Episode 44b. Public Comment through January 10, 2023, for extension to 39 Indian Reservations in Idaho, Oregon and Washington of EPA Residential Wood Burning regulations. Public Comment period began October 12, 2022.
https://www.epa.gov/farr/proposed-revisions-federal-air-rules-reservations
Indian Reservations have not, until now, been afforded protections of their air, to the level that some protection from air pollution is provided in some non-Reservation places. Recent wildfires in the Pacific Northwest may have spurred the action now taken to include some Pacific Northwest Indian Reservations in EPA regulations of Residential Wood Burning. Those EPA regulations have not been altered materially since 2011, so there will also be Public Comment shortly on the EPA changing its limits on allowable PM2.5 levels from 12 to 8 micrograms per meter cubed to be closer to the World Health Organization Standard of 5. That Public Comment is expected to start in November, 2022, after another EPA announcement.
This EPA proposed extension of EPA Residential Wood Burning regulations does not mention the regulation method of using PurpleAir PM2.5 air quality monitors to measure pollution from residential wood burning onto near neighbor's yards and infiltrating near neighbor's homes. PM2.5 is Particulate Matter of 2.5 micrometer size, the perfect size to infiltrate the human lung, causing a cascade of human health problems. Comments to the EPA until January 10, 2023 should include examples of personal negative experiences with residential wood smoke pollution, including Excel spreadsheets showing PM2.5 above EPA levels, and near neighbor's suggestions that the EPA adopt the measurement of particulates at the stack or, as a practical matter, at the fenceline at the yards of near neighbors, sometimes called hyper-localized monitoring. Near neighbors could operate PM2.5 monitors 24 hours a day to provide clear evidence of pollution that could be downloaded by the general public routinely, and by governmental authorities the day after a weekend or a night of wood smoke pollution, thereby not requiring entering the homes of wood burners or not requiring differentiation between certified or non-certified devices in order to establish that pollution above allowable levels is occurring.
The Public Comment solicitation language follows and is also found on the EPA website at EPA.gov proposed revisions federal air rules reservations
"From Seattle, Washington on October 14, 2022. The U.S. Environmental Protection Agency proposes revisions to the Federal Air Rules for Reservations and is soliciting public comments until Jan. 10, 2023.
Full details on the proposed changes and comment submission instructions are available on the EPA FARR website.
Created in 2005, the FARR are a set of basic air quality regulations established under the Clean Air Act that applies to 39 Indian reservations in Idaho, Oregon and Washington. The FARR is unique to EPA Region 10 and provides important tools for EPA and Tribes to effectively manage activities that cause air pollution.
The proposed revisions clarify aspects of the rules, improve implementation, incorporate recent air quality improvement strategies and extend the FARR to three new reservation lands.
One of the proposed revisions limits future installations of residential wood burning devices to only those certified by the EPA. This also limits burning materials to untreated wood and solid fuels designed specifically for these devices, like wood pellets and dry wood.
Another rule EPA proposes only applies to the Colville, Nez Perce and Yakama Reservations, and establishes a curtailment program for residential wood burning devices. A curtailment program restricts the use of wood burning devices during periods of poor air quality.
EPA also proposes extending the FARR to the Snoqualmie Indian Reservation, the Cowlitz Indian Reservation and the lands held in trust for the Samish Indian Nation, none of which had reservation lands in 2005. The proposed revisions would also clarify that the FARR applies to all lands held in trust for a Tribe in Idaho, Oregon and Washington that have not been formally designated as a reservation.
The public can request a virtual meeting to discuss the FARR revisions by contacting Sandra Brozusky at brozusky.sandra@epa.gov before Oct. 27. "

Mary noted that Wood burning emits more CO2 than Coal burning. Mary calculated the CO2 emissions of Natural Gas burning are, at most, around half of the CO2 that Coal emits. Mary also did a calculation from the chart from Families for Clean Air, which compared the weight of PM 2.5 emitted annually. The weights were one sixth of a pound for Natural Gas, 27 pounds for a wood pellet stove, 97 pounds for a certified wood stove and 244 pounds for an uncertified wood stove. Also, the Natural Gas weights would not increase over time, but wood burning emissions might very well increase over time, as wood stoves aged or were not maintained under laboratory conditions. Given the weights from the Families for Clean Air chart, a wood pellet stove emits 16,200 times more PM 2.5 than a natural gas furnace, a certified wood stove emits 58,200 times more PM 2.5 than a natural gas furnace, and an uncertified wood stove emits 146,400

times more PM 2.5 than a natural gas furnace. Mary noted that the focus of Residents Against Wood Smoke Emission Particulates (RAWSEP) is on the health effects to near neighbors of living next to residential wood burning, in those hyper-localized areas where the source of particulate pollution, PM 2.5, is concentrated. PM 2.5, particulate matter of 2.5 micrometer size, is the perfect size to infiltrate the human lung, causing a cascade of human health problems. Wood smoke consists of 90% PM 2.5. Residential PM 2.5 monitors can be purchased by neighbors from PurpleAir for less than $300, and their locations are put on the online PurpleAir Map, along with data uploaded every 10 minutes, available to the general public, and of course to governmental authorities. Neighbors of Residential Wood Burners would like their PurpleAir PM 2.5 monitor data to be used to regulate and shut down Residential Wood Burning detected at neighbors' fence lines that exceeds the World Health Organization (W H O) standards of 5 micrograms per meter cubed or future US standards of 8 micrograms per meter cubed. There could even be court-ordered monitoring using a neighbor-owned PurpleAir PM 2.5 monitor as a "breathalyzer" (similar to car breathalyzers court ordered for repeat drunk drivers) to turn off the ignition of a neighboring indoor wood stove when levels of PM 2.5 in a near neighbor's yard is exceeded. In this way governmental authorities would not have to check the make and model of an appliance and would not have to rely on unreliable certification and other worthless assurances of levels of wood stove particulate emissions by the company that manufactured the wood stove. PurpleAir monitors also provide data every 10 minutes 24 hours a day, and data can be downloaded from the map by governmental authorities the day after the PM 2.5 levels are exceeded, during normal government working hours. PurpleAir PM 2.5 monitors are so reliable and accurate they are put on U S AirNow Smoke and Fire maps alongside $100,000 Environmental Protection Agency (E P A) monitors, correlated to the EPA monitors with a simple mathematical formula. But to publicize this, it is necessary to point out that living hyper-localized next to a residential wood burner is essentially the same as living hyper-localized next to any kind of PM 2.5 emitting wood burning appliance, next to a PM 2.5 emitting wood burning wildfire or next to a PM 2.5 emitting industrial biomass (wood) burning facility.