

Whereas air pollution and climate change threaten human health and life,

Whereas United States and Wisconsin's governments don't supply residents with free air quality monitors as a basic service unlike Postal Service or Utility Regulation,

Whereas Government AirNow Smoke Map utilizes both governmental data and resident-owned Purpleair 2.5 micron size Particulate Matter (PM 2.5) monitor data,

Whereas solar, wind and natural gas residential heat produces vastly less PM 2.5 than wood-burning, affirmed by PM 2.5 PurpleAir monitors near wood-burning neighbors,

Resolved that Wisconsin Democratic Party encourage residents to purchase PurpleAir monitors to regulate and so reduce residential wood-burning for heat.

I do not work for Purpleair. I am a consumer. I paid \$249, to buy an outdoor PM 2.5 monitor particulate monitor from Purpleair. There are two Purpleair PM 2.5 monitor versions, one that puts your monitor on a publicly-accessed map at Purpleair.com and provides 10-minute interval readings whenever your internet is on. The other monitor costs \$279. The SD Card in it provides 10-minute interval readings even if you don't have internet service. It captures the dead-of-night readings that show PM 2.5 spikes when a wood burner knows the fire department won't be called at 2 AM. Or the wood-burner knows the fire department probably won't respond to a smoke-without-imminent destruction of property complaint at 2 AM. The problem is it is hard to sleep when you can't breathe. Other preferred times for wood burning are weekends, when Public Health officials are not at work, and when interrupting the peaceful enjoyment of neighbors in their own homes can be most dramatically achieved by a wood-burner. This is called a Public Nuisance and also called Trespass and there are usually local ordinances against nuisance, and ordinances against trespass. Ask your neighbors on either side of the wood burner, and down the street, to get a Purpleair monitor to strengthen your cases.

I started a website called Residents Against Wood Smoke Emission Particulates (RAWSEP) in 2007 to reach out to the neighbors of wood burners, who usually put up with adversity in life and just get on with it, without complaint, suffering in silence.

Wood smoke particulates invading your lungs is something you can usually avoid in civilized societies in the world in the twenty first century.

This was before the Wood Burning Industry started pushing fire pits. Outdoor wood boilers (OWBs) were being pushed by the Wood Burning industry and were causing neighbors of people with OWBs, in rural and urban areas around the country, to notice that they suddenly had health problems.

The RAWSEP website was a way for me to collect emails and addresses of people who found me and corresponded with me, after reading my reports on similar instances of near neighbors being harmed by wood smoke from Outdoor Wood Boilers, some used to heat swimming pools. In 2010 and 2011 I helped pass Outdoor Wood Boiler Bans in all areas of Wisconsin. I corresponded with people around the world.

I knew it wasn't enough. My neighbor turned out to be using wood stoves and a fireplace to pollute the air continuously. One of his wood stoves was in his garage, not far from detonatable gas-filled cars. So my complaints led to one of his wood stoves being removed from his garage.

My neighbor sold his house this summer, and advertised his house as a great place to burn wood. He held out until he found a fellow-wood burner to take the place. The next wood burner moved in in August.

The problem for neighbors of wood burners who burn at night is that it is hard to sleep when you can't breathe. Other preferred times for wood burning are weekends, when Public Health officials are not at work, and when

interrupting the peaceful enjoyment of neighbors in their own homes can be most dramatically achieved by a wood-burner.

In their own homes? Surely wood burning smoke is in the outdoor air, not in other people's homes? No, wood smoke can seep into other people's homes. The closer neighbors are to each other, the more wood smoke can invade neighbor's houses. This necessitates use of an indoor (Purpleair) air monitor, and air purifiers, which often work like sifting sand on the seashore in the experience of many neighbors.

I am now a Citizen Scientist, contributing to the database of knowledge on PM 2.5 particulate pollution across the U.S. and the world. I have a B.S. in Biochemistry, so I like the idea of using my hard-earned knowledge. But I would rather not be the guinea pig in this experiment.

Breathing wood smoke harms people's health. That has been established by science over and over again. Breathing wood smoke probably caused shortened lifespans of humans since prehistoric times until non-solid-fuel burning became widely available in the late 19th century. Most humans moved on to safer heating options, if they cared about their, and their neighbors', health.

I've started this new website RAWSEP_Residents.com to start anew in 2021, when there is both the promise of new legislation on Climate Change and dollars for fighting it, and also the old threats blocking it. In addition to causing health problems, the particulates in wood smoke also contribute to Climate Change. This is all very old to me, sixteen years old. It seems very old and very simple-minded that some people have responded like lemmings to the Wood Burning Industry's quest to put a fire pit in every backyard, in addition to fireplaces and wood stoves.

The cleaner alternative of natural gas is widely available, even in rural areas, as a bridge to the cleanest alternatives of Solar and Wind. Since last year, I pay a portion of my Electric Bill for Solar powered electrical energy. The cost of this Solar Energy will not go up over time, which seems very practical to me. I hope to put up my own Solar Panels to make my entire electric bill every month totally Solar or Wind powered in the future. This is positive and community-minded. What's not to like? Anyone and everyone has these alternatives. Another map I've joined is <http://Homegrownnationalpark.org> Our residences can be used productively to help the environment, not harm it.

<https://map.purpleair.com/1/i/lb/mPM10AQI/a10/p0/cC0#12/43.06266/-89.32023>

Having a Particulate Monitor makes a difference because months of PM 2.5 data can be seen to be undeniable. The data my monitor collects can be matched to the standard of the data of official Environmental Protection Agency (EPA) data, collected by their own Air Quality Monitors, by a simple mathematical formula. Conversion factor: $PA * 0.5140 + 1.8304$.

The conversion factor means ((Purpleair Monitor 24 hour (1660 minute) average of PM 2.5_CF1_ug/m3) times 0.5140) plus 1.8304. If the result is over 12.5 it exceeds EPA limits for Particulate Pollution, and in the case of factory emissions and wildfires, it signifies a threat to public health. 12.5 level PM 2.5 is when people are warned to exercise indoors rather than outdoors, since PM 2.5 is the perfect size to infiltrate the human lung. 12.5 PM air is the point established at which the air diminishes life, instead of sustaining life.

Objective: To pass a city ordinance that sets the maximum residential (home) production of PM 2.5 at the current EPA level (12.5 PM 2.5) at which health warnings are issued regarding PM 2.5 from wildfires and industrial production.

I expect to submit documentation in support of EPA lowering their PM 2.5 standards in 2022 or 2023, and I am willing to testify in EPA hearings on the issue. I think that directly participating in reducing pollution is a positive experience, sparking, especially in young people, interest in the environment. Air pollution is a concern

that is universal and that concern about air pollution even crosses party lines. Air moves freely. I feel that polluted air is a nuisance and trespass on my property, property on which I should have quiet enjoyment.

If every person experienced air pollution from a source which could be eliminated or controlled, as rational people I believe the vast majority would support limitation or elimination of wood burning for home heat. However, I know there is a minority who are as passionate about wood burning in their homes as mask mandate protestors are passionate about not wearing masks. The wood burning industry, surprisingly, is powerful and remains intent on retaining wood burning as a recreational activity in the home and in suburban yards.

British Columbia Wood Smoke

<https://www.facebook.com/groups/501106566602577/permalink/5132929906753530/> and **Purpleair Users Group** <https://www.facebook.com/groups/purpleair> on Facebook continue educating and providing forums on the ill health effects of wood smoke. I hope to begin to do the same with this RAWSEPResidents Wordpress site <https://rawsepresidents.wordpress.com/> and my new handle on my Mastodon site [@breathecleanair@mastodon.social](https://mastodon.social/web/@breathecleanair) <https://mastodon.social/web/@breathecleanair>

This may also be the right time to begin addressing wood smoke's contribution to climate change and wood smoke's public health issues, in addition to COVID public health issues, as the pandemic seems to be easing. Of note, COVID is also airborne, as is the increasing problem of wildfire smoke.

I also have a B.S. in Biochemistry and worked as a medical researcher in the past, so I understand the public health implications of this data and understand this issue. I actually have two Outdoor Purpleair Monitors and one Indoor Purpleair Monitor. I keep three indoor Blueair Air Purifiers on because wood smoke can infiltrate even through closed doors and windows into a neighbor's house.

City of Madison Health Department site regarding wood smoke

<https://www.publichealthmdc.com/environmental-health/air-quality/outdoor-air-quality/wood-smoke-pollution>