

Episode 57DHU1 May 28 2025 In Cancer Alley in Louisiana Who Gets to Measure PM Air Pollution?

In Episode 57DHU3 1 Louisiana In Cancer Alley A Battle Over Who Gets to Measure Air Pollution Community groups are fighting an unusual Louisiana law that restricts how they use data from air quality monitors **which are PurpleAir PM two point five monitors** saying it violates free speech 2 United States Heat Pump Rebates 3 Arizona 4 California 5 Colorado Boulder Wood burning pollution statistics The climate virtue signaling in Boulder Colorado keeps the wood fires burning Complete Colorado Burning coal or charcoal pollutes less than wood And burning natural gas pollutes far less than coal Boulder type environmentalists do not want to The climate virtue signaling of Boulder Colorado keeps the wood fires burning **RAWSEP View RAWSEP agrees** with some of the claims of the author of this article Wood burning PM two point five emissions do cause unnecessary disease and death However the author of this article says that solar and wind clean energy is beyond the means of poor people in Africa when they are not **RAWSEP** 6 Indiana Heat pump rebates Indiana Taps IRA for HVAC Efficiency Rebates 7 Maine Heat pump rebates 8 Massachusetts Worcester Heat pump rebates City program offers help for energy efficiency 9 New York Heat Pumps New York Group Seeks Support for Early Adoption 10 Pennsylvania Philadelphia and Connecticut Electric grills can be powered by electricity generated from clean energy sources like wind or solar Electric grills are a climate friendly option to fossil fuel grills **RAWSEP View** Electric grills are also a clean option to wood burning grills 11 Washington Everett Heat pump rebates 12 Wisconsin Madison PM two point five and pregnant patients Wildfire smoke exposure is harming pregnant patients who have limited access to health care 13 Marianas Islands Chalan Kanoa Fire destroys wood tin house in CK 14 New Zealand Rotorua airshed loses its polluted status NZ Herald Wood smoke particles are about 90% PM TWO POINT FIVE In a report senior planner Elsa Weir said intervention would be needed to meet potential new targets 15 Israel Cooking in Gaza is now a toxic affair Israel Palestine conflict Al Jazeera To eat we are forced to breathe the poisonous smoke from burning wood and trash 16 China PM two point five and wind speed 17 PM two point five and human health Main Content

1 Louisiana and Kentucky and West Virginia In Cancer Alley A Battle Over Who Gets to Measure Air Pollution Community groups are fighting an unusual Louisiana law that restricts how they use data from air quality monitors which are PurpleAir PM two point five monitors saying it violates free speech A meeting of Rise Saint James in 2023 a group leading an effort to use low cost air pollution monitors **Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates a 501c3 nonprofit organization** The New York Times May 23 2025 Since 2022 residents of Saint James Parish along the heavily industrialized banks of the Mississippi River known as Cancer Alley have used low cost monitors to measure air pollution But a new law in Louisiana makes it illegal to use that data to push for stricter pollution controls or enforcement The law requires people to instead buy expensive air pollution monitors that meet strict Environmental Protection Agency standards if they are going to use the data to allege violations of clean air laws People who do not comply face penalties of thousands of dollars a day Now community groups are fighting the law saying in a federal lawsuit filed Thursday against Louisiana that it violates their constitutional right to free speech The law enables polluting industries to silence the science said Caitlion Hunter director of research and policy at RISE St James which leads the air monitoring efforts The Louisiana law was the first of its kind in the country when it went into effect last year But Kentucky passed a similar law this year and in West

Virginia their legislature debated a version in February though it did not pass. The Louisiana Department of Environmental Quality declined to comment. Louisiana Attorney General Liz Murrill did not respond to requests for comment. Community air monitoring proliferated across the country under the 2022 Inflation Reduction Act which made \$81 million in grants available for monitoring projects. That came as part of efforts by Congress to help protect communities of color and lower income neighborhoods like St James Parish which bear a disproportionate burden of industrial air pollution. Low cost monitors have been key to that effort and have been endorsed and in some cases even loaned or funded by publicly funded programs. In St James Parish RISE has used a brand of sensor called PurpleAir which cost less than \$300 to monitor for particulate matter which are emitted from power plants construction sites and industrial facilities and can trigger heart attacks and respiratory problems like asthma. The sensors were placed at the homes of people living near chemical facilities Ms Hunter said. The region also has some of the highest rates of cancer in the country. Under the new Louisiana law the group is no longer allowed to publicly discuss data or file complaints using information from PurpleAir sensors. The group says it would instead have to use government approved particulate monitors that cost almost \$60000 each beyond their financial reach. RISE has been tracking spikes in fine particulate matter pollution. This kind of pollution also known as PM TWO POINT FIVE is made up of solid particles less than 2 point 5 micrometers in size which are small enough to enter the bloodstream when inhaled. PM TWO POINT FIVE is the deadliest form of air pollution leading to millions of premature deaths each year. The group had intended to use the data to oppose a plastics plant proposed by Formosa Plastics Group a Taiwanese plastics manufacturer Ms Hunter said. The data showed elevated levels of PM TWO POINT FIVE in St James Parish where several petrochemicals plants already operate. But using the PurpleAir data this way would likely be prohibited under the new law. Along parts of the Mississippi River homes are sometimes near chemical facilities. Industry groups that backed the law known as the Community Air Monitoring Reliability Act say it ensures data integrity. The Louisiana Chemical Association said the standards did not stop anyone from tracking pollution levels as long as the data did not trigger enforcement or penalties or form the basis of a lawsuit. Air monitoring is a precise science and decisions based on that data carry serious consequences said David Cresson president and chief executive of the association which represents the Louisiana petrochemical industries. The goal of this law is not to silence community voices but to ensure that regulatory action is based on high quality validated science. PurpleAir did not respond to questions about the law and the accuracy of its product. The law has sent a chilling effect through community groups said Joy Banner co founder of The Descendants Project an environmental group that supports people descended from slaves in Louisiana. The group recently paused plans to publicize more data from its air monitors she said. We simply cannot afford \$30000 plus fines she said. The law has been unfortunately very effective. It is scaring us away from being able to share the data with our community members who need it the most. Peter DeCarlo an air pollution scientist at Johns Hopkins University said low cost sensors like PurpleAir played a critical role in helping communities track air pollutants like PM TWO POINT FIVE as well as other chemical emissions that are not tracked by regulators. Even his own pollution data from cutting edge mobile labs and sensors might be prohibited from public disclosure under the new law he said. Community monitors can be particularly important during accidents at nearby industrial plants and other sources he said. While they are not as accurate as regulatory monitors they are able to provide real time information to communities in the places they live and breathe he said.

2 United States Heat pump rebates Startup unveils first of its kind smart home appliance could shave \$600 off your annual energy bills The Cool Down A heat pump water heater is a more efficient option because it does not The Home Efficiency Rebate offers up to \$8000 as a rebate to cover project A new unique type of intelligent heat pump water heater is designed to move heat from the air into your tank to heat water more efficiently A typical water heater can cost about \$400 or more a year to operate Traditional tank water heaters use a gas or electricity powered heating element to heat cold water that enters the tank As you use water more cold water enters causing the water heater to heat the water again Even when you are not using water the tank uses energy to maintain the temperature of the water A heat pump water heater is a more efficient option because it does not generate heat Instead it moves heat from another place and in the case of this manufacturer the air into the water heater Energy Star states that switching to a heat pump water heater could save around \$550 in annual energy bills If you upgrade to a heat pump water heater you could also take advantage of tax credits and rebates provided by the Inflation Reduction Act The Home Efficiency Rebate offers up to \$8000 as a rebate to cover project costs Alternatively low to moderate income households could qualify for the Home Electrification and Appliances Rebate for \$1750 There is also a tax credit for 30% of the project costs up to \$1200 Note that IRA incentives may not be available forever as President Trump has publicly spoken out against IRA funding It is best to take advantage of these rebates and credits earlier rather than later to potentially save thousands on your new water heater The first intelligent heat pump water system thinks ahead so you do not have to By learning your water usage behaviors this water heater adjusts its heating routine to be more efficient and always have hot water available when needed If you are looking for other ways to lower your cost of energy consider installing solar panels It is a top home energy hack that can bring your energy costs to \$0 or close to it Heat Pumps How to Stay Cool During One of the Hottest Anticipated Summers in world history Yahoo Despite the name heat pumps are not just for heating they are also A heat pump actually removes hot air from the home and pumps it outside Heat Pumps Lessons on heat pump systems for the public sector Open Access Government Heat pumps deliver impressive energy efficiency lower running costs than alternatives reduced carbon emissions and decreased maintenance Pumps One Heat Pump for All Seasons 40°C to 65°C Performance HPAC Magazine The forthcoming Midea EVOX All Climate Heat Pump delivers up to 100% heating output at 35°C 31°F and up to 100% cooling at 60°C 140°F Heat Pumps Samsung Hylex Heat Pump Named in the Green Builder Sustainable Products of the Year for 2025 Samsung Newsroom the Samsung Electronics commitment to innovation in climate solutions has been recognized with a key industry accolade The Samsung Hylex Hybrid Heat Pumps Two Leading Manufacturers Bring New Heat Pump Water Heater Updates To Market CleanTechnica Rheem and Bradford White have recently updated their heat pump water heaters HPWH We thought it was a good time to take a look at these new United States Heat Pumps Considering Getting a Heat Pump? Everything You Need to Know CNET Either way a heat pump is a solid choice for temperature control year round In fact heat pumps outsold gas furnaces in 2023 and that is not Heat pump rebates Cutting the residential solar tax credit would force small businesses to shut down EnergySage According to data from the Solar Energy Industries Association SEIA eliminating the residential solar tax credit Heat pump rebates Homeowners stunned by little known system that cuts energy costs here is how to find out The Cool Down tax credit of 30% of the project cost up to \$2000 The biggest expense associated with a heat pump is installing it and these incentives United States Heat Pumps The Power of Collaboration Advancing Heat Pump Performance in Extreme

Climates ACHR News Unlike traditional furnaces and boilers heat pumps can transfer more heat energy than the electrical energy they consume sometimes reaching North America Heat Pumps North America Geothermal Heat Pumps Market Competition & GlobeNewswire The North America Geothermal Heat Pumps Market valued at USD 4 point 42 Billion in 2024 is projected to reach USD 5 point 89 Billion by 2030 3 Arizona Yavapai County Wood burning restrictions Yavapai County Implements Stage 2 Fire Restrictions Under New 2025 Ordinance to The Prescott Times Outdoor Fire Ordinance 2025 dash 2 which replaces Ordinance 2020 dash 2 Exemption Portable stoves wood pellet smokers grills fire rings 4 California Los Angeles Breaking Bouquet Fire reported in Los Angeles County on May 26 Sacramento Bee Wildfire breaks out in Los Angeles County CA Sacramento Bee Bouquet Fire has been burning on private land At this time there Breaking Wood Fire reported in Madera County on May 26 Updated May 26 California Lake Tahoe Prescribed Fires to Continue This Week USDA Forest Service smoke produced by unwanted wildfires Smoke from prescribed burns wildfire or wood burning stoves may hang low to the ground at night and in the California Merced PM two point five and dementia Researchers at UC Merced studying the link between air pollution and dementia ABC30 You see that PM TWO POINT FIVE concentration is around 15 or above throughout the years said Professor Xuan Zhang a Life & Environmental Sciences at UC California Sacramento Breaking Almond Way Mahogany Way Fire reported in Lassen County on May 26 Sacramento Bee Almond Way Mahogany Way Fire has been burning on federal land managed by the United States Forest Service Breaking Wood Fire reported in Madera Breaking Jennings Fire reported in Trinity County on May 26 Sacramento Bee Jennings Fire has been burning on federal land managed by the Bureau of Land Management Breaking Wood Fire reported in Madera County on May 26 California Santa Barbara County Air Pollution Control District Launches Heat Clean Program Edhat Wood smoke contains gases and particulate matter and can harm the lungs and heart Smoke from fireplaces and woodstoves accounts for nearly a third of The Santa Barbara County Air Pollution Control District has launched the Heat Clean program which helps cover the costs of replacing residential wood burning heaters with zero emission alternatives such as electric fireplace inserts or heat pumps1234 California Santa Barbara Heat pump rebates 3CE Urges Customers to Use Federal Energy Incentives While They Last The Santa Barbara Independent rebate of up to \$500 per kilowatt hour of storage capacity and a variety of home heat pump incentives The draft bill in Congress also proposes 5 Colorado Boulder Wood burning pollution statistics The climate virtue signaling of Boulder Colorado keeps the wood fires burning Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates a 501c3 nonprofit organization Complete Colorado Burning coal or charcoal pollutes less than wood And burning natural gas pollutes far less than coal Boulder type environmentalists do not want to RAWSEP View RAWSEP agrees with some of the claims of the author of this article Wood burning PM two point five emissions do cause unnecessary disease and death However the author of this article says that solar and wind clean energy is beyond the means of poor people in Africa when they are not RAWSEP believes Clean solar cookstoves are or should be available and cheap for residents of Africa in many cases Natural gas whether piped in or delivered as liquified natural gas or propane LNG may be more available right now and may be the only alternative available right now However according to RAWSEP LNG is less desirable because of logistics problems because of the need for continuous deliveries rather than having a reliable cheap alternative of a solar stove or an electric stove powered by clean wind power ready at any time Wood burning does emit 450 times the PM two point five as natural gas burning But clean energy from a

solar stove or from an electric stoves powered by wind energy emits no PM two point five unlike natural gas burning Complete Colorado May 21 2025 Two point one billion people across the planet still cook over open wood fires Ghana and Kenya should start move from cooking over open wood burning fires to using propane Propane is a liquefied natural gas LNG the stuff made by the companies Boulder is suing To cook over an open fire fueled by wood women in these African nations spend on average five hours a day collecting sticks breaking them up by hand setting them ablaze inside their poorly ventilated homes as their little children inhale the smoke just to cook the meals of the family Indoor smoke pollution from open fire cooking kills an estimated 3 million people annually That is more than malaria HIV tuberculosis and cholera combined Global warming is caused by evil energy companies not doing enough to replace deadly wood fires with clean burning gas stoves For around \$40 women in poor nations could switch to a portable propane burner running on a portable tank like what your backyard barbecue uses When they do their lives change dramatically for the better Yes men do not gather wood or cook in these nations which are nothing like Boulder Colorado If these 2 point 1 billion people switched from cooking over burning twigs and cow dung to inexpensive propane stoves it could save the planet Greenhouse gases are produced by people in squalor cooking over burning cow dung Burning wood pollutes less than burning cow dung Burning coal or charcoal pollutes less than wood And burning natural gas pollutes far less than coal those cooking over open wood fires will not soon be affording windmills solar panels and backup batteries to simply cook their food But a switch to affordable gas stoves in poor nations could be done relatively quickly Does Boulder care more about virtue signaling than solving climate change and saving lives? 6 Indiana Heat pump rebates Indiana Taps IRA for HVAC Efficiency Rebates ACHR News Residents can qualify for funding to offset the cost of heat pump HVAC systems water heaters and clothes dryers Energy Star certified cooktops Indiana Heat pump rebates New Energy Saver Program launches offering savings on home upgrades Indiana Capital Chronicle It provides subsidies for energy efficient appliances and systems such as heat pump water heaters HVAC systems clothes dryer electric stoves 7 Maine Heat pump rebates Inflation Reduction Act offers \$840 rebate under these conditions Explica dot Maine While the IRA is best known for offering tax credits and rebates for big ticket items like electric vehicles and heat pumps there is a lesser Maine Heat pump rebates The Maine heat pump boom has been promising for rural workforce development Can it last? Bangor Daily News Rural areas have historically spent more on energy bills and participated less in residential energy and efficiency financing and rebate programs Maine Heat Pumps The Maine heat pump boom has been promising for rural workforce development Will it last? News Center Maine Dave Whittemore works in the Kennebec Valley Community College heat pump lab where he teaches students how to install and maintain electric heat pumps 8 Massachusetts Worcester Heat pump rebates City program offers help for energy efficiency Worcester Magazine While heat pump systems are not cheap Mass Save rebates of up to \$16000 are available to help and there is currently a federal tax credit of up to 9 New York Heat Pumps New York Group Seeks Support for Early Adoption of R290 Heat Pump Natural Refrigerants Heat Pumps Letter by New Yorkers for Cool Refrigerant Management wants State Building Code Council to align with ASHRAE and UL deadline for 10 Pennsylvania Philadelphia and Connecticut Electric grills can be powered by electricity generated from clean energy sources like wind or solar Electric grills are a climate friendly option to fossil fuel grills RAWSEP View Electric grills are also a clean option to wood burning grills Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates a 501c3

nonprofit organization NPR May 23 2025 A Philadelphia couple says convenience is the main reason they switched from a propane grill with no need to refill tanks Switching to electric also reduces their contribution to climate change Summer grilling usually starts with filling a propane tank or buying a bag of charcoal briquettes But some people are ditching these fuels for a more climate friendly electric grill Just before dinner recently a man wheeled his electric grill across the backyard patio to an electrical outlet plugged it in and hit the power button You can choose what temperature you want the man says setting it to 500 degrees Fahrenheit on the digital display So you see it is at 152 now and it will take about 15 minutes to get to 500 Convenience is the main reason they switched to an electric grill We used to have a gas grill and we used to go buy propane Not only is it getting more expensive but it is just a pain to lug tanks around Whether running an electric or propane grill is cheaper depends on utility rates and local propane prices though if you do not have an outdoor outlet that might involve hiring an electrician Climate change is another reason for the switch Before the grill the couple replaced several fossil fuel items with electric ones First their car then lawn mower and trimmer then a water heater and last year the grill Switching from a fossil fuel burning device to an electric one called electrification is a key climate solution especially as they are powered by electricity generated from an increasingly cleaner grid that uses clean energy like wind or solar instead of fossil fuels Grill manufacturers embrace electric Mention electric grills and many people think of small models that look more like a waffle iron But now some manufacturers are focused on making full size stand alone grills that can reach temperatures of 700 degrees Fahrenheit People are skeptical because of those previous experiences where they have used small electric grills One modern electric grill can reach temperatures of 700 degrees Fahrenheit and plugs into a standard outlet Electric grills are popular with younger consumers and people who live in apartments that may not allow gas grills A lot of empty nesters that also find it more convenient to simply plug into their outlet and 15 minutes later have a grill that is hot enough to cook on Cooking vegetables also is easier with electric grills You are able to control the different parts of the grill and really control the temperature Because electric grills do not have flames they also can be an option in places like Connecticut where forest fires are a risk assuming there is an outdoor outlet available Many grills can withstand some exposure to water such as a light rain Gas grills generally cost more to purchase The highest rated gas grills at Consumer Reports which does not rate electric grills range from \$275 to \$2750 Freestanding electric grill retail prices range from about \$200 to \$1600 The expense of operating a grill whether electric or propane or electric depends on your local utility rates and propane prices Either way the cost is nominal per meal and usually under 2 dollars For one manufacturer electric grill sales have increased more than 40 percent in the past three years Another electric grill maker is expanding its line with an electric griddle and pizza oven Electric grills are ridiculously convenient in part because they are easy to use and often easier to clean Some people who call themselves purists would like wood flavor imparted in food **RAWSEP Interjection** Because of tradition and addiction you would like a whiff of wood when you bring your head closer to your food just as a cigarette addict would like a whiff of nicotine when you bring your head closer to a cigarette This does not make taking that whiff a desirable activity A Chef is quoted as saying he would like to constantly bathe food in smoke **RAWSEP Interjection** Bathing your food in contaminants that may lead to cancer is not a desirable activity The wood smoke chef is quoted as saying You will not get that with an electric grill though some electric grills do offer a way to introduce wood smoke usually with a tin of wood chips that burn as the food cooks **RAWSEP Interjection** What follows is how chefs introduce contaminants

by not cleaning their grills regularly thus introducing contaminants into food by contact with the grill rather than bathing the food in smoke Professional chefs say there are a few other tricks for introducing smoke flavors with an electric grill An owner of a vegan restaurant in Philadelphia is quoted as saying I find that electric grills are all about the seasoning RAWSEP interjects that the seasoning described here is old food particulates on the grill itself not the fresh and clean edible according to the FDA food seasoning put on the item you are grilling but the seasoning of old particulates on the grill itself The chef instructs the reader to Clean your electric grill but not too much This helps create that deep layer of flavor on a grill He suggests using lava rocks in the bottom of the grill because they are porous and absorb all of your grill drippings they become seasoned as well and each time you grill will give you more and more flavor RAWSEP agrees that One thing electric grills can do better than most others is make picture perfect grill marks That is because an electric grill provides a more constant heat where a fire will die down lower or you have to adjust the gas the electric grill consistently is giving heat that makes it so that you can get those pretty grill marks

11 Washington Everett Heat pump rebates DIYers should get heat pump break too Everett Herald heat pump system to replace an electric furnace I understand the Snohomish PUD energy saving rebate is only offered if I paid an overpriced

12 Wisconsin Madison PM two point five and pregnant patients Wildfire smoke exposure is harming pregnant patients who have limited access to health care Study FOX40 The assessments also included measurements of fine particulate matter PM TWO POINT FIVE that were attributable to wildfire smoke The scientists found

13 Marianas Islands Chalan Kanoa Fire destroys wood tin house in CK Local News Marianas Variety On May 23 2025 at noon A FIRE that broke out around noon on Friday incinerated a wood and tin house in Chalan Kanoa On May 23 at 12 PM the Department of Fire and Emergency Medical Services received multiple calls reporting heavy black smoke behind the Snack Bar of Terry When firefighters arrived at the scene they found a single story house fully engulfed in flames They noted that the fire had the potential to spread due to the close proximity of nearby buildings

14 New Zealand Rotorua airshed loses its polluted status NZ Herald Wood smoke particles are about 90% PM TWO POINT FIVE In a report senior planner Elsa Weir said intervention would be needed to meet potential new targets for

15 Israel Cooking in Gaza is now a toxic affair Israel Palestine conflict Al Jazeera To eat we are forced to breathe the poisonous smoke from burning wood and trash

16 China PM two point five and wind speed Mechanisms of O3 and PM TWO POINT FIVE evolution along the cold wave passage in Eastern China Nature PM TWO POINT FIVE is driven by wind speed PBL height PBLH and mean sea level pressure MSLP while O3 is influenced by temperature humidity solar radiation

17 PM two point five and cold weather Combined Effects of Extreme Cold Events and Fine Particulate Matter on the Success Rate ScienceDirect dot com Furthermore combined exposure to ECEs and high concentration of PM TWO POINT FIVE further increased the risk of CPF with the relative risk of 1 point zero 7

PM two point five and pregnant patients Personal exposure to air pollutants and immune system biomarkers in pregnant women Nature Abbreviations PM TWO POINT FIVE particulate matter with diameter less than or equal two point five micrometer size

PM two point five and tuberculosis Racial ethnic disparities in tuberculosis incidence linked to PM TWO POINT FIVE BMC Infectious Diseases BioMed Central PM two point five and Particulate matter with aerodynamic diameters less than 2 point 5 micrometers PM TWO POINT FIVE is increasingly considered as a risk factor of TB 2 to 4 consisting of various

PM TWO POINT FIVE Distribution High Resolution PM TWO POINT FIVE Retrieval Using Gaofen 1 WFV Camera Data ScienceDirect dot com PM TWO POINT FIVE pollution within a small scale within the city PM