Episode 50a, 50b, 50c, 50d, and 50e RAWSEP News

Episode 50a

January 1 to February 6, 2023 Residents Against Wood Smoke Emission Particulates (RAWSEPResidents) News

United States

Mary in the Midwest , Noel in the Northeast and Wendy on the West Coast all submitted comments on January 6, 2023, the first day the 90 day comment period began, on the Environmental Protection Agency (E P A) proposal to lower the Particulate Matter of 2.5 micrometer size (PM2.5) from 12 micrograms per meter cubed to 8 micrograms per meter cubed, to be nearer to the World Health Organization (W H O) standard of 5 micrograms per meter cubed. Wood smoke is 90 percent PM2.5. PM2.5 is the perfect size to infiltrate the human lung, setting off a cascade of human health problems. Cameron in Canada created a poster about how to submit comments.

Online articles about the E P A change to Particulate standards were from Forbes, J.D. Supra, The Enlightened Mindset, R S C Publishing, Foley and Lardner, L L P, The Augusta Chronicle, E H S Daily Advisor, Mondaq, Nature World News, Sportskeeda, Phys.org, National Catholic Reporter, Sci Tech Daily, American Public Power Association, Healio, Inside Climate News, The Lancet (a medical journal), The Daily Universe, and the Union of Concerned Scientists.

Also in the United States, Air Quality News had an article on wood burning is a major source of fine particulate matter, which is one of the most harmful pollutants, yet people's awareness of this impact is low. Carrie from Canada commented on that article, from her own experience. There were several research papers online about the harmful effects of PM2.5. Wood smoke consists of 90% PM2.5. PM2.5 exacerbates Alzheimer's Disease, Asthma, Chronic Obstructive Pulmonary Disease (C O P D), impaired Chess performance, Hypertension, Kidney Disease, Nuisance Odor, Psoriasis skin condition, and impaired Running performance. Residential wood burning also interacts with and worsens wildfires. Temperature inversions in winter also exacerbate the effects of PM2.5 on residents who have to cope with the pollution of their neighbors burning wood.

In the United States, many states had issues with residential wood burning and the resulting PM2.5 pollution.

States that did not report stories about wood smoke pollution reported stories on residential fires caused by use of wood burning stoves. In Alabama cancer causing compounds were found in the burning of a landfill. In Indiana, a faulty wood-burning stove is likely to blame for the death of three residents. In Kentucky a home caught fire after an issue with the home's wood-burning stove, taking with it all of the owner's personal belongings. In Nebraska, a fire believed to be caused by a wood-burning stove engulfed a shack or workshop and killed one resident. In New York state, a Wood Fired Pizza business and several neighboring businesses had fire and smoke damage and were forced to close. In Oklahoma, fire officials said a man was killed in a fire. The man had a propane heater and a wood-burning stove to keep warm, which may have caused the fire. In Washington State, two residents were injured while escaping a fire. The fire's origin was determined to be the living room area near a wood burning stove, but the exact cause of the fire is still under investigation.

Alaska

RAWSEP view: The Alaska Department of Environmental Protection (D E P) wants to continue certification of wood stoves rather than eliminate use of wood stoves by residents. Certification of wood stoves by their own manufacturers has been woefully unsuccessful in reducing PM2.5 air pollution in Alaska. The Alaska D E P wants to continue a failed program rather than measuring PM2.5 pollution from residential wood burning with PM2.5 air pollution monitoring devices such as PurpleAir monitors placed in the yards of neighbors of wood burners. With low cost PurpleAir PM2.5 monitors whose data is available 24 7 online, PM2.5 that enters the yards and infiltrates the homes of neighbors of wood burners at night or on weekends can be downloaded by Alaskan officials during normal business hours, with no need to enter wood burners' residences. Fines can be imposed upon use of wood burning that pollutes, which can lead to removal of polluting wood burning appliances. Public Comment on this matter until March 13, 2023 should bring up these points. RAWSEP believes that the use of wood stoves should not be protected.

Synopsis of the story in Alaska. In Alaska, the Alaska Department of Conservation (D E C) questioned the efforts of the federal Environmental Protection Agency (E P A) in court. The U S District Court Judge granted a motion for the State of Alaska to intervene in the E P A regulation of the air quality in and around Fairbanks. The nonattainment area around Fairbanks has been under a Fine Particulate (PM2.5) State Implementation Plan (S I P), which the EPA failed to approve or disapprove by the stated deadline of June 15 of 2022. Wood-burning stoves around Fairbanks have been scrutinized for years, and part of the State Implementation Plan (S I P) includes a move toward cleaner-burning models (this probably refers to models of wood burning stoves, which are inherently highly polluting, no matter what the certification by the manufacturer). "These devices contribute nearly 90% of the health-threatening pollution that disproportionally impacts vulnerable populations," the Alaska D E C release said. However, the DEC release asserts that the E P A failed to oversee and certify these woodstoves and that the Alaska D E C, Fairbanks North Star Borough, and other local governing organizations have made progress on air quality over the last 14 years. If recommended changes from the U S E P A are not implemented, the Alaska D E C release said that over \$37 million in federal highway funding would be withheld annually. President Joe Biden's administration proposed more rigorous standards earlier this year. "With this proposed disapproval, U S E P A is sending a clear message that the local plan is not good enough," the Alaska D E C Air Director said in the release. "They believe the federal government and folks in Seattle know what is best for Fairbanks and North Pole." "(the Alaska S I P) protects the community's ability to use wood stoves while not breaking the bank." The DEC release says that they sought guidance from the EPA's national wood stove certification program, which then "uncovered a program in such disarray that E P A's Inspector General's Office opened an ongoing investigation." A public comment period on proposed E P A regulations is open until March 13, 2023 and will include a public hearing in Fairbanks.

Episode 50b

Arizona

RAWSEP View: Low Income Home Energy Assistance Program (LIHEAP) is a Government program that provides assistance to U S Citizens in moving to clean energy sources, and help with their energy bills.

Synopsis of the story. There were Air Quality Alerts in Arizona calling for Mandatory Wood Burning Curtailment, in Imperial County and the Calexico area. Many tribal Hopi members have switched from coal to wood burning but feel there is a problem with lack of firewood.

California

RAWSEP View: The Bureau of Land Management should compost or move dead wood rather than burning it.

Synopsis of the story: In California, the E P A was accused of delaying soot reduction plans. A no-burn wood-burning alert was issued for Los Angeles, Orange, Riverside and San Bernadino counties by the South Coast Air Quality Management District. In Altamont, California, the head of an advocacy group called Doctors and Scientists Against Wood Smoke Pollution was incredulous that some people think woodsmoke smells good. He went on to say that taking a walk is no longer a healthy thing to do in Altamont, California. In Davis, California, a letter to the editor referred to a screenshot at the Fire and Smoke map at Airnow.gov showing the presence of particulate matter PM2.5, at a time when toxic fireplace smoke was encountered at Davis Elementary School. An opinion piece in Laguna, California stated that 'The wood smoke in our south Laguna neighborhood was simply too acrid. Because this smoke pollution seems particularly bad at night, ". In San Clarita, California a no burn day was scheduled on the weekend. In San Diego, California a story stated "The EPA last changed the PM 2.5 standards in 2012. health protections against particulate matter is grounded in the best available science". In San Francisco, California, a letter to the editor said "Wood smoke is far more immediately dangerous than the noxious gasses from natural gas-burning appliances." Another letter, from the San Luis Valley said "But did you know wood burning can harm you and your family's health? Wood smoke, from fireplaces or wood stoves, is a major source of air pollution." In the San Luis Valley, the Bureau of Land Management (B L M) planned two pile burns. Pile burns are conducted each winter to remove dead wood. The B L M announced that smoke from the pile burns will be visible throughout the day of the burn.

Colorado

RAWSEP View: Firefighters should compost or move dead wood rather than burning it.

In Colorado, burn bans in El Paso County were rescinded. Outdoor burning concerns in Colorado Springs can be reported. In Eagle County, Colorado, criminal penalties for violators of fire restrictions were removed from ordinances. In Summit County, Colorado, Vail, forest debris, slash pile, burning was done by firefighters.

Indiana

RAWSEP View: Cities should compost or move dead wood rather than burning it.

In Indiana, a City Council approved the use of an air curtain incinerator for an open burn. In the air curtain, smoke particles are trapped and reburned.

New Mexico

In Sandoval County, New Mexico a City Council passed a second reading of a new burn ordinance.

North Carolina

North Carolina trees are feeding Europe's "Clean Energy" revolution. Scientists and environmental activists say there is little carbon benefit to burning wood pellets. But the industry has continued to grow in North Carolina.

Ohio

In Mansfield, Ohio a letter to the editor stated outdoor wood burning concerns. The letter said there was a poor city response to the pollution problems.

Oregon

In Corvallis, Oregon, it was announced that the state of Oregon wants input for locating more air quality sensors, with a February 1, 2023 deadline. SensORs, which were first developed by the Oregon Department of Environmental Quality (D E Q's) Laboratory in 2019, are lower-cost monitors that collect timely particulate matter 2.5 data. In Lane County, Oregon, and the City of Eugene, burning wood was being highly discouraged in three Lane County cities. Cold air and air stagnation prompted "Yellow" home wood heating days, where wood heating was discouraged for Eugene, Springfield and Oakridge, Oregon. In the City of Portland, Oregon and Multnomah County, the "fireplace czar" explained the county's rules limiting wood fires. He highlighted the dangers of recreational wood burning. His main message was simple: wood smoke is a health hazard. A Multnomah County ordinance, instituted two years ago, also forbids wood burning in stoves.

Pennsylvania

In Pennsylvania, the E P A was accused of delaying soot reduction plans.

Utah

Utah air quality is continuing to get worse, said a Utah State University (U S U) professor. The dangers of tree thinning to save the Great Salt Lake was outlined. Logging destroys forest carbon absorption and burning the biomass is harmful for multiple reasons. Wood smoke is deadly. A writer said the state motto of Utah should be "come for the jello, stay for the PM2.5".

Vermont

In Vermont, a writer reconsidered biomass in Vermont, asking "Is burning wood really renewable?" The writer looked at how burning wood fits into Vermont's climate goals.

In Yakima County, Washington a burn ban was issued. The use of uncertified wood stoves, fireplace inserts and other uncertified solid fuel burning was prohibited.

Washington, DC

RAWSEP View: This Washington, DC article ignores that wood burning produces much more particulates than natural gas burning.

In Washington DC an article was published on how to convert a gas fireplace to wood burning or electric, because of pressure to ban natural gas in the home.

Canada

Canada, British Columbia, qathet

RAWSEP View: Wood burning units should only be replaced by natural gas furnaces.

A British Columbia Provincial wood stove exchange program will be offered by the q R D. According to a staff report, in total in 2022 17 exchanges of old, inefficient wood burning units were removed and upgraded to cleaner burning wood burning units.

At the University of British Columbia, more research needs to be done to look specifically at the effects of wood smoke on the brain, a researcher concluded. Air pollution appears to be changing the way our brain functions.

Nanaimo, British Columbia residents were reminded to be cautious when burning wood.

British Columbia Hydro announced more controlled wood burning at their site. The burning is only done for debris that cannot be removed and mulched.

A Cowichan Valley, British Columbia letter to the editor said that drivers should be criticized instead of criticizing wood burners.

In Pique, British Columbia, paramedics treated an individual for smoke and fire likely caused by a wood burning stove.

A Columbia Valley, British Columbia article criticized home heating with wood stoves, and also criticized open slash burning.

Canada, Quebec, Quebec City

RAWSEP View: Wood stoves should only be replaced by natural gas furnaces.

The City of Quebec, Canada is to pay to replace non-compliant wood stoves, in order to promote good air quality.

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South America

Chile, Puren

An online service called California 18 publicizes the PM2.5 air quality of various cities in South America.

Columbia, Bogota

In Bogota, Columbia, there has been an increase in the concentrations of PM2.5 because wind carried smoke from several fires blamed on armed groups some 350 kilometers (220 miles) to the northwest, all the way to the Colombian capital.

Australia (Bushfire is the Australian word for Wildfire)

In Australia, bushfires appear to affect lung function of children with asthma. Mean levels of particulate matter at the 2.5 micrometer scale (PM2.5) reached 35.7 micrometers per meter cubed on days with bushfires.

United Kingdom

The Guardian in the U K published the most articles on wood burning "There is a rise in U K wood-burners likely to be creating 'pollution hotspots' in affluent areas" (That means researchers could be missing the creation of new hotspots from wood-burning stoves. Many of the harmful chemicals found in tobacco smoke are emitted by wood burning, which may be even more toxic.),

"How to get rid of a wood-burning stove", "What is the best alternative to a wood-burning stove?" (the answer was a gas fire. Though expensive, they give off more heat),

"Councils say they lack funds to enforce stricter limits on wood burners" (although one of the main reasons for wood burning is aesthetics),

'A serious threat': calls grow for urgent review of England's wood-burning stoves" ("Pollution from wood-burning is a growing source of fine particulate matter pollution in some areas, and "There will also be tighter regulation of new wood burners, which in designated "smoke control areas" will be allowed to produce no more than 3 grams of PM2.5"),

"Thérèse Coffey admits U K can't achieve air pollution target advised by experts" (Wood-burning stoves, which are usually expensive to install, are increasingly being used in urban areas for aesthetic reasons and are now the main source of PM2.5, more than traffic),

"Worst London air pollution in six years as home fires burn" (Wood fires produce more particle pollution than traffic exhausts in U K, ... Home wood burning played a large role in the pollution peaks last year),

"Greenpeace accuses Treasury of distorting its stance on biomass burning," (in a briefing note to a minister before a meeting with Drax, formerly a coal-fired power station operator and now a major burner of wood for the U K, Greenpeace says Drax lied in saying that Greenpeace approves of wood burning.)

"Pollutionwatch: citizen science helps raise alarm on UK air pollution" (The citizen scientist said "I began making measurements out of concern about wood smoke pollution from the proliferation of domestic solid fuel burning in Chorley."), and

"A roaring fireplace': the polluting raffle prize promoted by the British Heart Foundation" (

The British Heart Foundation (B H F), which has campaigned on the pollution risks of burning wood at home, is being urged to review a charity draw for a roaring fireplace, an ironic prize for the group to offer.)

The B B C News published "Log burner rule change in England could land users with £300 fines" (A tightening of emissions regulations has reduced the amount of smoke new ... This means a wood-burning stove emits more particles per hour than a ...),

Berkshire Live in the U K published an article "Log burner owners in England risk £300 fine after rule change" (A wood burning stove, therefore, emits more particles on an hourly basis than a diesel lorry. In addition to limiting how much PM2.5 wood burners ...).

The Bolton News in the U K published an article "Greater Manchester Integrated Care Partnership (G M I C P): Beware of health and pollution risks of fires and wood burners" (the smoke produced when wood and other solid fuels are burned contains tiny harmful ... If you burn wood, make sure it's dried properly.).

The Cheshire Herald published an article titled "Take A Look At Your Indoor Air Quality" (The more robust smoke to cause concern is wood smoke, which is a combination of gases and microscopic particulate matter. Even with an airtight ...)

The Chronicle Live in the U K published an article titled "Warning as Gateshead home destroyed by raging fire sparked by wood burning stove" (A woman was left with burns and saw her home burned down after using a wood burner to save on energy bills.)

The Coventry Telegraph published an article "Why using the wrong wood in your burner could land you with a £300 fine" (The Department for Environment, Food and Rural Affairs says log burners are the biggest source of particles of air pollution, called fine particulate ...),

The Daily Express in the U K published an article on "Log burner owners could be hit with a '£300 fine and criminal record' - how to avoid" (Some 1.5 million homes in the UK use wood for fuel but burning wood and coal in open fires and stoves is responsible for almost two-fifths (38 percent) of PM2.5 pollution).

The Daily Mail in the U K published an article "Wood burning stove could leave you with a £300 penalty or criminal record under new regulations" (A million Brits who own wood-burning stoves could be fined £300 and ... Emissions of PM2.5 - 'particulate matter' less than 2.5 micrometres in ...).

The Daily Kos published an article about the U K titled "Is this the end for England's wood-burning stoves?" (England has moved to ban wood-burning stoves as it looks to push active policies on environmentalism and pollution).

The Derby Telegraph in the U K published an article "Brits warned of £300 wood burner fine and criminal record amid rule change" (However, the new wood burning stove laws have been put in place in a bid to reduce harmful emissions, as the appliances are said to account for around ...).

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Energy Live News published "Wood pellets shortage make UK households burn cat litter" (A growing shortage of wood pellets has forced British households to burn cat litter to heat their homes. A new report by the Daily Telegraph cites ...)

Gloucestershire Live published "Burning wood for heating warning from environment bosses after man fined" (He was burning waste wood for the provision of heating and hot water - but it contained toxic chemicals such as paints and creosote which give off ...)

I T V in the U K published an article "Could you be hit with a £300 fine and criminal record over your wood-burning stove?" (What is the problem with wood burners? Burning wood releases harmful pollutants, such as tiny particles called particulate matter, straight into ...), and

"Warning issued about how to heat homes safely after fire destroys Chopwell " (A bungalow in Chopwell was badly damaged after a wood burning stove ... a visit to ensure smoke alarms work and are in the correct position).

L B C in the U K published an article "Wood burning stoves could land owners with £300 fine and criminal record after sales..." (A wood burning stove could land urban homeowners with £300 fines and a criminal record as the Government clamps down on dirty appliances.)

Lancaster Guardian in the U K published "Expert comments on wood burners after Lancaster council warns householders to cut back ..." ("Those with wood burning stoves should look out for the Ready to Burn logo, which means it is certified as having a moisture content of less than 20%)

Leicester Mercury Leicester Live published articles titled "Wood Burning Stoves" (Rules and regulations on Wood Burning Stoves and log burners are changing. More alternatives to heating your home here. Homes with Wood Burning ...), and

"Full list of smoke control areas for houses with wood burning stoves" (Many councils of England are classed as smoke control areas, this means only certain fuels can be burnt in select wood burning stoves.)

The Liverpool Echo in the U K published an article titled "Warning to anyone with a wood burning stove as new rules come into force" (The popularity of wood burners is on the up due to the spiraling cost of gas and electricity).

A Letter in the London Review of Books in the U K was titled "Burning Questions." (Fraser MacDonald draws attention to the negative health effects of domestic wood burning (London Review of Books (L R B), January 5, 2023). He is right).

The Manchester Evening News published an article titled "Warning issued to millions of homeowners with log burners after rule change" (The new wood burning stove laws have come into force to reduce harmful ... If you are in a smoke control area you will need to look for a wood ...).

The Mirror in the U K published an article "Man fined after 'pungent and acrid' smell from chimney sparks neighbour complaints" (A man has been fined a total of £330 after burning treated wood at his home ... a council enforcement officer saw smoke coming from the chimney on ...).

The Telegraph in the U K published articles on "Wood-burning stoves attract thousands of neighbor complaints – but just two fines in six years" (Wood-burning stove users reported by their neighbors in pollution hot spots ... unauthorized wood-burning stoves or fuels in smoke control areas.), and

"Wood-burning stoves face tougher restrictions" (Wood-burning stoves face tighter restrictions in pollution hotspots under Government plans to improve air quality.)

Tewkesbury Borough Council published "Successful prosecution for burning of chemically treated waste wood" (Tewkesbury Borough Council has successfully prosecuted an individual for the burning of chemically treated waste wood on a domestic boiler.)

The Times in the U K published articles on "Readers' poll: Should wood-burning stoves be banned?" (The clampdown is designed to reduce particulate air pollution. However, environmental campaigners say the measures do not go far enough),

"Worst particle pollution in London for six years" (Householders who flout air pollution rules on wood-burning stoves could be fined £175 to £300 and even get a criminal record),

"Yes, I own a wood-burning stove. The shame" (A new "eco-design" wood-burner may not emit as much visible smoke but it still emits 750 times more tiny particulate matter than an H G V lorry),

"How bad are wood-burning stoves for the environment?" (Wood burning is responsible for more PM2.5, tiny particles 2.5 microns across that are linked to heart and lung problems, than traffic),

"Country folk need wood-burners — but townies don't" (George Monbiot and his supporters condemn all woodburners, saying they are a "public health disaster" ("Is your trendy wood-burner a dirty secret")).

Wales Online in the U K published an article "What are the new law changes affecting wood burning stoves?" (Over a million-and-a-half people in the UK have a wood burning stove warming their homes.)

Ireland

The Clare Champion in Ireland published the article "The big question: Should we keep the home fires burning?" (The one with the worst health effects is called fine particulate ... Peat sod emits more than six times the amount of particles as dry wood, ...).

European Union

EURACTIV.com in the European Union published "Exposed: How E U countries use firewood to bloat their renewable energy stats" (.. national statistics after several EU countries reported a sudden increase in residential wood burning to meet their 2020 renewable energy goals.)

Health Policy Watch in the European Union published "E U Pushes For Stronger Air Pollution Rules" (The new rules aim to limit PM2.5 and N O 2, the two deadliest air pollutants, to 10 micrograms per meter cubed and 20 micrograms per meter cubed respectively, which the E U says will cut ...).

ScienceDirect.com published "related deaths among children under 5 years of age in 17 low- and middle-income countries"

Portugal

The Portugal News published "Sooty or Sweep!" (Wood smoke contains 'matter particulates' which are tiny particles that can easily travel deep into your lungs when you breathe.)

Ukraine

The B B C News published "Ukraine war: Hiding from Putin's call up by living off-grid in a freezing forest" (He cooks using a makeshift wood-burning stove. "I have oats, buckwheat, tea, coffee, sugar. Not enough fresh fruit and vegetables of course, ...)

Africa

Eurasia Review published "Half A Million Lives Could Be Saved Yearly By Replacing Wood And Charcoal Stoves In Africa" (OnStove modelling shows that replacing traditional wood- and charcoal-burning stoves in sub-Saharan Africa could avert as many as 463,000 deaths every ...)

South Africa

Verra published "Projects Open for Public Comment: February 6, 2023" (.. AS Koc Kirsehir Biogas Power Plant – closes March 2; Installation of high efficiency wood burning cookstoves in South Africa – closes March 2 ...)

Episode 50e

Asia

Bangladesh

The Daily Star published "Dealing with air pollution to protect human rights" (.. indicating high percentage of PM 2.5 and PM 10, respectively, referring to 'particulate matter less than 2.5 microns and 10 microns'.)

China

EurekAlert published "China's stricter clean heating policies may have saved thousands of lives – study" (From 2015 to 2021, the impact of winter heating on China's capital and 27 other cities saw concentrations of fine particulate matter (PM2.5) from ...)

Earth.com published "Nocturnal pollution is a rising public health threat in China" (... radicals (P N O3) that may have a significant impact on health-threatening levels of ozone and fine particulates (PM2.5) in the atmosphere.)

Dove Medical Press published "Trends in the burden of C O P D in China" (Objective: Exposure to ambient particulate matter (PM2.5) is the leading risk factor for developing chronic obstructive pulmonary disease (C O P D) in ...)

India

Business Standard published "Explainer: What does an A Q I of 450 mean? Is it just a winter thing?" (PM 2.5 refers to inhalable particulate matter that can enter the bloodstream and has several health impacts. A level of 250 micrograms per meter cubed is four times the ...)

While Delhi's air quality, on which mainstream media focuses, improved slightly, smaller towns--Ambala, Khanna, Kurukshetra and Ludhiana--had severely polluted air (A Q I over 400) on November 9, according to the air quality index bulletin published by the Central Pollution Control Board (C P C B).

But what does having an AQI over 400 really mean?

For one, it means that people are breathing air that has an average concentration of 250 micrograms of PM 2.5 per cubic meter (micrograms per meter cubed) in a day, according to the AQI-to-concentration converter. PM 2.5 refers to inhalable particulate matter that can enter the bloodstream and has several health impacts. A level of 250 micrograms per meter cubed is four times the permissible amount--60 micrograms per meter cubed over a 24-hour period-- according to the standards defined by the C P C B.

Energetica India published "Norway's Climate Investment Fund Norfund to Invest Rs 500 Cr in S A E L" (Fine particle matter (PM 2.5) levels rise with the yearly burning of crop stubble and contribute to some of the world's worst air quality).

Greater Kashmir published "Rising air pollution shrouds Kashmir skies" (With the onset of winter, High Particulate Matter (PM 2.5) levels have been detected in air in Kashmir especially in its summer capital Srinagar.)

The Indian Express published "Delhi remained most polluted city in 2022: N C A P tracker" (The analysis has however revealed that PM 2.5 levels in the city has shown a 7% improvement from 108 micrograms per meter cubed in 2019. The analysis, which has been ..)

NDTV.com published "India Added 180 Air Quality Stations, Over 600 Needed in 2 Years: Report" (1.5 Million People Die Every Year Due To PM 2.5 Air Pollution: Report · Over 60% Decline In PM 2.5 Pollution In Delhi This Diwali Compared To 2021 ...)

ThePrint published "Burning of twigs, dry leaves for warmth & vehicles biggest pollutants in Delhi, shows study" (Biomass burning (wood, stubble, etc.), vehicular emissions and dust (road and construction) were the other major sources of PM2.5 in the last one ...)

Times Now "Chennai: Yellow alert issued as A Q I crosses 100; pollution likely to increase" (The pollutant in all the stations is PM2.5 which is a tiny particulate matter of diameter 2.5 or less than 2.5 microns that can enter deep into the ...)

Times of India published "4 years after clean air mission, 'marginal' gain in some cities" (The cleanest city with a PM 2.5 concentration of 26.33 micrograms per meter cubed is Srinagar whereas Kohima emerged as the cleanest in terms of PM10 concentration ...)

Pakistan, Islamabad

The Express Tribune published "Capital's air quality remains unhealthy despite rain" (... metropolis remained high since the onset of the fall season as prolonged dry weather, increased vehicular traffic and wood burning continued.)

The Philippines

Centre for Research on Energy and Clean Air published "Estimating the Health & Economic Cost of Air Pollution in the Philippines" (... guidelines of annual average air pollution exposure to 5 micrograms per meter cubed from 10 micrograms per meter cubed for PM2.5 and to 10 micrograms per meter cubed from 40 micrograms per meter cubed for nitrogen dioxide (N O 2).)

Thailand

Bangkok Post published "Industry president urges long-term fix to PM2.5" (Meanwhile, the Royal Thai Navy is also speeding up the installation of 13 air purifiers across Bangkok to help deal with a high volume of PM 2.5 ...)

Pattaya Mail published "Thai DMS chief warns PM2.5 can cause serious illnesses to children" (Dr Thongchai warned about the health impact of Particulate Matter 2.5 (PM2.5), which has been accumulating in many regions of Thailand and noted ...).

"Thailand reports unsafe PM 2.5 in 43 provinces; Bangkok announces work from home" (The levels of particulate matter 2.5 micrometers and less in diameter exceeded its safe threshold in 43 provinces this morning as many schools in ...), and

Thai PBS World "3500+ hot spots detected by satellite on Sunday, raising pollution concerns" (... by the Suomi N P P satellite, raising serious concerns over forest fires, cross-border pollution and PM 2.5 dust during the dry season.)