Why Wood Stove or Wood Insert Change-outs with a New Wood-burning Device Makes No Sense in the San Joaquin Valley

The Air Resources Board may believe that in funding a newer, EPA-certified wood-stove for an older, uncertified one, it is increasing efficiency and decreasing emissions. It is not!

Not in the San Joaquin Valley.

Let me explain why—it’s very important the Air Resources Board understands this.

• In the San Joaquin Valley, the air district already all but totally bans discretionary, non essential use of older, non-EPA certified wood-stoves throughout the coldest months under its Rule 4901, a ban that will only become more stringent in the valley’s next PM 2.5 SIP.

• Those for whom wood-burning is the sole source of heat and those without natural gas service are excepted from the all wood-burning curtailments.

• The only folks who have an economic incentive to change an old, wood-burning device for a new one under valley air district Rule 4901, are those whose homes are equipped with natural gas heaters.

• Those without natural gas have zero economic incentive to change out their old wood-stove for a new one, because they’re already allowed to burn at all times, without restriction.

• So, by subsidizing an EPA certified wood-burning stove, in lieu of an older wood-stove or fireplace, you’re simply giving someone who would be otherwise mandated to use their gas heater, license to burn wood instead.

• With its subsidy, what ARB has displaced are not the emissions from the use of an older, uncertified wood-burning devices, the use of which is already essentially banned; what has actually been displaced is the use of gas heat. Such funds as ARB gives to the San Joaquin Valley Air District to subsidize the purchase of a wood-burning device allows the use of dirty solid fuel instead of a gas. ARB is subsidizing the use of a dirty solid fuel—a fuel with more than twice the CO2 emissions and hundreds of times the black carbon emissions as gas—in a device which can be used practically every single day under the valley air district rules (since district Rule 4901 has a very permissive wood-burning curtailment threshold—65 micrograms per cubic meter—for EPA-certified devices.

And EPA-certified wood-burning devices are not clean-burning. They are dirty. Studies have shown their real-world emissions to be many times what’s shown in the EPA lab test, which by design ignores the first half-hour of start-up emissions. And even once the device is heated up, and supposedly burning “cleanly”, emissions of ultra-fine particulates and polycyclic aromatic hydrocarbons and dioxins have been shown to be greater in tests of the newer stoves as compared to the older stoves or open hearths they’ve replaced.

Lest this sound too academic, I live in a neighborhood with natural gas service. The folks next door have an old, wood stove. The guy across the street has a new, EPA-certified stove (the purchase of which my air district subsidized with funds you folks at ARB provided.

Which stove do you think is sending more harmful emissions my way? The old stove that can never be used, or the new one that can always be used?

So I beg you, please, stop—think—and end the subsidizing of EPA-certified wood-burning stoves in the valley. Only allow the subsidy money ARB provides to be spent on electric heat-pumps or gas replacements devices in the valley. Make that a condition for use of ARB funds. To continue to allow ARB funds to subsidize wood-burning units is contrary to both our greenhouse emission goals and our ambient air quality goals for reducing fine particle pollution.

This is a tale of good intentions—and unintended consequences.

Most of members of the ARB board probably believed that subsidizing the change-out an old wood-burning stove for a new one would reduce emissions.

Not always. Not in the San Joaquin Valley.

Wood-stove replacement with a heat pump or natural gas makes sense.

Change-out of an older wood-stove for a newer, EPA certified wood burning device within the San Joaquin Valley Air Pollution Control District, as presently administered

1. makes no sense,

2. harms the public health and

3. increases emissions of both greenhouse gases per BTU of heat produced and organic carbon PM 2.5 emissions—black carbon—itself a potent greenhouse gas.

Please, take heed of how these funds are used and attach conditions to the funds you provide for wood-stove replacements. Only allow the purchase of non-polluting replacement devices.

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