GOVERNOR ARNOLD SCHWARZENEGGER

August 19, 2010

Ms. Lisa Jackson
Administrator
U.S. Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Avenue, NW
Mail Code: 1101A
Washington, DC 20460

RE: Docket Number EPA-HQ-OAR-2002-0058 (Industrial, Commercial, and Institutional Boilers and Process Heaters located at major sources).

Docket Number EPA-HQ-OAR-2006-0790 (Industrial, Commercial, and Institutional Boilers located at area sources).

Docket Number EPA-HQ-OAR-2003-0119 (Commercial and Industrial Solid Waste Incineration Units).

Dear Administrator Jackson,

California has adopted some of the nation's most ambitious renewable energy and greenhouse gas reductions goals and I am concerned that rule changes being considered by your agency will undermine the progress we are making.

While I understand the need to update standards to reflect new technologies, U.S. EPA must carefully consider the trade-offs that must be made in meeting California's ozone reduction and greenhouse gas reduction goals. The attached comments by our energy and environmental agencies outline major concerns about how your proposed boiler standards may cause California's existing biomass-to-energy facilities to close.

California's 40 biomass plants provide approximately 800 megawatts of electricity generation capacity that last year produced 5,700 gigawatt-hours of electricity, representing about three percent of California's total in-state power generation. In addition, these facilities employ 750 people on-site and support 1,200 to 1,500 jobs in the fuel supply infrastructure. I know the Obama Administration is working as hard as we are to increase, not eliminate, green jobs.

While I support your efforts to adopt national regulations to reduce hazardous air pollutants, I have significant concerns that these proposed standards would have adverse impacts on California's environment and economy. Therefore, I strongly urge you to reconsider the proposed standards for existing biomass-to-energy facilities.

Sincerely,

Arnold Schwarzenegger

Enclosures (3)

Attachment
July 2010

California Agency Comments on U.S. Environmental Protection Agency's Proposed National Emission Standards for Hazardous Air Pollutants[1]

This document provides detailed comments on the U.S. EPA's Proposed National Emission Standards for Hazardous Air Pollutants for Area Sources; Industrial, Commercial, and Institutional Boilers and the National Emission Standards for Hazardous Air Pollutants for Major Sources for the Industrial, Commercial, and Institutional Boilers and Process Heaters; and Standards of Performance for New Stationary Sources and Emission Guidelines for Existing Sources: Commercial and Industrial Solid Waste Incineration Units (MACT Standard). The document is organized by the agency that prepared the comments.

Comments Prepared by the California Air Resources Board

The California Air Resources Board's (ARB) mission is to promote and protect public health, welfare, and ecological resources through the effective and efficient reduction of air pollutants while recognizing and considering the effects on the economy of the State. The major goals of ARB include: providing safe, clean air to all Californians; protecting the public from exposure to toxic air contaminants; reducing California's emission of greenhouse gases; providing leadership in implementing and enforcing air pollution control rules and regulations; providing innovative approaches for complying with air pollution rules and regulations; basing decisions on the best possible scientific and economic information; and providing quality customer service to all ARB clients. ARB's comments are as follows:

1. In California, BTE boilers are tuned to reduce oxides of nitrogen (NO_x) emissions at the expense of some increased carbon monoxide (CO) emissions (an attainment pollutant) because of California's ozone nonattainment problem. Modifying a biomass boiler to meet the CO emissions requirements used as a surrogate for non-dioxin organic hazardous air pollutants (HAP) will result in higher emissions of NO_x that may trigger New Source Review (NSR) requirements for best available control technology and offsets. ARB believes U.S. EPA needs to re-evaluate the increased NO_x emissions of this proposed standard and the impacts on states, such as California, in meeting the National Ambient Air Quality Standards for ozone.

2. The proposed MACT Standard does not acknowledge the technological differences and does not establish separate requirements for the different combustion type

[1] U.S. EPA's proposed National Emission Standards for Hazardous Air Pollutants for Area Sources; Industrial, Commercial, and Institutional Boilers and the National Emission Standards for Hazardous Air Pollutants for Major Sources for the Industrial, Commercial, and Institutional Boilers and Process Heaters; and Standards of Performance for New Stationary Sources and Emission Guidelines for Existing Sources: Commercial and Industrial Solid Waste Incineration Units (MACT Standards) published in the Federal Register on June 4, 2010.

categories for BTE facilities such as those that were delineated in the Major Source MACT Standard (stoker, fluidized bed, fuel cell oven, and suspension burner/Dutch oven). U.S. EPA staff acknowledged they did not have the information on the combustion types used for the Area Source Standard for biomass. It appears that the Area Source CO Standard may have been developed relative to what fluidized bed combustors can achieve. The analysis did not take into account that there are significant technological differences among biomass combustor designs and the associated emissions. Most BTE facilities in California utilize a stoker, Dutch oven or fuel cell oven design. Any proposed standard should be based on the ability of a particular combustion technology to reasonably meet the limits established by regulation.

3. The proposed MACT Standards did not take into account the technological and economic feasibility for some of the existing BTE facilities to meet the proposed emission limits. The supporting documentation to the MACT Standards stated that boilers with CO emission levels between 400 parts per million (ppm) and 1,000 ppm (at 3 percent O_2) could install a Linkageless Burner Management Systems (LBMS) for under $20,000 dollars. However, there is no documentation that these systems can or have been successfully retrofitted to existing BTE facilities using stoker or fuel cell oven combustion to achieve the proposed levels. For units burning biomass, the draft regulatory analysis estimated that 72 percent of the units are exceeding the MACT floor emission limits, and that these units would need to install an LBMS. Based on ARB staff conversations with several stoker burner manufacturers, we could find no stoker units that have been retrofitted with these systems. Further, these manufacturers stated that a successful retrofit to meet the proposed standards was doubtful based on the inherent leakage of air in these types of facilities. In consulting with several LBMS manufacturers, none of these manufacturers were aware of any retrofits of stoker type boilers with a LBMS system. ARB recommends U.S. EPA conduct a more thorough analysis of the feasibility and costs for existing biomass facilities utilizing stoker or fuel cell/Dutch oven combustors to be retrofitted with a LBMS system.

4. BTE facilities required to install an oxidation catalyst to meet the proposed CO emission limit may have space limitations or other engineering constraints which would prevent the installation of the additional control equipment. For example, the temperature regimes at the catalyst placement site may not be high enough for the catalyst to function properly. In this case, additional heat (by co-firing) will be needed to get the exhaust temperature within the required temperature range. This co-firing will result in an increase of NO_x and other pollutants and may also trigger NSR in California. ARB recommends U.S. EPA perform a more thorough analysis on the feasibility of existing facilities to meet the proposed standards.

5. The proposed MACT Standards did not take into account California's long history of comprehensive toxics control programs. ARB's statewide air toxics program was established in the 1983 under the Toxic Air Contaminant Identification and Control Act (AB 1807, Tanner) which created California's program to reduce exposure to air toxics. The Air Toxics "Hot Spots" Information and Assessment Act (AB 2588, Connelly 1987) supplemented the AB 1807 program, by requiring a statewide air toxics inventory as well as notification of people exposed to a significant health risk. Facilities that are

found to pose a significant health risk to the community are required to reduce their risk below the level of significance through a risk management plan. All HAPs identified by U.S. EPA are included in California's list of toxic air contaminants (TAC) and additional chemicals have also been added to the list by ARB, based on toxicity and potential exposure. Over 600 substances have been listed under the Act.

In addition, districts include a TAC review during the permitting process for new and modified facilities. Sources emitting TACs must comply with district requirements regarding risk assessment and risk management of TAC emissions. Screening analyses and health risk assessments are performed as part of the permitting process. In the case of unacceptable health risks, districts require mitigation to reduce the risk.

Since the goal of U.S. EPA in developing any MACT standard is to reduce public exposure to hazardous air pollutants, any analysis conducted should include consideration of existing state programs that accomplish or contribute to the same goal.

Comments Prepared by the
California Bioenergy Interagency Working Group

The California Bioenergy Interagency Working Group consists of state agencies which have a role in bioenergy, including the California Environmental Protection Agency and Resources Agency, and various commissions, departments and boards such as the California Energy Commission and Public Utilities Commission, which are responsible for energy policy, financing and electricity rate setting; California Air Resources Board and Water Resources Control Board, which deal with environmental permitting; and the California Department of Resource Recycle and Recovery (CalRecycle), Department of Forestry and Fire Protection (CalFire), and Department of Food and Agriculture, which are responsible for resource management and related waste disposal. The Working Group's comments are as follows:

1. If implemented as proposed, the MACT regulations will have a significant impact on the ability of biomass-to-energy facilities to continue to operate in the State and the State's ability to meet its 33 percent renewable energy goals by 2020.

2. Development of biomass as an energy source is very important to the State of California. The State, through Governor Schwarzenegger's Executive Order S-06-06, establishes a 20 percent target for biomass within its established State goals for renewable generation for 2010 and 2020. Currently, generation from biopower resources provides about 20 percent of California's renewable energy or an estimated 2.8 percent of California's total in-state power generation.

3. In order to support biomass facilities and other renewable energy resources, California imposes a public goods charge to provide incentives and financial support to make them economically viable. More than 70 percent of California's biopower generation from solid-fuel biomass facilities in the State receives funding from this program.

4. Despite State subsidies, the total generating capacity from solid fuel biomass has decreased from 994 megawatts (MW) in the 1990s to 667 MW today, despite a potential to generate 3,421 MW from biomass resources. Only one new facility has been developed since 2000.

5. The power plants also have existing power purchase agreements and would not be able to pass the cost of the retrofit on to utility ratepayers. The Energy Commission's analysis indicates that the existing biomass power plants would not be able to fund the retrofit needed to meet the MACT Rule and would discontinue operation.

6. The California Air Resources Board indicates that the proposed rule will not necessarily improve the air quality, and we agree that it will have unintended consequences. Specifically, the Bioenergy Interagency Working Group believes the proposed rule will have negative environmental impacts by increasing the amount of opening burning of agricultural and forest waste, there will be higher risks of wildfires, and more greenhouse gas from landfills.

7. Continued operation of the biomass-to-energy facilities supports state and federal healthy forest initiatives, helps our agricultural sector, assists solid waste disposal, and enables utilities to meet renewable energy mandates.

Comments Prepared by the
California Department of Resource Recycle and Recovery (CalRecycle)

Identification of
Non-Hazardous Secondary Materials That Are Solid Waste
Docket ID No. EPA–HQ–RCRA–2008–0329

CalRecycle is responsible for establishing California solid waste diversion goals; overseeing all waste management activities, including solid waste and tire facilities; promoting better resource management by increasing waste prevention, reuse, composting, and recycling; promoting methods to reduce greenhouse gases waste including landfill gas emission reduction and bioenergy/biofuels production; implementing programs to assess and help develop secondary materials markets; and, preventing illegal or inappropriate disposal of solid waste and mitigating any resulting hazards. The hierarchy for solid waste management in California is waste prevention, reuse, recycling, and composting; with combustion as a lower priority but preferred over landfilling. CalRecycle has been successful in increasing the diversion rate and promoting reuse of solid waste through a non-regulatory approach. Our approach relies on a collaborative effort involving the generators, local communities and industry; and less reliance on regulatory incentives such as determinations of beneficial reuse. CalRecycle's comments are as follows:

CalRecycle supports the efforts of U.S. EPA to promote the safe and effective use of non-hazardous secondary materials as fuels or ingredients in the industrial processes involving combustion. CalRecycle supports the prevention of sham recycling and speculative accumulation as these improper activities have resulted in significant hazards to public health and the environment. However, while we understand that U.S. EPA needs to be consistent with past legal determinations regarding discard and the definition of solid waste, **we urge U.S. EPA to use its discretion to amend the proposed rule to recognize the benefits of using certain secondary materials as fuel or ingredient.** We believe such action is justified from both an air quality perspective, and a resource perspective to preserve our nation's lands and meet our energy needs.

Review of the proposed rule has revealed that there may be unintended consequences that have potentially adverse affects on California's efforts to increase diversion of solid waste from landfills and to promote the recovery of low carbon fuels and energy from solid wastes. The rule as drafted adversely impacts our efforts to promote the use of conversion technologies to produce fuel or electricity from solid wastes and our waste tire diversion program. U.S. EPA can mitigate these adverse impacts by amending the proposed rule as suggested below.

1. The Scope of the Rule Impacts Small Business' Ability to Reuse Wastes

The proposed regulatory approach requires that the secondary material is under the control of the generator and complies with the legitimacy criteria to ensure that the material is not handled as a waste and is a truly beneficial fuel or ingredient product. CalRecycle staff agrees that this approach may work well for waste generated by large companies, but

using only this approach eliminates similar legitimate uses for wastes generated by residences and small businesses since they are unable to maintain control of their wastes. We would support development of a regulatory approach that addresses wastes generated by residences and small businesses and that promotes legitimate and environmental protective reuse of wastes.

2. Landfill Gas/Biogas/Biofuels

On Page 31856, U.S. EPA is asking for comments on whether landfill gas and biogas should be considered a 'traditional fuel'. CalRecycle agrees with U.S. EPA's finding that the composition of these gases is similar to natural gas. On Page 31855, U.S. EPA states that biofuels are viewed as legitimate fuel products. We believe the basis for the determination that biofuels are considered a traditional fuel is also applicable for landfill gas and biogas. The consequence of not considering these as a traditional fuel would be adverse affects on the marketability for these gases as fuel. This would reduce the demand for these fuels, which will result in increased flaring of landfill gases and thus waste a valuable resource. The proposed rule places the responsibility on the end user of the gas to establish that landfill gas or biogas meets the definition of a traditional fuel based on its chemical composition. Lastly, the consideration of landfill gas or biogas as a solid waste appears to be inconsistent with the hazardous waste regulations where uncontained gases are not regulated.

CalRecycle supports the identification of landfill gas and biogas as a traditional fuel in the final rule or as a finding in the final preamble.

3. Waste Tires

Approximately 40 million tires are generated annually in California. Approximately 75 percent of these waste tires are diverted from land disposal and are re-used in construction projects (e.g., rubberized asphalt concrete paving and tire derived aggregate (TDA) light weight backfill), landfill application (e.g., TDA in aggregate landfill gas collection systems and, as alternative daily cover), and as fuel. About nine million tires annually are used as fuel (primarily in cement kilns).

Although the use of waste tires as a fuel is not CalRecycle's preferred alternative for the reuse of waste tires, the use of waste tires as fuel and "ingredient" in cement kilns constitutes a beneficial use of these waste tires and accounts for a significant portion of the diversion rate. However, the proposed rule poses significant problems by requiring the processing of waste tires so that the steel belts are removed, in order for waste tires to be considered a legitimate fuel. The three cement plants now burning tires as a fuel in California would be treated as solid waste incinerators under the proposed rule, and because processing costs would increase, may elect to not burn waste tires. If the three plants were to stop taking the tires, the diversion rate in California for tires may be reduced significantly from about 75 percent to about 55 percent, resulting in more landfill disposal, and the potential for stockpiling or illegal disposal of tires. U.S. EPA is proposing this rule change even though the preamble for the rule recognized that cement kiln emissions are lower when burning tires as fuel instead of coal, that the metal in the steel belt is needed to make quality cement, and life cycle analysis indicates that lower greenhouse gas

emissions result from burning tires when compared to coal. It appears that the proposed regulatory approach does not consider the situation when a secondary material has a dual benefit as an ingredient and a fuel.

In response to the question on Page 31878, **CalRecycle recommends that the final rule contain a provision for waste tires used as fuel in a cement kiln to not be considered a solid waste and supports any effort by U.S. EPA to adopt an additional definition for processing that would not require the metal belts to be removed from tires or the tire be shredded when the waste tire is used in a cement kiln.**

4. Ability to Petition for a Non-Waste Determination

The proposed rule allows a petition to the U.S. EPA Regional Administrator for a non waste determination. CalRecycle supports the ability to seek a case-by-case non-waste determination due to the unknown number of situations that may be affected by the adoption of the proposed rule. On Page 31880, U.S. EPA asks for comments on allowing states to handle the petition determination process. States are more knowledgeable about solid waste activities within their respective state, have programs in place to promote safe and effective management of solid wastes in lieu of land disposal, and have the resources for regulating solid waste facilities and landfills. CalRecycle supports allowing states to handle the petition determination process for non-waste determinations.

5. How Long Should Fuels be Held Before Use

CalRecycle does not believe there is a single answer to the question on Page 31881, of how long fuels are generally held before they are used. Fuel storage varies by industry and in some cases State requirements. For example, in the case of waste tires at cement plants, California statutes provide for a maximum of a one-month supply of waste tires at a cement plant (based on the monthly consumption during the previous year). If the facility stores more tires than this limit it must obtain a waste tire storage permit and be subject to regular inspections.

6. The Proposed Rule is Unclear on How On-Going Activities Will be Addressed

The proposed rule does not address if an on-going activity that would be subject to the new rule would need to be stopped while a petition is filed and processed. Activities should not have to cease if they are meeting all existing State and Federal requirements while U.S. EPA acts on a petition that is filed within a reasonable time. The rule should include a provision for U.S. EPA (or states if delegated the authority) to accept and act on petitions within a reasonable time frame. In addition, CalRecycle staff recommends that the rule be amended to provide for a type of 'interim status' until the U.S. EPA Regional Administrator or State acts on a petition.