

**North Coast Unified Air Quality
Management District**
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December 10, 2015

Ms. Mary Nichols, Chairperson
California Air Resources Board
1001 I Street
Sacramento, CA 95814

RE: Support for Wood Heating Device Change Out Program in Second Investment Plan

Dear Chairperson Nichols:

The North Coast Unified Air Quality Management District (District), supports the wood heating device change out program included in the Second Investment Plan that would replace inefficient and uncertified heating devices with certified devices.

As stated in our previous letter dated August 31, 2015, this type of program would greatly benefit residents of our jurisdiction comprised of the three rural counties of Humboldt, Del Norte, and Trinity County, which are primarily rural and low income communities that rely on wood heating for a large percentage of their heating requirements. Reducing the number of these inefficient stoves by replacing them with either the most efficient, lowest polluting wood stoves, or with natural gas or electric heating devices, will have major benefits in terms of decreased climate pollutants, lower levels of toxic air pollutants, and an overall increase in public health.

Incomplete combustion of wood occurs when using low-efficiency wood stoves, the type most common in our air district. When wood is burned in these stoves, many pollutants are emitted, including greenhouse gases such as carbon dioxide, methane, and nitrous oxide. A wood stove change out program would result in significant and measureable reductions in these pollutants, as much as a 1 ton reduction in CO₂e per cord of wood for every uncertified stove converted to a certified stove with catalyst.

A wood stove change out program would also have measureable co-benefits. Wood smoke contains black carbon, a short-lived climate pollutant specifically mentioned in Governor Brown's January 2015 Inaugural Address. Estimates previously made by ARB indicate that fireplaces are the fourth largest contributor to black carbon emissions, making it essential that we decrease black carbon emissions from these sources in order to meet the Governor's targets.

Another co-benefit of replacing older wood stoves with more efficient heating devices would be the potential improvement to public health in communities affected by wood smoke. Wood heating is a source of PM 2.5, and decreasing PM 2.5 from older wood stoves will improve indoor air quality as well as outdoor air quality, where the particulate matter can become trapped in the air due to the natural topography and stagnant weather conditions.

As mentioned in the District's previous August 31, 2015 letter, the District has implemented a successful change out program over the last 15 years if/when funding has been available. The District incentive amount has been \$500, and we estimate that we have avoided approximately 46 tons of CO and 6.5 tons of PM 2.5, but we still have a long way to go and the need for change out programs is greater than ever. As wood stove technology continues to improve, the cost of these stoves continues to climb. Since 2010 we have seen an increase in the number of applicants applying for our programs when they are available and an increasing number of these applicants are placed on a waitlist due to lack of funding. For example, our last cycle in the 2014-2015 fiscal year saw a record number of eligible applicants placed on our waitlist for funding.

Many other air districts around the state have also already implemented wood stove change out incentive programs when local funding is available, and have been highly successful in targeting lower income areas with high uses of wood heat and/or areas where wood smoke causes significant public health impacts. Our program does not currently target low income areas, but we have seen an increased need to target this section of the population who would have no other means to afford the replacement costs associated with these projects. In our three county jurisdiction, approximately 20% of the residents are at or below poverty level. With the incentives that could be provided through a wood stove change out program, residents in our rural, often low-income communities, could be incentivized to replace their older stoves with a more efficient heating option, and in turn decrease climate and toxic pollutants, improve overall public health, and save money on monthly energy bills.

We greatly appreciate the inclusion of a wood heating device change out program in the Draft Second Investment Plan and look forward to working with you on this and other vital programs to help California meet its climate and public health goals.

Sincerely,



Brian Wilson
Executive Director & Air Pollution Control Officer
NCUAQMD

c: Alan Abbs, Executive Director, CAPCOA