waste status. The legitimacy criterion of 5,000 btu/lbs is an arbitrary cutoff that threatens to exclude useful, valuable biomass resources: agricultural residues can have heating values from 4,300-7,200 btu/lbs,<sup>1</sup> while forest residues can range from 4,250-6,000 btu/lbs.<sup>2</sup> These products often have a moisture content of over 40%, and many forest products industries rely on these “wastes” for economically priced process heat. BTEC supports the lowering of the minimum heating level to 4,000 btu/lbs to accommodate for the characteristics of these commonly used biomass fuels. Maintaining the proposed 5,000 btu/lbs level could discourage investment in sustainable harvesting practices, as residues would have little to no value and mostly likely be abandoned.

A further recommendation for the legitimacy criteria addresses the definition of sufficient processing of biomass residues into usable, non-waste fuels. As proposed, the legitimacy criterion does not recognize the labor intensive procedure of resizing, sorting, and drying biomass residues as sufficient processing. Whereas steps like dewatering are standard processing for other residues prior to disposal, biomass residues undergo resizing, sorting, and drying for the express purpose of developing a marketable energy product. BTEC believes that sufficient processing should include the aforementioned practices for unadulterated biomass. Revising this legitimacy requirement in coordination with other recommendations will encourage the reuse of clean biomass residues and spur development of additional biomass conversion facilities without limiting access to economical fuel options.

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<sup>1</sup> Oak Ridge National Laboratory, “Heating Value Reference List,” Bioenergy Feedstock Development Programs , [http://bioenergy.ornl.gov/papers/misc/energy\\_conv.html](http://bioenergy.ornl.gov/papers/misc/energy_conv.html).

<sup>2</sup> Oak Ridge National Laboratory, “Biomass Energy Data Book, Appendix A – Conversions: The Effect of Fuel Moisture Content on Wood Heat Content,” Nov. 2009, [http://cta.ornl.gov/bedb/appendix\\_a/The\\_Effect\\_of\\_Moisture\\_Content\\_on\\_Wood\\_Heat\\_Content.xls](http://cta.ornl.gov/bedb/appendix_a/The_Effect_of_Moisture_Content_on_Wood_Heat_Content.xls)

Within 25 years, the Energy Information Administration estimates that domestic energy consumption will increase by 14%.<sup>3</sup> Powering that growth in a low carbon economy will require a comprehensive solution of renewable, clean, and affordable sources of energy. Biomass thermal technologies can help the nation's businesses, institutions, and citizens meet their heating and cooling needs, but restricting biomass fuel options will severely undermine this tremendous resource, not to mention its impact on existing sectors such as forest products. BTEC's proposed solid waste rule recommendations regarding traditional fuels, the Proposed Approach, and legitimacy criteria will help direct valuable biomass energy resources toward their most efficient and beneficial end uses.

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<sup>3</sup>Energy Information Administration, "Annual Energy Outlook 2010 – Executive Summary," May 2010, [http://www.eia.doe.gov/oiaf/aeo/pdf/exe\\_csummary.pdf](http://www.eia.doe.gov/oiaf/aeo/pdf/exe_csummary.pdf), pp. 2.