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To the House Committee on Energy and Commerce Subcommittee on Energy and Power

September 8, 2011

Good morning Mr. Chairman and Members of the Subcommittee. Thank you for this opportunity to testify. I speak to you today as an employee of Covanta Energy, one of the largest biomass to electricity energy producers in the United States. I also speak to you as a former Assistant Administrator of the EPA for Research and as EPA's Science Advisor.

Our Biomass-to-energy facilities which generate and sell electricity from several types of biomass fuels are regulated by the proposed MACTs. Their fuel is largely agricultural and forest residues that are left from timber and agricultural activities. As such, it is one of the most sustainable uses of biomass. These operations are on an economic tight rope. We are balancing low power prices and high fuel prices. In fact, of our eight facilities, two are in standby mode and one has been operating intermittently this year due to economic constraints.

As a company we know that operating in a clean and safe manner is key to being a good member of our communities. That is why we are supporters of the Clean Air Act. But we believe the EPA had it right when it requested the courts to give it more time for the promulgation of the Boiler and Commercial and Industrial Solid Waste Incinerator (CISWI) MACTs. We agree with their decision to seek more data and other information. Not only did the paucity of data lead EPA's standard setting process to illogical outcomes, insufficient consideration of natural variations in performance from one boiler unit to the next, and insufficient consideration of different boiler technologies -- but the methodology for considering these data was also flawed.

The methodology applied was not only different than that contemplated at the time of the passage of the CAA Amendments of 1990 but is illogical from an engineering perspective. Emission standards for each pollutant were set by finding the lowest emissions from all the different units in a category, not the best overall units. This “pollutant-by-pollutant” approach rather than “plant-by-plant” is analogous to asking that the decathlon champion at the Olympics be able to win not only the overall decathlon, but all of the 10 gold individual events as well. People don’t work that way and neither do machines. The legislation before you addresses the plant-by-plant issue.

EPA conducted a statistical analysis of existing units’ emission data to predict the variability of emissions and set the MACT emission floors. Now statistics can be useful in these types of efforts, but has limitations. Specifically, one needs an adequate amount of representative emission data on which to perform statistics. EPA’s data are inadequate. In most cases EPA has relied on only a single 3-run test typically covering three hours of operating time or 0.04% of a given unit’s operating year. These data cannot adequately describe emissions under all operating conditions and foreseeable circumstances and are therefore not representative for conducting statistical analysis. Furthermore, EPA sets the standards based on a 99% probability, leaving a 1% chance, per pollutant, that the emission standard would not be met. For a CISWI facility with two units this correlates to nearly 20% likelihood that the facility would fail a performance test each and every year. We are encouraged that EPA is reconsidering certain aspects of the rules and hope that it will recognize its emission data inadequacies and err on the side of achievability when setting MACT floors. Otherwise it risks setting standards which have not been achieved in practice, contrary to the law. EPA has two additional vehicles under the law – the beyond-the-

floor analysis and the 5-year review – with which it can ultimately set more stringent standards, if justified.

The Agency's strict implementation of a flawed method with insufficient data leads to some illogical outcomes. For example, in the final rule the emission level for particulate matter allowed for CISWI units is eight times higher than that for boilers. We now know a great deal about how particulate matter can affect human health. I can see no basis for different treatment of CISWI and Boiler MACTs from a health perspective but that is the result of the Agency's method.

One problem that the Agency has not addressed and will not in the Reconsideration process is the change they have made to the definition of waste. Their changes have meant that some traditional fuels for our biomass plants are now classified as wastes and so our boilers for electricity production would become, in a regulatory sense, Commercial and Industrial Solid Waste Incinerators. Tree stumps from old orchards that we have traditionally used might place us in a different and more costly regulatory regime because they are now a waste. These plants have also traditionally used construction and demolition (C&D) debris from urban centers to supplement the biomass residue. These traditional fuels would also place our units in the CISWI category. What will the outcome be? We will allow the C&D to go to landfills where it will generate methane gas that is, as a climate change inducer, 25 times more potent than carbon dioxide. What about the stumps? We'll leave them to the farmers to burn them in their open fields. That prospect, and the prospect that costly retrofits to our facilities might lead to their closure, is why the California Air Resources Board (CARB) submitted comments questioning the Agency's approach to this MACT proposal. In fact, CARB questioned why the EPA was pursuing these changes to their technology based standard when CARB regulates the facilities

looking at the risks they pose to human health and the environment and CARB has set standards such that these facilities don't pose a risk. I will include their comments along with two other California Agencies that were critical of the EPA's approach for the record. There are other illogical aspects to the definition of wastes where in one case something is a traditional fuel and therefore falls under Boiler MACT and in others it would make the facility converting it to electricity a CISWI unit. I commend the sponsors of the legislation for addressing these issues.

I have one last suggestion for the Subcommittee to consider. There are other MACTs yet to be promulgated. Application of EPA's same flawed methods could be problematic for the affected sectors. In addition to Biomass my company converts municipal solid waste to electricity. That sector could supply more reliable, baseload electricity for the nation. Constructing one of our facilities infuses about \$1 billion into the local community, providing not only significant construction jobs, but also long term, well paid skilled labor employment opportunities. If the Agency's approach to the CISWI, Boiler, and Cement MACTs was flawed and is deserving of your attention I submit that sectors such as our own, aluminum recycling, fertilizer production and others in the cue deserve your attention, also.