Episode 56EN May 26, 2023. The "Succession" issue and the "Fairbanks, Alaska in March 2021" issue.

Residents Against Wood Smoke Emission Particulates (see RAWSEPresidents.wordpress.com and Scroll Down for PDFs of articles with U R L's to search on, and on the website are links to 30 minute Youtube videos and Spotify podcasts as well as podcasts on Amazon Music Prime (free for Prime subscribers), podcasts.google.com, Cast Box, and Pocket Cast (Pocket Cast is only free on the phone App)

https://www.washingtonpost.com/wellness/interactive/2023/birds-song-nature-mental-health-benefits/?fbclid A little uplift to start this issue. Why birds and their songs are good for our mental health? Birds need living trees and smoke-free skies to thrive in, and humans do too. Birds communicate this to us with their songs, give us beauty, and calm us with their songs.

## World

I don't watch "Succession" but I read about it in the New Yorker. A 1955 photographic exhibit showcased "the essential oneness of mankind throughout the world." The trouble is that even the most intimately connected human family can divide against itself. In the final days of the Soviet Union a member of the Politburo discussed the possibility of war with Ukraine. The Soviet official observed that Ukraine had 12 million Russians (at that time in the late 1980's) and many more in mixed marriages "so what kind of war would that be?" An American discussing this with him replied "A normal war." Why is hereditary power so hard to shake? The people in power can bend the rules in ways that help them, and their successors keep (the rules that are bent).

The New Yorker May 29, 2023. Pages 62 to 66. "Succession"

The rules that are bent that affect Residents Against Wood Smoke Emission Particulates most are the bent rules (the loopholes) for Environmental Protection Agency Certification of Wood Stoves. Loopholes insisted on by Wood Stove Industry lobbyists over the years ensure that wood stoves that are certified are highly polluting off the assembly line and when sold. The fact that the "tradition" of wood burning continues is due to succession issues. Wood burning for heat or cooking is not needed in civilized society, where the alternatives of natural gas heating, and other much less polluting forms of heating homes, have been available widely since the 1950's, over 70 years ago. Costs of the new alternatives of solar, wind and geothermal energy for heat are going down precipitously in price for consumers. The costs of wood burning are going up, because of the logistics, scarcity, and the most important cost to Residents Against Wood Smoke Emission Particulates, the cost to human health is being broadcast to more and more formerly gullible consumers of wood burning for heat.

Is the Wood Stove Industry a dynasty, a monopoly, like the Fossil Fuel industry? Yes, these polluting industries operate from the same playbook and have the same aims. Is this a benevolent industry, like a family? No, because a real family which works together for mutual health and survival would not inflict deliberate and knowing harm on family members. We are all members of the human race. Some of us forget that when playing the game of looking into wood flames as recreation, we are not looking, as we should be looking, into wood flames with healthy fear for the lives and futures of ourselves and the other members of the human race. Wood smoke is 90% PM2.5, particulate matter of 2.5 micrometer size, the perfect size to infiltrate the human lung, setting off a cascade of human health problems and early deaths. Monitor the pollution from Indoor Residential Wood Stoves with PM2.5 monitors hung from the eaves of homes of near neighbors of indoor residential wood burners. Make the polluters face what they are doing to the air and to the health and lives of their near neighbors. Take away the idea of "Succession" except to the people who have taken the health and lives of everyone to heart. Shut down indoor residential wood stoves. Impose personal responsibility on those who hide behind "tradition" in a modern world full of solutions to air pollution that unchecked will affect all of us, near and far. Wood burning pollutes, and also contributes to climate change.

**United States** 

Alaska, Fairbanks (in March 2021)

Way Back Machine

Fairbanks, Alaska article from March 2021. Has anything really changed for near neighbors of residential wood burners in Fairbanks, Alaska. One eloquent Fairbanks, Alaska, woman summed up her situation in March 2021. How are she and her son doing now?

RAWSEP view: In February 2023, the Office of the Inspector General (O I G) "watchdog" of the E P A, issued a report stating that the certification of wood stoves was "flawed" and resulted in highly polluting wood stoves being manufactured and sold up to the present day. The flawed certification was caused by successful lobbying by the wood stove industry for loopholes to compliance with wood stove certification rules. RAWSEP believes that certification should be replaced by monitoring of pollution from indoor residential wood stoves by PM2.5 monitors put in the yards

of near neighbors of residential wood burners. Governments, probably Health Departments, should hand out free low-cost (currently \$249) PurpleAir PM2.5 monitors, to any resident who complains of the wood smoke pollution from their indoor residential wood burning neighbor. The data from PurpleAir PM2.5 monitors is already put side by side with \$100,000 E P A official monitors in AirNow Maps of Smoke and Fire. PurpleAir PM2.5 data that is collected overnight and on weekends, when wood burners often burn wood surreptitiously, is available to governments and the general public during governmental normal working hours, without need to enter homes of residential wood burners to have evidence enough to shut down indoor residential wood burning. PurpleAir data is correlated to EPA official monitors with a simple mathematical formula. PurpleAir PM2.5 downloaded historic data from PurpleAir's own online maps could be used to shut down residential indoor wood burners that exceed E P A "safe limits of PM2.5 emissions, shut down one by one if necessary.

The eloquent view of a woman living in Fairbanks, Alaska in March 2021, next to indoor residential wood burners, follows. Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates.

A Fairbanks woman has been campaigning for cleaner air for 14 years, since her son, who was born with heart defects, collapsed outside his high school on an especially smoky day. The woman says millions of dollars have been wasted trying to get people to burn wood more cleanly when it would have been better spent switching them to another fuel. "We have a whole generation of young people who may never achieve their full lung capacity, or even potentially their cognitive potential, because they've been breathing this smoke," she said. She says the problem isn't just stove technology. And yet she can drive around her city on a cold day and see chimneys emitting thick plumes. "This house right here is a habitual offender. Just burns and burns," she said, pointing out a home in an older neighborhood. An air sensor there, on the porch of an 86-year-old woman, regularly registers the worst readings in Fairbanks. The Fairbanks woman doubts the problem will be solved in her lifetime. The attempts to clean up Fairbanks' air are a story of half measures, technology that didn't pan out, administrative blunders and political resistance. It's also been hard for many to accept that burning wood – an activity that seems so wholesome and close to the land – should be subject to intense regulation. "Neighbors' smoke all blows on to my property," she said. "My most personal property is my body. And when I can't avoid smoke, that's invading the most personal property I have." The Fairbanks woman stands in front of a kiln where wood is dried before it is sold, in an effort to limit air pollution. Airborne particulates from burning wood in homes may be to blame for 10,000 to 40,000 premature deaths annually in the US, according to two studies. In 2017, the particle pollution from residential wood heating was four times higher than the particle pollution from coal-fired power plants. Only about 4% of residential heating in the US is from wood. But that wood heating is responsible for more particulate pollution than any other source – 22%.

Natural but deadly: Huge gaps in the US rules for wood-smoked smoke exposed bulletin.chemwatch.net/regulatory-update/natural-by-deadly-huge-gaps-in-the

March 2021

Fairbanks, Alaska

Now, an investigation by state environment officials is revealing a critical flaw in that plan: The latest stoves might not be any less polluting than the previous ones. State air regulators conducted a review of 250 wood-burning stove certifications and found unexplained data omissions and atypical lab practices.

Natural but deadly: huge gaps in US rules for wood-stove smoke exposed.

The Guardian.

Alaska Public Media.

This article is more than 2 years old, March 16, 2021.

The government spent millions subsidizing new wood heaters supposed to burn more cleanly. But an investigation has discovered critical flaws.

Tuesday, March 16, 2021.

Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates.

The trouble is that 12,000 Fairbanks-area homes heat with wood. Smoke can get trapped in low-lying neighborhoods for days or weeks. Fairbanks has some of the dirtiest air in the country, largely due to smoke from wood stoves. Wood smoke is a serious health threat. It emits high levels of fine-particle pollution that can be inhaled deep into the lungs, exacerbating respiratory problems like asthma, and increasing the risk of premature death from heart attacks and

strokes. In 2015, the US government required that newer models of wood stoves perform better but the latest stoves might not be any less polluting than the previous ones. A review of 250 wood-burning stove certifications found unexplained data omissions and atypical lab practices. When the officials retested about a dozen of the heaters in their own labs, they were not able to reproduce the certification results. They found many stoves were polluting as much as the previous models. One was producing so much pollution that it wouldn't have met the Environmental Protection Agency's first-ever standards from 1988. "We pulled the test reports that are supposed to be publicly posted and we compared – did this certification report meet all the rules? And we couldn't find any that actually met all the rules," Alaska, along with a group of north-east air regulators called Nescaum, expanded the review and concluded the certification procedures and EPA's oversight of them are a "systemic failure". As long as the stove review process continues virtually unsupervised, people inhaling wood smoke from the stoves will continue to get sick and die early, not just in Alaska but around the US, the state officials said. A new utility is trucking natural gas to Fairbanks and piping it to homes, but it's not available everywhere and residents say the cost of getting it installed is steep. But the wood stove industry is suing the federal government over the 2015 Obama wood stove certification rule. It also lobbied federal regulators to change testing methods while the rule was under development. The state officials behind the wood stove report argue that led to loopholes that made certification easier. Although the EPA has approved hundreds of new wood stove models, Alaska has double-checked those certifications and allows only a few dozen to be sold or installed in the Fairbanks area, which is not meeting federal standards for particle pollution. "Right now, we've made compromises and have left some things on the list that we still have concerns on – because we need to have something on the list," said the Alaska air official. The EPA is reviewing complaints about the certification program and acknowledged it could revoke approvals for stoves and test labs if appropriate. "Having wood-burning devices that are not meeting the standards is problematic for homeowners, as well as for communities and states working to meet the National Ambient Air Quality Standards for [particulate matter]," the agency said. The public affairs director for the trade group the Hearth, Patio, and Barbecue Association, said "This is fire. Fire is pretty random. You can imagine when you get out into the real world. It varies a lot." The Alaska DEC added a metric that (one in the Wood Stove Industry) calls arbitrary: a particulate limit of six grams for the first hour, when stoves burn less efficiently.





