Atmospheric Pollution & Climate Change (APCC)

Environmental Information System (ENVIS)

Resource Partner

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Articles in Media

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Indian Institute of Tropical Meteorology (IITM, Pune) a Resource Partner to Ministry of Environment, Forest & Climate Change's scheme- Environmental Information System's (ENVIS) on Atmospheric Pollution & Climate Change (APCC). IITM-ENVIS is compiling the news articles in media regarding air pollution and climate change topics, for the year 2018.

This book has articles which were published in print and online media making record of important environmental-pollution events which was happened in 2018 and its impact on the environment and human health. This Publication will be ready record for any researcher or administrator for review of the pollution events.

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January 2018

Mumbai's air quality slips to 'very unhealthy' on New Year's Day

Date: 01-Jan-2018 Source: Scroll.in

The city's air quality has been steadily dipping since the last week of December.

Mumbai's air quality dropped to "very unhealthy" levels on the first day of the New Year. At 10 am, the air quality index, which measures the amount of pollutants in the air, was 281.

An Air Quality Index reading up to 50 is considered "good" and up to 100 is considered "satisfactory". A reading between 401 and 500 is ranked "severe" on the index, which means the air is dangerously filled with pollutants.

The air quality was worst around Bandra Kurla Complex, which recorded PM2.5 levels of 306 at 3.30 pm. At Navi Mumbai, the air was sightly better, at an AQI reading of 107.

The city's air quality has been steadily dipping since the last week of December, the Hindustan Times reported.

"The wind speed picked up pace after Christmas, which has dispersed pollutants at the surface," The Asian Age quoted Gufran Beig, the project director of the System of Air Quality Forecasting and Research, or SAFAR, as saying. "As the speed decreases, pollutant particles get suspended on the surface."

Delhi Pollution: Air pollution, a constant menace in Delhi, even on New Year

Date: 01-Jan-2018 Source: OneIndia.com

Delhi continues to choke under the increasing pollution level even as a year went by. The National Capital was engulfed in smog at the break of dawn in the beginning of a new year, falling from 'very poor' category to 'severe' with regards to the air pollution in the city.

The hazardous PM 2.5 was recorded at 308 micrograms per cubic metre and PM 10 at 470 micrograms per cubic metre. According to the Supreme Court appointed panel EPCA, when PM2.5 and PM 10 are recorded over 250 and 400, and persists over 48 hours, strict action has to be taken.

Currently the action imposed on the National Capital is the Graded Response Action Team or GRAP by the EPCA. However, the plans by the National Green Tribunal and the Prime Minister's pollution task force, both of which are fighting for consensus.

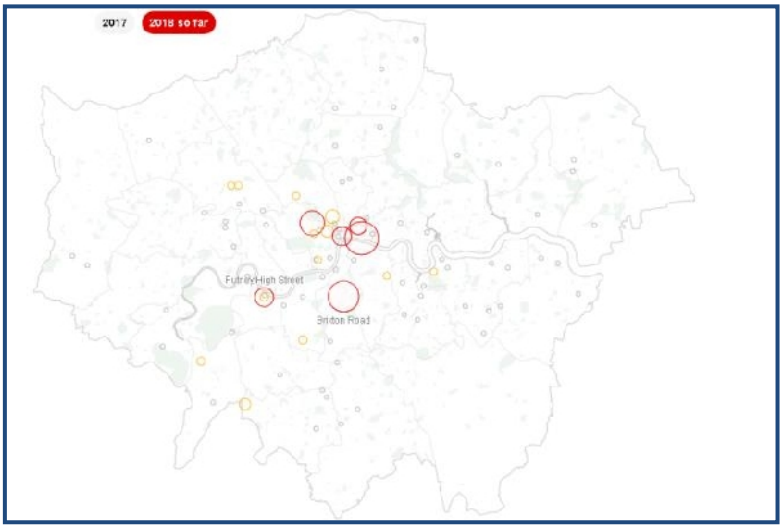
This sharp spike in the pollution levels come after November this year, due to which steps like ban on sale of fire crackers was imposed to combat the increasing air pollution. Doctors termed the crisis as health threatening and the Delhi Government came up with suggestions to impose odd-even rule. Parking fees were also hiked to curtail pollution from traffic congestion. Entry of trucks was stopped as well as construction work.

However, as the condition bettered these restrictions were revoked. The recent hike in the level of pollution could also mean a return of the aforementioned restrictions.

As the city was covered in thick smog which adversely affected the visibility, several flights and trains had to be cancelled. OneIndia News.

London air pollution live data – track the breaches of legal limits in 2018

Date: 02-Jan-2018 Source: The Guardian



Toxic NO2 pollution affects most of urban areas of the UK, but London is worst hit. View live data from the capital to see which sites are breaking legal limits

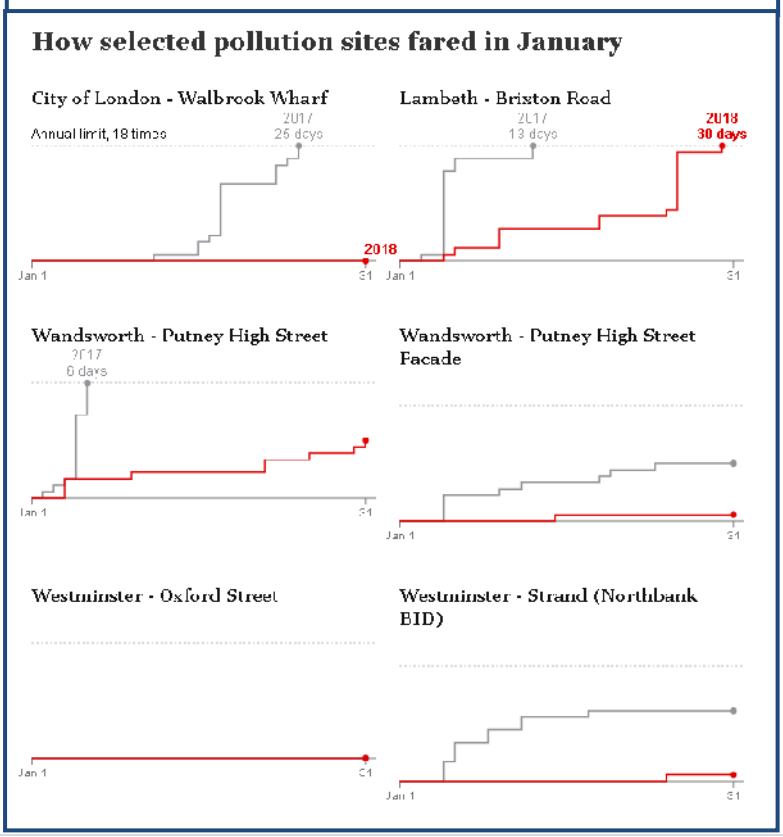
On 30 January, Brixton Road in south London reached its annual legal limit for toxic nitrogen dioxide (NO2) – less than a month into the year. It breached the limit .

Exceeded annual limit

Site	Hourly limit breaches
City of London - Walbrook Wharf	107
Lambeth - Brixton Road	87
Westminster - Marylebone Road	51
Westminster - Strand (Northbank BID)	26
Wandsworth - Putney High Street	25
City of London - Beech Street	20

Exceeded hourly limits at least once

Site	Hourly limit breaches
Camden - Euston Road	11
Westminster - Oxford Street East	7
Sutton - Worcester Park	6
Kingston Upon Thames - Cromwell Road	2
Wandsworth - Putney High Street Facade	2
Wandsworth - Tooting High Street	2
Brent - Ikea	1
Brent - Neasden Lane	1
Camden - Swiss Cottage	1
Greenwich - Trafalgar Road (Hoskins St)	1
Southwark - A2 Old Kent Road	1
Westminster - Buckingham Palace Road	1
Westminster - Oxford Street	1



The rapid breaking of the limit is a dramatic illustration of the illegal air pollution affecting most urban areas in the UK, for which the government is being sued in the high court for a third time early in 2018. High NO2 levels are estimated to cause about 23,500 early deaths a year across the nation.

The date of the 2018 breach was in fact an improvement over previous years, when the first breach usually occurred in less than a week. The improvement follows London mayor, Sadiq Khan, taking dirty buses off polluted routes and implementing a charge for more polluting vehicles in central London. But more action is needed, particularly from the government.

You can follow all the monitored sites across London in the map below, which is updated as each hour's data is received from the London Air Quality Network, run by King's College London.

The law requires that hourly levels of toxic NO2 must not exceed 200 micrograms per cubic metre (µg/m3) more than 18 times in a whole year. The most polluted places have vastly exceeded this in recent years: in 2016 Putney

high street broke the hourly limit more than 1,200 times.

There is also an legal limit for the average NO2 level across the whole year: in 2016 this was broken at 59 of the 97 sites.

The most effective way of cutting NO2 is , but ministers have told councils this should be the measure of last resort.

Fight Delhi air pollution with Rs 10 Nano filter; here's how and where to buy 'Nasofilter'

Date: 02-Jan-2018 Source: Financial Express

A product called 'Nasofilter' that costs Rs 10 is designed by Alumni, professors and students of the Indian Institute of Technology (IIT), Delhi, in collaboration with Nanoclean Global Private Ltd.

A nano-respiratory filter worth just Rs 10 has been designed to tackle deteriorating air quality in the national capital. A product called 'Nasofilter' that costs Rs 10 is designed by Alumni, professors and students of the Indian Institute of Technology (IIT), Delhi, in collaboration with Nanoclean Global Private Ltd, reported the Indian Express. This nano-respiratory filter is meant to protect users from air pollutants, including PM 2.5 particles, and reduce risk of respiratory diseases. Nasofilter will be available for purchase from today. The product will initially be available online before it hits retail shops. People can buy these filters from the website – nasofilters.com from. In some time, these filters will be available on all recognised e-commerce websites, and finally in retail shops.

Nanoclean Global Private Ltd is the company which was incubated at IIT-Delhi to produce the filters. Prateek Sharma, who is the chief executive officer of the company explained how this filter works. He was quoted as saying that these filters stick to the user's nasal orifice and restrict foreign particulate matter from entering the body. It is a use-and-throw biodegradable product, which is highly efficient in restricting particulate matter, and at the same time gives very little pressure drop, which makes it unique. Sharma added by saying that as the cost of the product is low, it can be used by the masses. He said the filters would keep away PM 10 particles 100 per cent, and PM 2.5 particles by 95 per cent. The filters can last up to 8-10 hours.

"From tomorrow, the filters will be available on our website nasofilters.com. After a few days, we will make them available on all recognised e-commerce websites, and finally in retail shops. We hope to start physical sale in January. It would come in box of 10 nasofilters initially. Subsequently, we will also introduce a box of 30," Sharma said.

Besides Sharma, the team comprises faculty members Manjeet Jassal and Ashwini K Agrawal, alumni Sanjeev Jain and Tushar Vyas, and a student, Jatin Kewlani. The initiative received the 'Startup National Award' 2017 by former President Pranab Mukherjee, and also made it to the South Korean government's list of 'Top 50 technical startups in the world'.

The Unexpected Side Effects of Cleaning Urban Air Pollution

Date: 02-Jan-2018 Source: EDGY

Scientists have discovered that cleaning up air pollutants from urban areas could lead to an increase in organic hydroperoxides, noxious chemical compounds, through atmospheric autoxidation.

Urban pollution is the result of mostly human-made emissions from various sources, such as industrial and household activities along with car traffic (exhaust fumes), which is responsible for a quarter of airborne pollutants in the form of particulate matter (aerosols).

While actions taken to purify the air we breathe reduces the effects of airborne pollutants on health and the environment, a new study claims they could also give rise to another class of harmful compounds.

In short, cleaning up urban air could lead to an increase in other harmful chemical compounds.

Air Pollutants Undermine Public Health and Welfare

The primary pollutants found in the urban atmosphere are nitrogen oxides (NO and NO2), carbon monoxide (CO) and a number of other volatile organic compounds. Concentrations of these pollutants in the urban atmosphere vary according to seasons, meteorological conditions, and human activity.

Air pollution can trigger the development of respiratory diseases (chronic obstructive pulmonary disease), cardiovascular diseases, strokes, and lung cancer. Scientists have also found a link between air pollution and adolescent delinquency and lower IQ.

Annually, air pollution causes the premature death of 7 million people in the world, or, according to the World Health Organization, one in eight of total deaths. The organization subsequently declared air pollution as the world's largest single environmental health risk.

"Cleaning up the air we breathe prevents noncommunicable diseases as well as reduces disease risks among women and vulnerable groups, including children and the elderly," claim WHO experts.

Measures against atmospheric pollutants (such as reducing car use, limiting urban access to vehicles, and better urban development) have allowed a significant improvement in air quality in many large cities in the U.S such Los Angeles, New York, and Chicago.

The EPA, or the Environmental Protection Agency, says that the Clean Air Act (passed in 1970, and amended twice, in 1977 and 1990) allowed Americans to breathe less polluted air, and helped to cut the toll of pollution on the economy and environment.

The Flip Side of Fighting Air Pollution

The increase in air quality standards instigated by the Clean Air Act has helped to cut the emissions of (six main) pollutants (like nitric oxide and hydrocarbons) in the U.S by 70% since 1970. However, in doing so, they may have also triggered an increase in organic hydroperoxides not usually found in the air.

This serious and unexpected downside to cleaning up the air has been revealed by scientists at California Institute of Technology, Caltech, and the University of Copenhagen, UCPH, in Denmark.

Researchers noted that, compared to the dramatic drop in nitric oxide, the decline of hydrocarbons has been significantly slower. Their research found that this disparity could possibly trigger the production of organic hydroperoxides.

Not common over cities, organic hydroperoxides are usually found in rural areas and regions where not much tailpipe exhaust and other sources of nitric oxides are produced.

Besides the natural process which involves light interaction, researchers found another chemical process that can trigger the production of organic hydroperoxides molecules. This process, known as gas-phase autoxidation, occurs when hydrocarbon molecules can't find enough nitric oxide to react with.

"As these nitric oxide concentrations go down by another factor of two over the next five to seven years, we're going to start making more and more organic hydroperoxides in urban areas," says Caltech's Paul Wennberg, lead author of the study. "… we haven't seen large concentrations of hydroperoxides in heavily populated areas, so we don't know how the formation of gas and aerosol hydroperoxides will impact public health. But we do know that breathing in particles tends to be bad for you."

Will the fossil fuel industry use these new findings against the Clean Air Act, which is already under attack? Or do you see this as a temporary side-effect to creating a cleaner environment within our urban areas? Let us know your thoughts in the comments section below.

Air pollution on edge of emergency level in Delhi on New Year day

Date: 02-Jan-2018 Source: Live Mint

Air pollution in Delhi on Monday stood on the brink of the emergency level due to a rapid build up of particulate matter owing to foggy conditions, even as Delhiites stepped out in large numbers to mark the first day of the New Year.

The day's average air quality index (AQI) was at 400, classified as 'very poor' by the Central Pollution Control Board (CPCB). However, it was just one point short of 'severe', the worst AQI in the CPCB index.

SAFAR, which has its own monitoring network, recorded 'severe' levels of pollution. SAFAR, which comes under the ministry of earth sciences, said the air quality was worse this 1 January, compared to 2016 and 2017. During the previous two years, the foggy days were distributed over a longer period of time, it said in an assessment report.

On Sunday, too, the AQI was at 'very poor' level (398). The agency said it was mainly because the spell of dense fog remained concentrated between 25 December and the first week of January this year. Firecrackers were burst in many parts of Delhi last night to ring in 2018, contributing to the worsening air quality.

An AQI between 0-50 is considered 'Good', 51-100 'Satisfactory', 101-200 'Moderate', 201-300 'Poor', 301-400 'Very Poor', and 401-500 'Severe'.

The PM2.5 and PM10 levels in the city at 6pm stood at 311 and 471.5 ug/m3, respectively, according to the CPCB. Pollution is considered 'severe plus' or in emergency category when the readings of PM2.5 and PM10 cross 300 and 500 ug/m3, respectively. The corresponding prescribed standards are 60 and 100.

The nitrogen dioxide (NO2) level at air quality stations at Punjabi Bagh and Anand Vihar were reported at 147.47 and 91.97 µg/m3 respectively.

The pollution graph maintained by the central air quality monitoring room of the CPCB was indicative of the rapid fall in air quality. The high levels of moisture manifested itself in the form of fog, which in turn trapped particulates. The levels will come down if the fog precipitates.

According to the Centre-notified graded response action plan (GRAP), a set of sweeping measures including odd-even and ban on construction activities are to be enforced when PM.2.5 and PM10 turn 300 and 500 respectively and persist for 48 hours at a stretch.

These measures were in place for over a week in November when pollution had risen alarmingly. A dense fog enveloped the city on New Year day, with the mercury dipping to 5.7 degree Celsius in the morning, but the weather condition did not deter revellers from coming out for celebrations.

Radial roads leading to the Connaught Place and streets around India Gate were crowded with people on a rather cold day.

Beijing meets 2017 air pollution target set under 2013 clean-up plan

Date: 03-Jan-2018 Source: Reuters

China's smog-prone capital Beijing met its air quality targets last year following a crackdown on polluters and a sustained period of favorable weather, the local environmental agency said in a statement on Wednesday.

The yearly average concentrations of particulate matter with a length of 2.5 microns or less,

known as PM2.5 and which damage the lungs when inhaled, dropped by 35.6 percent in 2017 from 2012 to 58 micrograms per cubic meter, the Beijing Municipal Environmental Protection Bureau said.

The figures were in line with Reuters estimates made last week.

The Chinese capital was ordered to cut PM2.5 concentrations to less than 60 micrograms as part of a 2013 action plan designed to head off public anger about rising pollution.

The city has since closed nearly 2,000 factories in the cement, foundry and furniture-making sectors, shut down coal-fired power plants and eliminated over 2 million high-emission vehicles over the past five years.

Beijing, along with 27 other northern Chinese cities, is part of a government campaign that started in October to ensure the 2017 targets were met.

As the region prepared to switch on residential winter heating systems, it started phasing out coal-fired boilers and switching to gas- or electric-powered equipment. It has also shut or curbed production at heavy industrial plants to limit smog build-ups.

But the city's environment agency acknowledged that drier and windier weather conditions played a role in meeting air quality targets for the year, especially in the fourth quarter.

The government blamed bad weather for the near-record levels of smog last January and February, which saw PM2.5 readings spike by 26.7 percent in the key Beijing-Tianjin-Hebei region in the first quarter of 2017.

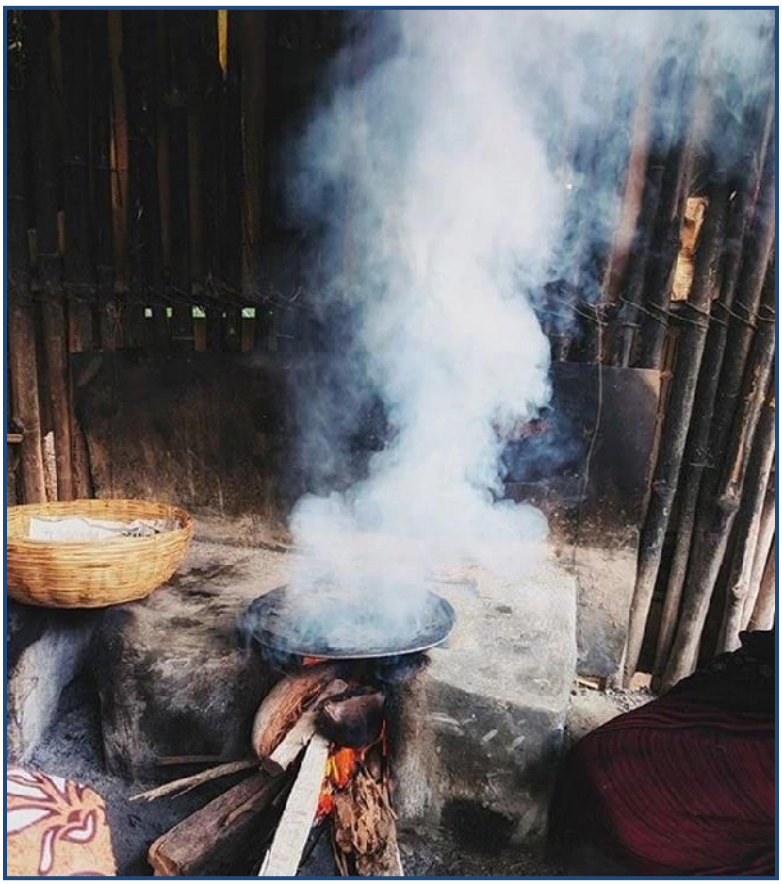
The province of Hebei, which surrounds Beijing and is a major source of smog drifting over the capital, also saw PM2.5 concentrations decline 7.1 percent from a year ago to 65 micrograms in 2017, the province's environmental protection bureau said on Tuesday.

But the region is still some distance away from meeting its official PM2.5 standard of 35 micrograms. The World Health Organization recommends levels of no more than 10 micrograms.

"Current air pollutant levels remain a lot higher than the national air quality standard, indicating the improvement in air quality will still be a long-term process," Beijing's environment agency said.

Indian cook-stoves are contributing heavily to air pollution levels

Date: 04-Jan-2018 Source: IndiaToday.in



In countries like our own, there is no one way to cook. The traditional chulhas, fired by wood, dung or charcoal, are still popular in rural areas. In cities, most homes have gas stoves. Most outdoor vendors have gas stoves or tandoors.

But whichever means of cooking we use, we are contributing to the air pollution levels. It's true, believe it or not.

Traditional cook-stoves

A recent study by a team at the Washington University has revealed that the smoke emitting from the traditional Indian cook-stoves used in rural parts of India is having a detrimental impact of the environment and public health.

"Traditional cook-stove burning is one of the largest source of pollutants in India. We found it's a really big problem; this is revising what people knew for decades," said Professor Rajan Chakrabarty, who led the study.

The cheap biofuels used in these stoves or chulhas--crop chaff, gobar gas or dung, wood, and in some cases, charcoal--have very high levels of particulate emissions, much more than earlier thought. This underlines our need to improve this traditional and cheap process, so that air pollution levels can be reduced.

Gas stoves no good?

The gas stoves we are so used to in the cities have a similar problem. You might not believe it readily, but gas stoves we use indoors also emit harmful gases. Cooking, be it of any kind, is an act of controlled combustion, and emissions are inevitable.

Cooking on gas stoves particularly leads to exposure to unsafe levels of nitrogen dioxide and carbon monoxide. A study led by the Department of Energy's Lawrence Berkeley National Laboratory in the USA also found that gas stove emissions include formaldehyde.

Clearly, there is nothing natural about the particulate emissions from natural gas. The primary component in natural gas is methane, and if there are leaks in your gas line or cylinder, it can be even more hazardous.

All the emissions from cook-stoves, whether they're chulhas, tandoors or gas stoves, can potentially poison us--and that's apart from being a major contributor to air pollution levels. It makes all of us, whether we live in cities or villages, prone to a number of respiratory and cardiovascular diseases.

While modern technology, with the advent of induction cook-tops and electrical ovens, has made less-polluting options available, they are by no means cheap or viable throughout the nation (especially in rural pockets). What this leaves us in is nothing short of a grave situation.

Severe air pollution chokes Mongolia amid harsh winters

Date: 05-Jan-2018 Source: TRT World

Air pollution in China and India often makes international headlines, but in one country air quality is even worse.

With thousands of families burning coal to survive in arctic temperatures, Mongolia is now home to the most poisonous air on the planet.

For Baasanjargal Batbaatar, a single mother of four, coal brings the only warmth they can afford. But it's coming at a price.

"The first time I almost lost my daughter was last winter. I went to the next room to feed my son and when I returned, she was suffocating. Her eyes rolled back. The diagnosis: asthma," Batbaatar said. The hazardous haze is mainly caused by household stoves making Mongolia's air pollution up to 80 times the World Health Organization's safe limit. Children and newborns are worst hit.

"A recent study indicated that during the winter of 2014-2015, there was a five-fold increase in the rate of still-births, with a near perfect correlation to air pollution," said Alex Heikens, resident representative of UNICEF in Mongolia.

Indian Innovators Offer Nose Filters to Counter Heavy Air Pollution

Date: 05-Jan-2018 Source: VOA News

People walking outdoors with masks are an increasingly common sight in the capital of India, where the toxic air, which ranks among the world's dirtiest, has rung alarm bells. Now a team of innovators from the prestigious Indian Institute of Technology, New Delhi, is offering another solution: a tiny respiratory filter that can be stuck in the nose to restrict particulate matter from entering the body without hampering breathing.

The project involved creating a thin, flexible membrane which blocks out most dust and air pollutants, including concentrations of the deadly PM 2.5, the tiny particulate matter which doctors say causes maximum damage to lungs.

The innovation, called Nasofilters, won the Indian president's "National Startups Award" last May and was featured in South Korea's 2017 list of "Top 50 technical startups in the world."

The idea of nasal filters is not new, and some are available in Western countries to help reduce exposure to allergens such as pollen. One study conducted in 2016 on a product made in Denmark found it reduced symptoms of allergies and was comfortable to use.

The Indian device, however, focuses on the country's pressing problem of air pollutants. Working out of one room on the sprawling IIT campus, which has been the home of several innovations, the young team is optimistic it will find acceptance in a city where the toxic cocktail of vehicle fumes, construction dust and burning waste spikes to as much as 30 times the safe limit in winter.

Shaped roughly like a fingernail, the dark brown membrane is made by assembling millions of small-sized pores and resembles a fine, porous cloth. The costs have been held down to ensure

the filter is within the reach of most people: It is priced at approximately 16 cents. Effective for around eight hours, the innovators claim it can filter out 95 percent of the pollutants.

Origins of the invention

Prateek Sharma started working on the idea along with some faculty members and others when he enrolled at IIT for engineering studies. The inspiration: His mother suffered from asthma.

"The initiation of this story was about a decade back. I always noticed my mother is wearing some kind of cloth on her face. That has always annoyed me," said Sharma, the 25-year-old who now heads the startup which produces the filters, Nanoclean Global Private Ltd.

Noticing she refused to wear a mask when she went outside, he set out to search for another solution.

"The problem is mega, the product is nano," said Sharma, pointing to the filters. "It's comfortable to wear, it is aesthetically not bothering them like a face mask which covers half of your face. There is a problem — I can't even eat, can't even talk to you while putting on a face mask."

Growing curiosity

Reports of the product in Indian media have piqued curiosity in the city.

Ashok Joshi, a retired senior army officer who lives in Delhi, made the trip to IIT with his wife to find out more about the filters and pick them up after reading reports about it in newspapers.

"We are outdoor people by and large, being in the army, mostly I am outdoors," he said. "If something is there, which does not look very ugly and you can wear it comfortably, excellent idea. Why not?"

On days when air pollution is categorized as severe, doctors advise people, especially children and the elderly, against outdoor activities. On New Year's Day, New Delhi's air pollution levels bordered on severe.

The nose filter's real test lies in winning acceptance from people like Joshi as they try it out in the weeks and months ahead.

While the invention, if it proves acceptable to consumers, may help people protect themselves from the dirty air, environmental activists stress that the pressing need is to address the causes of the air pollution: the city's huge vehicle fleet and smoke from fires.

India's air pollution crisis is not restricted to New Delhi — nine other Indian cities figure among the WHO's list of the world's 20 most polluted cities.

Low level air pollution costs the economy billions of dollars in lost productivity

Date: 06-Jan-2018 Source: CBC.ca

Air pollution affects more than just our health

Air pollution delivers subtle effects that can have lasting negative impacts on our brain function, a new policy paper suggests.

We've known for some time that air pollution from vehicles or industry is associated with a host of health issues, everything from an increased risk of cardiovascular disease, to a worsening of respiratory issues, like asthma, and even death.

According to the lead author of a new policy forum paper in the journal Science, those health issues are just the tip of the iceberg. Dr. Joshua Graff Zivin, a professor of economics in the School of Global Policy and Strategy and the Department of Economics at the University of California San Diego, says there are more subtle effects — a hidden cost to air pollution, we should also be considering.

"What we're learning is that at severe levels, pollution clearly impacts respiratory and cardiovascular function," says Graff Zivin. "Those same impacts at more subtle levels simply impair our ability to do every day tasks. Of course, the brain is the largest or most oxygen organ in our body. And so, if pollution is impairing the oxygen that's being delivered to ourselves, it stands to reason that pollution could impact our brain function as well."

What it's costing us

At air pollution levels well below current regulatory standards in the United States, Graff Zivin says they've found impacts of air pollution on agricultural, manufacturing, and call centre work productivity.

There is also a new line of research where evidence is showing that exposure to low level air pollution to the fetus or in the first year of life when the brain is still developing, can have lasting negative cognitive impacts. "There are a range of studies now that have shown that even a short amount of exposure to modest levels of pollution in utero and the first year of life leads to demonstrable impacts on intellectual performance on standardized tests in middle school, in high school," says Graff Zivin. "We also find from other studies that we even see the imprints of that exposure 30 years later on the earnings of workers."

The bottom line

Contrary to popular belief that environmental regulation is a strain on economic activity and growth, Graff Zivin says policy makers should be thinking of environmental protection as an investment in our economy.

"If you take the effects, for example, of light manufacturing that we've identified in a plant in northern California and we apply them to the manufacturing sector in the United States alone, and we think about — for example, we've seen great progress in fine particulate matter pollution abatement over the past decade or so. If we look at simply the reduction in ambient particulate matter levels from 1999 to 2008 and we think about what done for labour productivity, it's the equivalent of about 20 billion dollars a year in labour savings."

He says these patterns exist across all sectors and settings, but they'll need to do more research before they can determine how much this loss in productivity and cognitive abilities adds up to.

Study Links Mother's Air Pollution Exposure Around Time Of Conception With Risk Of Birth Defects In Baby

Date: 07-Jan-2018 Source: Clean Technica

The amount of air pollution a mother is exposed to around the time of conception is directly linked with the risk of her baby being born with birth defects, according to a new study published in the Journal of Pediatrics on December 10th, 2017.

In other words, women who breathe heavily polluted air in the month before and after conception are much more likely to give birth to babies with birth defects than those who don't.

The new findings are the result of a study that analyzed data on birth defects relating to around 200,000 infants born in Ohio between the years of 2006 and 2010. The data were then paired with data relating to air pollution measurements near mothers' homes. While there's no doubt variation in the risk of birth defect depending upon the type of air pollution that mothers are

exposed to, the new study focused simply on PM 2.5 (very fine particulate matter, less than 2.5 micrometers in diameter, suspended in the air) as a proxy for other pollution as well, in a way.

“Our study indicates that there are several particularly vulnerable exposure periods near the time of conception, both before and after conception, in which exposure to higher levels of particulate matter in the air may pose an increased chance for a birth defect to occur,” explained study author Dr Emily DeFranco, of the University of Cincinnati College of Medicine in Ohio.

Reuters provides more: “The impact of particulate matter on birth defects varied based on how far women lived from air quality monitoring stations. Overall, when researchers looked at every mother in the study, women were exposed to average PM 2.5 levels of 13.79 micrograms per cubic meter of air (ug/m3) during the months just before and after they conceived. This included women who lived within 10 kilometers (6.2 miles) of an air quality monitoring station.

“When researchers looked at a subset of women who lived within 5 kilometers of a monitoring station, they found that for every 10 ug/m3 increase in PM 2.5 levels women experienced during the month after conception, their babies were 19% more to be born with birth defects…At the time of the study, the US Environmental Protection Agency standard for particulate matter levels was 15 ug/m3, while the current standard is 12 ug/m3.”

In other words, standards would need to change if the intent was to limit the prevalence of air pollution–caused birth defects in babies born within the US.

Obviously, there are some limitations to the study — the work just explored air pollution levels near the homes of the mothers, not in them, and not where they worked or spent a lot of their other time. Still, the work is compelling. It would be prudent for women looking to conceive to take the findings into consideration if possible.

High air pollution monitored in Derry

Date: 07-Jan-2018 Source: BBC News

High levels of air pollution are being monitored in the Londonderry area, the Department of Agriculture, Environment and Rural Affairs has said. Low levels of pollution are

also being monitored in other parts of NI.

The department said there is a possibility that other urban areas will experience high air pollution as a result of current weather conditions.

The pollution is likely to continue overnight and into Monday, before improving from Monday evening onwards.

The high pollution levels are the result of the cold, calm weather conditions, which can lead to the build-up of emissions from vehicles and home heating.

During periods of high air pollution the symptoms of people with lung or heart disease may worsen. Healthy people are unlikely to experience any ill effects.

Hourly updates on levels of particulate matter, sulphur dioxide, nitrogen dioxide, ozone and carbon monoxide are available on the department's website.

AIR POLLUTION: Traffic cops worst-hit

Date: 08-Jan-2018 Source: The Himalayan Times

Kathmandu: At around 2:00pm yesterday, a lady head constable of Traffic Police, who was on duty at Balkhu Chowk, made her way to a nearby hospital to wash her face after standing at one of the busiest and most polluted areas of Kathmandu Metropolis for five hours.

The area was engulfed in thick dust due to the ongoing road extension work. She came out of the hospital after three minutes, wore her mask and returned to her duty.

This is routine work for hundreds of traffic police personnel in Kathmandu Valley, who have been doing their duty without using safety measures against air pollution. There are around 1,400 traffic police personnel working in the valley.

They working under adverse conditions but cannot even complain about it as they are bound by the strict disciplinary codes of the police department.

Kathmandu ranks fifth in the list of most polluted cities, according to Pollution Index, 2017 published by numbeo.com. Similarly, according to the website of the Department of Environment of Nepal, the Particulate Matter (PM 2.5) in Ratnapark last evening was 48 µg/m³. The national standard set by the government for PM 2.5 for the 24 hours is 40 µg/m³. While the total suspended particulate matter yesterday was 645 µg/m³.

Sarita Thapa, head constable at Putalisadak, said they had been doing minimum 10 hours' duty daily amidst the noisy and overcrowded streets and chowks of Kathmandu Valley. "Many of us

suffer from respiratory and throat related problems, but we are not even offered regular health check-up by the department," she added.

"We are not even provided masks to protect ourselves from dust and pollution during duty hours," said another traffic policeman working at Pulchowk, who refused to reveal his identity.

However, officials at Metropolitan Traffic Police Division said traffic police personnel had to be on duty for maximum eight hours.

Officials also claimed that MTPD was conducting free health camps for traffic police personnel on regular basis. However, they do not have any record of traffic police personnel who received treatment in the free heath camps.

Senior Superintendent of Police and Spokesperson of Nepal Traffic Police Umesh Ranjitkar said, "We are well aware of the fact that our staffers are facing a difficult time during duty hours due to dust and fumes, but there is hardly anything we can do to solve the problems."

Women exposed to air pollution before getting pregnant are nearly 20% more likely to have babies with birth defects, study finds

Date: 09-Jan-2018 Source: Daily Mail

Women exposed to air pollution before getting pregnant are nearly 20 percent more likely to have babies with birth defects, new research reveals.

Living within 5km of a highly-polluted area one month before conceiving makes women more likely to give birth to babies with defects such as cleft palates or lips, a US study found.

For every 0.01mg/m3 increase in fine air particles, birth defects rise by 19 percent, the research adds.

Fine air particles, which weigh less than 0.0025mg, are given out in vehicle exhaust fumes and, when breathed in, become deposited in the lungs where they enter the circulation. Previous research suggests this causes birth defects as a result of women suffering inflammation and 'internal stress'.

Birth defects affect three percent of all babies born in the US.

How the research was carried out

Researchers from the University of Cincinnati analyzed 290,000 babies living in Ohio between 2006 and 2010.

Monthly fine air particle levels were matched to the home addresses of pregnant women before and after they conceived.

Pollution causes the stomach to protrude the abdomen

Results also reveal living within 10km of a polluted region in the month after becoming pregnant raises babies' risk of birth defects.

As well as cleft lips or palates, another common complication is the protrusion of the stomach or intestines through an unusual opening in the abdomen.

The findings were published in The Journal of Pediatrics.

This comes after researchers from The Johns Hopkins University last month found young children who grow up exposed to air pollution are more likely to develop asthma.

A mix of dust, sand and non-exhaust tailpipe emissions, known as coarse particulate matter, increases youngsters under 11's risk of the lung condition by 1.3 percent, they found.

London's air quality alerts 'inadequate' for protecting public health, say experts

Date: 09-Jan-2018 Source: Standard.co.uk

Air quality alerts of the type used in London by Sadiq Khan are “inadequate” in protecting public health, researchers said today.

They said tackling filthy air was best addressed by enforceable laws on cleaner fuel and emissions and by targeting polluting industries rather than leaving people to protect

themselves.

Lead author Dr Hong Chen said: “Air pollution is a societal problem that can be addressed most effectively through enforceable measures that reduce pollutants in the air we breathe every day, not just on days when air pollution is at its highest.

“Globally, air quality alert programmes represent one of the most common public responses to protect people from air pollution, but the findings of our study show that air quality alert programmes offer inadequate protection for public health.”

The study, in The Lancet Planetary Health, looked at the impact of alerts on 2.6 million people in Toronto, Canada, between 2003 and 2012.

It was the first study to evaluate the effectiveness of alerts. The results were said to be potentially relevant for cities such as London.

Because of inaccurate forecasting, alerts were sometimes not issued when pollution exceeded trigger levels - while alerts were issued on other days when pollution failed to reach warning levels.

The alerts were associated with a 25 per cent reduction in asthma-related A&E admissions but had no impact on reducing admissions for cardiovascular disease, or deaths from cardiovascular or respiratory disease. This is probably because such people already spend a lot of time indoors.

In London, the Mayor has issued seven air quality alerts, the most recent last September. These are published on bus countdown signs, outside Tube stations and on roadside message boards.

Last week the Standard revealed that air quality breached EU legal limits in almost 50 locations across the capital last year. The worst area was Brixton Road in Lambeth.

Simon Birkett, founder of Clean Air in London, said high pollution could cause “terrible suffering” and alerts were “vital”.

He said: “But as this study highlights, the alerts need to be accurate, or at least precautionary, include appropriate health advice and be combined with meaningful action to reduce pollution at its source. Sadiq must up his game, take bolder action and work with other cities to fight air pollution.”

Mr Khan last October introduced the £10 T-charge, which is thought to have discouraged about 1,000 of the most polluting vehicles from entering the congestion charge zone each weekday.

The T-charge is due to be replaced by the ultra-low emissions zone in April 2019, charging cars £12.50 and lorries £100.

A spokesman for the Mayor's Office said: “This new report endorses the Mayor’s approach that, in conjunction with tough measures to improve air quality, issuing air quality alerts is fundamental to protecting public health. Sadiq believes Londoners have a right to know when there are high pollution episodes so those who are most affected can take measures to protect themselves - from changing their journeys, to carrying their inhalers.

"Unlike the previous Mayor, the Mayor will always be honest with Londoners about the state of London’s toxic air and he believes sharing information about high pollution is the right thing to do.

“London's polluted air is a health crisis and the Mayor is doing everything in his power to protect the public.

"Sadiq is delivering hard hitting measures in London - from the Toxicity Charge, to reducing the number of older, dirtier cars in central london and removing polluting buses from busy routes with his Low Emission Bus Zones. He is currently consulting on expanding the Ultra Low Emission Zone up to the North/South Circular Road which would cover 3.8 million Londoners in the most polluted parts of London."

EU Commissioner: Air Pollution is Among the EU's Biggest Environmental Problems

Date: 10-Jan-2018 Source: Novinite.com

Air cleanness is a problem not only for Bulgaria but also for the whole European Union and for the world at large. This is what the Commissioner for the Environment, Karmenu Vella, told the Bulgarian National Television.

"In Europe every year 400,000 people die prematurely because of the dirty air," he said.

Vella also commented on the change of the Pirin Park's layout and related protests. Pirin is part of Natura 2000 and when it comes to environmental conservation measures and Natura 2000 management plans, the authorities must take all measures in line with European legislation, "the Maltese said.

According to him, there is no reason to believe there is a breach of EU law so far.

"The ecological work program for the next year is very important, we have many hopes for it. One of the most important things during the Bulgarian presidency will be the circular economy, within the framework of a circular economy we have a strategy for plastics, the Drinking Water Directive, "added the Environmental Commissioner.

Why Air Pollution Is a Socioeconomic Issue

Date: 10-Jan-2018 Source: JSTOR Daily

Climate change, ozone depletion, and other environmental ills are widely discussed effects of air pollution. Less well-known, at least in the developed world, are the lethal short-term public health impacts of breathing polluted air. In fact, up to 6.5 million deaths globally every year may be attributed to air pollution.

Too much pollution can pose a health risk to anyone, but whether it is lethal or not mostly depends on the person's underlying health status. The highest rates of mortality are among the elderly, or those who for whatever reason are susceptible to cardiovascular damage. Existing heart or breathing conditions can increase risk. High concentrations of single pollutants, e.g. particulate material or ozone, are more deadly compared to smaller simultaneous concentrations of many different pollutants. For vulnerable populations, even short-term exposure can be lethal; one exceptionally polluted day can kill a vulnerable person. However, even low-level chronic exposure over prolonged periods can reduce life expectancy.

On the other end of the age scale, infants under the age of one are also extra susceptible. Studies on the subject found that both respiratory disease and Sudden Infant Death Syndrome (SIDS) are associated with higher rates of particulate air pollution. The exact reason remains unclear. In adults excessive particulates can stimulate dangerous allergic reactions, inflammation, or changes in heart rhythm, and it could be that these problems are difficult for an infant's immature system to tolerate. As with adults, socioeconomic factors play a major role. All of the studies of infant deaths control for socioeconomic factors; the recent research finds that pollution kills the most infants in poorer and developing countries. For children, SIDS risk increases when there is a smoker in the household, and more affluent or more educated people are less likely to smoke.

Socioeconomic factors affect adults as well. Deaths proximally caused by air pollution are more common on hot days that already stress an older or younger body. So economically

disadvantaged people who cannot afford air conditioning, for instance, are more vulnerable. They may be exposed to more heat or even more pollution if they open a window to cool off. In general, poverty exposes people to various stressors, such as polluted water, that increase pollution susceptibility. In other words, it isn't so much that air pollution kills people directly, it's that more people would be alive without it.

Delhi Air Pollution: NO2 Level Rises In The National Capital Despite Fall In Diesel Consumption

Date: 11-Jan-2018 Source: Outlook India.com

The concentration of nitrogen dioxide (NO2), a toxic gaseous pollutant, substantially rose in Delhi in 2017, despite a fall in diesel consumption, according to official data.

The Delhi government today attributed the fall in levels of particulate matter (airborne particulate matter) in the city to the fall in diesel consumption, but annual NO2 level breached the 50 microgram per cubic metre (ug/m3) last year for the first time since 2013.

According to pollution data of the six National Air Quality Monitoring (NAMP) stations in Delhi, the annual concentration of NO2, primarly a product of diesel combustion, has been steadily rising since 2015.

The stations are located in Pitampura, Siri Fort, Janakpuri, Nizamuddin, Shahzada Bagh and Shahdara.

The data shows, the annual NO2 average in 2013 was 49.8 ug/m3, 46.3 ug/m3 in 2014, 48.3 ug/m3 in 2015, 49.8 in 2016 and 51.83 in 2017 as against the annual safe average standard of 40 ug/m3.

But how can one explain the increase in NO2 despite a fall in diesel consumption, from 15.08 lakh metric tonnes (MT) in 2015-16 to 12.67 lakh metric tonnes (MT) 2016-17, and a dip of 11 per cent in the registration of new vehicles in 2017 as against 2016 in the city?

Anumita Rowchowdhury, executive director of the Centre for Science and Environment (CSE), said it may be due to a massive number of vehicles entering Delhi from the neighbouring national capital region districts.

"In 2015, we found that the daily total influx of vehicles in Delhi from outside was nearly similar to the annual registration figures," she said.

Meanwhile, going by the same Central Pollution Control Board (CPCB) report, the levels of PM2.5 and PM10 in the city's air dropped marginally in 2017, the first time since 2013.

The levels of PM2.5 in 2013, 2014, 2015, 2016 and 2017 were - 73, 80, 81.5, 118.9 and 101.3 ug/m3 as against the annual prescribed standard of 40.

Annual PM10 levels during the corresponding years were -- 211, 215.8, 227.8, 301 and 260.6 ug/m3. The annual prescribed limit is 60.

Deputy Chief Minister Manish Sisodia said the fall in the levels of PM has also got to do with the fact that the AAP government, "unlike its neighbouring counterparts", sincerely enforced measures under the Graded Response Action Plan (GRAP).

Residential biomass burning deadliest source of air pollution, reveals study

Date: 12-Jan-2018 Source: Livemint.com

New Delhi: Residential biomass burning was responsible for at least 267,700 deaths in 2015, or nearly 25% of the deaths attributable to Particulate Matter (PM) 2.5, making it the most important single anthropogenic source of mortality due to air pollution, according to a study released on Thursday.

Coal combustion, dusts, transport, diesel, and brick kilns were the other major contributors to air pollution. Of the total 1.1 million air pollution related deaths in 2015, the burden falls disproportionately (75%) on rural areas.

Of the total 1.1 million deaths, the highest number was due to residential biomass fuel burning, followed by coal combustion from both thermal electric power plants and industry, which resulted in 169,000 deaths. Apart from that, anthropogenic dusts contributed to 100,000 deaths, open burning of agricultural residue contributed to 66,000, and transport, diesel, and kilns contributed to over 65,000 deaths in India in 2015.

The study, Burden of Disease Attributable to Major Air Pollution Sources in India, said it provides the first comprehensive assessment conducted in India to understand exposures at the national and state levels from Particulate Matter (PM) 2.5. It was conducted by IIT Bombay,

the Health Effects Institute (HEI), a US-based global research institute, and the Institute for Health Metrics and Evaluation (IHME), another US-based research institute working in the area of global health statistics and impact evaluation

“This systematic analysis of emissions from all sources and their impact on ambient air pollution exposure found significant contributions from regional sources (like residential biomass, agricultural residue burning and industrial coal), underlying that from local sources (like transportation and brick kilns)," said Dr Chandra Venkataraman of IIT Bombay, who led the air pollution source analysis.

The study, however, noted that India has begun to implement clean fuels and pollution control programs for households, power plants, vehicles, and other sources, but emphasised that as the country’s population grows and ages, health impact from air pollution will increase.

In the decades ahead, the study noted, a much larger portion of the Indian population may be susceptible to heart and lung diseases tied most closely to air pollution exposure.

According to the study’s analysis of a projected 2050 scenario with no further air pollution control actions, the health burden would increase to 1.7 million deaths in 2030 and more than 3.6 million deaths in 2050.

However, the study concluded that with increasing levels of emissions reduction, more than over 1.2 million annual deaths (in 2050) could be avoided.

In November 2017, the India-wide Global Burden of Disease analysis had identified air pollution, both outdoors and in households, as the second most serious risk factor for public health in India.

In the past few years, especially during the winter months, high levels of air pollution in Delhi and adjoining National Capital Region (NCR) have received enormous attention. However, experts have repeatedly pointed out that air pollution is not just a Delhi-NCR phenomenon but a nationwide challenge that requires focused effort.

Indoor air pollution linked to lung, kidney dysfunction

Date: 13-Jan-2018 Source: Livemint.com

Air pollution can affect microvascular functions

A cross-sectional study of over 400 kitchen workers in Lucknow and Coimbatore showed that almost 50% of them suffered from poor lung functions and microalbuminuria. They also noticed that Coimbatore workers had a higher risk of obstructive lung problems.

The study conducted by researchers from Indian Institute of Toxicology Research (CSIR- IITR) also examined the particulate matter pollution (PM2.5 and PM1) in the kitchen environment and found high concentrations of particulate matter of both sizes, volatile organic compounds, carbon monoxide and carbon dioxide. The study was carried out among male workers in Lucknow and Coimbatore and a control group.

Urine and lungs

Though air pollution primarily affects the lungs, it can also affect other microvascular functions via systemic circulation. So the workers were first tested for microalbuminuria. This is a condition in which there is an excess amount of albumin in urine, and this can be used as a marker for kidney diseases. More workers from Lucknow (56%) had higher microalbuminuria than their counterparts in Coimbatore (42%). Fine particulate matter can reach the alveolar epithelium of the lungs, enter the circulatory system and increase the risk of kidney dysfunction.

“By conducting various lung function tests, we found that lung abnormalities were higher in south Indian workers. Apart from exposure to indoor air pollutants, ethnic differences may be the reason. Previous studies have shown south Indians have lower lung function,” explains Dr C.N. Kesavachandran from CSIR-IITR and corresponding author of the paper published in Environmental Health.

The researchers found significantly increased systolic blood pressure in the kitchen workers with microalbuminuria in both states. “But no association was observed between systolic blood

pressure and microalbuminuria," says Dr Vipin Bihari, former senior principal scientist and consultant at CSIR-IITR.

Air quality

"We found a cocktail of different elements like carbon, magnesium, calcium, aluminium, iron in its particulate form in the air," says Amarnath Singh, a PhD scholar at CSIR-IITR and first author of the paper.

This study throws light on poor lung function and its inverse relationship with microalbuminuria. The authors say that a follow-up study is necessary to get a more precise measure of the association between the two.

As Chennai Lights up for Bhogi, Air Pollution Levels Skyrocket

Date: 13-Jan-2018 Source: The Quint.com

As Chennai woke up to thick smog billowing outside homes, thanks to the burning of old furniture and other household items to celebrate Bhogi, the pollution levels in the city shot through the roof. With visibility at the Chennai airport dropping to just 50 metres, several flights were also cancelled.

According to reports, at least 10 flights were diverted from the Chennai airport to Hyderabad, Coimbatore and Bengaluru, and flights did not take off after 3:30 am, leaving passengers stranded at the airport. Regular operations are expected to restart after 9 am.

Data from the National Air Quality Index, maintained by the Central Pollution Control Board, showed that the air quality in Chennai on Saturday morning was 'poor'. At 8 am, the PM2.5 levels (Particulate Matter with diameter less than 2.5 micrometers, which are primary pollutants in Chennai) at Alandur was at 221, 144 at IIT and 246 at Manali. Levels above 200 are considered 'poor'.

The air quality index maintained by Atmos, which activists say is far more accurate than government data, however, showed alarming levels of pollution. At 8 am, an air monitor maintained by Huma Lung Foundation on Anna Salai shower PM2.5 levels at 555, and another one at Besant Nagar maintained by Atmos was at 628. A monitor maintained by Atmos at MKB Nagar showed PM2.5 levels at 459.

These are very high levels of pollution. Most advisories state that these are 'severe' or 'hazardous' levels of pollution. Healthy persons are advised to minimise outdoor activity, the elderly, pregnant and those with lung and head diseases are are advised to avoid outdoor activity.

“City wide air quality levels are very poor and at least three-four times above the standards prescribed by the Ministry of Environment and Forests. These levels will have serious health implications for all but especially people with heart disease, lung disease, respiratory problem, pregnant women and children,” says city-based activist Shwetha Narayan.

“Pongal is a festival of health and happiness and today’s air quality levels on the onset of festivities is contrary to that,” she added.

Centre and Delhi to launch joint campaign on air pollution

Date: 14-Jan-2018 Source: The Indian Express

The Central government will launch a clean air campaign for two weeks in the capital in February, Union Environment Minister Harsh Vardhan said on Saturday. Vardhan said that the Union government will coordinate a joint campaign, for two weeks, with the Delhi government, the New Delhi Municipal Council (NDMC), Central Pollution Control Board (CPCB) and other municipal agencies. “The campaign seeks to sensitise ground-level functionaries and general public to enforce the habit of environmental protection,” Vardhan said.

He chaired a meeting on the mitigation of air pollution on Saturday with a team of 70 officers, led jointly by one officer each from the Ministry of Environment, Forest and Climate Change (MoEF) and an officer from the Delhi government. An official said, “These officers will be assisted by CPCB, Delhi Pollution Control Committee (DPCC) and municipal corporations.”

Vardhan emphasised on the role of RWAs and shopkeeper associations, stating that they would be encouraged to become a part of these teams and participate in the campaign for mitigation of pollution. “The teams will be provided with check lists so that there is focused activity on mitigation of pollution, including effective measures for dust mitigation, solid waste management and prevention of garbage burning,” said a statement. MoEF secretary C K Mishra and Delhi chief secretary Anshu Prakash also attended the meeting, said officials.

Air quality may dip this week, foggy mornings to return

Date: 15-Jan-2018 Source: Hindustan Times.com

The Capital's air quality, which was 'very poor' on Sunday, may deteriorate from Wednesday for a brief period, scientists from the Central Pollution Control Board (CPCB) said.

On Sunday the Air Quality Index (AQI) of Delhi was 358 just one notch higher than Saturday's 357. An AQI value between 300 and 400 on a scale of 0 – 500 is considered as 'very poor'.

"An anti-cyclonic circulation is likely to form from Wednesday night. South-easterly winds are likely to gush in. As a result, wind speed would drop and moisture levels would shoot up," said a senior official of the regional weather forecasting centre.

Over the past two days, Delhi benefitted from strong winds blowing at 15 km /hour. Winds help flush out the pollutants and the air quality improved from 'very poor' category to 'poor' category on Friday.

"Low wind speed and increasing moisture levels could result in a spike in pollution. While moisture trap the pollutants, the low velocity wind is not able to flush them out. As a result, pollutants accumulate," said D Saha, head of the air quality laboratory at CPCB.

Temperature

Met officials have forecast that there won't be any drastic change in temperature. On Monday morning, minimum temperature in was recorded at 6 degree Celsius with the maximum at 25 degree Celsius. India Meteorological Department has predicted moderate fog during the day.

New Agency ANI reported that a total of 39 trains, arriving in Delhi, were delayed, while four were rescheduled and 13 got cancelled. According to Delhi airport website, six flights were delayed on Monday.

On Sunday, the minimum temperature was 5.7 degrees Celsius, two degrees below the climatic normal. With a clear sky and lot of sunshine, the maximum temperature hovered around 25 degrees Celsius, which was five degrees higher than usual this time of the year.

Low wind speed and moisture could trigger foggy mornings and low visibility.

“Even though at present we are witnessing some shallow fog in the morning hours with visibility around 700-800m, there could be some moderate fog on Thursday because of these changes in the weather parameters. Visibility could drop to less than 500m,” Saha added.

A senior MeT official said that this, however, won’t affect flight schedules.“The anti-cyclonic circulation won’t last more than a day or two. We expect the winds to pick speed from Friday again,” said the Met official.

Tired of air pollution? This new device can turn pollutants into ink!

Date: 15-Jan-2018 Source: Financial Express.com

Good news for Delhi residents! A device that has the power to turn pollutants into ink. Yes, you read that right. Delhi people can heave a sigh of relief and expect the pollution levels to come down to normal levels soon. A startup known as the Chakr Innovation has recently tied up with the Delhi government and is testing the device that can convert air pollution from diesel generator sets to ink, according to Indian Express. The device which is being called as ‘Chakr Shield’ has a ‘chakr’ or circle that denotes the closing loop for black carbon. The device has the power to capture 90% of particulate matter emissions.

The device is currently being tested at the Indian Institute of Technology (IIT) Delhi and also at some factories in Gurgaon, Noida and Ghaziabad. Retrofitting the device to diesel engines is key, as they are one of the major sources of air pollution. Dhupar said that the device traps not just PM 2.5 particles, but particles as small as 0.3 micrometres in diametre, the report stated.

Chief technology officer, Amit Dhupar while talking of the device which is currently being tested said, “It uses a solion-based method and is one of a kind. It doesn’t cause an adverse impact on the environment. The captured pollutant — essentially black carbon — is processed and converted into ink and paint.” The Chakr Innovation is a Delhi based start up that was founded back in 2015 by three tech graduates — Dhupar, Kushagra Srivastava (22) and Prateek Sachan (22). They launched theit pilot project in 2016 and won the University of Chicago’s ‘Urban Labs

Innovation Challenge' in the same year. The University of Chicago's 'Urban Labs Innovation Challenge' is a partnership between the university and the Delhi government and it seeks to crowd-source local ideas to cut pollution in the capital.

Dhupar added, "This year, we are going to test the system at 25 different locations in Delhi. These tests will take place alongside 25 other sites where the device will not be present. Throughout the year, pollution levels in these locations will be compared. Our own monitors will check the air pollution levels continuously, while a third party will monitor the air in the area twice a month," as quoted by Indian Express. The report added that the device's performance will be the basis on which the Delhi government will decide on whether the technology deserves large-scale implementation.

We can't afford to ignore indoor air quality – our lives depend on it

Date: 16-Jan-2018 Source: The Conversation.com

We often talk about healthy living and quality of life but have you considered the quality of the air you breathe? Most of us spend up to 90% of our time indoors, according to many surveys. Add up the time you spend at home, in the office and on transport, and you will see how close this figure is for yourself.

The study of indoor air quality did not achieve any public prominence until the 1970s. This was brought on by the "Oil Shock" that rapidly pushed energy prices to unprecedented highs. The response from building managers in the United States and elsewhere was to reduce the fresh air entering a building and recirculate as much as possible to retain heat in winter and keep out heat in summer.

Sick building syndrome

These changes were made with minimal understanding of the effects on indoor air quality. Suddenly a new phenomenon emerged, "sick building syndrome".

The first indicator was that high levels of carbon dioxide (the most common of the bio-effluents) emitted by the occupants invoked a physiological response that made the air feel "hot and stuffy".

The second was a build-up of moisture, leading to condensation, particularly where that condensation occurred within wall cavities. This allowed mould to flourish unseen and undetected, until it made its presence felt by outbreaks of eye, nose, throat and skin irritations and eventually the smell from the emitted chemicals.

Volatile organic compounds

Unfortunately, the irritation and smell were generally attributed to chemical exposure and not to biological origins. This led to a four-decade-long obsession with volatile organic compounds (VOCs) and the emission of these chemicals into the indoor air. This was in part understandable because VOCs were also the main focus of environmental protection agencies at that time.

Apart from particularly aggressive chemicals like formaldehyde, emitted from resins in particle board and laminates, and the nitrogen dioxides from gas-fired cookers and heaters, most other VOCs have never been convincingly linked to health effects.

This is hardly surprising when you compare the occupational exposure limits for the same chemicals with their concentration in indoor air. The levels for safe workplace exposure are often 1,000 times higher. So why would we expect any effect in the home or office?

But headlines like “Is your carpet killing you?” are much sexier than “Please remember to open a window occasionally”.

Semi-volatile organic compounds

In the mid-2000s attention switched to semi-volatile organic compounds (SVOCs) as a result of the endocrine disruptor debate. Previously no-one had considered them in indoor air quality because it couldn’t be envisaged how a compound with such a low volatility could be inhaled in any significant quantities.

It has now been shown that dust settling on materials containing SVOCs (vinyl flooring and the like) absorbs the chemicals then is resuspended in the air, for us to inhale or ingest. The Bornehag study linked phthlates (chemicals widely used in plastics) absorbed on particulate matter to asthma.

The most ubiquitous SVOCs are the phthlate plasticisers. Laboratory and environmental studies in animals have provided strong indications that endocrine disruption is taking place. Human evidence is lacking at this stage. But human studies of other effects have shown stronger evidence.

A study in Bulgaria by Scandinavian researchers showed increasing rates of childhood asthma correlated to rising use of phthlates in the home. Given that most homes did not contain vinyl flooring or seat covering this was at first confusing. But interviews with the households showed a big increase in use of a particular cleaning product that contained phthlate, presumably to rejuvenate vinyl surfaces.

You can open a window, but what if it’s worse outside?

Our traditional way to improve poor indoor air quality is to increase ventilation to purge the contaminants. This works well for volatile organic chemicals and bio-effluents like CO2 and odours, and also works well in suppressing the SVOC-laden dust.

But what do you do when the outside air quality is worse than the inside air? This had long been a problem in inner-city areas before the era of environmental legislation. Later, with the rise of the use of diesel engines for motor vehicles, a new category of pollution has emerged – ultra-fine particle (UFP) pollution. Other sources are bushfire smoke from activities such as land clearing in South East Asia and bushfire mitigation activities in southern Australia and grass pollens, which can result in "thunderstorm asthma".

In these cases the pollution is coming indoors from outside, as opposed to the traditional indoor air quality problem of pollution being inside and trying to get it out.

While the technology exists to reduce ultra-fine particles coming indoors, it is expensive and not well known. We should be developing this technology as a required standard for buildings like hospitals, because this is where asthma suffers seek shelter and treatment during such events.

My mantra has always been that I can fix any indoor air quality problem with enough clean, fresh air. This is still true, but that clean air is getting harder to find.

ROK to help Mongolia with combating air pollution

Date: 17-Jan-2018 Source: Xinhua Net.com

The government of the Republic of Korea (ROK) is willing to support Mongolia on combating air pollution in its capital city, the Mongolian government press office said Tuesday.

The ROK's Prime Minister Lee Nak-yeon expressed the desire during talks with visiting Mongolian counterpart Ukhnaa Hurelsukh.

After the meeting, the two leaders witnessed the signing ceremony of bilateral relations and cooperation documents.

The ROK government will grant a soft loan worth 500 million U.S. dollars within the framework of Extended Fund Facility arrangement with the International Monetary Fund. The loan must be repaid over a 30-year period with a 10-year grace period and an interest rate of 0.2 percent.

According to Hurelsukh, this money would be spent on reducing air pollution in Ulan Bator.

In addition, the two sides also agreed to work together to intensify cooperation in the labor sector in order to prepare skilled labor and job opportunities. Relations between Mongolia and

the ROK have constantly improved since the two countries established diplomatic relations in 1990.

Bilateral trade volume stood at 700 million dollars in 2017, with an increase of 1.4 percent.

Hurelsukh arrived for a three-day official visit to the ROK on Monday at an invitation of his ROK counterpart Lee Nak-yeon. This is Hurelsukh's first overseas trip since he took office in last October.

Unabating air pollution in Capital endangers public health

Date: 17-Jan-2018 Source: TheHimalayanTimes.com

KATHMANDU: Relentlessly increasing air pollution in Kathmandu Valley is proving to be a peril to the health of its inhabitants, calling government agencies to recognise the situation as a public health emergency.

The air quality of Kathmandu is deteriorating with each passing day and the city dwellers do not know when or whether they can expect any improvement in the quality of air they breathe. The situation is no longer just a general topic of conversation as it has started posing serious threats to the health of general public.

Major factors contributing to the risky levels of air pollution are harmful and uncontrolled emission from vehicles, increasing level of dust in the air caused by the seemingly unending road demolition-road construction cycle and Melamchi Drinking Water Project, emissions from industries, and smoke emitted from brick kilns, among others, as cited in a meeting held at the Office of the Prime Minister and Council of Ministers (OPMCM) on January 10.

The city is largely covered in smog, like a blanket of dust and smoke, especially during the dry season. This phenomenon further retains the pollution within the valley. According to a data released in The Guardian, Dr Andrew Lodge reports that the smog in Kathmandu is five times worse than the levels which prompted Paris to ban cars.

The magnitude of air pollution in the city has reached its level-high. As stated in the data provided by the US Embassy in its website, the Air Quality Index (AQI) monitoring of PM 2.5 at the premises of the embassy measured 162 at 1:00 pm today, which falls under the 'unhealthy' category that affects not only the sensitive groups – people with heart or lung disease, older adults, children and teenagers – but everyone.

Backing this data, the air quality monitoring of the Department of Environment placed at Ratnapark measures PM 2.5 at 109.51 as a running average in the past eight hours. The department states that air pollution has become a serious environmental concern and a public health risk.

"THE DUST WILL LINGER FOR LONGER SINCE NATURAL SINKS HAVE DISAPPEARED"

According to Watershed Practitioner and Climate Change Expert Madhukar Upadhya, air pollution is a very complex issue and it has reached its peak in Kathmandu. He expressed that vehicle emission is one of the primary causes of accelerating pollution of the city's air. The number of vehicles has uncontrollably multiplied in the valley, not just making the city congested, but its air unhealthy and unwholesome.

Adding to this is the thick layer of dust that is consuming the city air. Upadhya stressed the absolute need of 'natural sinks' like grasslands, ponds, and other greenery to absorb this dust. He shared that the city does not have such sinks any more. There are only concrete everywhere, which does not provide any place for the dust to land, and so the dust is always floating in the air.

"The dust is not going to settle after the Melamchi project is over," he said, "it is going to be there for a long time after because the natural sinks have disappeared."

Addressing the repercussion that the worsening air quality of Kathmandu is having on people's health, Upadhya said that breathing problems amongst people have increased drastically. Despite people using masks to shield themselves from the pollution, it is a challenge to escape the long term implication of this dire situation. It is harder still for the children for whom masks are ineffective. Likewise, the elderly population is severely affected.

"If we are not alert about the current level of air pollution, then we will reach a point of no return. By the time some policy is developed to counteract this situation, it might be too late," Upadhya told THT Online.

Upadhya also expressed that people tend to clean the smaller areas of their homes, forgetting the larger impact. So people – at an individual level – should also be aware and proactive in

keeping their larger environment clean, especially by growing plants and controlling concretisation in its literal sense.

As a climate change expert, he informed that the environmental problems caused by air pollution are mostly local. “We must start looking at environment with a very focused approach with ideas that are minutely analysed,” Upadhya suggested.

“A FUNDAMENTAL PARADIGM SHIFT IS NEEDED IN HOW WE VISUALISE OUR CITY”

Environment Expert Bhusan Tuladhar expressed that the country is getting worse by the day in terms of air pollution.

Tuladhar shared with THT Online that air pollution is especially high during winter. The reason behind this is pollution tends to remain closer to the ground during this season when the valley is covered in fog or clouds. The westerly wind toward mid-day tends to blow the pollution out to some extent.

Other than this, the burning of bricks in the kilns also takes place during the winter time. Similarly, the cold causes people to burn more firewood. They also have the tendency to burn garbage. All these contribute to making the air more polluted during the winter, which peaks in the month of January, informed Tuladhar.

He also shared an interesting notion that not just time, but space is also another determinant of air pollution. “When we are talking about emission from vehicles, the air pollution is high not just at a certain time but also in a certain place depending on the flow of vehicles.”

In context with vehicle emission, Tuladhar added that the dust laden air clogs up the air filter of the vehicles, affecting the engine, which in turn will worsen the vehicle emission.

Tuladhar added that as per the statistics of WHO, Kathmandu ranks 261st in the list of most polluted cities in the world that comprises of 3,000 cities, clearly indicating that we fall within the top 10 per cent of polluted cities, which in itself says a lot.

Some of the measures Tuladhar shared in managing air pollution and its implications, as concerned responsible citizens are tuning the vehicles well, management of waste, walking and cycling where possible, and voicing our concerns with the government authorities and concerned agencies.

“If possible, avoid the most polluted areas during the most polluted times of the day,” he added as a suggestion to the general public. Stating the importance of proper sidewalks and bicycle lanes in the city, having something more than a car-centred transport system, he said, “A fundamental paradigm shift is needed in how we visualise our city.”

Addressing the issue of implications of air pollution on public health, Tuladhar shared that unhealthy air negatively affects the respiratory system, which then hits the circulatory system of the human body giving rise to various heart and lungs diseases primarily. Then through the circulatory system, various other parts of the body get affected. In pregnant women, not just the mother, but the fetus is also adversely affected.

He also shared that WHO reported 9,943 deaths in Nepal due to air pollution, making it a major public health risk. He further added how this has a domino effect and influences the nation's productivity, thereby affecting the economy of the country.

This issue, however, is not an overnight or a current one. Persistent negligence on part of the state to address environmental concerns, especially as a threat to public health, has led us to this point. Partly, citizens' apprehension to voice their concerns can also be taken as a responsible factor behind an ever-deteriorating environment of the city.

The state's negligence is evident also in the fact that not much effort has been made in terms of scrutinising the effect of growing vehicles in the city. During auto-shows, thousands of bookings are made in advance and sales of vehicles during other times are rampant too. This is just a random instance of where the state could impose regulation in terms of controlling indiscriminate sales of vehicles. Not only does this add to an existing environmental concern, it further puts a huge question mark against the already complicated traffic management system in the city.

However, albeit late, the state has become alert and has started taking little steps to address this issue after mounting public pressure. This concern may now be confined to the capital and a few urban areas, but this will definitely expand if not brought into check.

Young activists and politicians too are taking these environmental concerns seriously, which definitely has not yet fallen in the 'priority-list' of most of our senior politicians.

THT Online will get back to its readers with further commentaries and suggestions of such environmental-activists and experts with more polished details in the next article, in an attempt to give continuity to the environmental-concern debate.

Concentration of small air pollution particles has risen by more than one-third

Date: 18-Jan-2018 Source: PhysicsWorld.com

Air pollution is a major global issue. In the city of London, for example, more than 9000 deaths each year are attributed to air pollution, with around 3500 of those associated with long-term exposure to PM2.5. Now a study has shown that globally PM2.5 concentrations have increased by more than one-third since 1960, and that the number of deaths attributable to long-term exposure to PM2.5 has increased by nearly 90%.

Pollution particles are inhaled deep into the lungs, with smaller particles (PM2.5) penetrating the furthest and having the most serious effect. Those exposed to higher levels of particulate pollution are more likely to suffer from respiratory and cardiovascular diseases, and have a shorter average life expectancy.

Today, nearly 90% of the global population lives in areas exceeding the World Health Organisation's air-quality guidelines for annual mean PM2.5. A number of studies have investigated the impact of present-day air pollution on health, but few have looked at how air pollution has affected health over the last few decades; a period where air quality changed rapidly.

To rectify this, Edward Butt from the University of Leeds, UK, and his colleagues used the HadGEM3-UKCA coupled chemistry-climate model, along with demographic and disease data, to estimate the changes in global and regional air pollution PM2.5 and the attributable health burden over the period 1960 to 2009.

The team found that global mean population-weighted PM2.5 concentrations increased by 38%, dominated by increases in China and India. The global attributable deaths from particulate pollution, meanwhile, rose by 89% to 124% over the same period, again dominated by large increases in China and India. These large increases were not only a result of regional growth in particulate air pollution levels, but were heavily influenced by rapid population growth and ageing.

"These changes resulted in significant increases in attributable deaths in China and India year-on-year because more people were being exposed to high levels of air pollution, which is further exacerbated by an ageing population, who are more vulnerable to the effects of particulate air pollution," said Butt.

In contrast, the study showed that air-quality regulation and emission controls in Europe and the US reduced air pollution PM2.5 concentrations over the same time period. There was a significant drop in the number of attributable deaths – by 65.7% for Europe and 47.9% in the US. In 1960 the US and Europe accounted for 27% of the global attributable deaths; this fell to around 1% by 2009.

Butt and his colleagues hope that understanding the changes in particulate air pollution deaths over the past few decades can help policy makers make sound decisions on future air quality policy. They also note that projected demographic changes in Asia will pose a challenge for policy makers aiming to reduce the total number of deaths due to particulate air pollution in the near future.

Alert For India: Even Brief Exposure To Air Pollution Can Be Deadly, Says Harvard Study

Date: 19-Jan-2018 Source: India Spend.com

India, where air pollution touched severe levels this winter, has more reasons to worry about the health hazard it poses to the elderly. Even short-term exposure to air pollution was seen to cause premature deaths among the elderly in the US–a country with tighter air quality standards than India–a new Harvard study has found.

In the US, even brief exposure to fine inhalable particles in the air, commonly referred to as PM 2.5, and ozone–at levels well below current national safety standards–were linked to higher risk of early death among the elderly, said the study by the Harvard TH Chan School of Public Health at Harvard University.

Studies have shown that PM 2.5–airborne particles 30 times finer than a human hair that can sicken or kill people by entering their lungs–and ozone, (particularly 'warm-season' emissions in summers) are linked with increased mortality rates.

"This (is) the most comprehensive study of short-term exposure to pollution and mortality to date," said Francesca Dominici, professor of biostatistics and senior author of the study. "We found that the mortality rate increases almost linearly as air pollution increases. Any level of air pollution, no matter how low, is harmful to human health."

The air quality standards used for the study are 35 micrograms per cubic metre of air (μg/m3) for PM 2.5 (24-hour average) and 70 parts per billion for ozone (8-hour average). These standards are set by the US Environmental Protection Agency (EPA).

Indian air quality standards are more lax–60 μg/m3 for PM 2.5 (24-hour average) and 100 parts per billion for ozone (8-hour average). This means that the health emergency caused by air pollution in many Indian cities is much more grave and demands greater attention.

What this means for Indian cities

"This finding has very strong relevance for Indian cities that are battling choking haze of pollution," said Anumita Roy Chowdhury, head of the air pollution programme and campaigns for clean air and public health at Centre for Science and Environment (CSE), an advocacy.

"We already know from the Global Burden of Disease estimates that most of the health effects occur at levels that are recorded at much lower than the national ambient air quality standards or levels that are largely recorded in our cities," she added.

In 2015, 2.5 million of 10.3 million deaths in India due to non-communicable diseases (NCDs) are linked to pollution making it the country with the highest number of pollution-related deaths, followed by China, IndiaSpend reported on January 3, 2018.

In 1990, NCDs accounted for 30.5% of disease burden, which has risen to 55.4% in 2016, according to the 2017 report India: Health Of Nation's States, by the Indian Council of Medical Research.

The situation is getting worse with industries like thermal power plants–one of India's chief polluters–ignoring the deadline and a 2015 law promulgated by the environment ministry to clean up, according to this IndiaSpend story from December 21, 2017.

In 2017's winter, the air pollution level in India was 15 times higher than the national standard. PM 2.5 crossed severe levels of 400 μg/m3 in many Indian cities, according to this IndiaSpend report from December 22, 2017.

Even small increase in pollutants can lead to deaths

Harvard researchers used prediction models to find accurate estimates of PM 2.5 and ozone for most of the US, including unmonitored areas, and linked the air pollution data with mortality data from the entire country. The study included the country's Medicare population–those enrolled in its social health insurance programme–residing in 39,182 zip codes (93% of the US), over a 13-year period from 2000-2012.

For each 10 μg/m3 daily increase in PM 2.5 and 10 parts per billion daily increase in warm-season ozone, the daily mortality rate increased by 1.05% and 0.51%, respectively. This means an increase of just 1 μg/m3 in daily PM 2.5 over the course of one summer in the US would lead to 550 more deaths per year–that is 7,150 over 13 years.

An increase of just 1 ppb in daily ozone over the summer would lead to 250 extra deaths per year or 3,250 extra deaths over 13 years.

Rajasthan doctor sounds warning on air pollution in state

Date: 20-Jan-2018 Source: The Weekend Leader.com

Rajasthan suffers the most in the matter of indoor and outdoor air pollution and COPD (Chronic Obstructive Pulmonary Diseases) due to such pollution account for most deaths in the state, former SMS Medical College Principal Dr Virendra Singh said on Saturday.

Dr Virendra Singh, Secretary of Indian Asthma Care Society, was speaking at 'Air-O-Thon', the Jaipur edition of the second series of an international summit, organised on the Malaviya National Institute of Technology (MNIT) campus here on indoor air pollution and air quality management.

The one-day event focused on indoor air quality in India and discussed health implications of such exposure.

Speaking on the occasion, Ashish Jain, Founder-Director of Indian Pollution Control Association, said: "Air-o-thon is a platform where various stakeholders share their knowledge, learning andexperience on indoor air quality and help break the myth about it, helping citizen of India to breathe easy."

Dr Nivedita Kaul, Assistant Professor, Department of Civil Engineering at MNIT, said: "The workshop was an effort to bring together the technical acumen of engineers and the expertise of eminent pulmonologists to put before society the concrete manner in which the growing challenge of indoor and air pollution can be addressed."

The event was organised by Prospurs Pte Ltd and IPCA, New Delhi, with the knowledge partnership of Society for Indoor Environment (SIE).

Eminent speakers included researchers and academicians from IPCA, SIE, Indian Institutes of Technology and National Institutes of Technology), government officials, medical officers from the SMS Medical College, regulators (state Pollution Control Board) and industry experts.

It was supported by organisations, including IIT-Bombay, IIT Madras, IIT-Delhi, and others which shared knowledge, experience, concerns, technologies and solutions to set up a momentum to fight air pollution. – IANS

Mumbai pollution check: Maximum city ranked 12th with moderate air quality

Date: 20-Jan-2018 Source: FreePressJournal.com

Mumbai: In a news that would cause huge embarrassment and at the same time raises concerns about environment, Navi Mumbai ranked third among Indian cities with satisfactory air quality in 2017, as per the latest report by the Central Pollution Control Board (CPCB), while Mumbai ranked 12th among the cities with moderate air quality. CPCB officials stated that air quality across Navi Mumbai and Mumbai has improved over the years. The first two positions with satisfactory air quality went to Thiruvananthapuram and Bengaluru.

The air quality report, which was released in Delhi on Thursday, featured the annual average of air quality index (AQI) across the cities. None of the tabled cities fell under the 'good' category. CPCB officials said the qualities in a city depend upon the weather conditions.

While Navi Mumbai recorded annual average AQI of 76 which positioned the city at number three, Mumbai's AQI stood at 107. The Maharashtra Pollution Control Board (MPCB) has attributed it to the strict regulations that have been imposed on the stone quarrying and industrial emissions. "Stone quarrying in the hills has significantly reduced in Navi Mumbai. Also most of the industrial units here have turned to cleaner fuels. All these factors have helped to some extent," said P. Anbalagan, member secretary, MPCB, reported The Asian Age.

While the MPCB stated that Mumbai's AQI was 'fairly good', an official said city roads still need improvement to curb down dust pollution. Although Mumbai ranked third in cities with 'moderate' AQI levels, data shows that the city needs to reduce the pollution by 100 per cent to enter the 'good' category (where the AQI is between one and 50).

This development doesn't come as a surprise as the financial capital of India has become toxic, polluted and dirty with influx of many factors responsible for the deteriorated air quality. Apart from Mumbai, five other cities in Maharashtra including Thane, Nagpur and Nashik fell under the moderate category. Apart from Navi Mumbai, Pune also fell under the good category in terms of annual average AQI.

Air pollution: India restricts use of imported petcoke in Delhi region

Date: 21-Jan-2018 Source: NewIndianExpress.com

NEW DELHI: India's environment ministry has placed restrictions on the use of imported petroleum coke in the capital Delhi and its surrounding region, in the latest effort to curb rising air pollution.

As the world's largest consumer of petcoke, India imports over half its annual petcoke consumption of about 27 million tonnes, mainly from the United States. Local producers include Indian Oil Corp, Reliance Industries and Bharat Petroleum Corp.

"Only consented and registered industrial units of NCR States shall be permitted to directly import pet coke and consignment shall be in the name of user industrial units for their own use," the ministry of environment, forest and climate change said in a notification issued late on Friday.

Cement plants and other industries approved to use petcoke in the region would also need to obtain permission from the state pollution control board to continue operations, it said.

The ministry has also banned imports of petroleum coke for trading purposes in the capital region, the notice said, adding that even industrial units allowed to use petcoke will not be allowed to store more than three months worth of their consumption.

India will also track the trade of the commodity, and has asked both sellers and consumers to submit monthly reports on petcoke-related transactions.

India is the world's biggest consumer of petroleum coke, which is a dark solid carbon material that emits 11 percent more greenhouse gases than coal, according to the Carnegie–Tsinghua Center for Global Policy.

India's government is in favour of imposing a wider ban on the import of petcoke, according to a government affidavit filed with its top court in December, a ruling on which is expected next month.

Cleaning Up Air Pollution May Strengthen Global Warming

Date: 22-Jan-2018 Source: ScientificAmerican.com

Pollution in the atmosphere is having an unexpected consequence, scientists say—it's helping to cool the climate, masking some of the global warming that's occurred so far.

That means efforts worldwide to clean up the air may cause an increase in warming, as well as other climate effects, as this pollution disappears.

New research is helping to quantify just how big that effect might be. A study published this month in the journal Geophysical Research Letters suggests that eliminating the human emission of aerosols—tiny, air-polluting particles often released by industrial activities—could result in additional global warming of anywhere from half a degree to 1 degree Celsius.

This would virtually ensure that the planet will warm beyond the most stringent climate targets outlined in the Paris climate agreement. World leaders have set an ambitious goal of keeping global temperatures within 1.5 to 2 degrees Celsius of their preindustrial levels. But research suggests the world has already warmed by about 1 degree—meaning even another half a degree of warming could push the planet into dangerous territory.

"Since we're trying to keep to a 1.5- or 2-degree target, then this is something we still need to keep in mind," said Bjørn Samset, a climate scientist at Norway's CICERO Center for International Climate Research and the study's lead author.

The research also suggests that removing aerosols could have striking regional consequences by causing major changes in precipitation and other weather patterns in certain parts of the world. Aerosols don't linger in the atmosphere for very long, meaning they don't have time to spread around the world the way carbon dioxide and some other greenhouse gases do. Their effects tend to be strongest in the regions where they were emitted in the first place.

This means the places where air pollution is most severe are likely to experience some of the greatest effects if that pollution were to disappear. East Asia, where aerosol emissions are some of the highest in the world, would be likely to experience a strong increase in precipitation and extreme weather events. To a certain extent, these effects might carry over to other parts of the Northern Hemisphere, which are connected to Asia via major atmospheric currents.

"We also see that the impact that these aerosols have on temperature in Asia really transports northwards to the Arctic region, northern Europe, Norway, the northern U.S.," Samset noted. "That part of the world is also quite sensitive to the changes in aerosols in Asia."

Scientists have long known that some types of pollution can actually help cool the climate. Certain aerosols—sulfate, for instance—can reflect sunlight away from the Earth or enhance sun-reflecting cloud cover. As nations around the world have begun to crack down on air pollution, scientists have grown interested in figuring out how much extra warming might be expected as they disappear. This is critical information for strategizing ways to meet global climate goals, like the 2-degree target.

The new study relied on four global climate models, which the researchers used to simulate the effects of removing all human-caused emissions of the major aerosols, including sulfate and carbon-based particles like soot. The resulting global warming, they concluded, would be anywhere from 0.5 to 1.1 degrees Celsius.

These results are in line with other studies that have investigated the cooling "mask" of aerosols. A 2016 paper published in Nature Geoscience found that up to a half-degree Celsius of the warming that has been observed in the Arctic—the most rapidly warming region on the planet—since 1980 was caused by pollution reductions in Europe. Like the new study, those findings speak to both the considerable cooling effect aerosols have had on the climate and to the atmospheric linkages between different regions of the Northern Hemisphere.

Other research has also supported the idea that aerosols have influenced global temperatures as a whole. Another 2016 paper, also published in Nature Geoscience, suggested that about a third of all the warming that occurred over land areas over the past 50 years was masked—temporarily covered up, in other words—by aerosol pollution.

Collectively, the research indicates that greenhouse gas emissions have had an even greater effect on the climate so far than it appears—it's just that part of it has been obscured by the presence of air pollution. As the air gets cleaner, those masked effects will start to make themselves known.

The new study demonstrates how much extra warming might be expected if all those aerosol emissions suddenly stopped—but it can't predict how long it might take the world to get to that point.

Many nations, including the United States, have made significant strides in cutting down on air pollution—often for health-related reasons—over the last few decades, and other countries are stepping up their efforts now, as well. Additionally, global efforts to cut down on greenhouse gases are likely to have a spillover effect on aerosols, because air pollution is often a byproduct of the same industrial sources that produce carbon emissions. Reducing one type of emission can help cut down on the other.

So it's likely that aerosols will continue to decline in the atmosphere. At what point they'll disappear entirely—which is where that 0.5 to 1.1 degrees of warming would reach its full potential—is another question.

Some scientists have already pushed for caution when interpreting the new study's results.

"While aerosols are linked to many of the activities related to CO2 emissions (coal burning, deforestation), there is not a one-to-one correspondence," noted climatologist Gavin Schmidt, director of NASA's Goddard Institute for Space Studies, in a Twitter thread commenting on the new research. "You cannot assume that net zero CO2 emissions must also imply zero anthropogenic aerosol emissions."

As a result, he added, it's important to note that anthropogenic aerosols "will not suddenly disappear and make global warming much worse."

Still, other scientists say the new research lends support to the idea that current global goals—particularly the 1.5-degree target—are now almost certain to be overshot, even if the timing is uncertain.

In his own Twitter comment, researcher Glen Peters (also of CICERO, although he is not an author on the new study) suggested that meeting the 1.5-degree target is only possible with the help of geoengineering—using technology to bring global temperature back down below a certain threshold.

In fact, one major proposed form of geoengineering involves using aerosols to cool the climate—although ideally a form that's not hazardous to human health. Other ideas include drawing carbon dioxide back out of the atmosphere. So far, none of the proposals are anywhere near developed enough to be considered a viable global solution—but some scientists suggest that they deserve more research, and quickly.

For now, Samset said, he hopes the new study can help "inform the next generation of climate scenarios."

The Intergovernmental Panel on Climate Change has established a number of possible future climate trajectories, assuming different levels of climate mitigation efforts and greenhouse gas emissions. It has accounted for future aerosol reductions in all of these scenarios, Samset noted, but with very little variation in the amount of reduction assumed.

Because it's still uncertain exactly how quickly aerosol emissions will decline in the future, some scientists believe a greater variety of possible scenarios should be investigated.

"I think we need to have more variety in those projections, since even matching up the real world today with the emissions projections from 2000 that we used last time shows a significant mismatch," said Schmidt, the NASA scientist (who was not involved with the new research), in an email to E&E News.

What remains clear, though, is that the full extent of human-caused global warming is still revealing itself—and the future may be more severe than the past would seem to suggest.

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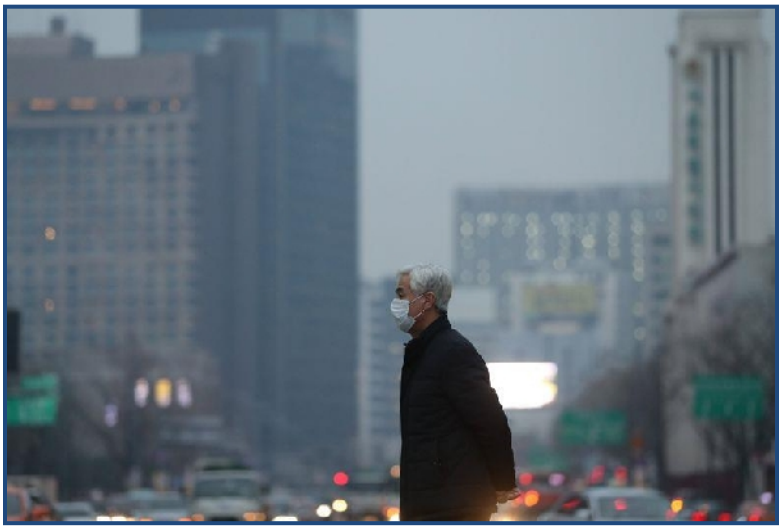
Foreigners in South Korea unsure how to respond to dangerous air pollution

Date: 22-Jan-2018 Source: StraitsTimes.com



SEOUL (THE KOREA HERALD/ASIA NEWS NETWORK) - When Seoul waived public transportation fees last week as part of anti-pollution emergency measures, Mike Hugo, a 31-year-old foreign resident who has been working in South Korea since 2009, also received an "important notification" via text message; only he couldn't read Korean.

"I received notifications of emergency situations on Jan 14, 16 and 17. Of course the messages were in Korean. I had to copy and paste the messages into the Papago app to confirm that it was about fine dust and free public transport, although I'm unsure how it works," Hugo told The Korea Herald.

Hugo said foreign residents here post to local Facebook groups asking what the messages say whenever cities or state official notifications are sent out, including a message last November about the Pohang earthquake, the second-strongest quake ever recorded here that left more than 1,500 homeless.

"I think the air pollution in the last few years has become heavier and heavier on people's minds, including for foreign residents. People ask about the security situation with North Korea, but I haven't known anybody who decided to leave Korea based on that, but quite a few leaving or thinking of leaving because of the worsening air quality, even some who had been here more than a decade," Hugo added.

Amid worsening air quality, the Seoul Metropolitan Government activated the city's free public transport program three times last week, along with other measures including a mandatory alternate no-driving program in the public sector on days when the daily density average of particulate matter exceeds 50 micrometres per cubic metre for two consecutive days.

But in the capital city, home to nearly one-third of 2 million residents who came from abroad, foreign residents cry foul over the lack of emergency information available in English in the event of natural disasters.

Many foreign residents use real-time air quality index site aqicn.org to find out about the level of air pollution instead of relying on government-provided data because they feel they are on their own, according to another long-term foreign resident of Seoul.

"Some foreigners are very bothered indeed. Particularly parents and people who have been here long-term," said the man who wished to remain anonymous.

"They are angry because the government seems to continually understate how bad it is. And because of lack of information for foreigners on air pollution, many wrongly believe the Moon Jae In government blamed China unduly (for causing air pollution) when it's really South Korea's fault. Many think it is all coal power plants because Greenpeace told them, when it isn't really."

Currently, foreigners whose mobile phones are not registered to local mobile carriers should download the "Emergency Ready App" on their phones in order to receive real-time natural disaster alerts in English.

An official from the Ministry of the Interior and Safety that sends out the emergency notification messages across the country blames "too many technical barriers" for preventing the service from being provided for foreign residents and visitors here.

"We need to figure out how to send massages to cellphones that use foreign mobile carriers," the official said.

Ask A Scientist: What Are Iceland's Top Sources Of Air Pollution?

Date: 23-Jan-2018 Source: Grapevine

When you step out of Keflavik Airport, one of the first things you notice is the fresh air. With a small population and lots of renewable energy sources, Iceland has been able to protect its air quality. However, are there any air pollutants that we should be worried about? We asked Þorsteinn Jóhannsson from The Environment Agency of Iceland.

"Emission of air pollutants in Iceland were compiled into a report that was prepared in accordance with the Convention on Long-Range Transboundary Air Pollution (CLRTAP)," he says. "It was adopted in 1979 and came into force in 1983."

"Firstly, significant amounts of sulphur as hydrogen sulfide (H2S) are emitted from geothermal power plants," Þorsteinn continues. "Secondly, 89% of the fuel used in the energy sector is used by mobile sources (transport, mobile machinery and fishing vessels). Thirdly, emissions from industrial processes, especially from nonferrous metal production, have a higher share in Iceland than in most other countries. This can be seen in the fact that around 75% of the electricity produced in Iceland in 2015 was used in the metal production industry."

The emissions profile for Iceland is unusual in some respects, says Þorsteinn. "Emissions from generation of electricity and space heating are very low, due to renewable energy sources," he says. "Almost all electricity in Iceland is produced with hydropower (approximately 70% in 2015) and geothermal power (approximately 30% in 2015), with wind power and fossil fuel-derived power accounting for less than 0.1%. Furthermore, geothermal energy sources are used for space heating (in over 90% of all homes)."

Mayors Of The World's Major Cities Speak Out About Air Pollution

Date: 23-Jan-2018 Source: HuffingtonPost.in

In cities and towns around the world, car exhaust, coal-burning stoves, factories and farms are among the causes that add to the urgent problem of air pollution — a risk to public health that research shows is linked to around one in six deaths globally. As part of a new series, mayors from some of the world's major

metropolises told HuffPost about the unique challenges of reducing smog, soot and other pollutants that threaten the safety of their cities, calling on everyone to do more to protect the air we breathe.

Although the challenges are immense, the mayors argue that there's no time to waste. As major cities have become frontline spaces in the fight against climate change and air pollution, mayors and city officials have become some of the most prominent advocates for environmental protections.

"We know we have a lot more to do. It's going to take a lot of resources. It's going to take public education. It's going to take community organizing. But this is the way of the future if we're going to save our Earth," said New York Mayor Bill de Blasio.

The growing research highlighting the deadly and debilitating risks of living with air pollution has spurred many city leaders around the world to launch initiatives and push for new laws to reduce dangerous emissions.

Breathing in air pollutants can lead to heart disease, respiratory problems, stroke and a range of other fatal illnesses, as well as greatly reduce the quality of life for people living without clean air. Air pollution is linked to millions of premature deaths each year, according to the World Health Organization, including tens of thousands in the United States alone.

"The battle against climate change is a challenge that concerns every one of us: It is a matter of public health and preservation of the planet," said Manuela Carmena, the mayor of Madrid.

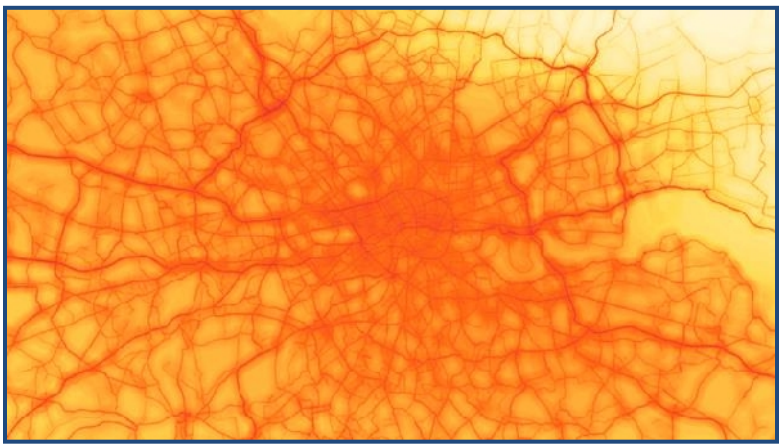
It's a problem that especially hurts the world's most vulnerable groups, including children in developing countries like Bangladesh and Somalia, where air pollution is linked to over one in four deaths. But air pollution is also a universal issue that every country must address as an environmental and public health risk, and in recent years scenes like the Eiffel Tower being shrouded in smog have shown that no city is immune to its effects.

"In London – one of the richest and most well-resourced cities on earth – it's shameful this problem has been ignored for so long," said London's Mayor Sadiq Khan. "It is a scandal that air pollution claims the lives of thousands every year and that children have been allowed to grow up in our capital with stunted lungs, while no meaningful action has been taken to safeguard their health."

Together, the mayors featured in HuffPost's series are calling for a wide range of measures to address the problem of air pollution, an issue which they argue can only be tackled through collective action.

Can You Truly Escape Air Pollution?

Date: 23-Jan-2018 Source: HuffingtonPost.co.uk



In 2017, London broke its total annual air pollution limit just five days into the year.

To put that into some context, European Union rules - and UK law - state that monitoring stations are allowed to exceed hourly limits of 200 micrograms of NO2 [nitrogen dioxide] per cubic metre of air just 18 times in a year.

Brixton Road in Lambeth, the South London district that broke the limit, exceeded this hourly limit 19 times throughout the day hitting a peak reading of 347.7 micrograms.

The city is expected to break its annual limit for 2018 in the first half of January, according to the mayor's office.

World Health Organisation figures from 2016 reveal that a staggering 92% of the world's population are living in areas that exceed its own guidelines on air quality.

If you happen to live in a major city, the answer may appear to be moving out to less populated areas. But the solution is not that simple.

What is air pollution?

Air pollution is best understood when it is split into two groups: noxious gasses and particles, according to Boris Quennehen, an atmospheric scientist for the French clean air start up Plume Labs.

The two most dangerous of these gasses is nitrogen dioxide (NO2) and ozone. They're not the only gasses created through pollution (carbon monoxide and sulphur dioxide are also created) but they are the easiest to measure and are often used as the benchmark for air quality.

"NO2 is emitted by any combustion source, so it could be a car engine or a fireplace in your home. Essentially, it's anything that burns solid fuels," he explains.

Nitrogen dioxide essentially inflames the lining of the lung and in turn reduces immunity to lung infections such as bronchitis.

The second is ozone. Traditionally known to many of us through the protective ozone layer around the planet, this gas is actually extremely harmful to us down on ground level.

Ground level ozone is created when nitrous oxides and volatile organic compounds (VOC) react with sunlight. According to the London Air Quality network, ozone "can irritate and inflame the lungs. It can also irritate the eyes, nose and throat, which can lead to cough and chest discomfort."

While NO2 is found traditionally in urban centres originating from heavy traffic sources, ozone is most commonly found in rural areas or suburbs.

Next up are particles. These are tiny bits of solids or liquids which are created through a huge range of different man made activities.

Unlike ozone, particles can very much exist alongside the harmful gas NO2.

"The sources of particles are actually quite similar to those of NO2, namely combustion processes." says Quennehen. "You can also find particles being created mechanically - so when a train brakes for instance, or when a car rides on the road. How? Tiny particles are created when tyres roll over the road."

It is the size of particles, not the type, that causes concern.

Most large particles are actually prevented from entering our bodies through the nose and throat, however particles that are smaller than 10 micrometers (PM10), or 2.5 micrometers (PM2.5) can actually settle in the airways or even deep within the lungs.

Connecting air pollution to actual mortality rates has proven incredibly difficult, as doing would involve a complex process of pairing causes of death with environmental factors.

Despite that, governing bodies have been able to make some startling discoveries about the long-term impacts of air pollution on our health. The Royal College of Physicians' report 'Every breath we take: the lifelong impact of air pollution', reveals that each year some 40,000 deaths in the UK are attributable to exposure from outdoor air pollution.

The report also estimated that air pollution costs the UK a staggering £20bn every single year.

How does air pollution behave?

The seasons and the weather have a direct impact on air pollution levels.

“When you speak about air quality you need to speak about meteorology as well,” explains Quennehen. “Two days randomly chosen can produce drastically different air quality levels, and that would be thanks solely to meteorological conditions.”

“When we speak about transporting pollution, it’s almost exclusively in reference to particles,” he adds.

For example windy temperate days will often disperse particles over large distances, reducing their effect but spreading it out over a larger area so overall you’ll see an increase in air quality. Alternatively a cold non-windy day will create a heat layer that traps particles and gasses at ground level which means that while pollution won’t be spread out over large distances, the levels at source (e.g. busy roads) will spike enormously.

So imagine you’re on that busy road, during a cold day. What’s happening to the air pollution around you? Using the example of fumes from a car exhaust, Quennehen explains that NO2 and particles can both dissipate quickly from their source, and in turn can reduce their danger to your body.

“It’s like when you put a piece of sugar in your coffee. The sugar is very concentrated to start with. However when you mix your coffee it becomes sweet everywhere but, much less so than just the pure piece of sugar that you started off with.” he explains.

The result of this is that both forms of pollution can, under normal conditions, remain extremely close to their source, producing the vein-like imagery that you can see above.

Particles, much like NO2 will dissipate quickly once released from their source, however unlike NO2 they are far more susceptible to other weather conditions such as rain or wind.

“Their sizes really suit the atmosphere so they can stay within it for several days and then if there’s any amount of wind they can be transported over large distances.”

Yet take away the wind and provide a considerable amount of rain and the particles will almost immediately stick to the ground.

The seasons also play a major role. It was no coincidence that London broke its air quality standards last January.

“In the winter it is colder so you turn on your heater and you burn more fossil fuel, you burn more wood in your fireplace, so you increase the NO2 and particulate emissions,” he explains.

“Then there are specific meteorological conditions which mostly occurs when it’s cold outside.”

Quennehen is referring to a phenomenon known as the inversion layer. This takes place when cold air is effectively sandwiched down at ground level by a warmer higher layer of air above it.

“Due to the pollutants that are then concentrated within the ground layer and it can lead to dramatic pollution levels during this event,” he explains.

A perfect example of this is a piece of imagery taken by Plume Labs of London during the middle of the night in mid-January last year. Despite being 1am, the pollution levels have drastically spiked, a result of the inversion layer.

Move along to Spring and there’s another shock courtesy of Dr Gary Fuller, Kings College London.

“Each Spring you’ll get those headlines where Paris has to bring about emergency measures to control its air pollution, we have similar concentrations in London.” he explains.

“It is at these times the whole of Western Europe experiences some really severe air pollution problems and these are caused partly through the pollution we emit but also caused by pollution from agriculture and farming.”

“The fertiliser that’s applied to fields and the manure that is stored up over winter and is then spread on land in the springtime causes releases of ammonia, and this reacts with air pollution from industry and traffic to form these particle episodes that extend over hundreds and hundreds of kilometres.”

Summer generally brings a spike in rural ozone explains Quennehen.

Here, a simple animation shows how over 24 hours ozone can spike in the rural parts of South West England as the sunlight reacts with the oxides blown westward from urban centres like London. With such high levels of sunlight, the spike is not only large in concentration, but in size as well.

Of course it’s not always so simple.

“During summer you can actually see ozone peaking in urban areas between the two commute peaks. You usually have an increase in ozone during those periods and if you are in a situation where you have an inversion layer (which can happen during heatwaves) you can end up with very huge amounts of ozone within the cities as well.”

Autumn, as air pollution goes, is probably “the best time of year” according to Fuller.

How to escape air pollution?

While cities like London and Paris are fortunate enough to have huge governmental and academic partnerships like the London Air Quality Network, not every city or town is as lucky.

It's also clear that living in the countryside isn't the safe haven many of us thought it would be. Spikes in ozone during the Summer combined with the huge agricultural pollution spikes during the Spring show that the countryside is equally in the firing line.

For everyone though there are small, surprising changes that you can make on a day-to-day basis that could drastically reduce the effect it has on your body.

"You can reduce your exposure to air pollution by choosing your route differently," explains Dr Fuller. "Like if you walk down a back street (and this depends on the circumstances) or through a park rather than along a main road then you could probably, roughly, halve your exposure to some of the traffic pollution."

That's a huge difference and as Quennehen points out, even those forced onto certain routes can make a difference to their exposure simply by walking a "few metres" further away from the source of pollution such as a main street.

Exercising at specific times in the day can help, mornings or late evenings when localised pollution has generally settled down while keeping abreast of the local weather. But that shouldn't always be a message that walking outside in a city is unhealthy, says London-based charity Living Streets.

"We'd want to be careful not to scare people into thinking they're unsafe walking, especially when the best way to reduce air pollution is for people to walk more," the group says.

"There's a myth that you're more protected in the car but that isn't true and when you walk or cycle you get the additional health benefits of active travel."

Another change we can make presented itself after experts saw a shocking rise in one particular type of air pollution throughout the UK and particularly London.

"One thing that has crept in under the radar is wood burning," says Fuller. "If you go back to the 1950s and 60s it was acknowledged that London had a solid fuel air pollution problem but then we thought that had gone away. However the return to home wood burning that we've seen since the turn of the century is really making quite an impact in London."

According to Fuller, during a typical January in London some 10% of the particle pollution you'd be breathing will have come from wood burning. With an estimated 1.5m stoves in the UK, this

is something that can easily and quickly be reduced through using them less or even scrapping them entirely.

While we can all make these changes ourselves, Dr Fuller argues that there's a far bigger question to be asked here.

"There's a sort of ethical question here which is why should you change your behaviour by walking along a side road or a back street," he says.

"We should really be focusing the solutions not on the victims but on the emitters, a polluter pays approach. Now I'm not saying people shouldn't avoid air pollution where they can but that can't be the main reason, we have to be tackling pollution at the main source."

Exposure To Air Pollution Before Birth Could Be Affecting The DNA Of Newborn Babies

Date: 24-Jan-2018 Source: IFLScience.com

Air pollution is responsible for 5.5 million of the 9 million deaths caused by pollution every year, making it the main cause of death by pollution in the world. Now, researchers have begun to understand the terrible effects air pollution is having on babies exposed to it in the womb.

The latest research, published in Environment International, looked at the DNA in umbilical cord blood from newborn babies born in Tongliang, China, before and after a coal-burning power plant was closed in 2004. Several findings suggest that the pollution has affected the children's DNA.

The team observed that babies born before the plant was shut down had shorter telomeres than those born afterward. Telomeres are a specialized section of DNA that allows chromosomes to be copied faithfully. After each copy, during cell division, the telomeres get shorter. Eventually, the shortened telomeres lead the copies to be less faithful and this has been linked to aging, cancer, heart disease, cognitive decline, and even premature death.

The team confirmed that the shorter telomeres observed in those born before the coal plant shut down are associated with the presences of polycyclic aromatic hydrocarbons, a toxic component of air pollution from coal plants, and that they also led to a lower level of brain-derived neurotrophic factor, a protein involved in neuronal growth.

"An individual's telomere length at birth is known to influence their risk for disease decades later during adulthood," co-author Professor Deliang Tang, from Columbia Univerisity's Mailman School of Public Health, said in a statement. However, "Further follow-up is needed to assess the role telomere length plays in health outcomes in the context of early life exposure to air pollution."

Out of the 255 children tested at birth in the study (half born before, and half after the shutdown), 210 were tested again at age 2 to check if the telomeres length was associated with neurodevelopment issues. They did not find any link, though this doesn't exclude telomere length-associated development issues at a later age.

"The new study adds to the evidence that closing this coal-burning power plant was beneficial to the health and future well-being of newborns there," said lead author Professor Frederica Perera, director of the Columbia Center for Children's Environmental Health and professor of Environmental Health Sciences at the Mailman School of Public Health. "Moreover, we know that lowering exposure to air pollution anywhere will be beneficial to children's health and long-term potential."

The role of coal power plants in producing toxic fumes is undeniable and it is important to tackle this environmental danger to safeguard our health and the health of future generations.

Better data needed to monitor the impact of air pollution on health and climate

Date: 24-Jan-2018 Source: IFLScience.com

As debates rage about the growing threat of poor air quality to human health, scientists still lack enough of the right data to help governments accurately model and mitigate air pollution and its effects, according to a new study published in the Journal of the Air and Waste Management Association.

To help policymakers make better, more informed decisions, there is an urgent need for more detailed information about the location and timing of pollutant emissions. Current data gaps are leading to large uncertainty in emission figures (of up to 50%).

In 2015, air pollution contributed to 6.5 million deaths worldwide from diseases such as heart disease, stroke, and lung cancer. In this new analysis, environmental scientists review the methods that are being used to model pollutant emissions around the world.

3D atmospheric chemistry transport models are crucial tools for assessing regional and local air quality, and play a vital role in linking global and regional emission data to health and climate. However, the reliability and usefulness of these models depend on the accuracy and quality of information about how, where, and when pollutants are emitted into the atmosphere from human activities and natural sources.

Most current emission inventories only provide annual emission totals based on national estimates, and do not report spatial (location) and time trends with the precision, accuracy, and resolution needed to improve air quality models results. While regional inventories capture more detailed information, these data do not exist in several regions including Africa and South America.

In recent years, new methods have been developed to provide a better understanding of spatial and timing variations for some emission sectors. For example, studies of ammonia emissions (which derive mostly from livestock waste and nitrogen fertilizers) have considered type of animal housing, timing of fertiliser application, and meteorological conditions (e.g. temperature, wind speed) to reveal large discrepancies with global inventories.

The researchers believe that there is also potential to improve emission estimates by exploiting big data gathered from information technologies in most areas of daily life--for example, tapping into large data sources already collected by authorities and companies like Google, such as road traffic flow or satellite observations on land use and plant growth. Armed with this data, they say, it may be possible to refine estimates of emissions to get a more accurate picture of what is going on, and improve our pollution forecasts.

Lead author Dr Volker Matthias from Helmholtz-Zentrum Geesthacht in Germany emphasises that emission reports must be updated more frequently and include more detail: "In a world where emission patterns are changing rapidly, it is crucial to use new types of statistical and observational data to create detailed emission data sets and keep inventories up-to-date."

Indoor Air Pollution: What's Inside My Living Room?

Date: 25-Jan-2018 Source: The HuffingtonPost.in

When you think about the phrase air pollution it's easy to immediately associate it with smog-filled cities, vast traffic jams and power plants pouring out harmful gases.

Yet there is another side to this global problem that we currently face and that is indoor air pollution.

Trapping not only the gases outside but also additional gases and particles that we create in our own homes, indoor air pollution is increasingly warranting more and more attention from both academics and the general public.

In order try and understand why it's becoming more and more of a health concern, we set out to discover what was actually floating inside our houses, where it came from and whether or not it could be considered a health risk.

To do this, Dyson agreed to send us one of their Pure Cool Link air purifiers which sucks in the air around it, filters it using both a HEPA and activated carbon filter and then pumps clean air back into the room.

The purifier was then used for a period of around 12 months at the end of which we sent the filter to Dyson who analysed it themselves and then sent it off for independent testing.

The Results

After a month of testing we got the results back, revealing the sheer breadth of gases and particles floating around our homes.

Now individually, many of these compounds were found in extremely low levels, but when combined together and inhaled over a long period of time we know that this can have a detrimental affect on our health.

We know that particle sources like benzene and formaldehyde can cause dizziness, asthma or allergies when inhaled in large quantities. We also know that hydrocarbons from cooking oil can irritate the mucous membranes of the eyes, nose and throat while also causing headaches.

When all combined they target, in particular, those with long-term respiratory conditions, heart disease and asthma, making their symptoms considerably worse.

The Solution

Speaking to Sarah MacFadyen, Head of Policy at the British Lung Foundation there are small but important changes that we can make to lessen these effects.

These include: Keeping rooms well ventilated (even with the outdoors) when using products like hairspray, making sure that on low pollution days you keep fresh air cycling through into the property, using liquid surface cleaners (not spray cleaners) to reduce how much they enter the air and finally burning solid fuels such as wood burning stoves less or giving them up entirely.

In addition there has also been research that shows buying certain types of plants such as bromeliads can also lessen the effects of certain particles like benzene and formaldehyde and that yes, air purifiers can also scrub out many of the particles and gases that would otherwise be entering our bodies

Air pollution linked to 'extremely high mortality' in people with mental disorders

Date: 26-Jan-2018 Source: The Guardian.com

The risk of death for people with mental and behavioural disorders rises sharply on days when air pollution reaches toxic peaks, a major study in Hong Kong has found.

Researchers analysed a decade of death statistics and revealed a strong link, with the mortality risk rising 16% on the first day of haze and 27% on the second day compared to normal days. If the haze was accompanied by high ozone pollution, the risk of death increased by 79%.

The new research tallies with other recent work that has found links between short-term increases in air pollution and suicides. However, scientists do not yet understand how air pollution may cause these effects and they are urging more research, as well as immediate help for those at risk.

“First of all we need more support to those high-risk groups,” said Lin Yang, at Hong Kong Polytechnic University and one of the research team. “Currently we have a lot of social workers to give support to people with mental disorders. But they probably need to pay attention to the fact that haze events could be a trigger for acute onset of symptoms.”

“Of course, as a priority, what governments need to do is control air pollution. That is the best way to eradicate the problem – from the source,” she said.

Prof Jonathan Grigg, at Queen Mary University of London in the UK and not part of the research team, said: “The association between poor air quality and mortality due to mental and behavioural disorders reported in this study is very disturbing.”

The Hong Kong research, published in the journal Environment International, is the first to analyse the link of haze days and risk of death. Haze days are those on which pollutants gather in the air and cut visibility, usually dry days with low winds. In the study period from 2007 to 2014, there were 111 haze days when particle pollution was on average twice as high.

The scientists examined more than 284,000 deaths, including those among people with mental and behavioural disorders including depression, bipolar, schizophrenia and dementia.

“Although a hazy day generally has 2.9% higher risk [of death] than a day without haze, a very intense adverse effect is found on the mortality associated with mental and behaviour disorders,” the researchers reported. “A combined influence of haze, extreme weather/air quality and urban environment can result in extremely high mortality.”

“From the mechanism point of view, for now, we don’t have very solid evidence or hypotheses,” said Yang. But she said earlier work may provide clues: “Haze days are very likely to trigger an acute depression response in people. This has been shown in surveys in 2013 in Indonesia, where there was a big disaster of haze from forest fires.”

Lin also said laboratory studies on mice show that small particles of air pollution can reach the brain and affect mental development. A study published in 2016 found toxic nanoparticles from air pollution in human brains in “abundant” quantities.

Sophie Neuburg, at the public health charity Medact, said: “The new report’s findings of an increase in mortality associated with mental and behavioural disorders on high-pollution days is extremely worrying. This is a sign that air pollution may be even more dangerous for human health than we currently understand.” She said the UK’s air is illegally polluted in most urban areas and that current policies to deal with it are “inadequate”.

The Hong Kong study did not specifically analyse suicides but Grigg said: “Although we do not yet understand how pollutants inhaled into the lung affect cognitive function, these new

findings from Asia are compatible with a recent Belgian study, which reported an association between short-term increases in air pollution and suicide."

That work examined over 20,000 suicide deaths recorded between 2002 and 2011 and was published in June 2017. The scientists reported: "[Short-term] increases in outdoor air pollutants such as particles or ozone can trigger suicide, particularly during warm periods, even at concentrations below the European thresholds."

A series of other studies published since 2015 have also suggested links between suicides and air pollution. In Salt Lake City, Utah, US, increases in suicides correlated with higher particulates and nitrogen dioxide (NO2) in some seasons, while in South Korea ozone was also implicated.

In Tokyo, Japan, scientists found elevated suicide risk among under-30s was linked to NO2 and in Guangzhou, China, sulphur dioxide also showed a correlation. However, some scientists have urged caution, saying that collecting comprehensive data on suicides is difficult and that both air pollution and suicides can vary with other factors, such as time of day.

Air pollution from a different viewpoint: 'Cars need clean air'

Date: 27-Jan-2018 Source: The TehranTimes.com

The governments sure have the biggest part in addressing the air pollution, but the public should also do their part, however small, to help the current situation.

Among the public, celebrities and artist can have a more instrumental role in attracting public attention to what they can do to mitigate such environmental challenges to some extent.

Masoud Nikdel, 37, is a designer, sculptor, and lecturer who is primarily concerned with the environment and voices his concerns with his radical performances.

Nikdel resolutely tries to make people aware of the environmental damages people are causing either intentionally or unintentionally. The "crisis experience" is one of his most remembered performances in 2015. In an attempt to show his concerns over water crisis, sympathize with

the Earth and caution the public against what is happening to it Nikdel covered himself in mud and sat motionless on the stairways of Milad Tower, Tehran, for three straight hours.

“Out of sight but alongside” was performed in January 2016. He tied some trash, mostly empty bottles, to himself using ropes and dragged them while walking on the streets of the capital intending to warn people how the trash we produce does not vanish off the face of the earth but merely hides in the landfill and finally drags down our poor and helpless environment.

In another performance he gave in the same year called “my city is my clothes” while walking in the streets he gradually filled his white clothes, covered with a plastic layer, with cigarette butts thrown away on the street to convey a message to the people: “What I’m wearing is a part of my city. My city is my clothes.”

His last but one performance, what he himself calls “not brutal, but foolish”, was staged at a breakwater in Anzali lagoon, northern Iran, in September 2017. He said that the performance was intended to make people aware of the adverse effects of throwing out trash in the environment.

“As an artist I’m fond of the environment and I praise it, and I’m of the belief that a beautiful and enjoyable life is only possible when we live in harmony and in accordance with the universe, and there is no way around it, but unfortunately many people are threatening and damaging the environment for their short term gains,” Nikdel lamented.

An artist is duty bound to voice his concerns and the truth about such damages regardless of any personal gains, as an artist I’m responsible to prod the public into action once in a while and remind them of what they are doing to the environment, he added.

‘Cars need clean air’

“Cars need clean air” is Nikdel’s most recent performance or as he himself calls it a “happening”. A happening is a performance, event, or situation meant to be considered art, usually as a performance art.

The performance is simply focusing on clean air but from a different angle, said the Iranian artist and environmentalist about his recent performance.

Nikdel said that the performance was given in Azadi Square, western Tehran, next to the Azadi Tower which is somehow the symbol of Tehran and where many cars pass during the day. The performance was put on January 13, also marking the 45th anniversary of the Azadi Tower opening in 1972 and some days before national clean air day on January 19.

“We have previously contacted the traffic police to make arrangement in order to avoid any chaos,” he said. “We have also used domestically produced air filters which are not very eco-friendly to also garner attention of the substandard auto industry,” he noted.

“Some 350 drivers pulled over and replaced their air filters themselves; while changing their used, filthy filters. We could see how disgusted they drivers were with the amount of dirt on the filters. While I was looking at them I was wondering if they knew that the dirt that has clogged the air filter was the outcome of what they do to the environment.”

After changing the filter the drivers were given a sapling to plant in order to abate air pollution, he added.

The performance was funded by #the_only_one_earth campaign established by a finance credit institution with environmental concerns. The campaign is launched by the institution in association with environmentalists as well as artists and do not seek any financial benefits, he noted.

Please do care about the air you breathe

“I always try to study about the roots of a problem before staging a performance,” Nikdel highlighted. “Vehicles are the main sources of air pollution and they are very much like human beings in that they breathe, they eat [gas], they burn calories [burn gas to move], and they require maintenance.”

“We always provide the vehicle with maintenance and we feel responsible for them but we sacrifice our health for it, so I used this analogy as a basis for my performance,” he added.

In this performance the main audience were car drivers, Nikdel said, adding, people who buy cars for their convenience, they constantly tune up their vehicles, they change the engine oil, replace the oil filter, the air filter, the fuel filter, etc.

Such people and their cars are the main sources of the air pollution in the metropolises, but they forget about one important thing, Nikdel explained. “They keep replacing air filter in their cars to provide them with clean air and to function better and each time they replace it they see how dirty the old one is which is caused by the pollutants in the air.”

“But they don’t see one thing, they are providing a vehicle with clean air which is itself a source of air pollution,” he regretted, stating, “they know that their cars need clean air but they don’t care about themselves, they forget about their own needs, they look for standard filter for their cars but do they look for clean air for themselves?” “I’m a member of this society and I’m not any different from the others, what I want to say is that if we just think about our actions, the

way we treat the environment and the consequences of our actions we would certainly be able to solve a great deal of the environmental challenges we are facing," Nikdel concluded.

Why Masks Cannot Be A Solution To Delhi's Air Pollution Problem

Date: 28-Jan-2018 Source: TheHhuffingtonPost.in

As the air quality level in New Delhi dipped to hazardous levels last November, leading its chief minister to call it a "gas chamber", city dwellers were seen covering their faces with anything they could lay their hands on -- masks, scarves, and handkerchieves.

Experts said Delhi needed to be evacuated. As Delhi was shrouded in a cloud of thick smog, schools were asked to discontinue classes, and doctors suggested staying indoors or wearing masks while outside, or even leaving the city for a few days. Masks were distributed to security guards, the traffic police and many corporate offices also distributed masks to their employees.

"This year we sold more air pollution masks than last year," Manoj Kumar, who works at Medicine House in New Delhi's central Connaught Place, tells HuffPost India.

The air quality index in India's capital was the worst in years in 2017. Particulate matter 2.5 (PM2.5) and PM10 -- ultra-fine particles that lodge themselves in the lungs and can make a person sick after long exposure -- too were at a record high. In such a scenario, are masks much of a solution?

Too Expensive For Most Delhi Residents

Medicine House, at the heart of the city, has only four kinds of masks in stock -- N95 masks priced at Rs 25 ($0.39), N99 masks priced at Rs 749 ($11.76), an Indian Standards Institute-approved variety that costs Rs 300 and a "three-layered" mask that is the cheapest at Rs 69($1.08).

In Delhi, which is one of the most polluted cities in the world, there are specific masks that can provide protection from the fine particulate matter lodged in its unbreathable air. N99 and N95 masks are the only one that are supposed to work. The N95 and N99 designations mean they have been carefully tested and ensure over 95% micro particles. However, these masks are unaffordable for lower income groups.

In Delhi's upscale Khan Market, Preet Medical, another medicine store, has even more expensive varieties of masks. Vogmasks are supposed to be super effective against PM2.5 and PM 10 particles, and are priced at Rs 2200 ($34.54). They also have another variety of masks that filters out PM2.5 that are priced at Rs 1200 ($18.84) for a pack of three. The cheapest are surgical masks priced at Rs 10 ($0.16) each.

While in a place like Khan Market such masks are available, smaller medical stores don't stock them. The only other place that such masks are available are on online markets like Amazon and Flipkart. Most people in India don't have access to the internet and hence these online sellers.

For those who spend a better part of their days outside -- security guards, cab and auto drivers, and ragpickers -- a Vogmask is perhaps more than a week's income.

Rajat Rai Handa, who is an advocacy and communications manager at Chintan Environmental Research And Action Group that works with waste pickers says, "The worse kind of hazy day in Delhi is an everyday reality for ragpickers who live around landfills."

Forget masks, they don't even have gloves when they sift through hazardous waste, he says."We often say during our campaigns, that masks are not a solution to air pollution. People from lower income groups are not going to wear masks because for them Rs 300 is a day's income, sometimes not even that much."

One often sees people on Delhi streets wearing surgical masks, which are perhaps the cheapest option.

Dr JC Suri, HoD and Consultant at the Respiratory Department in Safdurjung Hospital tells HuffPost India, "Surgical masks are not meant for protection against air pollution. They will allow fine particles like PM2.5 to pass through."

Like Dr Suri, Handa says that they don' filter out the finer particles.

The masks that actually may keep people safe from air pollution -- N99 and N95 -- are at the higher end of the cost spectrum.

He says, "The cheapest masks that we found that are effective to a certain extent are Rs 250-Rs 300."

Masks Are Not A Long Term Solution

Masks are filters that prevent fine particles from entering the nasal passage and then the lungs. The finer the particles that a mask filters, the more dense texture of the mask is.

Dr Suri says, "They are not a fool-proof method. It all depends on the quality of the mask and if it is worn properly. It has to be tightly fitted around the mouth and nose for it to block out polluted air."

Often moving your face while talking or turning the head can move the mask from the mouth and nose area.

He says, "Wearing a mask all day can be uncomfortable. You cannot wear them 24 hours a day. You cannot sleep with a mask on. It is good to wear one when you are going out."

Priya Naik, an assistant professor at the Department of Political Science at the Zakir Hussain Delhi College in Delhi says, "I did wear a mask for a few days when I went to work. I bought a 3M mask for myself and wore it primarily because I was expecting a baby. I disliked wearing the mask, I found it hard to talk and generally felt suffocated."

Discomfort while wearing a mask seems to be a reason many choose not to wear them.

"How long can I wear a mask? I stay out all day, driving, my eyes burn, but I feel even more breathless in mask," says Narsingh Pal an Uber driver. "And for how many days can I wear it? Pollution is always bad in Delhi," he adds.

Naik says even her son had to be coaxed into wearing a mask because he found it difficult to speak and didn't like wearing one. "But he was persuaded because the duration was short... Maybe about 15 minutes. Just the travel time to school."

Long-term effects of being exposed to fine particulate air pollution can cause heart disease, lung disease, and lung cancer. It can also cause damage to the brain, kidney, liver and nerves.

Handa says wearing masks in a polluted city like Delhi is like wearing a band-aid on a gunshot wound. "It may stop the bleeding, but it will kill you in the long term."

While Delhi residents wear masks during the worst days, as soon as the smog clears out, the masks go out as well. Nair says this year she bought a pack of six masks. "Four of them lie unused."

The demand for masks also disappears with the smog. "Now we are selling only one or two masks now and then. But when the smog was there we would sell an average of 20 to 25 masks a day. Each year demand goes up after Diwali," says Tulsa Prasad from Preet Medicals.

Kumar from Medicine House also says the same thing. He says the sale of masks is close to nil, while they sold over 50 masks a day during the worst days. Smog or no smog, Delhi air quality stays bad all year round, and so do the fine particulate matters.

Lack Of Awareness And Access To Good Quality Masks

While the necessity of wearing masks is covered in newspapers and television channels, lower income groups do not have access to them either. And they are the ones who are most exposed to the toxic Delhi air.

"The average middle class India has no awareness about air pollution and the gravity of the problem of air pollution, and the harm it causes," says Handa.

Uber driver Pal was forced to buy masks for his children -- an 11-year-old son and an 8-year-old daughter -- because teachers forced them to wear masks. "I did not buy them masks, but the school asked us to buy them masks. So now they wear masks to school."

While people from lower income groups are aware that pollution causes harm to the body because of the immediate symptoms, they are not aware of the long-term harms.

Ayesha Begum who lives in a resettlement colony in south Delhi's Madanpur Khadar and works in East of Kailash says, "I have never worn a mask. No one in my colony does."

She, along with five other women take an auto, bus or a shuttle cab from their area to East of Kailash where all of them work. All these modes of transport are not air-conditioned which means are exposed to the deadly air during the worse days of pollution. She says all of them cover their noses and mouths with dupattas (scarves).

Now, Ayesha Begum says she is aware of that pollution had increased and says she felt it too. "My eyes were watery and my nose was runny. My throat was burning too."

She says she doesn't even know where to buy the masks from and that where she lives she has not seen any masks being sold. When informed about the prices of good masks, she says, "I cannot afford a mask then."

Some people also think it will do nothing to protect them from the pollution. Nidhi Singh, a masters student from Delhi School of Economics tells HuffPost India, "No, I didn't wear a mask because I just didn't see how it would benefit me."

A resident of Gurgaon, she says none of her family members wore masks either. Her friend, Lawrence Simpte, a resident of Pandara Road, chimes in, "I wore a mask only for a day. I stopped wearing it since I read somewhere that it doesn't work."

Handa says Chintan is working towards creating awareness through blogs, appearances of its representatives on television channels including Hindi television channels, holding children's rallies and protests, he agrees that none of it will reach the lower income groups.

"The point is to push for some kind of response from the the government."

This year, unlike other years, the Delhi pollution levels have kept going back to hazardous levels. And without much protection from the pollution, the citizens continue to expose themselves to the toxic particles that will ultimately cause great harm to their bodies.

Air pollution protesters bring traffic to standstill demanding clean air

Date: 29-Jan-2018 Source: Metro.co.uk

Anti-pollution demonstrators brought traffic to a halt this morning in a protest against dangerous levels of toxic air.

The activists staged a sit-down protest in the middle of London's busiest roads including at Marble Arch and in Oxford Street.

Signs with the words 'Stop Killing Londoners' and 'This is a Protest Against Air Pollution' were held in the air as buses and cars backed up during the rush hour demonstration.

The protesters staged the sit in after research recently revealed that three quarters of the UK's worst pollution hotspots are in London.

Activists are calling for more to be done to protect people in the city going forward.

Hyde Park Corner and Marylebone Road in central London have the most polluted postcodes in the country, while spots near east London's Blackwall Tunnel were also ranked high for toxic nitrogen dioxide levels, the research revealed.

A letter distributed at today's campaign – orgnaised by group Stop Killing Londoners – read: 'The protests happening today are exposing the scandal that thousands of people are dying each year in this city from air pollution.

'Toxic air is killing 10,000 Londoners a year.

'Tens of thousands more have to cope each day with debilitating breathing conditions. 'Our children are growing up with shrunken lungs, which will cause them a life time of suffering and a likely premature death.

‘They don’t deserve this.’

Frustrated by what they claim is a lack of urgent political action, and horrified by the scale of a crisis which is responsible for 40,000 deaths a year in the UK, the Stop Killing Londoners group has staged a series of protests since last summer.

The group wrote on Facebook: ‘Another day of government inaction – another road blockade! Clean air now!’

The protest was certainly eye-catching with some taking to Twitter to say it caused traffic ‘chaos’ today.

Economic Survey 2018: Report expresses concern over air pollution

Date: 29-Jan-2018 Source: MoneyControl.com

The Economic Survey expressed concern over air pollution in Delhi with the onset of winter due to various factors and ascribed four main reasons for Delhi’s worsening air quality – crop residue, biomass burning, vehicular emissions and re-distributed road dust, industries, power plants and winter temperature inversion, humidity and absence of wind.

It suggested that the solution is to address each source problem systematically, coordination between agencies and Central and State Governments and sustained civic engagement.

It said that among the steps being implemented at present are short-term emergency plan and medium and long-range actions. The short-term emergency plan is to be implemented when 24-hourly PM 2.5 exceeds 300-400µg/m3 , including imposing heavy penalties on burning of agricultural waste, using satellite-based tools to detect fires, payment of incentives to farmers, the Economic Survey 2017-18 tabled in Parliament on Monday said.

The medium and long-range actions included implementing congestion pricing for vehicles, improving public transport system and expanding modernized bus fleets, phasing out old vehicles and accelerating BS-VI.

The Survey also noted the use of technology to convert agricultural waste into usable fodder or bio-fuels and provide incentives to shift to non-paddy crops and as a point in case quotes the straw management system for rice and wheat farming, as an example.

It mentioned the Happy Seeder machine that sows seeds without removing paddy straw and suggests that such a technological solution must be combined with economics, by providing incentives to Centre and states and should be implemented through agricultural cooperatives and local bodies.

It also mentioned the adverse impact of indoor pollution on women and children, adding that access to modern energy sources can reduce the amount of time spent on collective of firewood, as well as lead to a positive impact on the education and employment of girls.

Microscopic Air Pollution Particles Are Changing Earth's Weather in Dangerous Ways

Date: 29-Jan-2018 Source: OuterPlaces.com

We often hear lectures about air pollution around aerosol cans and their slow destruction of our ozone layer, and the effects that aerosol and other chemicals have on climate change are also documented.

Now, a new study shows that even microscopic pollution particles one-thousandth the width of a human hair can change the weather—making storms more intense, increasing cloud size and, as a result, cause more rain to fall.

"This result adds to our knowledge of the interactions between aerosols, clouds and precipitation," said study co-author Zhanging Li. "In areas where aerosols are otherwise limited, such as remote regions of the Amazon rainforest, ultrafine aerosol particles can have a surprisingly strong effect. "This finding will help us better understand the physical mechanisms of cloud development and severe storm formation, which can help us develop better storm prediction methods."

Using data gathered from the Green Ocean Amazon research campaign like ground and airborne measurements of rainforest climate and water cycling from 2014-2015, the team

focused on a largely pristine, untouched area of the Amazon. This was a unique opportunity to assess the impact of pollution on atmosphere in a pre-industrial environment. It led to the conclusion that, in an area where the air is already very clean, microscopic particles make a particularly strong impact.

The researchers used computer simulations to show how this works. Though the ultrafine particles are small in size, they are large in quantity and encourage a sharp rise in water vapor that causes humidity to spike well beyond 100 percent. Because the particles draw excess water vapor from the atmosphere, they also release more heat, making powerful updrafts. Warm air is pulled into the clouds, creating a runway effect that launches more droplets and creates stronger storms.

"Our findings open a new door to understanding cloud physics, which matters to both weather forecasting and climate modeling," said Li. "In particular, cloud physicists will revisit the mechanisms of aerosol-cloud-precipitation interactions, especially for regions such as the Amazon where the environment has undergone rapid change due to urbanization and deforestation."

Toward the end of 2017's catastrophically epic year of natural disasters, NASA launched a powerful weather satellite for tracking storms. NOAA's Space Weather Prediction Center warns of an impending geomagnetic storm powerful enough to wipe out such satellites, however, along with Earth's entire power grid. Last Friday's storm was just classified as a G1, thankfully, and the most intense G5 storms only occur about four times every solar cycle.

London exceeds annual air pollution limit just one month into 2018

Date: 31-Jan-2018 Source: metro.co.uk

London has already hit the legal air pollution limit for the whole of 2018. Disturbing figures have been released that show the capital has already exceeded it's annual pollution limit after just one month. Environmental campaigners are urging the Government to take urgent steps, including creating and funding clean air zones in pollution hotspots across the UK.

Government estimates suggest that compliance for levels of nitrogen dioxide, much of which comes from road vehicles, will not be met until 2026.

However, London has at least taken longer to reach the air pollution limit this year than last year – when legal levels were breached less than a week into January.

Air pollution is linked to the early deaths of about 40,000 people a year in the UK, and causes problems such as heart and lung diseases, as well as asthma.

Oliver Hayes, from Friends of the Earth, said: 'The frequency and severity of these pollution spikes shows we've still got a long way to go in cleaning up our air, despite some good initiatives by the Mayor.'

He said central government action was also critical: 'A decent scrappage scheme to compensate diesel drivers must go hand in hand with a network of genuinely effective clean air zones across the country.'

Mel Evans, clean air campaigner at Greenpeace, also called on central Government to take action.

'This is now an annual spectacle highlighting the Government's abject failure to tackle the toxic air cloaking our towns and cities,' she said. 'The Government could make a real difference very quickly by replicating London's evidence-led approach across the country, and yet it still advocates clean air zones only as a last resort.'

She called for funding for local authorities to put clean air zones into place, and said a planned Government phase-out for conventional diesel and petrol cars should be brought forward from 2040 to 2030.

Meanwhile ministers, including from the UK, were called to Brussels to discuss the ongoing failure by a number of EU countries to meet legal targets to cut air pollution, and the action that is being taken to reduce the problem. After the meeting, EU Commissioner Karmenu Vella said ministers had 'some positive suggestions', but they were not substantial enough and limits could be exceeded 'even well beyond 2020'.

Countries – including the UK – face legal action from the EU if urgent measures are not introduced to tackle the problem.

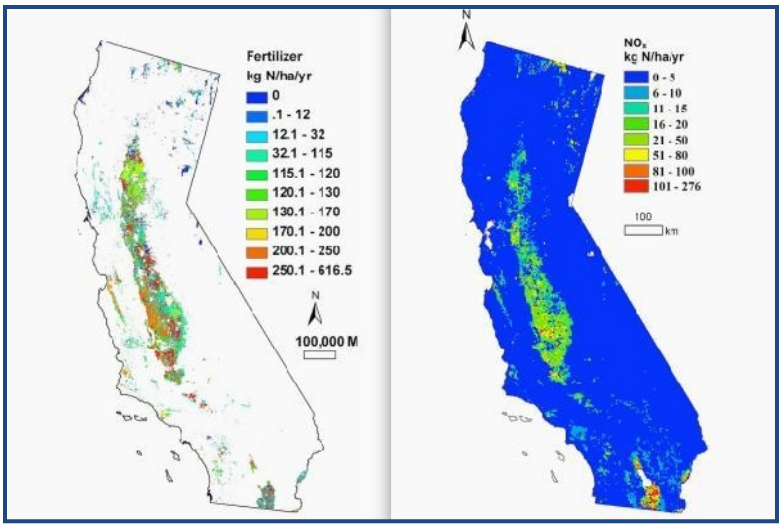
Legal charity ClientEarth took the Government to court last week for the third time over its air pollution strategy.

Ugo Tadei, a lawyer for the charity, said: 'The Commission should wait no longer and take immediate action in court, rather than having more meetings. People in the UK have waited long enough to breathe clean air.'

FEBRUARY 2018

We knew fertilizer contaminates water. It turns out it contaminates air, too

Date: 01-Feb-2018 Source: Quartz



Nitrogen oxides, known collectively as NOx, are a dangerous group of chemical pollutants most commonly connected to combustion engines used in cars. NOx from car exhaust—especially diesel cars—has been linked to respiratory diseases, cancer, birth defects, and premature death. When Volkswagen and other car companies were busted for cheating on diesel emissions tests, the previously unaccounted-for NOx was calculated to have resulted in 38,000 additional premature deaths per year globally.

Right now, governments focus most of their NOx-reducing efforts on regulating cars and trucks, because that's assumed to be the most significant source. Power plants also produce NOx emissions, and are also regulated. But there may be another huge source of NOx emissions that has, to date, been almost completely ignored: farmland.

In a study published today (Jan. 31) in the journal Science Advances, researchers from the University of California-Davis found that California—home to one of the most productive agricultural regions in the world—could have 20% to 51% more NOx pollution than previously thought, thanks to its farms. That would mean NOx pollution from farmland could amount to up to 40% of the total NOx pollution in California.

That's a big departure from what the state of California originally assumed; right now, the California Air Resources Board thinks that about 3.8% of the state's NOx pollution comes from farmland soil.

Soil has long been known to contribute to NOx emissions; microbes feed on nitrate-rich organic matter in soil, and produce NOx as they munch away. Farmers add fertilizer, basically a pile of nitrates, because plants use nitrogen to make chlorophyll, which helps them grow. But what the plants don't use is digested by the microbes, producing NOx that escapes into the air. In heavily-fertilized areas like California's agricultural Central Valley, that is happening on a massive scale.

How to breathe cleaner in London's pollution-filled air

Date: 02-Feb-2018 Source: wired.co.uk

Just a month into 2018 and London's air pollution reached the legal limit for the entire year. While this is pretty dreadful, it's also a significant improvement over recent years.

In the past decade air pollution has reached illegal levels no more than a week into the year. Air toxicity has been at illegal levels in urban areas in the UK, including London, since 2010, resulting in around 40,000 early deaths a year.

The improvement can in part be attributed to Mayor Sadiq Khan's actions to tackle the issue such as cleaner bus routes through the worst polluted areas and introducing charges to deter older, dirty vehicles into the city.

"This shows the measures we have already taken in the capital are beginning to take effect," he told The Guardian. "I am using all the powers I have to their fullest extent to tackle this health crisis. But it's about time the government recognised the true scale of this issue."

But until radical changes are made the situation isn't drastically going to improve. Thankfully, there are some small changes you can make to help clean-up toxic air in London and reduce the amount inhaled.

Get more plants

Director of the University of Technology Sydney Plants and Indoor Environmental Quality Research Group, Dr Fraser Torpy says the air inside our homes and offices can often be more polluted than the air outside. Heating, cooking, cleaning, smoking, and perfumes can all be

sources of indoor pollutants. But, keeping plants around your home - and keeping them alive - will help manage carbon dioxide levels up to 25 percent in a building without air conditioning. He says any medium plant above 20 centimetres in size will have a significant impact and palms are the clear winner for reducing CO2 levels.

Encourage anti-pollution bus stops

Piccadilly-based startup Airlabs last year turned three London bus stops into clean air zones. Air cleaning units were installed inside the bus shelters, filtering out up to 97 per cent of nitrogen-dioxide from the air so commuters could breathe easy while waiting for the bus. King's College London independently tested the technology at one of London's most polluted streets, Marylebone Road. CEO Sophie Powers said at the time of the campaign, which ran for three weeks, that the company decided to target bus stops because they are some of the most polluted parts of the city.

Turn smog into diamonds

Dutch artist Daan Roosegaarde was so impacted by Beijing's pollution problem that he built a tower to suck it up. The solar-powered Smog Free Tower has been used in Rotterdam, Tianjin, and Dalian, as well as Beijing, sucking up 30,000 cubic metres of polluted air per hour, cleaning it at the nano level and releasing the clean air back to the city. Once finished, the air around the tower was 55 to 75 percent cleaner than the rest of the city. But, left with the pollution particles, made up of 42 per cent carbon, Roosegaarde looked to making jewelry. Compressing the particles for 30 minutes created diamonds that represented 1,000 cubic metres of polluted air.

Use eco-friendly paints and home products

A report released in 2016 by the Royal College of Physicians and the Royal College of Pediatrics and Child Health found as many as 99,000 deaths across Europe in 2012 were caused by indoor air pollution. "The lemon and pine scents that we use to make our homes smell fresh can react chemically to generate air pollutants, and ozone-based air fresheners can also cause indoor air pollution," the researchers said. Switching home cleaning products, paints, candles and air fresheners to eco-friendly or natural alternatives is the best way to keep the pollution in the home low.

Personal air sensors

Those most at risk from the polluted air – young children, joggers, people with asthma, for example – can use personal air sensors to track pollution 'hot spots.' The Flow device is a handheld sensor that monitors exposure to the three most harmful pollutants: volatile

compounds, airborne particulates and nitrogen oxides. The sensors are connected to a mobile app that creates pollution maps similar to the way traffic jams can be monitored through smartphones. Outside data collected on wind flow, temperature and other variables works with the information collected from each sensor to forecast pollution hotspots, so parents can choose to keep their children indoors or joggers and cyclists can choose a different route.

Use face masks for an outdoor commute

As research suggests smaller particles in polluted air including dust, dirt, soot, and smoke are responsible for the adverse health effects experienced in major cities, more commuters who choose not to drive or take the subway are opting for face masks that filter out the bad stuff. The particles that cause the greatest health risks are just 2.5 microns in diameter and invisible to the naked eye. To best protect against these during a walking or cycling commute is to find an anti-pollution mask that are able to filter more than 95 per cent of airborne particles.

Bangladesh grapples with polluted air

Date: 03-Feb-2018 Source: DhakaTribune

The air quality in Bangladesh has been declining over the years at an alarming rate. It worsens significantly during the winter in Dhaka.

So much so, that five among the top 10 causes of death in Bangladesh is related to air pollution, according to the World Health Organization.

Dhaka scored 556 in the Department of Environment's Air Quality Index (AQI) on January 29, which has been labelled as 'extremely unhealthy'.But in Bangladesh, Narayanganj's air was identified as most polluted with a 565 score in AQI. Chittagong scored the lowest at 174 and the city's air was categorized as 'unhealthy'. With a respective score of 264 and 274 in the AQI, air condition in Sylhet and Barisal was tagged as 'very unhealthy'.

However, the air pollution in Gazipur, Khulna and Rajshai was dubbed 'extremely unhealthy' due to a high level of pollution.

Of the total 11 air quality measuring stations in Bangladesh, three are located in Dhaka, two in Chittagong and one each in Gazipur, Narayanganj, Khulna, Rajshahi, Sylhet and Barisal.

Usually, the level of air pollution worsens in the dry months – from October to April – when scant rainfall makes matters worse.

The government has identified brick kilns, construction works as well as vehicles run by fuels with high levels of sulfur as the major sources of air pollution.

World's most polluted

Dhaka topped the list of US Air Quality Index (AQI) for having the worst air pollution in the world on January 30.

Data obtained from smartphone application AirVisual shows the user real-time air pollution index of any city across the globe. A real-time map of the US AQI, found on web portals aqicn.org and waqi.info, also supported the data found in the application.

The index terms the air quality of Dhaka extremely unhealthy, as the city consistently ranks between 301 and 500.

"There is no denying that the quality of Dhaka's air is quite terrible," said Md Ziaul Haque, director (air quality management) of the Department of Environment.

He noted that the air quality usually started dropping in October every year.

"At least a thousand brick kilns operate in and around the city during winter. It is one of the reasons behind the bad air quality here," Ziaul added.

The US Environmental Protection Agency (EPA) developed the AQI to report air quality. This AQI is divided into six categories, indicating increasing levels of health concern.

An AQI value of over 300 represents hazardous air quality and below 50 indicates that the air is good.

The index is based on five criteria pollutants regulated under the Clean Air Act – ground-level ozone, particulate matter, carbon monoxide, sulfur dioxide, and nitrogen dioxide.

Last year, a study report of World Health Organization claims that although particulate pollution levels are quite high in the capital, it is 44th among the cities it monitors, in terms of fine particle (PM2.5) pollution. In terms of PM10, or coarse dust pollution, it ranks 71st.

Health hazard

According to WHO, PM10 and PM2.5 can penetrate and lodge deep inside the lungs. Chronic exposure to particles contributes to the risk of developing cardiovascular and respiratory diseases, as well as lung cancer.

Among the top 10 causes of death in Bangladesh, five of them – lung cancer (13%), lower respiratory infections (7%), chronic obstructive pulmonary disease (7%), ischemic heart disease (6%), and stroke (5%) – are related to air pollution.

According to the National Institute of Diseases of Chest and Hospital (NIDCH), nearly seven million people in Bangladesh suffer from asthma – over half of them children.

Government initiative

Ziaul Haque suggested that that air pollution could be minimized during the dry months if concerned authorities like the city corporations and Bangladesh Road Transport Authority worked together.

“We [DoE] have been trying to suggest different measures but they are not working,” he added.

Meanwhile, DoE, in collaboration with Clean Air Asia, has initiated a project to reduce black carbon from heavy-duty diesel vehicles and engines in order to achieve a pollution-free environment within a certain period of time.

Under this initiative, the government has been considering using low sulfur diesel in vehicles and engines.

To introduce low sulfur diesel, the government has been preparing a roadmap which will work as a guideline to cut the use of high sulfur content energy.

According to the draft roadmap, import of diesel containing over 500ppm sulfur content will not be allowed from this year and the imported fuel will go through the distribution network without blending.

In addition, the import of diesel with 350ppm or less sulfur content will only be allowed from 2020. The ceiling of 50ppm sulfur content for imported diesel will go into effect by 2023.

Currently, the upper limit of sulfur content in diesel fuel in Bangladesh is 2500ppm. High sulfur content in diesel is partly responsible for particulate matter which is a major pollutant from diesel vehicles.

Govt working on easing air pollution, traffic congestion in Delhi, NCR, says Union minister Nitin Gadkari

Date: 03-Feb-2018 Source: First Post

New Delhi: Union Road Transport Minister Nitin Gadkari on Friday said both pollution and traffic congestion in the National Capital Region (NCR) will be reduced by half in the next two months.

"We are working on projects worth Rs 40,000 crore and this will help the people living in NCR," Gadkari said at India TV Budget Conclave in New Delhi.

He said that vehicles can run on ethanol extracted from paddy husks that are burnt rampantly in Punjab, Haryana and Uttar Pradesh.

"One tonne of paddy husk can yield 280 litres of ethanol. We will be setting up ethanol industry, which will give jobs to 40 to 50 lakh youths, and prevent air pollution too. This will also lower petro products import," he said.

Gadkari, who also heads Shipping and Water Resources Ministries, also claimed that they would clean up the Ganga by 80 percent by March 2019.

On the Budget, he said that it is the first one which can be "rightfully described as an agricultural budget".

"I hail from a place (Vidarbha) where more than 10,000 farmers have committed suicide. When I became a minister, I felt that our voice was not being heard in Delhi.

"But now I can say, for the first time since Independence, this is the first budget presented by Arun Jaitley under the leadership of Narendra Modiji, which can be rightfully described as an agricultural budget," he said.

Taking a dig on Congress President Rahul Gandhi over his tweet that the Modi government had promised better income for farmers four years ago, Gadkari said that some people keep their reactions ready in writing even before the budget is presented.

"Those unemployed and frustrated because of us, can you expect praises from them?"

He said that for the first time Operation Greens will be launched to protect prices of onion, potato and tomatoes for which Rs 500 crore have been allocated and this will "help in controlling demand and supply".

Air quality in Chennai 'unhealthy', levels of toxic metal 55 per cent higher than in 2017: Study

Date: 04-Feb-2018 Source: New Indian Express

CHENNAI: Air quality in the coastal city of Chennai in the past two months was consistently poor with all the samples designated as at least 'unhealthy' as per US standards, an international expert said on Sunday.

Levels of toxic metal manganese in the air during this period averaged 55 per cent higher than they were averaged in April 2017, whereas lead levels averaged nearly three times higher in two months than they were averaged in April.

Mark Chernaik, a scientist associated with the Environmental Law Alliance Worldwide who studied the reports, told IANS that five of the samples in Chennai in the past two months reached a level of 'very unhealthy' and two of them 'hazardous' under the US Environmental Protection Agency (EPA) Air Quality Index.

All of the 12 samples substantially exceeded the Indian 24-hour National Ambient Air Quality Standard for PM (tiny particulate matter) of 60 micrograms (Aug)/m3.

According to Chernaik, the levels of PM 2.5 (a crucial indicator of dangerous pollution) in December and January averaged 165 Aug/m3, 35 per cent higher than PM 2.5 averaged in April.

High levels of manganese, a neurotoxicant, excess expose causes adverse neurobehavioural health effects. It averaged 0.16 Aug/m3 in two months. The World Health Organisation prescribes an annual average standard of 15 Ig/m3.

Likewise, exposure to another neurotoxicant lead causes irreversible mental retardation in children. It averaged 0.16 Aug/m3 in the two months, exceeding the US Environmental Protection Agency's National Ambient Air Quality standard for lead of 0.15 Aug/m3 on a three-month rolling basis. Chernaik says the air quality in Chennai seems heavily impacted by re-suspension of dust."The emissions from the paved road dust contribute significantly to the pollution load as far as PM 10 is concerned. The contribution from the vehicular sources towards PM is only around 10 per cent in Chennai," he said.

The recommendations for policy to be adopted for meeting the pollution levels are: Sweeping and watering of the paved roads to reduce the emissions of the particulate matter.

Aluminum, iron, calcium and silicon, enriched in coal ash are indicators of pollution caused by re-suspended dust. Levels of aluminum, iron, calcium and silicon combined constituted roughly 15 per cent of PM 2.5 in ambient air samples collected both in December and January and in April 2017.

Levels of PM 2.5 trended higher on days when the percentage of combined levels of aluminum, iron, calcium and silicon were higher.

Manganese and lead are also constituents of coal ash.

It is reasonable to assume that over several decades, manganese and lead in coal ash disposed of in Chennai has permeated the city and is re-suspended on a daily basis from paved roads, he added.

Shweta Narayan of Healthy Energy Initiative, India, who is based in Chennai, told IANS: "Considering that aluminum, iron, calcium and silicon that are enriched in coal ash are also enriched in the Chennai dust samples, and given the cluster of coal-fired thermal plants in Ennore, it is reasonable to assume that coal ash dust is a significant contributor to Chennai's air pollution."

A total of 1,189 sq km Chennai Metropolitan Area currently has real-time air quality monitors that measure the levels of PM 2.5 at only four locations.

Air quality still poor in city

Date: 05-Feb-2018 Source: Indian Express

The Colaba observatory too recorded poor air quality with PM 2.5 at 251. The other four observatories at Malad, Andheri, Chembur and Worli experienced moderate air pollution with PM 2.5 levels at 198, 198, 90 and 114, respectively.

The city continued to experience poor air quality Sunday as the air quality index (AQI) came down to 241 from 263 on Friday, which was the year's most polluted day till now. Among the observatories of the System of Air Quality and Weather Forecasting And Research (SAFAR) in the city, the ones at Borivali, Bhandup, BKC, Navi Mumbai and Mazagaon experienced very poor air quality with PM 2.5 levels at 319, 302, 302, 328 and 306, respectively. The Colaba observatory too recorded poor air quality with PM 2.5 at 251.

The other four observatories at Malad, Andheri, Chembur and Worli experienced moderate air pollution with PM 2.5 levels at 198, 198, 90 and 114, respectively. Meanwhile, the city experienced slightly warm temperatures with minimum recorded at 17 degrees and maximum at 32.5 degrees, two degrees above normal.

8 Of Every 10 Indian Cities Breathe Toxic Air

Date: 05-Feb-2018 Source: IndiaSpend.com

People living in eight of every 10 Indian cities breathe toxic dust particles, PM 10, at levels exceeding national safety limits, according to a recent report.

National capital Delhi has the worst air in the country, said the report, Airpocalypse, released by Greenpeace India, an advocacy.

Of India's 280 cities/towns where air quality is monitored, none met the World Health Organization's (WHO) safe levels of PM 10--20 µg/m³--the report said.

The Indian annual safe level for PM 10--airborne particles seven times finer than a human hair that can sicken or kill people by entering their lungs--is three times more lenient at 60 µg/m³.

To prove air pollution is not limited to Delhi, the report analysed air quality data of 280 cities with a population of 630 million--53% of the total population of the country.

Of them, 550 million--9 of every 10 Indians--live in areas exceeding the national standard for PM 10, found the report.

Similarly, every three out of 10 Indians live in areas where air pollution levels are more than twice the stipulated standards, said the report.

"Apart from this, 580 million Indians live in districts with no air quality data available," the report said.

"Only 16% of the population inhabiting the districts (where air quality is being monitored) have real-time air quality data available," said Sunil Dahiya, senior campaigner, Greenpeace India,

and an author of the report. “This portrays how inhumanly we are responding to the national health crisis in front of us.”

Even the manual data collected for 300 cities and towns are not shared in a timely manner and in a format which can be accessed and understood easily by general public, he added.

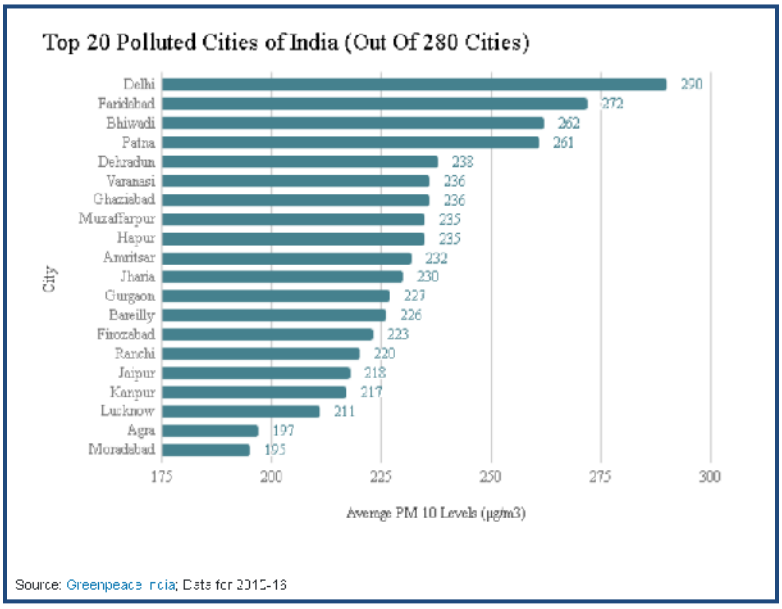
The data used for the report was obtained from multiple sources--the National Air Monitoring Programme, Right to Information (RTI) responses from State Pollution Control Boards and annual reports, along with the websites of various state pollution bodies.

Delhi worst hit, at five times permissible standards of pollution

Ranking of cities based on their annual average of PM10 levels reveal that Delhi is the most polluted city at 290 µg/m3—close to five times the national standard. It is followed by Faridabad, Bhiwadi and Patna with annual averages that are 272 µg/m3, 262 µg/m3 and 261 µg/m3 respectively.

Dehradun in Uttrakhand was an unexpected entrant in the list of 10 worst cities, with an annual average of 238 µg/m3.

The annual average PM 10 levels for the 20 most polluted cities ranges between 290 µg/m3 and 195 µg/m3.



Most of the top polluted cities are spread across the Indo-Gangetic basin with southern cities being slightly better off, said the report. However, cities in the south also need a focused and time-bound action plan to achieve WHO standards, it added. Less than 20% cities comply with air quality standard

“The fact that less than 20% Indian cities are complying with the national, or CPCB [Central Pollution Control Board], standards sadly points to the lack of workable, robust and timely action plans so far,” said Dahiya.

Delhi’s Graded Response Action is the only available programme in India to combat pollution. It entails a number of actions to be taken as soon as the air quality plunges. These include putting

a stop on garbage burning, not allowing trucks to enter the city, shutting down power plants, and closing brick kilns and stone crushers, IndiaSpend reported on December 22, 2017.

The government is planning to launch a National Clean Air Programme (NCAP) “as a medium term national level strategy to tackle the increasing air pollution problem across the country in a comprehensive manner”, according to a January 5, 2018 Lok Sabha reply .

Can the national programme be the answer?

NCAP entails evolving an effective ambient air quality monitoring network across the country besides ensuring a comprehensive management plan for prevention, control and abatement of air pollution.

“The NCAP focuses on collaborative and participatory approach covering all sources of pollution and coordination between relevant Central Ministries, State Governments, local bodies and other stakeholders” said the reply.

The NCAP has not been made public yet.

The Greenpeace report has made some recommendations to make the NCAP more effective. First, it needs comprehensive, systematic and time-bound plans with fixed accountabilities. Second, it needs to be made public soon so it can draw the participation of the general public and all layers of the government.

A continuous ambient air quality monitoring mechanism across the country with real time data sharing capabilities, stricter enforcement of laws for pollution control, and incentivising use of electric vehicles are the other suggestions on air pollution control.

Why air pollution is a ‘national health emergency’

Date: 05-Feb-2018 Source: The Hindu Business Line

Expert says that in most places it is equivalent to smoking 5-7 cigarettes There are few non-smokers in India. One may not smoke; may even be a just-born, but still inhale the pollution equivalent to five to seven cigarettes a day. That is how bad the situation is, not just in Delhi (where it is worse) but across the country.

Each person living in the National Capital Region, in one way or other, ‘smokes’ not less than 16 cigarettes a day. That was the central message left by Arvind Kumar, Chairman, Centre for Chest Surgery, and Director, Institute of Robotic Surgery at Sir Ganga Ram Hospital in New Delhi, at a recent media workshop on air pollution held here.

The workshop was organised by ‘Healthy Energy Initiative’, a global collaboration of health professionals and organisations, which advocates a shift-away from fossil fuels . India has the dubious distinction as the country with the highest number of deaths due to air pollution, Kumar said.

Most Indians are unaware of the enormity of the problem, said Kumar, who is also the Founder and Managing Trustee of the Lung Care Foundation, New Delhi. Air pollution causes a huge range of problems, including lung cancer.

Earlier, lung cancer used to be common only among smokers, but today more than half of Kumar’s lung- cancer patients are people who do not smoke. And, 95 per cent of lung-cancer patients die in five years. Air pollution is a ‘national health emergency’, he said.

Myths busted

Kumar said people ought to be aware of the myths about air pollution. One way to control it is to wear a mask. Most of the masks sold in pharmacies are useless . Only ‘N 95 or N 99’ masks are useful, provided they are worn tight across the nose. They also prevent large particles entering lungs. For finer particles — P2.5 and less — masks are of no use. In any case, masks can keep out only particulate matter, not gases. Harmful gases in the air, like sox and nox, will pass through the masks anyway..

Another myth is of self-cure methods like yoga. Yoga helps enhance lung capacity, but if the lungs are lined with particulate deposits, yoga cannot help remove them, Kumar said. In fact, nothing can get the particles deposited in the lungs out. Finally, contrivances such as air purifiers are of little use, because they have very limited effect across a huge space.

When President Obama visited Delhi, the US Embassy had 1,800 air purifiers installed, at the places the President would visit, Kumar said. Instead of spending lakhs on air purifiers, it could be invested in better measures to bring down pollution.

‘Given the severity of air pollution, there is no non-smoker in India'

Date: 06-Feb-2018 Source: The Hindu Business Line

There is no non-smoker in India. You may not even touch a cigarette, you may even be a just-born, but you still smoke the equivalent of 5-7 cigarettes a day. That is how bad the air pollution situation is, not just in Delhi (where it is worse) but all across the country.

Each person living in the National Capital Region may assume he is ‘smoking’ not less than 16 cigarettes a day. That was the central message left by Dr Arvind Kumar, Chairman, Centre for Chest Surgery, and Director, Institute of Robotic Surgery at Sir Ganga Ram Hospital, New Delhi, at a recent media workshop on air pollution held here. The workshop was organised by 'Healthy Energy Initiative', a global collaboration of health professionals and health organisations, which advocates shift away from fossil fuels.

India has the dubious distinction of being the country with the highest number of deaths due to air pollution, Dr Kumar said, quoting a WHO study. Most Indians are unaware of the enormity of the problem, said Dr Kumar, who is also the Founding and Managing Trustee of the Lung Care Foundation, New Delhi. Air pollution causes a huge range of problems, including lung cancer.

Earlier, lung cancer used to be common only among smokers, but today more than half of Dr Kumar’s lung cancer patients are people who do not smoke cigarettes. And, 95 per cent of lung cancer patients die in five years. Air pollution is a ‘national health emergency’, Dr Kumar said.

Myths busted

Dr Kumar said people ought to be aware of the myths around air pollution. One is that air pollution can be countered by wearing a mask. Most of the masks sold in pharmacies are useless for the purpose. Only ‘N 95 or N 99’ masks are effective, but only if worn tight across the nose. However, even they can only prevent large particles from getting into the lungs. For finer particles — P2.5 and less — masks are of no use. In any case, masks can keep out particulate matter, not gases. Harmful gases in the air, such as Sox and Nox, pass through the masks anyway, Dr Kumar said.

Another myth is that you can cure yourself of the ill-effects of air pollution by doing yoga. Yoga helps in enhancing lung capacity, true, but if the lungs are lined with particulate deposits, yoga cannot help remove them, Dr Kumar said. In fact, nothing can get the particles deposited in the lungs out. Once in, they stay in, and harm.

Finally, contrivances such as air purifiers are of little use, because the space they have any effect is extremely limited. When President Obama visited Delhi, the US Embassy had 1,800 air purifiers installed at various places the President would visit, Dr Kumar observed.

He said it was often a waste of money. He had seen five air purifiers, each costing several lakhs, in the room of a Member of Parliament in Delhi. This money could have been better spent in measures to bring down pollution.

Delhi air pollution risks children, youth; 8 of 10 with poor lung capacity

Date: 08-Feb-2018 Source: Business Standard

In New Delhi, India's capital and its most polluted city, eight of every 10 children and youth below 20 years of age living in areas with constantly polluted air have poor lung capacity, according to a study by Hazards Center, a Delhi-based advocacy.

These findings come at a time when data on the health effects of air pollution are being denied by the ruling Bharatiya Janata Party (BJP) government. There were no conclusive data to establish a direct or exclusive correlation between death/disease and air pollution, said Mahesh Sharma, minister of state for environment, in a response to the Rajya Sabha (upper house of Parliament) on February 5, 2018.

Particulate matter pollution monitored over 15 locations across the capital this winter–between October 10, 2017 and January 10, 2018–along with the peak flow tests conducted on 343 children and youth under 20 living in 11 out of 15 monitored locations revealed that 80% of the sample population had unhealthy or below-normal lung functioning.

Peak flow tests are a simple way to measure lung strength by assessing how fast one can blow air out. Normal values for a paediatric sample of children in the European Union were taken as a base for the test.

That Delhi's youth do not measure up to a European normal can partly be "due to the demographic differences between the European Union and India, but one would not expect such a large difference in the city with the highest per capita income in the nation", said the study.

Air quality data from the areas included in the study reveal a base pollution load of about 200 µg/m3 for PM 2.5 and 300 µg/m3 for PM 10, almost three times the national standard.

This pollution can be traced only to sources within Delhi, such as transport and construction, the report said.

Rising air pollution in a metropolis such as Delhi–and even small cities like Ranchi–is leading to rising incidences of chronic obstructive pulmonary disease (COPD) in the population, IndiaSpend reported on January 3, 2018.

As many as 27% of deaths in India were caused due to pollution, making it the country with the highest number of pollution-related deaths, followed by China, according to a Lancet study. Low- and middle-income groups are the worst affected by pollution; 92% of deaths due to pollution occurred in that income group, IndiaSpend reported on November 14, 2017.

New plans every winter, but no implementation

Road and construction dust, power plants and other industries–along with domestic cooking–are the biggest contributors (60%) to the rise in particulate pollution in Delhi's air.

The rest can be traced to vehicular pollution, according to a 2015 study by Indian Institute of Technology, Kanpur.

To deal with this, Delhi has been given a Graded Response Action Plan (GRAP), the only city-specific pollution control action plan in India. It entails a number of actions to be taken as soon as the city's air quality plunges. These include putting a stop on garbage burning, not allowing trucks to enter the city, shutting down power plants, and closing brick kilns and stone crushers, IndiaSpend reported on December 22, 2017.

"The Graded Response Action Plan formulated hasn't been put to use fully since its inception. Multiple organisations and bodies across Delhi seem to be advocating for new plans every winter instead of implementing what's been put in place to mitigate the problem," the report said.

Radical solutions to the air pollution crisis from around the world

Date: 08-Feb-2018 Source: Independent.co.uk

Air pollution is a serious global concern, linked by the World Health Organisation (WHO) to over 5.5 million deaths every year. It has been described as a greater threat to the world population than malaria and HIV combined.

As policymakers and scientists scramble for ways to battle the deadly smogs and clouds of particulates that have descended on their cities, some have suggested radical solutions.

In the UK, levels of toxic nitrogen dioxide have been branded illegal and "life-threatening" by the EU, and the Government's clean air strategy has been described by critics as "toothless and woefully inadequate".

London is the epicentre of Britain's pollution crisis, and as it passes the 10th anniversary of its low emission zone scheme – designed to restrict high-polluting vehicles – it still remains one of the worst-polluted cities in the country.

Nearly 10,000 Londoners die prematurely each year due to the effects of air pollution, and in 2014 Oxford Street was described as having levels of nitrogen dioxide that were "easily the highest in Europe".

"Impacts on cardiovascular and respiratory diseases are well known," says Professor Kian Fan Chung, a respiratory-medicine specialist at Imperial College London.

"But new information now indicates effects on the brain, low birth-weight babies, increased cancer risk etc. At certain levels of pollution, even normal people start to experience symptoms such as coughing and tight breathing, with increasing risk of chest infections."

Successive mayors have promised action on air pollution, and yet despite this, efforts to bring levels down in the city have, until recently, been rather modest.

“Until the last 12 months, polices introduced to London have had little benefit,” says Professor Frank Kelly, who leads the Centre for Environment and Health at King’s College London.

“Recently however, the introduction of a substantial number of electric single-decker buses and hybrid double-decker buses on specific routes has shown that improvements in air quality on those routes can be made.”

Changes implemented by the current Mayor of London, Sadiq Khan, have been welcomed by campaigners for making a slight dent in the city’s air pollution. However, the emphasis is on “slight”. Brixton Road in Lambeth still managed to hit its annual air pollution target at the end of January, with 335 days left to go.

In response to this Oliver Hayes, campaigner for clean air at Friends of the Earth, said “the frequency and severity of these pollution spikes shows we’ve still got a long way to go in cleaning up our air”.

However, while London’s air pollution is serious, it pales in comparison to that found in some of world’s “mega-cities”.

“It is in the intermediate range – the most polluted areas are in China and India and also in some other parts of the world,” says Chung.

“We are still exceeding the limit of various pollutants set up by the EU, but the levels we get up to are nothing compared to the levels that are often seen on a daily basis in cities such as New Delhi or Beijing.”

In other parts of the world, cities dealing with serious levels of air pollution are beginning to implement innovative measures to tackle the situation. London, and other highly polluted cities in the UK such as Glasgow and Leeds, may need to pay attention.

China has been ranked the world’s deadliest country for outdoor air pollution, with one study calculating 1.6 million people die as a result of exposure to dirty air there every year.

The response to the crisis has been dramatic. The Chinese government has vowed to “make our skies blue again” by massively cutting down the country’s steel and coal capacity, and investing in renewable energy instead.

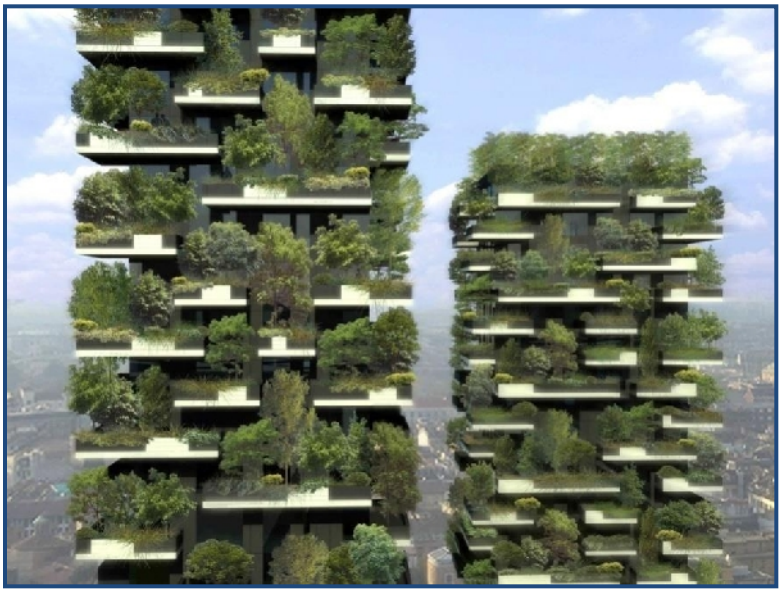
More controversially, the government has announced that the populations of both Beijing and Shanghai will be restricted in an effort to battle what it calls “big-city disease”.

By 2020, the size of the Beijing population will be kept at 23 million, while Shanghai’s population will be limited to 25 million by 2035.

Though ambitious as an approach to tackling pollution, critics have noted the profound social consequences that could result from such a dramatic intervention.

Dr Liang Zhongtang, a research fellow at the Shanghai Academy of Social Sciences, told state media upon the Shanghai policy's announcement that such targets are "unpractical and against the social-development trend".

He noted that migrant workers and low-income groups will be the most likely to suffer, as the government will likely meet its targets by demolishing the wholesale markets and cheap housing where they tend to work and live



A less controversial, but perhaps more ambitious, citywide intervention has been suggested by architect Stefano Boeri. His plan for polluted Chinese cities is to fill them with tower blocks covered from top to bottom in greenery.Besides the aesthetic appeal, the plant-covered buildings would absorb carbon dioxide and fine particulates in the atmosphere, making the air far safer to breathe – or so Boeri says. The architect has already constructed small-scale "vertical forests" in his native Italy, and he has big plans for tackling pollution in China. Beginning with prototype skyscrapers in the city of Nanjing, he has expressed a desire to create entire "forest cities" for people to live in.

A less ambitious suggestion is simply to plant more trees, in the hope that they can absorb unpleasant chemicals from the atmosphere and perhaps shield pedestrians from the aerial onslaught.

However, guidelines released last year by the National Institute for Health and Care Excellence (Nice) poured cold water on this idea by stating that "leaves and branches slow air currents, causing pollutants to settle out".

It added that the trees might act as "sinks" with the potential to harbour and store particles, and this could have direct or indirect effects on air quality.

If greenery is not the solution, maybe technology can save cities from air pollution?

In 2016, the scientific press flew into excitement over a proposal put forward by Massachusetts Institute of Technology scientist Moshe Alamaro.

The aeronautical engineer wanted to use a jet engine to blast Delhi's air pollution into the upper atmosphere. By placing the engine next to a coal-fired power plant, Alamaro suggested, it would be possible to create a "virtual chimney" that could displace pollutants into the upper atmosphere where their toxic effects would not be felt by the population.

However, as with so many bright ideas, Alamaro's never became any more than that: an idea.

"It has never been tested," he says. "We don't know how successful it would be except for some calculations."

More recently, in the Chinese city of Xi'an, an enormous air-purifying tower has been constructed. The team behind it have said their creation will clean pollutants from the air on a city-wide scale. Whether or not their claims are accurate remains to be seen.

"As there isn't any hard data publicly available to support the claim, for now a dose of scepticism is likely in order," writes Professor Alastair Lewis, an atmospheric chemist at the University of York.

Other technological solutions to air pollution include bus stops equipped with filters that remove harmful toxins from the air, and even in-car filter systems. The problem with these methods is that they are something of a sticking plaster – they do not address the root of the problem.

Of course, strategies do not need to be radical to make a difference.

One of the most obvious tactics for fixing air pollution is banning cars, or at least heavily restricting them.

"The ultimate solution to London's problem is less traffic, and for that reduced traffic to be zero-emission. So certain areas of the city should be pedestrianised and public transport improved further," says Dr Kelly.

Professor Chung agrees, citing stringent rules on car emissions and restrictions on central-London traffic as the best ways to deal with the city's pollution.

Banning cars is not necessarily a fix-all solution. Mexico City has a serious problem with air pollution, though one that has improved markedly since the 1980s. "We saw birds that suddenly fell down. They fell out of the sky and they were dead," pollution researcher Gabriela Alarcón told PRI, recalling the bad old days.

In an effort to address the problem, the city introduced driving restrictions on Saturday, but they have since been dismissed by scientists as having an impact “close to zero”.

This has not stopped cities from Sao Paulo to Oslo implementing car bans in one form or another, and in many places they have been hugely successful.

Barcelona has received acclaim for the rapid implementation of its “superblocks” scheme. Spearheaded by the mayor Ada Colau, the scheme involves changing traffic flow by simply introducing signage that directs cars straight back out of the city once they have driven in.

What is notable about the scheme is its simplicity. It requires minimal changes to the city’s infrastructure, and could play a key role in helping the city meet its air pollution targets.

The air pollution crisis in UK cities will not be solved overnight, but it does need to be solved. The Government is currently being threatened with court action by the EU, while closer to home it has recently been taken to court for the third time over its strategy by environmental lawyers ClientEarth. “It’s not an easy problem to solve. It will take time,” says Chung.

“All the potential solutions are available or will be soon, but there is a balance of what can be done and what should be done, determined by political, social and financial considerations.” Campaigners and scientists emphasise the importance of cutting pollutants off at the source, rather than investing in schemes that remove the pollutants already there. That means cutting down on fossil fuels, investing in electrical power and keeping high-polluting vehicles away from cities.While it is tempting to look at exciting new solutions to the air pollution crisis, the best solutions may also be the simplest.

Air pollution behind poor lung capacity among kids: study

Date: 08-Feb-2018 Source: The Hindu

In a sample size of 343, 80% found to have unhealthy or below normal lung function; cancers occuring earlier, say doctors

Particulate matter pollution monitored over 15 different locations across the Capital for more than three months in a row this winter on a sample size of 343 revealed that 80% of the sample population had unhealthy or below the normal lung functioning.

This report was released by the Hazards Centre which revealed poor lung capacity in children and teenagers.

The study did a peak flow test (done to measure how well your lungs are working by assessing how quickly you can blow air) and tests were conducted in areas where the monitors are installed, and out of the 15 locations, the samples for the health study were taken from 11 different areas.

The samples were collected from Holambi, Bhalaswa, Ayanagar, Punjabi Bagh, Wazirpur, Seelampur, Seemapuri, Saket, Okhla-NFC, Badarpur-TGK andMunirka.

City breathes bad air

The study also found that the southern and northern peripheries of the city — children seem to have better health but the air in all parts of the city is not good for our children.

“While one needs to remember that this may partly be due to the weaker economic background, the children across the city and country deserve good health,’’ noted the study.

“The air quality monitoring also highlights the fact that there is a base pollution load across Delhi of about 300 ug/m3 for PM10 and 200 ug/m3 for PM2.5, which is three times higher than the approved limits and the source is located in Delhi. It is important to note that the Graded Response Action Plan formulated hasn’t been put to use fully since its inception.

Multiple organisations and bodies across Delhi seem to be advocating for new plans every winter instead of implementing what’s been put in place to mitigate the problem,’’ the study added.

Meanwhile, Dr. Arvind Kumar, from Sir Ganga Ram hospital, said, “Air pollution has caused a public health crisis in the city.’’

‘Smoking 50 cigarettes’

“The major reason behind this emergency is industrial emission and vehicle fumes which has been sealed by cool temperature and still winds. At the same time, mass burning of crop waste across the north Indian hinterland has sent dense smoke billowing across one of the world’s most populated regions. The air has heavy metals and other carcinogens at levels more than 30 times World Health Organization limits, conditions likened by medics to smoking at least 50 cigarettes in a day,’’ he added.

Dr. Kumar also stated that in the longer term, consistent poor quality air is altering the demographics of cancer in the city.

“Earlier we would see 90% of the lung cancer patients were smokers. Most were men in their 50s or 60s. However, in the last two years, half of my lung cancer patients have been non-smokers. There is a peak in people aged in their 40s, even people in their 30s. Our cancers are occurring earlier, more in non-smokers, and more in females,’’ he said.

Air pollution may lead to unethical behaviour: Study

Date: 08-Feb-2018 Source: Indian Express

The results showed that participants who thought about living in a polluted area cheated more often than did those who thought about living in a clean area. As the researchers hypothesised, anxiety level mediated the link between imagining exposure to air pollution and unethical behaviour.

Exposure to air pollution, even imaginative, may lead to unethical behaviour such as crime and cheating, according to a study conducted on adults in India and the US. The findings published in the journal Psychological Science suggest that this association may be due, at least in part, to increased anxiety. “This research reveals that air pollution may have potential ethical costs that go beyond its well-known toll on health and the environment,” said Jackson G Lu, behavioural scientist at Columbia Business School in the US. “Our findings suggest that air pollution not only corrupts people’s health, but also can contaminate their morality,” said Lu. Previous studies have indicated that exposure to air pollution elevates individuals’ feelings of anxiety, which is known to correlate with a range of unethical behaviours.

In one study, the researchers examined air pollution and crime data for 9,360 US cities collected over a nine-year period. The researchers found that cities with higher levels of air pollution also tended to have higher levels of crime. In one of the experiments conducted with university students in the US, the researchers measured how often participants cheated in reporting the outcome of a die roll. In the other experiment with adults in India, they measured participants’ willingness to use unethical negotiation strategies.

Participants who wrote about living in a polluted location engaged in more unethical behaviour than did those who wrote about living in a clean location; they also expressed more anxiety in their writing, researchers said. Since they could not randomly assign participants to physically experience different levels of air pollution, the researchers manipulated whether participants imagined experiencing air pollution. In one experiment, 256 participants saw a photo featuring either a polluted scene or a clean scene. They imagined living in that location and reflected on how they would feel as they walked around and breathed the air. On a supposedly unrelated task, they saw a set of cue words (eg sore, shoulder, sweat) and had to identify another word that was linked with each of the cue words (eg cold); each correct answer earned them USD

0.50. Due to a supposed computer glitch, the correct answer popped up if the participants hovered their mouse over the answer box, which the researchers asked them not to do. Unbeknownst to the participants, the researchers recorded how many times the participants peeked at the answer.

The results showed that participants who thought about living in a polluted area cheated more often than did those who thought about living in a clean area. As the researchers hypothesised, anxiety level mediated the link between imagining exposure to air pollution and unethical behaviour. Together, the archival and experimental findings suggest that exposure to air pollution, whether physical or mental, is linked with transgressive behaviour through increased levels of anxiety, researchers said.

Bangkok Air Pollution Warning, Children Asked To Stay Indoors

Date: 08-Feb-2018 Source: NDTV

BANGKOK: Residents in Bangkok, one of the world's top tourist destinations, were warned on Thursday the city's air quality had hit dangerous levels just days after the country's pollution control agency appealed to residents to wear face masks.

Air pollution in the Thai capital has come under increasing scrutiny in recent weeks with residents complaining of smog and respiratory problems. Some schools were closed on Thursday or kept children indoors.

Air Quality Index (AQI) formulas usually include up to six main pollutants including PM2.5, PM10, carbon monoxide, sulfur dioxide, nitrogen dioxide and ground level ozone.

The Pollution Control Department reported PM 2.5 dust in the Bangkok Metropolitan at midday on Thursday and at midday it was measured at 72-95 micrograms per m3, with the likelihood that it would increase.

That compares with a World Health Organization (WHO)guideline of an annual average of no more than 10 micrograms. PM 2.5 is a mixture of liquid droplets and solid particles that can include dust, dirt, soot and smoke.

"We've warned at-risk groups including sick people ... the elderly and children. We've warned that they must not conduct activities outdoors," Suwanna Tiansuwan, deputy director general of the Pollution Control Department, said.

Tiansuwan said the lack of wind in recent days had allowed pollution to accumulate in the air.

The department reported the Air Quality Index (AQI) in central Bangkok area had reached an unhealthy level of 135 AQI by early afternoon.

The Air4Thai mobile phone application, which shows Pollution Control Department readings, does not factor in PM 2.5 or fine particulate matter that pose the greatest risk to human health.

Data from the American AirVisual smartphone application showed a 154 AQI reading for Bangkok.

"We've received information from my daughter's school that they are monitoring pollution levels and will be keeping the children indoors until it improves," Joanna Lorgrailers, 32, a mother of two who lives in Bangkok, told Reuters.

Some international schools in the city have installed their own air pollution measuring devices, said parents, and are in touch with other international schools in cities with high air pollution levels to discuss ways to limit childrens' exposure.

Suwanna said her department was preparing to provide PM 2.5 or fine particulate matter measurements on its mobile application.

Air pollution can contaminate your morality

Date: 09-Feb-2018 Source: TheHansIndia.com

Air pollution not only affects your health but may also lead to unethical behaviour such as crime and cheating, researchers have warned. A combination of archival and experimental studies indicated that exposure to air pollution, either physically or mentally, is linked with unethical behaviour. The experimental findings suggest that this association may be due to increased anxiety.

"This research reveals that air pollution may have the potential ethical costs that go beyond its well-known toll on health and the environment," said lead author of the study, Jackson G. Lu of Columbia Business School."Our findings suggest that air pollution not only corrupts people's health, but can also contaminate their morality," Lu added.For the study, published in the journal Psychological Science, researchers examined air pollution and crime data for 9,360 US cities collected over a nine-year period.

The air pollution data included information about six major pollutants, including particulate matter, carbon monoxide, nitrogen dioxide and sulphur dioxide. The crime data included information about offences in seven major categories, including murder, aggravated assault and robbery.The researchers found that the cities with higher levels of air pollution also tended to have higher levels of crime.This association held even after the researchers accounted for other potential factors, including total population, number of law enforcement employees, median age, gender distribution, race distribution, poverty rate, unemployment rate, unobserved heterogeneity among cities and unobserved time-varying effects.To establish a direct, causal link between the experience of air pollution and unethical behaviour, the researchers also conducted a series of experiments.

According to the researchers, previous studies have indicated that exposure to air pollution elevates individuals' feelings of anxiety. Anxiety is known to correlate with a range of unethical behaviour. The researchers hypothesized that pollution may ultimately increase criminal activity and unethical behaviour by increasing anxiety.

Air pollution in Delhi: CM Arvind Kejriwal, Central govt launch 'clean air campaign'

Date: 11-Feb-2018 Source: FinancialExpress.com

Air pollution in Delhi: To fight the increasing pollution levels in the national capital, Arvind Kejriwal-led AAP and Centre on Saturday launched a joint campaign. Union Environment Minister Harsh Vardhan and Chief Minister Arvind Kejriwal have launched a 15-day 'clean air campaign' awareness campaign in Delhi-NCR. The campaign is a result of months of interaction between

the two governments. Under this campaign, there will be 70 teams of five members each comprising officials from various government agencies, reported the Indian Express. They will fan out and monitor causes of pollution, penalise polluters – which also includes on-the-spot penal action against serious polluters – and initiate remedial measures. The officials will be drawn from central and state pollution watchdogs, Delhi government, civic bodies and the Ministry of Environment, Forest and Climate Change (MoEFCC), as per the report.

Speaking at the launch, CM Arvind Kejriwal was quoted as saying that it is the time that both governments came together to fight the menace. “But pollution cannot be solved in 15 days. There needs to be a concerted effort throughout the year. We need a round-the-year scientific study, machines that identify sources of pollution and improved road designs,” the CM said, reported IE. While Union Environment Minister Harsh Vardhan was quoted as saying that the Central government is also concerned about pollution levels across the country. He was quoted as saying that we must take the example of this campaign to the entire nation and that people must realise their green social responsibility. “I hope that children present at the gathering and elsewhere will become ‘green sainiks’ in the fight against pollution,” he said.

Green bodies had also lauded the campaign and said it should be taken as a pilot for other regions to address “rising national health emergency”. Terming the campaign a “much-needed step”, the Greenpeace India had said it was a welcome step considering the severity of air pollution in Delhi-NCR.

The campaign launched will also include enforcement of pollution-control measures for vehicles, driving discipline, inspection of power plants in Delhi to ensure they comply with the norms on pollution, etc. Local area development plans to specifically address air pollution will also be worked at and implemented.

New Signal: Teen sisters offer solution for air pollution

Date: 11-Feb-2018 Source: FreePressJournal.in

Mumbai : Seldom do motorists switch off their engines at signals, leading to fuel wastage and a rise in air pollution in and around the busy traffic junctions. In order to address this peculiar problem, 19-year-old Shivani Khot and her younger sister Esha (14) have come up with a unique solution — adding a new “blue” signal along with the red, yellow and green ones that people are familiar with.

As per their novel initiative, all the engines have to be compulsorily switched off at the blue signal. The blue light will turn on five seconds after a signal goes red and turn off to red five seconds before the green signal, allowing for time to switch on the ignitions.

“There is a huge loss of fuel and air pollution as the engines continue to be on at signals. We think we can change things by having the new signal,” Shivani Khot, a student of psychology at the S K Somaiya College, told PTI.

Citing findings of studies done by the Central Road Reserach Institute (CRRI), she said only 20 per cent of motorists switch off the ignitions while waiting at signals. She said by switching off vehicle engines, fuel worth Rs 70 crore can be saved annually at eight busy intersections in the national capital region alone.

At these eight junctions, around 28,750 tonnes of carbon is emitted, which can be considerably reduced, only if the engines are switched off, she said citing the CRRI data.

The college student said despite some signals having a digital counter, which shows the time before the signal goes green, there has been no change in the people’s attitude.

She said a placard campaign asking motorists to shut engines took the number of those switching off ignition up to 64 per cent, from where it declined week after week.

Shivani, whose father is an assistant commissioner of police in Mumbai, said the need to do something for the traffic woes arose from her personal experiences.

In late 2016, the sisters first thought about the ‘blue signal’ and got it patented.

After more research on the subject, they went public with it and won a number of competitions, including at the University of Mumbai and IIT-Bombay’s Techfest last December, where they garnered laurels in the sustainability challenge.At present, the sisters are in the national capital, exhibiting their project at the auto show after being selected by the Automotive Research Association of India to showcase their work.

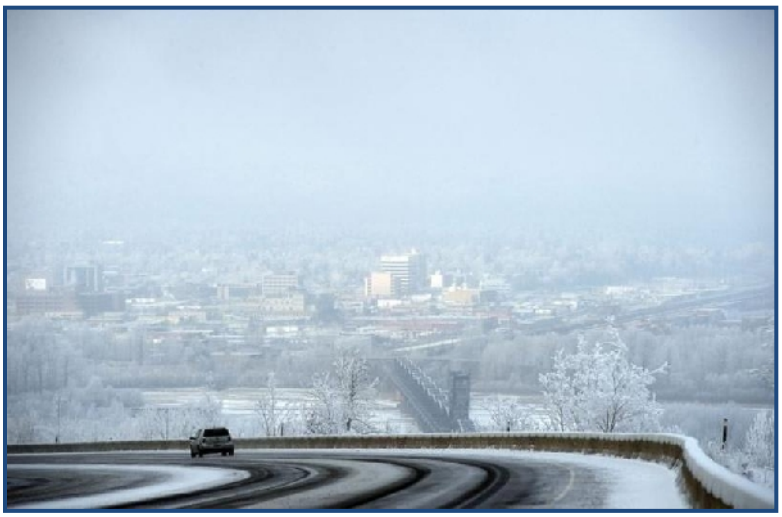
Asked if legislative changes will be required for better results of their initiative, which is yet to be piloted, Shivani said driving the change is possible through various means, including laws and also technology, as the GPS-enabled systems can automatically shut engines.

Getting rid of smog

19-year-old Shivani Khot and her younger sister Esha (14) have come up with a unique solution to reduce air pollution — adding a new ‘blue’ signal along with the red, yellow and green ones that people are familiar with.As per their novel initiative, all the engines have to be compulsorily switched off at the blue signal. The blue light will turn on five seconds after a signal goes red and turn off to red five seconds before the green signal, allowing for time to switch on the ignitions.According to studies done by the Central Road Reserach Institute (CRRI), only 20 per cent of motorists switch off the ignition while waiting at signals.

Air quality advisory in effect for Prince George

Date: 11-Feb-2018 Source: PrinceGeorgeCitizen.com



Fine particulate matter in the air has prompted the Ministry of Environment and Climate Change Strategy in collaboration with Northern Health to issue an air quality advisory for Prince George. This advisory remains in effect until further notice.Infants, the elderly and those who have diabetes, and lung or heart disease, are most susceptible to exposure to fine particulate matter. People who have chronic underlying medical conditions should postpone strenuous exercise until the advisory is lifted. If anyone experiences symptoms like ongoing eye or throat irritation, chest discomfort, shortness of breath, cough or wheezing, follow the advice of a health care provider. Staying indoors helps to reduce exposure to fine particulate matter.During air quality advisories the City of Prince George's Clean Air Bylaw prohibits the use of wood-burning appliances, except for sole wood-burning heat users.Industry is asked to reduce emissions wherever possible during the air quality advisory.Real-time air quality observations and information regarding the health effects of air pollution can be found at www.bcairquality.ca.

Doctors on increasing pollution: Wear masks, avoid morning walks

Date: 13-Feb-2018 Source: The Indian Express

Last Wednesday, when pollution in the city peaked with the Air Quality Index (AQI) hovering at 275, the worst after Diwali last year when the AQI level was 319, Parth Shah (26), a sound engineer, suffered coughing fits and breathlessness though the day.

By the weekend, he had purchased a nebuliser to tackle any sudden respiratory attack.

While respiratory infections are routine in winter, cases have worsened this year, say doctors who added that many patients were taking longer than a week to recover. The pollution levels have been particularly bad before sunrise when temperatures are low.

“I could not breathe properly for 24 hours. I did not take nebuliser support then, but I went to my home town in Madhya Pradesh and felt the difference in the air. It was fresher. Before returning to Mumbai, I purchased a nebuliser,” said Shah, adding he had an existing respiratory illness that was aggravated by bike rides.

General physician Dr Anil Ballani, attached to Hinduja Hospital, said he is advising his patients not to go for walks as pollution is higher in the early mornings and evenings. “If my patients still want to go for walks, I am suggesting them disposable masks. At least in 20 per cent cases of respiratory problems I am currently seeing, I am prescribing patients a mask,” he said.

Those with old upper respiratory tract infections, history of tuberculosis, asthma, or those with an allergic reaction to pollutants are more prone to prolonged coughing fits. “Instead of 3-4 days, patients are taking over a week to recover,” said Dr Shahid Barmare, physician attached with Kohinoor Hospital in Kurla. He recently treated a 22-year-old man from Kurla who suffered sleepless nights due to coughing fits for two weeks. “He is a non-smoker, his X-ray and other tests were clear. We are seeing patients with no existing medical history get coughing bouts,” Barmare said.

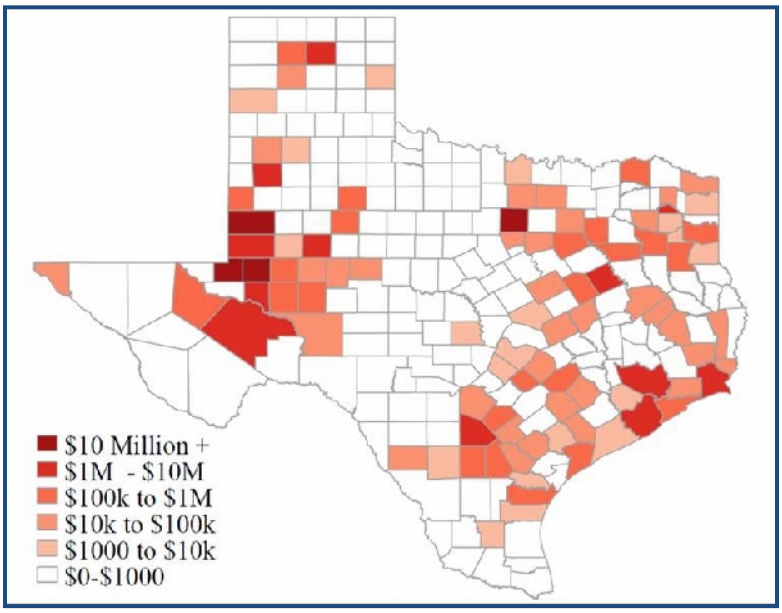
According to experts, air pollution is at its peak in mornings and evenings. “The pollution is always the highest when temperature is the lowest. The temperature is minimum in the early morning around 4 am till the sun rises. Air pollutants are trapped close to the surface due to an ‘inversion layer’. The concentration of pollutants increases and it does not get vertically dispersed. Again in the evening the pollutants build up as the temperature declines. Thus air pollution is lesser during the day than in the evening,” said Dr Gufran Beig, Director, System of Air Quality and Weather Forecasting And Research (SAFAR). On February 7, AQI rose to 275, the worst recorded for the year. On Sunday, however, Mumbai experienced the cleanest air this year so far with the AQI at 63, marking ‘good’ air quality. On Monday, the AQI continued to be good, at 79. Only Navi Mumbai recorded poor air quality at ‘very poor’ levels of 337. “The air quality in the city last week was bad, but since yesterday it has been very good. The temperature is still low yet the winds are very high so the pollutants are getting dispersed,” added Beig. Generally, the air quality during this time of the year is known to be satisfactory or moderate. “It is uncommon for the city to experience such poor air quality in February. However due to westerly disturbances, there was a lot of moisture in the air which kept pollutants trapped in the air,” he added. According to Dr Nandu Vijay, general physician with

Bhatia Hospital, those going for jogging or brisk walks in the morning are more prone to breathing problems because they take deeper breaths and gulp down more pollutants.

In Andheri, another physician, Dr Siddharth Lalitkumar, said he is seeing more respiratory illnesses in women and senior citizens. “We don’t know the reason behind it. I am seeing at least 10-15 patients a day for respiratory illness with similar symptoms,” Lalitkumar said.

Air pollution from industrial shutdowns and startups worse than though

Date: 14-Feb-2018 Source: The Conversation.com



When Hurricane Harvey struck the Texas coast in August 2017, many industrial facilities had to shut down their operations before the storm arrived and restart once rainfall and flooding had subsided.

These shutdowns and startups, as well as accidents caused by the hurricane, led to a significant release of air pollutants. Over a period of about two weeks, data we compiled from the Texas’ Air Emission Event Report Database indicates these sites released 2,000 tons of sulfur dioxide, carbon monoxide, nitrogen oxides, volatile organic compounds and other pollutants.

These types of emissions that result from startups, shutdowns or malfunctions are often referred to as “excess” or “upset” emissions and are particularly pronounced during times of natural disasters, as was the case with Hurricane Harvey.

However, as we document in a newly published study in the journal Environmental Science & Technology, they also occur regularly during the routine operation of many industrial facilities, sometimes in large quantities. And, even if unintended or unavoidable, the pollutants released during these events are in violation of the U.S. Clean Air Act (CAA).

With the EPA now revisiting the rules regarding these air toxics, our study shows how significant they are to public health – and how historically they have not been systematically tracked across the country or regulated comprehensively.

Excess emissions in Texas

Our study examines the occurrence of excess emissions in industrial facilities in Texas over the period from 2002 to 2016. We focused on Texas because, unlike nearly all other states, it has established comprehensive reporting requirements. The state collects data on so-called hazardous air pollutants that cause harm to people exposed to them, such as benzene, as well as substances called criteria pollutants, such as nitrogen oxides that contribute to the formation of ozone.

As a general rule, states set limits to industrial air emissions based on provisions in their State Implementation Plan (SIP), which is their strategy for meeting CAA requirements. The EPA in turn is responsible for ensuring that each state's SIP is drafted in accordance with the CAA.

The CAA requires sources of air pollution to achieve continuous emissions reductions, which in essence means companies need to install and maintain equipment to limit the release of pollutants that happen during routine operations.

Excess emissions occur when pollution abatement systems, such as scrubbers, baghouses, or flares that curtail emissions before they are released, fail to fully operate as the result of an unexpected malfunction, startup or shutdown. That is, a facility fails to maintain continuous emissions reductions, thereby exceeding its permit limits.

Although one might assume that such occurrences are rare, we found that excess emissions in Texas are frequent, sometimes large, and likely result in significant health damages for individuals living in communities near where these emissions are released.
Specifically, there are four important takeaways from our study.

First, excess emissions represent a sizeable share of permitted (or routine) emissions. In the case of the natural gas liquids industry, excess emissions amounted to 77 thousand tons over the period 2004-2015, representing 58 percent of the industry's routine emissions for that pollutant. Refineries emitted 23 thousand tons of excess emissions (10 percent of their routine emissions of SO2) while oil and gas fields released 11 thousand tons (17 percent of their routine emissions of SO2).

Second, the distribution of excess emissions is highly skewed. While thousands of excess emissions events occur every year in Texas, the top 5 percent of events release more pollutants than all the other events combined. In extreme cases, excess emissions events can release vast amounts of pollutants in a very short period of time. In 2003, a Total oil refinery in Port Arthur emitted 1,296 tons of sulfur dioxide within 56 hours, due to a power outage caused by a lighting strike. That was almost twice the amount of the total sulfur dioxide that refinery emitted that year from its routine operations.

Third, several industrial sectors account for a disproportionate amount of excess emissions. Facilities in just five sectors – natural gas liquids, refineries, industrial organic chemicals, electric services and oil and natural gas fields – emit about 80 percent of all excess emissions from industrial facilities in Texas.

Moreover, a few facilities within each sector are responsible for the vast majority of excess emissions. For example, the top six oil refineries are responsible for 70 percent and 77 percent of the excess emissions of sulfur dioxide and carbon monoxide, respectively, released from all 30 Texas refineries.

Finally, excess emissions have important health effects. Using a model that links pollution to mortality, we estimate that the health damages attributable to excess emissions in Texas between 2004-2015 averaged US$150 million annually. These estimates are certainly not comprehensive as they only consider damages from premature mortality due to particulate matter (PM) emissions caused by the emission of sulfur dioxides and nitrogen oxides.

The model does not account for the direct damage from other pollutants or from nonfatal, acute health events such as asthma attacks. As such, our estimate can be considered a lower bound.

Beyond Texas

The data we analyzed in our study reveal the magnitude of the problem caused by excess emissions. Yet, it is important to remember that they only capture the situation in Texas. We know very little about excess emissions and their trends over time at the national level. That's because Texas is one of just a few states (the others being Louisiana and Oklahoma) that systematically track and make public information on these type of pollution releases.

The Texas Commission on Environmental Quality (TCEQ) has gone as far as to implement a system that requires facilities to publicly report excess emissions events within 24 hours of their occurrence, information that the TCEQ then makes available on its website.

Although Texas is unique in its reporting requirements, excess emissions events are common elsewhere as the watchdog group the Environmental Integrity Project, has documented in a series of reports.

Excess emissions are underregulated

The EPA, after decades of leaving excess emissions outside of its regulatory focus, made a concerted effort to update its approach during the final years of the Obama Administration.

Prompted by a lawsuit brought by the Sierra Club, the EPA issued a State Implementation Plan (SIP) call in 2015, asking states to revisit the way they regulate excess emissions. The agency found that certain SIP provisions in 36 states were "substantially inadequate to meet Clean Air Act (CAA) requirements."

This means that industrial facilities may have been regularly surpassing the limit of their permitted pollution limits, in part because of these excess emissions. But because of state agency exemption provisions, it could be the case that these facilities would not always be penalized. In other words, the EPA determined that many states had, as a matter of policy, often failed to treat excess emissions as violations and potentially shielded offending companies from paying fines.

The EPA is now revisiting its policy as part of the Trump administration's broader efforts to scale back many of EPA regulations and decisions during the Obama era. Given the frequency, magnitude, and important adverse effects for public health, the EPA's ultimate decision on how states should treat excess emissions is consequential.

In addition, much is still to be learned about the magnitude of the excess emissions problem across the country. If an effective regulatory framework is to be designed to reduce them, it is imperative that more states begin tracking excess emissions events in a detailed and systematic way, following the example set by Texas.

Germany mulls free public transport to quash air pollution menace

Date: 14-Feb-2018 Source: Euractiv.com

"Car nation" Germany has surprised its European neighbours with a radical proposal to reduce road traffic by making public transport free, as Berlin scrambles to meet EU air pollution targets and avoid big fines.

The move comes just over two years after Volkswagen's devastating "dieselgate" emissions cheating scandal unleashed a wave of anger at the auto industry, a keystone of German prosperity.

“We are considering public transport free of charge in order to reduce the number of private cars,” three ministers including Environment Minister Barbara Hendricks wrote to EU Environment Commissioner Karmenu Vella in the letter seen by AFP Tuesday.

“Effectively fighting air pollution without any further unnecessary delays is of the highest priority for Germany,” the ministers added.

The proposal will be tested by “the end of this year at the latest” in five cities across western Germany, including former capital Bonn and industrial cities Essen and Mannheim.

The move is a radical one for the normally staid world of German politics – especially as Chancellor Angela Merkel is presently only governing in a caretaker capacity, as Berlin waits for the centre-left Social Democratic Party (SPD) to confirm a hard-fought coalition deal.

On top of ticketless travel, other steps proposed Tuesday include further restrictions on emissions from vehicle fleets like buses and taxis, low-emissions zones or support for car-sharing schemes.

Air pressure

Action is needed soon, as Germany and eight fellow EU members including Spain, France and Italy sailed past a January 30 deadline to meet EU limits on nitrogen dioxide and fine particles.

Brussels environment chief Vella gave countries extra time to present further pollution-busting measures or face legal action.

“Life-threatening” pollution affects more than 130 cities in Europe, according to the Commission, causing some 400,000 deaths and costing 20 billion euros ($24.7 billion) in health spending per year in the bloc.

Countries that fail to keep to EU limits could face legal action at the European Court of Justice, the EU’s highest tribunal, which can levy fines on member states.

Even without the pressure from Brussels, air quality has surged to the top of Berlin’s priorities over the past year.

Suspicions over manipulated emissions data have spread to other car manufacturers since Volkswagen’s 2015 admission to cheating regulatory tests on 11 million vehicles worldwide.

Environmentalists brought court cases aimed at banning diesels from parts of some city centres, and fears millions of drivers could be affected spurred Chancellor Angela Merkel into action.

Titans like BMW, Mercedes-Benz parent Daimler or the world's biggest carmaker Volkswagen agreed to pay some 250 million euros into a billion-euro fund to upgrade local transport.

The government "should make sure that the car manufacturers finance the emergency measure" of free transport, Greenpeace urged, adding that more parking and road tolls in cities could help reduce urban traffic.

On their own account, the auto firms have stepped up plans to electrify their ranges, with a barrage of battery-powered or hybrid models planned for the coming decade.

Feet of clay

Public transport is highly popular in Germany, with the number of journeys increasing regularly over the past 20 years to reach 10.3 billion in 2017.In comparison with other major European nations, tickets can be cheap: a single ticket in Berlin costs €2.90, while the equivalent on the London Underground costs €5.50 euros.But cities were quick to warn that more planning was needed if free travel was to succeed."I don't know any manufacturer who would be able to deliver the number of electric buses we would need" to meet increased demand if transport was free, Bonn mayor Ashok Sridharan told news agency DPA.Meanwhile, Association of German Cities chief Helmut Dedy warned that "we expect a clear statement about how (free transport) will be financed" from the federal government.Other attempts around the world to offer citizens free travel have failed, including in US city Seattle.Ministers "should think again during a ride on the U6 (underground line) in Berlin at 7.30 am," Die Welt newspaper commented."The conclusion would be clear: more carriages, more personnel, and maybe even more tracks and lines would be needed. Where would the billions for that come from?"

Paints, pesticides, and other consumer products now add as much to air pollution as cars

Date: 15-Feb-2018 Source: Sciencemag.org

AUSTIN—Cars are no longer the top contributor to urban air pollution. That's the conclusion of a new study presented here at the annual meeting of AAAS, which publishes Science, that finds pesticides, paints, adhesives, and other consumer and industrial products add about as much to air

pollution as transportation does. For the new work, researchers examined volatile organic compounds (VOCs). VOCs react with air to create ozone and, separately, produce fine particulate matter, which contributes to haze. Both of these air pollutants are health hazards and contribute to respiratory diseases, particularly in urban areas where emissions tend to be highest. Emissions from cars and other automobiles have long been considered the major contributor to these kinds of air pollutants. But the new work, which examined the chemical productions statistics from industrial and government agencies, found pesticides, coatings, inks, adhesives, and personal care products such as perfumes produce more than double the emissions of cars. That means U.S. inventories underestimate VOC emissions from these products by as much as a factor of three while overestimating car VOC emissions by 40%, researchers also report today in Science. Because most people use the products that make VOCs indoors, the researchers also compared emissions from residential and commercial buildings to outdoor measurements in Los Angeles, California. They found the concentration of emission compounds indoors was seven times higher than in ambient air. That means air pollution is increasingly from consumer and industrial products rather than from the transportation sector. These products are used indoors where people spend most of their time, which means their use poses a health risk that requires updated regulations, the researchers say.

Consumer and industrial products are dominant urban air pollution source: study

Date: 16-Feb-2018 Source: LiveMint

New Delhi: Emissions from vehicles are often dubbed as the main source of air pollution in urban areas across the world but a study released on Thursday has said consumer and industrial products are a “dominant urban air pollution source".

“Chemical products that contain compounds refined from petroleum, like household cleaners, pesticides, paints and perfumes, now rival motor vehicle emissions as the top source of urban air pollution," said a study led by NOAA (National Oceanic and Atmospheric Administration). The US government agency works on range of issues including weather

forecasts, severe storm warnings, climate monitoring, fisheries management, and coastal restoration.

“People use a lot more fuel than they do petroleum based compounds in chemical products—about 15 times more by weight, according to the new assessment. Even so, lotions, paints and other products contribute about as much to air pollution as the transportation sector does," said lead author Brian McDonald, a scientist working in NOAA’s Chemical Sciences Division.

The study was published in the international journal ‘Science’.

“In the case of one types of pollution—tiny particles that can damage people’s lungs--particle-forming emissions from chemical products are about twice as high as those from the transportation sector," found the researchers.

“As transportation gets cleaner, those other sources become more and more important. The stuff we use in our everyday lives can impact air pollution," added McDonald.

For the study, the scientists focused on volatile organic compounds (VOCs) which can waft into the atmosphere and react to produce either ozone or particulate matter (PM) that can cause serious health problems including lung damage.

Even though emissions from vehicles like cars and trucks are considered one of the major sources of air pollution, in the past few years indoor air pollution has also got significant attention.

The findings come as the world slowly moves towards better vehicles with car manufacturers making pollution-limiting changes to engines, governments pushing cleaner fuels and introducing strict pollution control systems.

“The scientists concluded that in the United States, the amount of VOCs emitted by consumer and industrial products is actually two or three times greater than estimated by current air pollution inventories, which also overestimate vehicular sources," the study emphasised.

The study said that as cars have gotten cleaner, the VOCs forming those pollution particles are coming increasingly from consumer products.

NOAA’s atmospheric scientist Jessica Gilman, who is also the co-author of the study, said that the disproportionate air quality impact of chemical product emissions is partly because of a fundamental difference between those products and fuels.

“Gasoline is stored in closed, hopefully airtight, containers and the VOCs in gasoline are burned for energy. But volatile chemical products used in common solvents and personal care products

are literally designed to evaporate. You wear perfume or use scented products so that you or your neighbour can enjoy the aroma. You don't do this with gasoline," Gilman explained.

"They also determined that people are exposed to very high concentrations of volatile compounds indoors, which are more concentrated inside than out. Indoor concentrations are often 10 times higher indoors than outdoors, and that's consistent with a scenario in which petroleum-based products used indoors provide a significant source to outdoor air in urban environments," said co-author Allen Goldstein, who is from the US based University of California Berkeley.

Last year, in October, a study by international medical journal 'The Lancet', said that in 2015, pollution was the reason behind nine million deaths worldwide—or about one in six. As per the study, the causes for air-pollution-linked deaths included ambient air pollution, which is outdoor air pollution comprising gases and particulate matter, as well as household air pollution, which results from the burning of wood, charcoal, coal, dung, or crop wastes indoors; and ambient ozone.

Consumer products' air quality impact 'underestimated'

Date: 16-Feb-2018 Source: BBC News

US research has found that chemicals in everyday household products are now a key contributor to city air pollution, rivalling some vehicle emissions.

The study, led from Colorado University, focussed on so-called volatile organic compounds (VOCs).

These are contained in petroleum-based products such as cleaning fluids and paints, and when they get into the air can form particles that affect health.

The scientists say the sources of non-vehicle VOCs have been underestimated.

This appears a somewhat surprising result because by weight, we use far more fuel than we do these other chemical products.

'Reduce your use'

About 95% of raw oil goes into the production of fuels, whereas roughly only 5% is refined for use in chemicals that are included in the likes of deodorants, pesticides, and adhesives.

But Dr Jessica Gilman said it should not be seen as that remarkable because vehicle fuels are burned (to yield mostly carbon dioxide and water), whereas many of the household products are simply wafted into the air by design.

"Most commonly, they're used as solvents - things like nail polish remover, the hairspray I used this morning; they are used in many cases as cleaning agents like carpet cleaners," the National Oceanic and Atmospheric Administration scientist told reporters.

"It would be difficult to remove them because the alternative is to use straight water, which as you know doesn't work for all stains."

One of Dr Gilman's colleagues, Dr Brian McDonald, did however suggest that reduced use would be helpful.

"Use as little of the product as you can to get the job done," he said.

By Roger Harrabin, BBC Environment Analyst

The air we breathe contains such a diverse mix of compounds it's impossible for researchers to be sure what chemical is causing what problem.

And there's an even trickier issue - setting pollution limits that are appropriate for everyone. Air fresheners are loved by some people - but they make others choke. Cleaning sprays are useful - but they make some people's eyes run. I know someone whose childhood asthma is thought to have been provoked by chemical emissions from flat-packed furniture in his bedroom.

This is a neglected field of research as public and media attention has focused on cars outdoors at the expense of chemicals indoors.

The researchers pulled together a wide range of information for their study.

They looked again at what manufacturers put in their products; they reviewed the statistics held by regulatory agencies; they flew atmospheric sampling missions above Los Angeles to examine the air chemistry; and they also evaluated indoor and outdoor air quality measurements collected by other researchers.

The team concluded that in the US, the amount of VOCs emitted by consumer and industrial products is very probably two or three times greater than estimated by current air pollution inventories. (There are also natural sources of VOCs in the environment.)

They add that these inventories likely also overestimate the motor vehicle sources.

'Good news'

The researchers cite as an example the current estimates from the US Environmental Protection Agency.

The EPA considers that about 75% of petroleum-based VOC emissions come from vehicle fuels, and roughly 25% from chemical products.

The Colorado reassessment puts the split closer to 50-50.

"The use of these products emits VOCs in a magnitude that's comparable to what comes out of the tailpipe of your car. One of the main reasons for this is that in the US, as well as in Europe, air quality regulations have been really successful at controlling emissions from motor vehicles," said Dr McDonald, who is affiliated to the Cooperative Institute for Research in Environmental Sciences (CIRES) in Colorado and is the lead author on the study.

"In some ways, this is a good news story that, as we control some of the bigger sources in the past, the other sources are emerging in relative importance, such as these consumer products."

Experts say the results of this research are broadly applicable to other industrialised nations, including those in Europe.

Anthony Frew, a professor of respiratory medicine at Brighton & Sussex Medical School in the UK, commented: "This research is a useful reminder that discussions of air pollution need to consider all sources of pollutants and that measures targeting cars only address part of the problem.

"Engineering changes to car exhausts have dramatically reduced the amount of pollution produced per mile, meaning that (a) there is now less to be gained from further changes to cars and (b) the public need more information on how their activities, apart from driving, contribute to current pollution levels."

Vehicles emit pollutants beyond just VOCs, of course. These include nitrogen oxides (NOx). Indeed, it is the reaction between the NOx and the VOCs that produces some of the particles of most health concern.

Delhi air pollution: Government installs this device to fight bad air; all you need to know

Date: 17-Feb-2018 Source: Financial Express

In a fight against alarming levels of air pollution in the national capital, the Delhi government has installed an 'anti-pollution tower'. The tower was installed under the Indraprastha Marg flyover, near ITO on Friday. As per a report by the Hindustan Times, this tower is fitted with exhaust fans that suck in polluted air. There is a machine that is present inside the tower which amazingly removes nearly 90 per cent of the particulate matter. The device has been developed by Maharashtra-based startup company Pi Greentech Solutions. In a tie-up with the Delhi government, the company has installed these 5 ft tall and two ft wide devices in Delhi that works on 'Carbon Cutter Machine' principle. This will help in bringing down the pollution levels especially during the winter months and spews fresh air out. Once the pilot project becomes successful, the officials said that more such machines would be installed in the city.

A government spokesperson was quoted as saying that to curb air pollution, especially at busy traffic intersections, at least six to seven more such anti-pollution towers will be set up at different locations of the city. He added by saying that once the trial is completed the government will decide the future course of action. Meanwhile, the effectiveness of anti-pollution tower devices would be monitored, Delhi environment minister Imran Hussain in a statement said. He also said that the results obtained from these devices will be evaluated for checking the efficacy and utility of the machines.

However, pointing out that such devices won't help in achieving the desired result in a place like Delhi, Anumita Roychowdhury, who is the executive director of research and advocacy at Centre for Science and Environment said that such purifiers are known to work indoors. But in Delhi, where pollution levels are high, the weather is dynamic and sources of pollution multiple, the device might not fulfil the purpose. she said.

Earlier, the state environment department had experimented with anti-smog guns. However, the trail had failed to create any difference in pollution levels. The CPCB had given an adverse report against such guns.

'Mumbai's air pollution levels will never be worse than in Delhi'

Date: 19-Feb-2018 Source: Financial Express

Last week, Mumbai's air quality index (AQI) was worse than in Delhi, sparking off a debate on the financial capital going the Delhi way.

Dr P Anbalagan, Member Secretary, Maharashtra Pollution Control Board, speaks about what measures will be taken and about the state's move to ban various plastic items starting next month. Excerpts from an interview to Indian Express

Last week, Mumbai's AQI was worse than in Delhi. Do we need a policy level intervention with regard to vehicular use, construction and waste management to ensure we do not go the Delhi way?

We should appreciate that the volume of emission remains the same. Within a month or a year, it does not shoot up exorbitantly. It also depends on the meteorological factors, typically the humidity, wind speed and temperature. Same level of emission on two days, but the temperature varies, so there is no natural dispersal or diffusion, which is normally like flushing, because it happens due to the wind speed.

So, I do not subscribe to the view that our levels will be worse than Delhi's. It will never happen. These are sporadic things. Vehicular emission is the major source of pollution and, coupled with poor traffic management, it can aggravate the situation. A good traffic flow should take care of 30-40 per cent of the pollution issues.

In cities such as Mumbai, where a lot of redevelopment activities happen including demolition and transportation of waste, this also forms a major source of pollution. Road quality also makes a lot of difference. This is more about management than about technology. When the same dust appears again and again, it is called resuspension. A certain day's AQI doesn't indicate that all the dust was accumulated in one day. It includes the dust from the previous day which has not dispersed. So we need good pavements with good roadside plantation, road quality, traffic management and management of construction activity.

We need to have a lot of green plantations and open spaces for carbon fixation, a good traffic management plan, reduced fuel burning with a robust public transport system. We have a graded response, giving advisories for different air quality levels, like avoid using personal vehicles or avoid venturing out of the house. It involves awareness among the people and

should be a movement from the people's side. The state government is planning to ban several plastic items and water bottles from March 18.

Looking at the ineffective implementation of plastic carry-bags below 50 microns, what are the measures suggested to ensure effective implementation?

There are two factors for the use of plastic carry-bags. One is demand and supply while other is comfort and convenience. But, the government has not taken a decision overnight. It is a well thought out process. For the first time in the country, we announced it six months in advance. Second, we have also appealed to people through media about the ban. Third, is about supply of plastic. It is about convenience and comfort for the people. People expect that everything should come from government but everybody has their own responsibility. We also held several divisional level meeting to study alternatives to plastic. We are also looking at making cotton bags attractive and aesthetic. Besides, we will also act on producers, stockists and retailers for penalties.

Have the widespread road digging and construction activity across Mumbai for various infrastructure projects added to the Suspended Particulate Matter (SPM) and dust levels? Are agencies undertaking these projects even monitoring air and noise pollution levels around their sites?

Absolutely. I don't think the agencies undertaking projects are monitoring pollution levels. They should be able to control the SPM on site. Mumbai also needs infrastructure projects but on a parallel you need to balance it. For controlling pollution, we will suitably guide them and direct them. We are preparing a comprehensive action plan for 10 cities and will consult all the stakeholders. Then we will suitably guide and direct them.

Has increasing vehicle density on roads in Mumbai necessitated traffic restrictions like the odd-even plan in Delhi?

Any isolated ad hoc measure would not yield much. You need to look at comprehensive factors. Instead of going for ad hoc or knee-jerk reaction, we should look at as a whole comprehensive phenomenon, as an urban management phenomenon and as health policy phenomenon. The Greenpeace report found that in 2016, of the 24 cities and towns with air quality monitoring facilities, none had complied with the annual PM10 air quality standards set by the CPCB.

MPCB began formulating an action plan to mitigate air pollution, how far has that progressed?

First of all, our city has performed marginally higher and not like cities such as Kanpur, Varanasi or Kharagpur. Though we are not excellent, we are also not bad. Having more stations will also have comprehensive data. Now, this data is based on one or two stations in a city. We should

have a good quality monitoring network in a city. That will also show actual status. We have draft plan ready and will finalise it after a stakeholders' meeting. The plan includes traffic flow, green cover, stringent norms for thermal power plants with others. By 2020, we should be able to breathe clean air.

At a time when the Maharashtra government is taking several steps to attract industries, some units in Taloja have alleged harassment by local politicians and MPCB officials. They say the board plans to set up expansion plants in other states. What do you say about this?

I'm not aware of anybody leaving the state. I have never seen people shifting to other states. Second, it can't be taken as an isolated thing as there were lot of cases before the Bombay High Court regarding the non-compliance of the Common Effluent Treatment Plant (CETP) norms. Taloja CETP is totally non-compliant. We have an enforcement policy and discretion doesn't exist. The enforcement policy that defines what exactly is the violation, what is the frequency and what is an incidence. We give them go-ahead for operation immediately after the unit complies with it.

Govt uses anti-smog gun to shoot down air pollution

Date: 20-Feb-2018 Source: Daily Pioneer

In a bid to combat air pollution problem in Delhi, the Delhi Government on Monday initiated its anti-smog campaign which will run for a week. The campaign has started from Delhi secretariat and Government of National Capital territory of Delhi (GNCTD) will take the assistance of Delhi Jal Board (DJB) for the use and upkeep of "Anti -Smog Gun" machine.

As per the Government officials, this gun will be used on Public Work Department (PWD) roads during non-peak hours for checking its capabilities in reducing air pollution.

"The Clean Air for Delhi Campaign is being jointly organised by the Delhi Government in association with the Union Ministry of Environment, Forest and Climate Change (MoEF&CC), from February 10 to February 23, 2018 in order to create awareness among the people of Delhi about the activities which lead to air pollution in Delhi." the Delhi Government mentioned in their official statement.

Officials from Delhi Pollution Control Committee (DPCC) also further said that sixty-six teams have been constituted under the supervision of Sub Divisional Magistrates or Tehsildars.

"These teams also include officers from respective Municipal Corporations, DPCC and Officers of MOEF&CC/Central Pollution Control Board (CPCB)," the official added.

These teams are taking preventive action in different parts of Delhi against instances of sources of air and noise pollution such as garbage burning, vehicular emission-traffic choke points, Measures to ease congestion, encroachment of roads by parking leading to congestion, dug up and dusty roads, Industrial emission, Construction and demolition waste, Use of power generators and DG sets.

launching the anti-smog campaign, Delhi Environment Minister Imran Hussain said that the use of Anti Smog Gun is expected to suppress air borne particles and dust on road surface.

“The Anti Smog Gun will be used for spraying on road side vegetation also. This process is likely to reduce the contribution of particulate matter which settles on the vegetation due to road re-suspension and windblown dust,” he added. Anti-Smog Gun will be used for next few days on different routes of PWD in consultation with Delhi Traffic Police.

Meanwhile in a joint clean air campaign of Union Environment Ministry and Delhi Government has recorded 4,347 violations, and 1,892 instances of slapping of penalties, leading to collection of Rs 54 crore over the past week, officials said on Monday.

The “Clean Air for Delhi” campaign was launched jointly by Union Environment Minister Harsh Vardhan and Delhi Chief Minister Arvind Kejriwal on February 10 to find a permanent solution to pollution in the National Capital Region, including Delhi, through experiments and an awareness drive over a fortnight. The Environment Ministry has claimed improvement in Delhi’s air quality during the course of the campaign.

“Data from Central Pollution Control Board (CPCB) shows that the level of air quality which was in ‘very poor’ category at the beginning, remained at ‘moderate’ level from February 12 to 15 and at ‘poor’ level on three days —February 16, 17 and 18,” a ministry statement said.

The Ministry added that there had also been a noticeable reduction in levels of pollution, particularly in comparison to the level of pollution on the same day in 2017.

As many as 70 teams with officials from the Central Pollution Control Board, Delhi Pollution Control Committee, civic bodies, Delhi Police and NGOs have been formed for the campaign. The Clean Air for Delhi campaign will continue till February 23.

India needs to 'move fast' to tackle air pollution: UN Environment Programme chief

Date: 21-Feb-2018 Source: Hindustan Times

No one thought air pollution was a big problem in India two years back but this is changing "rapidly" now, UNEP chief Erik Solheim said, asserting that the country has "ambitious" visions on environment.

India should enhance its actions in three areas, renewable energy, mobility and transforming the agricultural sector, the Executive Director of the United Nations Environment Programme (UNEP) said.

Solheim is in India for a week.

He stressed that India needs to "move fast" to tackle the issue of air pollution.

"China and India are both countries with ambitious visions on environment. Yes, in recent years, China has moved quickly on air pollution, and I see India moving in that direction as well.

"Two years ago, no one thought air pollution was a big problem in India, now that is changing, and rapidly," Solheim said.

Terming India's efforts to fight air pollution in New Delhi and other big cities as "very encouraging", he had earlier said that the country's experience in harmonising development and environment protection is an example for the world.

Solheim said that India has more benefits in comparison to China, and the country under Prime Minister Narendra Modi has a "very clear" direction towards tackling the issue which is very "positive".

Speaking on the sectors which India needs to focus on, the UNEP chief said that focus on energy should be the number one priority to "spur solar and green revolution".

“I think I need to list two or three issues. Energy is number one to really spur the solar and green revolution. Second traffic, we need to do a lot more and move towards electric mobility but it must be based on domestic industry and transforming agriculture,” he said.

In 2002, China introduced two metro systems and now has the biggest metro networks in the world, Solheim said.

He pointed out that there has been a “sea change” as far India’s approach at climate negotiations are concerned.

“I think there is a sea change. Ten years back India was so defensive in negotiations. Now India is taking a much more ‘front seat role’ and much more positive looking,” the UN official said.

He had earlier also signed a letter of intent with Indian Union environment secretary C K Mishra on India hosting the World Environment Day on June 5, 2018.

India will be the global host of the World Environment Day and the “Beat Plastic Pollution” theme.

Government plans to curb air pollution so inadequate they are unlawful, High Court rules

Date: 21-Feb-2018 Source: Independent.co.uk

The Government’s plans to tackle air pollution have been declared “unlawful” in a High Court ruling that condemned their inadequacy.

Environmental lawyers from ClientEarth won a legal challenge launched last month against official proposals for reducing illegal levels of harmful nitrogen dioxide, most of which comes from vehicles.

The judge said more action was needed in 45 English local authority areas and in Wales.

Mr Justice Garnham said the Government’s plan was “seriously flawed” in respect of those areas, and was not expected to reduce pollution to within legal levels until 2021.

He said: “Because the obligation is zone-specific, the fact that each of the 45 local authority areas will achieve compliance in any event by 2021 is of no immediate significance.

“The Environment Secretary must ensure that, in each of the 45 areas, steps are taken to achieve compliance as soon as possible, by the quickest route possible and by a means that makes that outcome likely.”

Previous plans had already been deemed illegal by courts for failing to adequately tackle air pollution in the UK and bring it in line with EU air quality standards.

The court had previously heard that nitrogen dioxide levels are still too high in 37 of the 43 air quality zones across the country.

The most recent government plan involves setting aside £255m to help local authorities improve air quality, and proposals to end the sale of all conventional petrol and diesel cars by 2040.

Critics have called this plan a “shabby rewrite” that is incapable of delivering cleaner air.

Mary Creagh, chair of the Environmental Audit Committee, said: “Millions of people in the UK live with illegally high levels of air pollution, which results in 40,000 early deaths every year.

“Ministers’ shambolic attempts to tackle this means this is the third time the courts have ordered the Government to come up with a new plan.

“The Government must now use every tool in the box to clean up our choking cities.”

Green MEP Keith Taylor said: “The Government still won’t learn its lesson. A shabby rewrite of their dismal air quality ‘plan’ was never going to deliver cleaner air. Time after time the Tories’ deadly apathy has been called out by the courts, thanks to the dogged and admirable work of ClientEarth.

“Instead of confronting their moral and legal duty to protect our health, ministers have prioritised throwing taxpayers’ cash away fighting in the courts against taking even the most basic action needed to bring our air within EU air pollution limits. It’s a disgrace. The Government is standing idly by while Britain chokes.”

James Beard, climate and transport specialist at WWF, said: “The ruling that a 2040 petrol/diesel sales ban and passing the buck to local authorities do not add up to a satisfactory air quality plan, means we’re back to the drawing board.

“Defra (Department for Environment, Food and Rural Affairs) should bring forward its petrol/diesel sales ban to 2030. This will help local authorities clear the air in their streets in the near term, while cutting carbon emissions and helping protect people and nature from the impacts of climate change.”

The judge did, however, reject ClientEarth’s case in relation to the Government’s plans for five key cities, including London.

He said the Government’s approach to those cities was “sensible, rational and lawful”.

A spokesperson from Defra said: “We are pleased that the judge dismissed two of the three complaints. The judge found that our modelling is compliant and that our approach to areas with major air quality problems is ‘sensible, rational and lawful’.

“The court has also asked us to go further in areas with less severe air quality problems. We had previously considered that it was sufficient to take a pragmatic, less formal approach to such areas. However, in view of the court’s judgment, we are happy to take a more formal line with them.

“We have already delivered significant improvements in air quality since 2010 and we will continue to implement our £3.5bn air quality plan.”

British Air Pollution Plans are Inadequate: High Court

Date: 22-Feb-2018 Source: Tempo.co

TEMPO.CO, London - Britain’s plans to curb air pollution are inadequate and must be improved, the High Court ruled on Wednesday following a legal complaint from environmental lawyers, Client Earth.

The judge, Justice Garnham, said more work was needed to be done to tackle harmful air pollution in 45 local authority areas in England and Wales.

“Good faith, hard work and sincere promises are not enough ... and it seems court must keep the pressure on to ensure compliance is actually achieved,” Garnham said when handing down the judgment. The government’s pollution plans have been criticized by environmental groups which have said the 45 local authority areas would be unlikely to comply with European pollution rules until 2021.

Under the EU’s Air Quality Directive, member states were supposed to comply with nitrogen dioxide emission limits in 2010 - or by 2015 if they delivered plans to deal with high levels of the gas, which is produced mainly by diesel engines.

Britain’s Department for Environment, Food & Rural Affairs said it would launch more formal plans for areas with less severe air quality problems.

“We have already delivered significant improvements in air quality since 2010 and we will continue to implement our 3.5 billion pounds ($4.88 billion) air quality plan,” a spokesperson said.

A modest proposal for solving the air pollution crisis: a worker smog bonus

Date: 22-Feb-2018 Source: The Guardian

We are all aware of the value of clean skies and the costs of pollution, so isn’t it time to put more economic pressure on governments and companies to clean up?

I first considered the potential for a smog allowance while I lived in Beijing (my heavily polluted home from 2003-2012) and the idea only strengthened after I moved under the mostly blue heavens of Rio (2012-2017).

My experience of these two very different cities confirms what ought to be blindingly apparent: that quality of life gets a big boost when you do not have to worry about what you breathe. This should be reflected in salaries and taxes.

Companies should be obliged to pay more to workers who cannot rely on a healthy oxygen supply. This would give them an incentive to clean up their own acts and to put pressure on neighbouring firms and hosting municipalities to tackle wider sources of pollution, such as traffic, factories, building sites and coal or wood-burning stoves and barbecues.

For the worker, the extra income could offset both the short-term cost of air-purifiers and face masks – if that is an option – and the long-term risks of asthma and bronchial disease (both of which I suffered in Beijing). It would also serve as a form of family compensation for particularly polluted days when children are told they must not go out at playtime and adults have to skip plans to go jogging or hiking - a frequent concern when I was living in Beijing, though not once an issue in Rio.

The amount of the smog allowance should vary according to the air quality. One way might be to calculate how many days per year the pollution exceeds WHO guidelines (for example, £100 for 10 days, £200 for 20 days). Or it could be assessed by how far beyond the safe standard the

air becomes. “Crazy Bad” readings – the term used to describe extremely smoggy days – should incur crazy high costs.

Some transnational companies already pay “hardship allowances” to expatriates in posts where healthcare, education and other living standard indexes are deemed below international norms. If pollution became a bigger part of this calculation, then firms would look more closely at air quality when deciding where to locate offices and factories. This would, in turn, encourage municipalities to clean up in order to attract investment.

Taken a step further, the state should pay smog allowances or oblige local authorities to give council tax rebates to residents who live in polluted areas. The pressure on their budgets would prompt them to crack down harder on polluters.

This might not change the world, but it should make people think more seriously about pollution – and who should bear the costs.

Black people impacted the most by air pollution: study

Date: 23-Feb-2018 Source: NyDailyNews.com

An EPA study shows that minorities face a greater risk from air pollution than white people while black people in particular are the most disproportionately affected.

Published in the American Journal of Public Health, scientists with the EPA's National Center for Environmental Assessment measured how much fine particulate matter people are exposed to only to discover that black people are subjected to 1.54 times more of this industrial byproduct than anyone else.

Likewise, people of color in general have a 1.28 times higher burden than white people and anyone living in poverty generally is exposed to 1.35 times more particulate in comparison to the overall population.

With this increased exposure to air pollution comes a greater likelihood of developing such problems as asthma and heart disease, not to mention an increased chance of premature death.

"Our study contributes to the narrative by providing a systematic study of burden by race, ethnicity and poverty status across the entire U.S.," EPA researcher and study author Ihab Mikati told BuzzFeed News.

In total, every state besides Maryland, New Mexico, North Dakota and Virginia featured a disparity in air quality between black people and white people.

The worst offenders were Indiana and Alabama.

"This report illustrates how people of color and people with limited means have been grossly taken advantage of by polluters who don't care about the misery they cause," Leslie Fields, director of Sierra Club's environmental justice program, told the Hill.

In light of the vast racial discrepancies, the study concluded by stating that "socioeconomic considerations may be insufficient" to address the burdens placed on these communities.

Air pollution reduces in Vijayawada

Date: 25-Feb-2018 Source: DeccanChronicle.com

Vijayawada: Air pollution has come down in Vijayawada, as per the reports of the Pollution Control Board. PM 10 (Particulate Matter) reading was 102, a fortnight ago, but now it has dropped to 83, which is a major change. PM 2.5 is at 37, which is supposed to be less than 100, as per the pollution standards. Ozone reads at 9 against the range less than 30. Sweeping during the night times, watering and sprinkling by the municipal corporation has given good results in increasing the quality of air.

The district administration has put in efforts to increase the air quality and reduce pollution by taking up different measures, despite the many construction works and traffic snarls in the city. Every night, staff of the VMC authorised agency have been sweeping the roads with machines and then watering and sprinkling to prevent the dust raise. This apart, compact machines are being used to lift garbage.

The district administration distributed 22,000 plants 11,000 shops, two each. Even the wine shop owners were asked to raise plants. There are plans to distribute 3 lakh plants in the city, one to each home. These ornamental plants will produce 260 pounds of oxygen and absorb 48 pounds of carbon dioxide, as per the Pollution Control Board report.

In the last fifteen days, with instructions from the higher officials, more efforts are being put to check air pollution. Over 10 vehicles causing pollution were seized and 394 others were fined for the same in the last 15 days. Collector B. Lakshmikantham told DC: "We are trying to check air pollution through various means. Apart from cleaning the roads and afforestation campaign, we have proposed to the government to extend the Benz Circle flyover up to Nidamanuru to avoid traffic snarls as vehicles are causing more pollution during idling. The Chief Minister too agreed on this and we are waiting for the official nod.

Poor air quality recorded in most parts of western Taiwan

Date: 25-Feb-2018 Source: TaiwanNews.com

TAIPEI (CNA) -- The Environmental Protection Administration (EPA) warned of poor air quality in western Taiwan on Sunday as 33 air quality monitoring stations flashed either an orange or red warning around noon, indicating generally unhealthy air.

As of 1:00 p.m., the EPA's Air Quality Index (AQI) flashed red, signaling unhealthy air for the general public, at 6 monitoring stations in the western half of the island, including Chiayi, Tainan, as well as Kaohsiung in the south, according to the AQI network (http://taqm.epa.gov.tw/taqm/en/).

Meanwhile, 27 monitoring stations in Taiwan, as well as the outlying county of Kinmen, flashed orange, indicating unhealthy air for sensitive groups, the website showed.

In the rest of western Taiwan and all of eastern Taiwan, the air quality was rated as either good or fair, the monitoring data showed.

Considering that the AQI at more than one-third of the monitoring stations in most parts of the west flashed red or orange alerts, state-owned Taiwan Power Co. (Taipower) was considering

reducing the output of the coal-fired Hsieh-ho Power Plant in Keelung in northern Taiwan, the coal-fired Taichung Power Plant in central Taiwan and the coal-fired Hsinta Power Plant in Kaohsiung in the south to bring down air pollution emissions, according to the EPA.

The EPA's AQI takes into account ozone, PM2.5 and PM10 particulates, carbon monoxide, sulfur dioxide and nitric oxide concentrations in the air.

The EPA advises people in areas with poor air quality to avoid outdoor activities if they experience eye irritation, coughing or a sore throat.

Meanwhile, young children, seniors and people with respiratory and cardiovascular diseases in those areas should avoid physical exertion and wear facial masks when outside, the EPA said.

German Court Rules Cities Can Ban Vehicles to Tackle Air Pollution

Date: 27-Feb-2018 Source: The New York Times

BERLIN — Germany's highest administrative court ruled on Tuesday that vehicles can be banned from some city streets as part of efforts to improve air quality in urban areas, a decision that could have far-reaching consequences for the country's automakers and the diesel technology they promoted for decades.

Other European countries have taken measures to reduce the number of diesel-powered cars, but the technology is almost synonymous with Germany, where there are 15 million diesel cars on the streets and where automakers bet their futures on technology they billed as environmentally friendly, even as they rigged software in their cars to pass stringent emissions tests. Environmental groups welcomed the Federal Administrative Court's ruling, which was centered on efforts to limit emissions in Stuttgart but set a precedent for all cities in Germany. Although they predicted that bans could be in place in some cities by fall, many cities and automakers pointed to language in the ruling that suggested its ultimate effect was yet to be determined.

The ruling called for "proportionality," stipulating that only older models with the highest emissions could be subject to such bans and that other considerations had to be taken into

account, but automakers warned that allowing individual cities to set their own rules could result in confusion for drivers.

“Volkswagen has to accept the Federal Administrative Court’s decision, but is unable to comprehend it,” the company said in a statement, adding that it was “unsettling for millions of motorists” and “completely unclear” how the decision could be implemented.

But Deutsche Umwelthilfe, an environmental and consumer rights organization that set the legal action in motion, cheered the ruling as a clear victory for residents of dozens of German cities who are suffering from respiratory and other health problems caused by air pollution.

“The days of flooding the inner cities with poisonous diesel emissions are over,” said Jürgen Resch, managing director of Deutsche Umwelthilfe. “These vehicles have no place in our cities anymore.”

Frustrated with the lack of progress in improving air quality in about 70 of the country’s most polluted cities, the group brought lawsuits against several local governments, demanding that they uphold the air quality standards set by the European Union. In some instances, cities found that the only way to ensure those standards were met involved banning certain vehicles — mostly older diesel models — from city streets.

Mr. Resch said he expected the first bans to be enacted in the fall in German cities where pollution levels are highest. Those cities include Stuttgart, home to Porsche and Mercedes, as well as Düsseldorf, both of which were directly involved in the case.

“Limited bans for certain diesel cars are within the law,” the court said in its ruling, as one way to allow cities to meet the limits on the emissions of nitrogen oxide established by the European Union in 2010.

The court further found that when emissions exceeded the allowed limits, banning all vehicles with diesel motors older than those approved in 2014 and gasoline-burning engines older than those approved in 2001 was the only way for the municipal authorities to ensure air quality.

In 2016, a lower court in Stuttgart ruled in favor of Deutsche Umwelthilfe’s argument that the only way to effectively reduce nitrogen oxide levels in urban areas was to keep off the streets those vehicles responsible for the pollution, most of them diesels.

But the state of Baden-Württemberg challenged the lower court’s ruling, and a court in North Rhine-Westphalia urged a higher court to weigh in, arguing that only the federal government had the right to enforce the European Union standards.

The ruling allowing such bans — already popular among Germany's European neighbors — could open the floodgates, allowing for a raft of new measures in other cities across the country. But resistance to steps that curb drivers' rights in Germany remains deeply rooted. Diesel technology was developed in the country, and it accounts for many of the 800,000 jobs in the German auto industry.

Ferdinand Dudenhöffer, a professor who runs an automotive research center at the University of Duisburg-Essen, warned the Germans who drive older diesel cars not to try to sell them, as the ruling was certain to send prices plunging. He criticized the government and auto industry for failing to take the problem of diesel emissions seriously enough when they met in Berlin in August.

"Car and policymakers now need to put their heads together and finally come up with a solution for how we are going to get out of this mess," Mr. Dudenhöffer said.

Chancellor Angela Merkel, whose government has been under pressure for years to take a stronger stance against the powerful auto industry, tried to soothe the concerns of diesel owners. "It only pertains to certain cities in which there is more negotiating to be done," the chancellor said after the ruling. "But it certainly does not affect all of Germany and every person in the country who owns a vehicle."

Municipal groups have warned that allowing bans could be fatal for inner cities, where delivery, repair and emergency workers, as well as many residents, rely on diesel-fired vehicles.

Diesel was sold for decades as a cleaner alternative to gas-fired engines on the argument that diesel cars were better for the environment because they burn fuel more efficiently and emit less carbon dioxide.

But in 2015, the United States authorities revealed that Volkswagen had duped consumers by rigging its vehicles to pass emissions tests: Software cut emissions during tests in a controlled environment but turned off under normal driving conditions.

Since then, the scandal has widened, most recently through revelations of a study in which VW forced monkeys to inhale fumes from a Beetle in an effort to prove they were not harmful.

At the meeting in August, the German government ordered all carmakers to fix the problem, and they responded by proposing software that would keep emissions at laboratory levels while driving on the open road. But environmental groups have argued that these have failed to sufficiently reduce pollution.

An alternative would be to retrofit some older vehicles, at a cost of 1,400 to 3,300 euros ($1,725 to $4,060), cutting diesel pollution by as much as 70 percent, according to Germany's auto safety group, ADAC.

Customers are already turning away from diesel technology. The latest figures show a drop of more than 17 percent in the number of diesel-burning cars registered in January compared with December. The figures reflect a trend established in the previous year, and the authorities fear they indicate a threat to the industry.

Like Stuttgart and Düsseldorf, Munich is also considering a ban. They would join European cities including Madrid and Athens, which have said they will ban all diesel vehicles by 2025. Britain and France have also said they want to end domestic sales of new diesel vehicles by 2040.

Air pollution: Delhi enjoys cleanest February in three years

Date: 28-Feb-2018 Source: Hindustan Times

As air quality improves and with winter gone, the Supreme Court-mandated Environment Pollution (Prevention and Control) Authority (EPCA) is likely to lift the Graded Response Action Plan (GRAP) from March 1, two weeks before it was scheduled to come to an end.

Delhi is enjoying its cleanest February in three years as far as the air quality index is concerned. The number of days with 'very poor' and 'poor' air quality has gone down while days with 'moderate' air quality have risen.

Data released by the Central Pollution Control Board shows that the number of days in February with 'very poor' air quality dropped from 15 in 2016 to four in 2017. In 2018 it dropped to three. Similarly, 'poor' quality days have dropped from 22 in 2017 to 18 this year. Days with 'moderate' air quality has gone up from 0 in 2016 to two in 2017. In 2018, there were six days of moderate air quality in February. "There were two 'moderate' days in February 2017. The AQI was 162 on February 7, 2017. This year the AQI dropped to 140 on Monday – the lowest AQI recorded in February in last three years," said a senior CPCB official.

Scientists said the clean air is a combined effect of measures taken to curb pollution and favourable meteorological conditions. “A slew of measures had been rolled out to keep pollution levels under control. Other measures such as the ban on pet coke and furnace oil have also yielded results. Meteorological conditions are also favourable. Strong winds are blowing and temperature is rising, which is aiding better air circulation. This is helping in dispersal of pollutants,” D Saha, former head of the CPCB’s air quality laboratory, said.

Officials from the regional weather forecasting centre said the wind speed had been high over the past 10-12 days. On Monday, it was around 35 km per hour. In winter, wind speed drops to less 5 km per hour. “Measures under the GRAP to combat ‘very poor’ and ‘severe’ pollution levels were rolled out for the first time from October 17, 2017. It was scheduled to end on March 15, 2018. But with air quality better and showing signs of further improvement, the plan is likely to be withdrawn from March 1,” said an EPCA member.

Even though measures to control levels of ‘severe’ and ‘very poor’ are likely to be lifted, ban on open burning will continue throughout the year.

Hindustan Times had earlier reported that despite the toxic haze that had engulfed Delhi for more than a week in November 2017, the Capital breathed comparatively cleaner air in 2017 than in 2016.

Air quality in Delhi-NCR in winter season slightly improved: report

Date: 28-Feb-2018 Source: Live Mint

New Delhi: Air quality in Delhi and adjoining regions this winter season (October 2017-February 2018) showed a slight improvement from the previous year, with the number of days in the ‘severe category’ decreasing in each month except in January but the air is not even close to being called clean yet, said an analysis released by the Environment Pollution (Prevention and Control) Authority (EPCA) on Wednesday.

The report warned that there was still a long way to go to achieve clean air and stressed that the fight against high levels of air pollution needed a “comprehensive plan, credible monitoring, enhanced implementation and rigorous enforcement".

The EPCA report card emphasized that, “current levels of air pollution are unacceptable and are a serious health issue" and “the damage to human health because of toxins in air must not be under-estimated."

EPCA was formed by central government in compliance with a Supreme Court order to tackle pollution in Delhi-National Capital Region (NCR).

According to EPCA’s report card on Delhi’s air pollution, data from 1 October 2017 to 25 February 2018 shows a “slight improvement in air quality levels".

“An analysis of the Central Pollution Control Board’s air quality index data shows that the number of days in the severe category has decreased for each month in comparison to the previous year, except in January. In February, 16% of the days were in the moderately poor category, compared to 8% in the previous year," the EPCA report card said.

But there are still reasons to worry as the report shows, “comparison of PM2.5 (Particulate Matter) concentrations at four monitoring stations -- Mandir Marg, Punjabi Bagh, R K Puram and Anand Vihar – shows that the impact is not visible yet."

“Pollution levels remain high. The data on the hot-spot pollution areas, in particular Anand Vihar, also shows that pollution levels are extremely high – and do not show any sign of improvement," the report added.

“This reduction in pollution levels shows that we can make a difference. But the air is not completely clean yet. We must not lose the momentum in our fight for clean air. We must not lose sight of the fact that right to breathe is fundamental," said EPCA chairperson Bhure Lal, while releasing the report.

Another EPCA member Sunita Narain said the air quality in Delhi-NCR region was so toxic that all combined efforts have reduced pollution merely from the “severe-severe plus category to poor-very poor category".

“Remember, very poor category is still deadly. According to the health index of the government, prolonged exposure to this level of pollution is hazardous, even for healthy people. This means that all of us breathing this air are exposed to toxins and this will impact our health and more importantly, health of our children. Therefore, we need to do much more to reduce pollution and bring it to the good-moderate level," she added.

EPCA stated that the Graded Response Action Plan (GRAP) adopted by authorities has shown an impact but much more needs to be done. It called for massive augmentation of public transport, cleaner fuels like natural gas or electricity generated from cleaner sources including renewable, efforts to enforce and implement directions for not burning of garbage, dust management and efforts to subsidise farmers' technologies that allow them to re-plough the straw into the ground. Bhure Lal said these actions were needed "at scale and speed".

Crop burning in northern states is often cited as one of the biggest reasons behind the high levels of air pollution in the city. This year too it impacted air quality levels in the Delhi-NCR region. In December 2016, the Supreme Court approved GRAP to tackle air pollution in the Delhi-NCR area. GRAP, which was notified by the union environment ministry in January 2017, classifies air pollution into four categories of air quality—moderate to poor, very poor, severe, very severe or emergency. It gives a clear direction on the steps to be taken by the central and state authorities at each level.

EPCA also listed out a series of actions that are needed from March 2018 onwards to further improve the air quality. It called for actions such as completing setting up of the network of monitoring stations and their linking, ensure GRAP is followed, strict regulation on polluting industries, tackle crop burning and others.

March 2018

High Court In UK Rules That Current Air Pollution Mitigation Plans Aren't Enough, Must Be Improved

Date: 01-March-2018 Source: Clean Technica

The air pollution mitigation plans in place in the UK currently aren't enough on their own to address the issue, and need to be improved, the union's High Court has ruled, according to recent reports.

The ruling follows from a legal complaint issued by lawyers working for Client Earth, which was intended to spur the government to action on the growing problem.

To be more specific, the judge rules that harmful air pollution levels in 45 different local authority areas in England and Wales required stronger action — and more needed to be done in these areas than is currently being done.

"Good faith, hard work and sincere promises are not enough…and it seems (the) court must keep the pressure on to ensure compliance is actually achieved," stated Justice Garnham, when handing down the judgment on the issue.

Reuters provides more: "The government's pollution plans have been criticized by environmental groups which have said the 45 local authority areas would be unlikely to comply with European pollution rules until 2021."

"Under the EU's Air Quality Directive, member states were supposed to comply with nitrogen dioxide emission limits in 2010 — or by 2015 if they delivered plans to deal with high levels of the gas, which is produced mainly by diesel engines. Britain's Department for Environment, Food & Rural Affairs said it would launch more formal plans for areas with less severe air quality problems."

The exact wording in the statement from that department reads: "We have already delivered significant improvements in air quality since 2010 and we will continue to implement our £3.5 billion ($4.88 billion) air quality plan."

Well, maybe so, but maybe that still isn't enough. Air pollution in some parts of the UK just seems to be getting worse by the year it seems (the same is true of many other parts of the European Union as well, it should realized).

Air pollution hits hazardous levels in North, Northeast

Date: 02-March-2018 Source: NationMultimedia.com

Air pollution intensified in the North and Northeast, as the level of particulate matter smaller than 2.5 microns (PM2.5) was found to have reached harmful levels in many provinces. Data from the Pollution Control Department (PCD) air quality monitoring system yesterday showed that the daily average PM2.5 levels in Chiang Mai, Khon Kaen and Lampang had risen beyond Thailand's safe level of 50 micrograms per cubic metre of air. PM2.5 measurements in those provinces were at 80.65, 64.95 and 50mg respectively.

The other PM2.5 monitoring stations in these regions, which are at Tak's Mae Sot district and Nan's Chaloem Phra Kiat district, showed daily average levels of PM2.5 had still not exceeded the safe limit, but the data showed that the levels were slowly increasing.

Currently, there are five air quality monitoring stations in nine provinces of the Northern region, which can measure PM2.5 levels and report the realtime results on the PCD website, while there is only one station that reports PM2.5 levels for all 20 provinces of the Northeastern region.

Greenpeace has encouraged the PCD to install more PM2.5 monitoring devices to cover the entire nation, to include PM2.5 level in the national Air Quality Index (AQI) and to report realtime PM2.5 levels on an hourly basis.

According to the PCD, the AQI, which does not include PM2.5 levels, showed that air quality throughout the country yesterday, including areas affected by smog in the North, were within safe levels.

It was reported in the North that dense smog throughout Chiang Mai resulted in lowered visibility. Doi Su Thep Mountain could no longer be seen from Chiang Mai's downtown area.

The dense smog also reduced visibility at Chiang Mai Airport, as planes could not be seen in the distance, but air traffic had not been disrupted.

Suthep Phongsri, head of Occupational and Environmental Health at the Chiang Mai Provincial Public Health Office, said officials were closely monitoring air quality in the province and had already prepared 64,550 facemasks for distribution, while health volunteers had been dispatched to educate people to protect themselves from air pollution.

Suthep advised people to wear a facemask when going outside when the air quality was bad and to refrain from outdoor exercise, while four groups of vulnerable persons – children, pregnant women, the elderly and persons with chronic diseases – should remain indoors and monitor their health conditions.

The ban on outdoor burning was already in place in Chiang Mai and it would be enforced until April 20 in order to prevent air pollution in the province.

In Lampang, the military led a team of officials from relevant agencies to inspect top soil mining businesses, as local people had complained that lorries transporting soil without covering their loads through their communities had intensified air pollution.

Authorities determined that many soil mining businesses did not have dust prevention measures and the volume of lorries contributed to a significant source of air pollution.

Health savings outweigh costs of limiting global warming: study

Date: 03-March-2018 Source: CTV News

The estimated cost of measures to limit Earth-warming greenhouse gas emissions can be more than offset by reductions in deaths and disease from air pollution, researchers said on Saturday.

It would cost US$22.1 trillion to US$41.6 trillion between 2020 and 2050 for the world to hold average global warming under two degrees Celsius, a team projected in The Lancet Planetary Health journal.

For the lower, aspirational limit of 1.5 C, the cost would be between $39.7 trillion and $56.1 trillion, they estimated.

But air pollution deaths could be reduced by 21-27 percent to about 100 million between 2020 and 2050 under the 2 C scenario, the team estimated, and by 28-32 percent to about 90 million at 1.5 C.

"Depending on the strategy used to mitigate climate change, estimates suggest that the health savings from reduced air pollution could be between 1.4-2.5 times greater than the costs of climate change mitigation, globally," they wrote.

Health costs from air pollution include medical treatment, patient care, and lost productivity.

The countries likely to see the biggest health savings were air pollution-ridden India and China, said the researchers, who used computer models to project future emissions, the costs of different scenarios for curbing them, and the tally in pollution-related deaths.

"The health savings are exclusively those related to curbing air pollution," study co-author Anil Markandya of the Basque Centre for Climate Change in Spain told AFP.

"Other health benefits are not included, which of course makes our figures underestimates of the total benefits."

The costs of limiting warming, Markandya explained, included higher taxes on fossil fuels like oil and coal, which in turn raise the costs of production.

The world's nations agreed on the 2 C limit in Paris in 2015, and undertook voluntary greenhouse gas emissions reduction targets.

These pledges, even if they are met, place the world on a 3 C trajectory, scientists say.

To date, the average global temperature is thought to have increased by 1 C since the Industrial Revolution.

"We hope that the large health co-benefits we have estimated... might help policymakers move towards adopting more ambitious climate policies and measures to reduce air pollution," said Markandya.

Air pollution from fossil fuel emissions, particularly fine particulate matter and ozone, has been linked to lung and heart disease, strokes, and cancer.

Health savings by reducing pollution outweigh costs of limiting global warming: Study

Date: 03-March-2018 Source: DeccanChronicle

The estimated cost of measures to limit Earth-warming greenhouse gas emissions can be more than offset by reductions in deaths and disease from air pollution, researchers said on Saturday (March 3).

It would cost US$22.1 trillion (S$29 trillion) to US$41.6 trillion between 2020 and 2050 for the world to hold average global warming under 2 deg C, a team projected in The Lancet Planetary Health journal.

For the lower, aspirational limit of 1.5 deg C, the cost would be between US$39.7 trillion and US$56.1 trillion, they estimated.

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Old Cars Bringing More Air Pollution to Croatia

Date: 04-March-2018 Source: Total Croatia News.

ZAGREB, When it comes to the impact of transport on air quality in Europe, cars in the Czech Republic, Poland and Estonia fare the worst and they are labelled by the Eco Experts organisation as the most toxic drivers, while Croatia ranks the fifth on the list of 25 European countries. The ranking was compiled according to the results from several criteria: the average vehicle age, the number of vehicles per 1,000 inhabitants, the percentage of alternative fuel passenger cars, and air pollution.

Motorists in the Czech Republic were named the most toxic in Europe, according to the report released by the British organisation Eco Experts. Not only do Czech motorists have the 6th lowest number of alternative fuel vehicles (0.7%), their cars are also the 6th oldest on average at 14.5 years old, according to the findings of the report.

"Vehicle owners in Poland came in at a close second. Despite having the highest number of alternative fuel passenger cars (15.5%) in the research, the eastern European country performed poorly on all other measures of vehicle toxicity. Most notably, Poland is home to the oldest cars in Europe (17.2 years on average) and has the highest recorded ambient air pollution in the continent," reads the research.

"Estonia was found to be home to the third most toxic drivers in Europe, owing to its citizens driving the 5th oldest vehicles on average at 15.1 years old, and having the fifth highest number of vehicles per capita. The country also has a very low percentage of alternative fuel vehicles, at a mere 0.6%.

"Croatia and Slovakia completed the list of the top 5 most toxic drivers in Europe, with motorists in countries such as Slovenia and Romania not far behind."

In terms of the number of vehicles per 1,000 inhabitants, Croatia ranks 25th (with 392 cars per 1,000 inhabitants). Only Latvia, Hungary and Romania have fewer cars per 1,000 inhabitants. Measured by this criterion, Malta and Luxembourg top the list. In Croatia, the average vehicle age is 14.1 years.

SC-mandated pollution control authority directs UP, Haryana to build air monitoring stations soon

Date: 04-March-2018 Source: Scroll.in

The Supreme Court-mandated Environment Pollution (Prevention and Control) Authority, or EPCA, has decided to write to the Uttar Pradesh and Haryana governments asking them to hasten the process of installing air quality monitoring stations, the Hindustan Times reported on Sunday.

“We want three things – the stations you have committed should be installed, should be connected to the Central Pollution Control Board network, and should function properly,” EPCA member Sunita Narain said earlier this week. “We are tired of chasing you month after month.”

Three stations have been installed in Haryana’s Gurgaon, Faridabad and Rohtak. As many as 13 more stations are yet to be installed, and the second deadline for their installation – February

2018 – has expired. In Uttar Pradesh, two stations are functioning – in Noida and Ghaziabad. Another 10 are expected to come up. In Delhi, 24 stations have been installed and are operational, but 20 of them are yet to be connected with the Central Pollution Control Board website.

The board's common Air Quality Index will accurately reflect pollution in Delhi and the National Capital Region after these stations are installed, the Hindustan Times said.

EPCA Chairperson Bhure Lal said he would write a letter to the chief secretaries of Haryana and Uttar Pradesh. "I will also call a meeting of the chief secretaries," he said. "We need those stations up and running. The deadline given to you was end of February, where are these stations now?"

The Hindustan Times quoted unidentified Haryana officials at the EPCA meeting as saying that the remaining stations would be ready in two months. Uttar Pradesh officials said five of the 10 remaining stations could be installed by March 31.

For poor and minority children, excessive air pollution creates a toxic learning environment

Date: 06-March-2018 Source: PRI.org

School is supposed to be a safe environment, but a recent study in the journal Environmental Research has found that at many public schools, children are being exposed to harmful levels of air pollutants. Out of nearly 90,000 public schools studied, only 728 had the safest possible score.

The study found the five worst polluted areas included New York, Chicago and Pittsburgh, as well as Camden and Jersey City, based on air quality measurements of more than a dozen neurotoxins.

The researchers looked at a variety of chemical pollutants, such as lead, mercury, toluene, manganese and polychlorinated biphenyls, which come from sources like industrial activities, combustion engines, refining, waste incineration and mining.

“There's evidence that when you inhale these types of toxins, they gain entry to the body and then the body mounts an immune response which causes swelling, and this neuroinflammation in the brain leads to the damage of neural tissues,” says study lead author Sara Grineski, a professor of sociology and environmental studies at the University of Utah.

“[This has] been linked to autism, ADHD and, later in life, Parkinson's disease and Alzheimer's disease,” she notes. “All kinds of neurological conditions are starting to be traced back to having an environmental component to their origins.”

This exposure can affect kids for the rest of their lives, Grineski emphasizes. “This neurological impact is so subtle and so insidious that it's hard to even know if your child has been affected or is being affected,” she says. “You wouldn't know if their math score would have been a little higher if they lived in a different neighborhood.”

The effect on these young, developing brains can be profound. Grineski points to a study done by Dr. Lilian Calderón-Garcidueñas at the University of Montana. Dr. Calderón-Garcidueñas performed autopsies on children in Mexico who had died in traffic accidents. The brains of children who came from rural areas looked as one would expect, Grineski explains, while the brains of children from highly polluted areas like Mexico City show signs of early-stage Alzheimer’s disease.

In the US, low-income and minority children are disproportionately stuck in schools with poor air quality, according to the study. Schools with a higher percentage of African American, Latino and Asian children had significantly higher levels of the neurotoxicants in the area surrounding their schools, Grineski says. “It's a pretty strong pattern,” she notes. “It’s statistically significant, and it's quite notable that students from these racial, ethnic, minority backgrounds and also students who are poor, face higher levels of these air toxins at their schools. So, there's clearly an injustice present that … is reflective of broader issues related to racial and class discrimination in the country.”Schools are often located on cheap land, Grineski points out, and cheap land is often found in areas near major freeways or hazardous sites. Only 10 US states have a policy in place to prohibit locating schools in areas that are known to be environmentally hazardous. The other 40 states and Washington, DC, don't have a policy at all.Perhaps most disturbing, schools serving prekindergarten students had even higher levels of pollution than elementary schools, Grineski adds.

“It's quite surprising [and] depressing,” she says. “We know that children are more vulnerable to air pollution than adults. They have less developed lungs. They spend more time outside. They consume greater quantities of oxygen per body weight. So, their exposure is higher and the consequences are likely greater because they are developing and they are changing and

their cells are growing so fast. It's not a happy finding that we have our youngest students facing high levels of exposure."

Indonesia to reduce air pollution ahead of Asian Games

Date: 07-March-2018 Source: TheSstraitsTimes

JAKARTA (THE JAKARTA POST/ASIA NEWS NETWORK) - The 2018 Asian Games is just six months away and the Indonesian government has decided to focus on air quality in the host cities of Jakarta and Palembang, South Sumatra, given the high level of air pollution in the country. The Environment and Forestry Ministry recently informed President Joko Widodo that the country needed to use cleaner gasoline - of a standard known as EURO IV - to reduce air pollution from petrol-guzzling vehicles.

Speaking after a Cabinet meeting to discuss the country's readiness to host this year's Games, Coordinating Maritime Affairs Minister Luhut Panjaitan confirmed that reducing air pollution had already been on the government's agenda ahead of the prestigious sporting event.

However, when asked about the details, such as securing supplies of EURO IV standard gasoline, Mr Luhut said, "I don't know the technical [details] yet, but yes, we have plans to reduce air pollution."

Air quality monitoring conducted by the Environment and Forestry Ministry between January 2017 and January this year indicated that the level of fine particulate matter air pollutant, known as PM2.5, had reached 35 and 12 micrograms per cubic metre in Jakarta and Palembang, respectively.

Although these readings did not exceed national ambient air quality standards, which stand at 65 micrograms pcm, the level in Jakarta exceeds the standard set by the World Health Organization, which is 25 micrograms pcm.

Environment and Forestry Minister Siti Nurbaya, who delivered the report to Mr Joko on Monday (March 5), said vehicles should shift to EURO IV standard gasoline, such as Pertamax Turbo gasoline produced by state-owned energy firm Pertamina.

Last year, the ministry issued a decree on exhaust emission levels from new motor vehicles that are set in accordance with the EURO IV standard. The decree states that cars, among other vehicles, must use fuel with a minimum research octane number (RON) of 91 and a sulfur content of no higher than 50 parts per million (ppm).

Ms Siti said she had proposed to Mr Joko to implement the regulation gradually, starting in Palembang and Jakarta. "Pertamina must prepare gas stations where Pertamax Turbo or other EURO IV standard clean gasolines are available," she said.

The minister said in the report her previous discussions with relevant ministries and state-owned energy firm Pertamina concluded that Pertamina could ensure the supply and distribution of EURO IV standard gasoline by May 2018 at the latest.

Pertamina external communication manager Arya Paramita said supplies of Pertamax Turbo gasoline were available at 800 Pertamina gas stations across Indonesia, including in the cities hosting this year's Games.

Jakarta Governor Anies Baswedan said the administration was set to offer some 1,500 Transjakarta buses to transport visitors to sporting venues in the capital in order to help ease traffic congestion during the event.

When asked how Jakarta would implement measures to reduce air pollution, Mr Anies said he would first study the data.

Meanwhile, Youth and Sports Minister Imam Nahrawi visited a training camp on Tuesday.

Mr Imam, who was accompanied by undersecretary for sports achievement Mulyana, visited the aquatic and weight lifting training camp in Jakarta to check on each team's preparations for the Games.

"I want to make sure that [things like] salaries, accommodation and other needs such as nutritional requirements and supplements are all in order. I will check on this regularly because the government has distributed all the funds to the sport federations," he said.

Faurecia partners Clean Air Asia for air quality management solutions

Date: 07-March-2018 Source: Autocarpro.in

With air quality increasingly becoming a major concern for cities, there is a growing need for powertrain electrification and new clean technologies. In this context, Faurecia and Clean Air Asia are partnering to explore effective technology solutions to improve air quality and enhance industry awareness of clean city solutions. The strengthened collaboration will be focused on three key aspects across Asia: Clean Cities Initiative: Utilising Clean Air Asia's extensive regional air quality network and its years of experience in guiding national and city-level air pollution reduction, Faurecia will provide its leading air quality management solutions.

Clean Fleets Initiative: Faurecia will bring its expertise in eco-driving and emissions reduction solutions to support Clean Air Asia's Green Freight and Logistics Program, which is at the forefront of the establishment of regional and national green freight programs and initiatives. Communication: Faurecia and Clean Air Asia will facilitate multi-stakeholder actions to manage air pollution at the city level.

Effective air quality management starts with robust monitoring that can provide reliable data for risk assessment and prevention. Faurecia and Clean Air Asia are exploring the possibility of providing such monitoring through sensors and software.

"The signing of the MOU with Clean Air Asia today marks a new positive milestone to deepen the collaboration in Asia we started three years ago," said Christophe Schmitt, executive vice-president of Faurecia Clean Mobility. "As a global leader in sustainable mobility, Faurecia has the clear objective of driving mobility and industry towards zero emissions. As part of our constantly growing open innovation ecosystem, the partnership with Clean Air Asia will enable us to achieve the shared vision of reducing the environmental impact of air pollution."

"Through this cooperation, we aim to help urban cities in Asia chart a cleaner, greener and more sustainable industrial trajectory," said Bjarne Pedersen, executive director of Clean Air Asia. "Clean Air Asia boasts high-level expertise in air quality management. The launch of this

partnership with Faurecia will assist us in our aims to promote the broader uptake of cleaner fuels, vehicles and freight technologies, support more conducive transport strategies and policies, and encourage other manufacturers to embark on more environmentally sound development."

Clean Air Asia is leading the regional mission for better air quality, and healthier, more livable cities throughout Asia. Its approach entails actionable guidance for administrators and policymakers to reduce air pollution and greenhouse gases at city, national and regional levels; high-level expertise in air quality management across Asia; and an ethos of partnership, collaboration and cooperation.

Established in 2001 as the premier air quality network for Asia by the Asian Development Bank, the World Bank and USAID, Clean Air Asia is working with a range of partners to reduce air pollution and greenhouse gas emissions across Asia by building capacity, advocating for effective and appropriate policies and practice, and informing stakeholders of air pollution and climate change impacts.

Its aim is to reduce air pollution and greenhouse gas emissions in over 1,000 cities in Asia through a range of innovative policies and programs covering air quality, transport and industrial emissions, and energy use.

Clean Air Asia has its headquarters in Manila and offices in Beijing and Delhi.

How Air Pollution Has Put a Brake on Global Warming

Date: 08-March-2018 Source: Yale Environment 360

Pollution particles emitted by diesel cars and trucks, coal-fired power plants, factories, rudimentary cook stoves, and the burning of forests are major contributors to the unhealthy pall of smog that blankets many cities and regions, particularly in the developing world. Scientists have long known that these aerosols serve to block incoming solar radiation and temporarily cool the planet, but now an international team of scientists has quantified that cooling effect, saying the earth would be 0.5 to 1.1 degree C (0.9 to 2 degrees F) warmer if that pollution were to suddenly disappear.

In an interview with Yale Environment 360, lead author Bjørn H. Samset of Norway's Center for International Climate Research discusses the implications of this research. As countries like China make progress in reducing air pollution, regional planners should be prepared for the cleaner air to cause a jump in temperatures even above those expected under global warming scenarios. At the same time, Samset says, rising temperatures will likely lead to an increase in precipitation as more water evaporates from oceans, lakes, and rivers.

In Samset's view, the recent findings should not be taken as a green light to ramp up controversial geoengineering efforts to spray aerosols into the atmosphere, a prospect he likens to Russian roulette. "In Russian roulette, you know there's a bullet in there," Samset told Yale 360. In the case of geoengineering, "there might not be a bullet, you might be lucky. But would you count on it? The precautionary principle argues against it."

Yale Environment 360: With these aerosols, is particle size important?

Bjørn Samset: Yes, it is. The thing that connects all aerosols is that they are all of a size that is relevant for interaction with sunlight. The reactions with sunlight — the scattering of sunlight which leads to a cooling effect — become stronger as the aerosols grow, at least up to a certain size. For the sulfate aerosols, for instance, they tend to grow in humid air as water molecules and droplets tack onto them. The longer they are in the atmosphere, the stronger their effect becomes. There is a time element with aerosols after they are emitted, and that is where some of the detailed science is going at the moment — into tracking the evolution of these particles in the air over time.

e360: How does the presence of these particles impact climate?

Samset: They act as mirrors or as miniature clouds, and they reflect the sunlight back into space. So if the earth was surrounded with these aerosols, a lot of the sunlight would reflect back out and you would get cooling. That is exactly what we see. We believe that the volume of human-created aerosols is so great that they have counteracted the effect of global warming to a certain extent. There is a kind of tug of war taking place between the warming greenhouse gases and the mainly cooling aerosols.

"It turns out we have actually been helping ourselves - we've been polluting ourselves toward a slightly cooler climate."

e360: That is ironic — pollution is actually slowing down global warming.

Samset: Yes, it turns out we have actually been helping ourselves — we've been polluting ourselves toward a slightly cooler climate, we've been mitigating climate change through pollution.

e360: How big a thermal effect do anthropogenic aerosols produce?

Samset: We think that sulfate is cooling by half a degree or maybe a bit more. So this is the cause of some concern if we clean up air pollution, as we will do, then this impact on temperature will come very rapidly as opposed to greenhouse gases, where the impact of reducing them is felt much more slowly.

e360: When you say that aerosols have led to at least half a degree Celsius of cooling, that is over how many years?

Samset: That is the interesting thing about aerosols. We are used to thinking in terms of greenhouse gases, where you emit CO2, for example, and it just stays up there for a long, long time. But that's not true of aerosols. If we were to stop emitting them today, then in a week there would be no aerosols in the sky, it would all rain out. It's a continual process, which in a sense makes it a bit easier to treat than greenhouse gases.

e360: If we were to end all pollution today, how much more of an effect would that have?

Samset: That's what we tried to find out in the paper that came out earlier this year — we turned off all anthropogenic aerosol emissions from all over the world. So if you removed all our emissions today, then the world would rapidly — within a year or two — warm between a half of a degree and 1 degree Celsius additionally

"Aerosols have gone from being a perturbation to being very relevant because of our more ambitious climate goals."

e360: We can see the cooling effect of aerosols in the atmosphere perhaps most dramatically in massive volcanic eruptions, which can alter the earth's weather for years. What is the difference between the impact of a volcanic eruption and that of anthropogenic aerosols?

Samset: Very little, except that a powerful volcano like Mount Pinatubo will emit mostly sulfate at very high altitudes — they will go 20 or 30 kilometers straight up all the way to the stratosphere, where they stay for a long time. Many of the particles remain above the layers of the atmosphere where rain is created, so it stays there for several years.

e360: We've certainly known about the impact of aerosols on climate for a long time. But my perception is that there was not a lot of attention paid to them until recently.

Samset: That's true. Some years ago we thought that aerosols were interesting for people like me who like to study them, but not so important on the global scale, because it is really the greenhouse gases that matter. And that may be true. But then the Paris Agreement came around and it looked like there was momentum to keep the world below 2 degrees C of

warming. So suddenly this half to 1 degree of cooling from aerosols — that actually begins to matter a lot more in the context of what we're aiming for. So the aerosols have gone from being a perturbation to being actually very relevant because of our more ambitious climate goals.

e360: That puts nations in something of a bind, doesn't it? In places like India and China, pollution is leading to hundreds of thousands of additional deaths per year. So they have a huge incentive to cut down on their pollution. Yet in cutting pollution, they are simultaneously speeding up global warming?

Samset: It's one of those Catch-22s. They should certainly clean up their air pollution. That's obvious, it's an immediate concern. Not only do they have a huge incentive to cut pollution, but they are actually doing it. There was a paper that another group did before Christmas that said that sulfur dioxide emissions in China have gone down by 75 percent since 2007. You really can see it even in the satellite images. So they really are cleaning up.

e360: What impact does that have on the climate?

Samset: That's what we're trying to figure out. It's clearly been mitigating climate change in China and India, for example. The really interesting question, I think, is what the continual reduction in aerosols will mean for rainfall, for the monsoon, for extreme weather events. And there, to be honest, we really don't know, because the climate models that we have been using thus far have been just too coarse.

e360: What do we know about the impact of aerosols more generally on rainfall?

Samset: Several studies have shown that there has been a drying trend in the monsoon since the 1950s. And that seems to link to this cooling from aerosols. This hasn't been published yet, but there is a study that shows that Asia would have gotten wetter over the past 100 years if it weren't for the aerosols. We see from ground observation that large parts of China have gotten drier, and we've seen a slowdown of the [South Asian] monsoon.

e360: So now that aerosols are being reduced, can we expect things to get wetter?

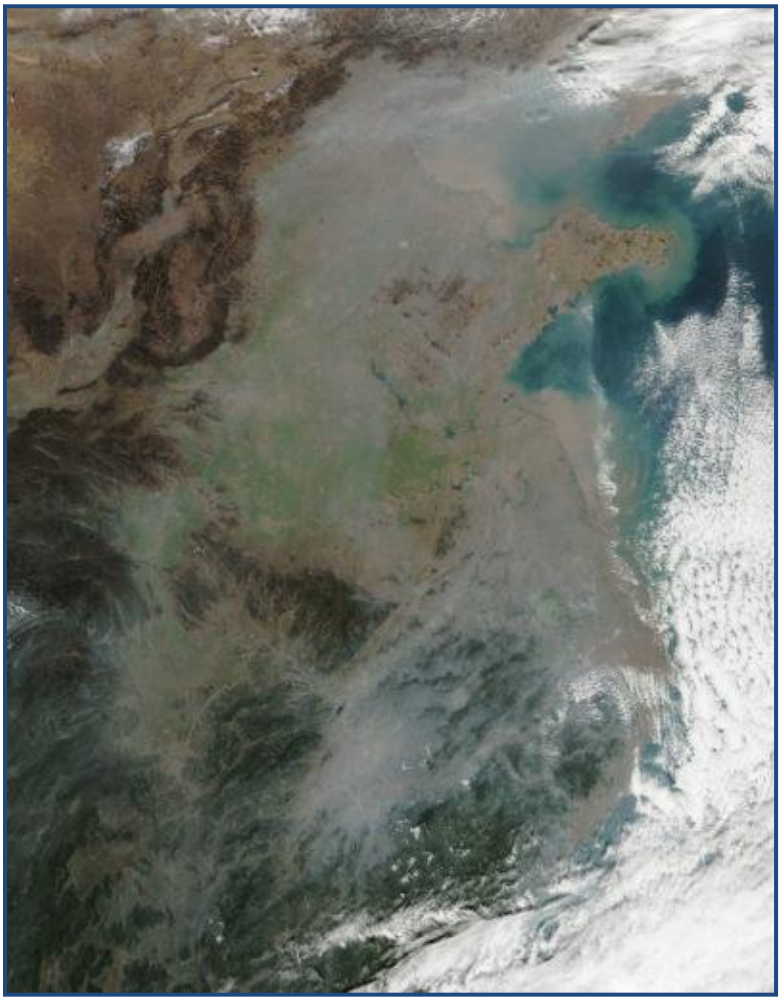
Samset: That's right, the drying trend has come as a result of the aerosol emissions that have increased. So when you remove the aerosols, you heat up the earth's surface, increase evaporation, and get more rainfall. So much of Asia will get more rainfall, which to a certain extent may actually be good news, because these are regions that often have problems with accessibility to fresh water.

The other side of that is there will be greater likelihood of extreme events. There are regions that are susceptible to extreme rainfall already, there are landslides and mudslides and many people killed every year. We need to step up the effort to protect against that kind of damage.

e360: You speak of the regional impacts of aerosols. Aren't the effects global?

Samset: For CO2, we see global effects. For aerosols, the regional effects are more profound because of the fact that they get removed from the atmosphere very efficiently. Think of a handful of sand that you pick up on the beach — gravity draws it down very quickly. This happens to aerosols as well. They are heavier than air so they fall down. As soon as there is a rain shower, it washes the air of aerosols. So there are all these processes that rapidly remove them."At some point you are going to want to stop this geoengineering and then all the problems are going to come back more or less immediately."

e360: Some people have argued that your latest findings are an argument for geoengineering. Do you see it that way?



Samset: I don't. Geoengineering is one of those things that looks nice on paper, it looks nice in climate models because it encourages us to think outside the box by simulating climate engineering experiments. But the one takeaway from all those studies is that unexpected things happen when we do this. My favorite example was a paper that tried to see if we could save the polar ice cap by emitting sulfur aerosols over the North Pole, and they found large impacts of that on the South Asia monsoon system because it changed the whole circulation system of the atmosphere.

And there is always the termination problem — at some point you are going to want to

stop this geoengineering and then all the problems are going to come back more or less immediately. So my feeling after researching this for some time is that the uncertainties are so large that I just can't advocate it.

However, it is certainly something that we do need to look into and research. Because the question is being raised by more and more planners and politicians — is there a Plan B? Probably the answer is "No, there is no Plan B." But we need to be able to give that answer in a proper way, not just say, "No, I don't think so."

e360: At the moment would it be fair to say that doing geoengineering with aerosols would be something like playing Russian roulette with the climate system?

Samset: Somewhat, yes. It is a rather tough way of putting it, but you introduce the possibility of totally unexpected climate impacts. In Russian roulette you know there's a bullet in there. In this case, there might not be a bullet. You might be lucky. But would you count on it? The precautionary principle argues against it.

How Much Do Household Products Contribute to Air Pollution?

Date: 09-March-2018 Source: Environmental Technology

Installing solar panels on your roof, buying an electric vehicle (EV) or, better yet, leaving the car at home entirely and walking, cycling or catching the bus to work might all seem like sensible suggestions when it comes to cutting air pollution… and they most certainly are.

However, a new study has found that a whole range of household products, including cleaning supplies, personal care products and paint, release as many contaminants into the air as passenger vehicles, despite being used considerably less.

Ecology begins at home

The growing market for continuous emissions monitoring systems (CEMS) - even in the developing world – means that we are now more aware than ever of the quality of the air we breathe. According to the World Health Organisation (WHO), over 90% of the Earth's populace are exposed to unsafe levels of pollution on a daily basis, but a new study suggests more of this contamination may be caused by household products than previously thought.

The new study, published in the journal Science last month, concentrated its efforts on volatile organic compounds (VOCs), which are released through the combustion of motor fuel and from a myriad household products, such as bleach, soap, paint, deodorant and air fresheners. As well as being dangerous to humans when inhaled, VOCs also interact with other gases in the air to

create ozone and particulate matter. This transformation makes them even more dangerous than before.

An outsized effect

The research team analysed air samples in the Pasadena Valley near Los Angeles over a six-week period, intentionally choosing this spot because of its notoriety as a smog stronghold. Cross-referencing this data with other research conducted on indoor air pollution (itself a topic of increasing concern), the researchers were able to pinpoint the sources of the VOCs in the LA air.They found that household products such as perfume, hand sanitizer, glue and cleaning sprays only accounted for 4% of consumer use, compared to 47% of petrol consumption and 8% of diesel consumption. Despite this, the household products contributed 38% of the VOCs in the air, while the fossil fuels associated with powering vehicles were only responsible for a mere 32% of emissions. Clearly, the cleaning products have a disproportionate effect based on their use.

A positive sign?

Despite the alarming news that everyday products contribute a significant amount of contamination to our atmosphere, the researchers have taken a largely positive interpretation of the results. The fact that vehicle exhaust fumes are now on a par with such items should be viewed as a successful symptom of measures introduced to improve air quality and reduce transport-related pollution.

On the other hand, the study does demonstrate that we should be mindful of the chemicals we are using inside our homes. After all, if these VOCs are in such abundance in the wider atmosphere, imagine how concentrated they must be inside a house.

Even 'safe' air pollution levels affect brain growth in children: Study

Date: 09-March-2018 Source: Jagran Josh

A new study reveals that babies, when exposed to even ‘safe’ levels of air pollution in the womb, may face an increased risk of having brain abnormalities that can lead to impaired cognitive function by school-age.

The study showed that air pollution levels related to brain alterations in the foetal brain, which is in developing stages and has no mechanisms to protect against or remove environmental toxins, were below those considered to be safe.

Speaking on the same, lead author of the study, Monica Guxens, MD of Barcelona Institute for Global Health (ISGlobal) in Spain said that they observed brain development effects in relationship to fine particles levels below the current EU limit. According to the European Union, 25 µg/m3 is the safe level of fine particle.

Key Findings

• The findings of the study showed that the exposure to fine particles during foetal life was associated with a thinner outer layer of the brain called the cortex, in several regions.

• The brain imaging performed when the children were between six and 10 years old revealed abnormalities in the thickness of the brain cortex of the precuneus and rostral middle frontal region.

• These brain abnormalities contribute in part to difficulty with inhibitory control - the ability to regulate self-control over temptations and impulsive behaviour - which is related to mental health problems such as addictive behaviour and attention-deficit/hyperactivity disorder.

• According to researchers, the observed cognitive delays at early ages could have significant long-term consequences such as increased risk of mental health disorders and low academic achievement, in particular, due to the ubiquity of the exposure.

Therefore, Guxens said that they cannot warrant the safety of the current levels of air pollution in our cities.

To come to this conclusion, the research team assessed air pollution levels including levels of nitrogen dioxide, a prominent air pollutant caused by traffic and cigarette smoking, coarse particles, and fine particles, at home during the foetal life of 783 children.

The study was published in a journal called Biological Psychiatry.

Comment

The study is not the first one to link safe air pollution levels with impaired cognitive functions, as previous studies have also linked acceptable air pollution levels with impact on lungs, heart and other organs including cognitive decline and foetal growth development.

Pollution hits dangerous levels in Srinagar during winters: Study

Date: 11-March-2018 Source: Business Standard

In a surprising find, a study has revealed that pollution in Srinagar the summer capital of Jammu and Kashmir hits dangerous levels during winter months as the air carries five times more tiny particulate matter than the permissible limit, with the experts terming it a worrying development.

The study, jointly conducted by a team of scientists from Pune-based Indian Institute of Tropical Meteorology (IITM) and University of Kashmir, found that the air quality deteriorates significantly during the winters in the city, known as one of the world's major tourist destination and also for its pristine environment.

"Long term monitoring of fine particulate matter, PM2.5, responsible for deteriorating human health, has been done and the results indicate that air quality of the capital city Srinagar deteriorates significantly during the winter," the study, conducted between May 2013 and April 2014 and the report of which was released recently, said.

It found that PM 2.5 levels in winter touched 348 micro-grams per cubic metre five times higher than the national permissible limit of 60 micro-grams per cubic metre, mainly due to the use of coal for domestic purpose.

"The level of PM2.5 touches a peak value of 348 micro-grams per cubic metre against the Indian permissible limit of 60 micro-grams per cubic metre. The emissions due to domestic coal usage are found to be 1246.4 tons/year, which accounts for 84 per cent of the total annual emissions," it said.

On some days, the air pollution in Srinagar is worse than that of Delhi and overall as bad as Kolkata.

"While the overall pollution in Srinagar (in winter) is as bad as in Kolkata, on some days, it is as bad or worse than Delhi," Shakil Ahmad Romshoo, Head Department of Earth Sciences at Kashmir University, and one of the authors of the study, said.

He said what was worrying was that the air quality in Srinagar is worst among all Himalayan states in the country.

"There are inter-annual variations. The dry weather in winter months spikes up the pollution levels, while it decreases whenever there is rainfall or snowfall," Romshoo said.

The study revealed that cold temperatures with dry conditions along with elevated level of biofuel emissions from domestic sector are found to be the major processes responsible for winter period particulate pollution.

"The emission from vehicular combustion is 220.5 tons/year which accounts for 15 per cent of the total annual emissions, followed by the emissions from fuel wood burning that is around 8.06 tons/year one per cent," it said, adding that westerly winds originating from Afghanistan and surrounding areas also contribute to the high PM2.5 levels.

The study said high altitude destinations around the world are perceived to have a clean environment and have become preferred places for tourist attractions, but such places are slowly found to be environmentally degrading due to ever increasing tourists and associated emissions.

"The geographical location of the region also plays an important role, which may result in long-range transport of pollutantsIn recent times, the Kashmir Valley has become the largest urban centre across the whole Himalayan region and is undergoing areal expansion and facing high rates of population growth.

"The increased urbanisation and the increased use of biofuels in the valley are disturbing the environment. Studies show that lower mixing heights, limited dispersion and long-range transport of pollutants results in higher pollution levels during winter, as the pollutants get trapped in the lower layers of the atmosphere," the study said.

It, however, says during the summer, autumn and spring seasons, the values of PM2.5 are between the range 2050?micro-grams per cubic metre, which are well within the permissible limits. Romshoo said the government needs to immediately take measures to check the pollution and the major step was to harness the vast hydro-power potential which would reduce the dependability on conventional sources especially in the winters.

"There a lot of other steps that need to be taken and definitely more at the government level. One of the main sources of pollution is open burning for charcoal. The government's responsibility is to build technical capacity of the people. You have to make charcoal, no doubt on that, but there are technologies that you need to transfer to the people so that they do not openly burn this.

"The other sources of pollutants are dusty roads here. A large proportion of roads is not macadamised here. We need to macadamise as much road length as possible, he said.Romshoo said the number of cars on the roads needs to be decreased to check emission of fossil fuels.

"Every year, J-K adds up to 1.5 lakh vehicles. We are forced to use our own vehicles because of the lack of very efficient transport system," he said.

The pollution levels are worrying and should be a matter of great concern, he added.

Centre's clean air plan goes beyond Delhi, urban India and outdoor pollution

Date: 12-March-2018 Source: Hindustan Times

A draft of the National Clean Air Programme that the Union environment ministry will finalise in less than a month broadens the focus from Delhi to 100 non-attainment cities across India and calls for guidelines on indoor air pollution.

The ministry told the Supreme Court on Friday that the plan, that seeks to reduce pollution by 35% in three years and 50% in five years, will be finalised within four weeks.

The country's apex pollution regulator, the Central Pollution Control Board, has identified 94 cities that persistently flout the national standards for particulate matter pollution and are called "non-attainment cities," and a few others that flout norms for other pollutants.

The action plan also aims to ensure that all locations in the country meet the national air quality norms, however, a time frame was not provided in the draft version that was shared with Greenpeace India through an RTI request.

"This should have happened 20 years ago, till now they have been dumping polluting industries, vehicles outside Delhi," MC Mehta, environmental lawyer who is a petitioner in the decades-long case to tackle air pollution in the top court.

Less than 10% of 4,000 cities in India covered by the manual air quality monitoring network. The plan aims to expand the network from the existing 680 stations to 1,000 stations. Continuous air quality monitoring which helps generate regular updates useful for the public, will be expanded from 40 cities to 67 cities with the number of stations growing from 55 to 268.

The monitoring of PM2.5, fine particulate matter that is capable of penetrating deeper into the body and causing harm, will be increased from 67 stations to all the stations in the country.

Calling indoor air pollution and ozone a “neglected issue” in rural areas, the National Air Quality Monitoring Programme 50 monitoring stations will come up in rural areas.

“Indoor and outdoor air pollution is linked. These are things that have to be taken into consideration, if other countries are doing it why not India?” Mehta said.

Air pollution plans are to be drafted for all the non-attainment cities. However, since the pollution sources, contributions and options available for cities will vary, each city will have to conduct source apportionment studies to start with. Till now, apart from Delhi, no other city has an updated and comprehensive source apportionment study. For six such cities, these studies have been commissioned but the plan is to do them in all the 100 cities.

As of Friday, 51 cities had submitted air pollution action plans to the CPCB, according to A Sudhakar, member secretary, CPCB.

Apart from that a 10-city Super Network has also been proposed which will be identified so that they represent a wide range of conditions from level of urbanisation to size to meteorological conditions. By tracking pollution in the super network the centre hopes to monitor larger air pollution trends in the country.

A Global Burden of Disease report published last year estimated that 1.1 million deaths in India were linked to PM 2.5 air pollution in 2015, of these the largest number were associated with residential biomass burning, a major source of indoor pollution in rural India.

The concept note prepared by the environment ministry acknowledged growing health concerns from air pollution but also noted that “international reports” were complicating the issue by “creating a flawed public perception.” The government stand with regard to the health impacts of air pollution has been widely criticized.

In its note the ministry reiterated its stance that “authentic Indian data” be used. A working group already exists with representatives from the environment and health ministries and medical experts. Preliminary findings are expected in five to seven months that will feed into a larger National Environmental Health profile.

Another strategy to combat pollution recommended by the ministry is an extensive tree plantation campaign that it believes will have a significant positive impact on the health of people.

“If it is good for the life health and economy of the country, why should there be any delay?” Mehta said.

In order to implement the plan an apex committee chaired by the environment minister will be formed, along with a steering committee under the secretary, environment ministry, a monitoring committee under a joint secretary and a five-member national Pollution Monitoring Unit (PMU) at the centre coordinating with two-member, state level PMUs.

Govt to overhaul its air pollution strategy to cover regions across India

Date: 12-March-2018 Source: Live Mint

New Delhi: The Indian government is now set to undertake a major overhaul of its strategy with a National Clean Air Programme (NCAP) which includes setting up of nearly 600 new air quality monitoring stations covering regions across India including rural areas as well.

A draft concept note of NCAP was prepared by Harsh Vardhan led Union Ministry of Environment, Forest and Climate Change (MoEFCC). The note was accessed by Greenpeace using a Right to Information (RTI) application which made it public on Monday.

Sunil Dahiya, a senior campaigner with Greenpeace India, praised the move stating that the draft note on NCAP is a “big step in the right direction to achieve breathable air across the country".

He, however, said the “fact that this concept note is not even available in the public domain raises concerns on how the government is going to make the NCAP a truly participatory initiative".

“It’s important that all discussions and documents regard to NCAP to be available in the public domain and people are informed of planning, implementation and progress made. The draft needs more thinking and clarity in terms of articulating interim milestones for completing source apportionment studies to reduce 35% & 50% pollution in three and five years respectively along with specific targets for polluting sectors such power and industry," added Dahiya.

In past few years, the issue of air pollution has gained centrestage due to Delhi facing toxic levels of air pollution in winters. But of the 4,000 cities in India, only 300 (only 7.5%) are covered by the manual air quality monitoring network.

As per the note, the government plants to increase manual air quality monitoring stations from 680 at present to 1,000, increase continuous air quality monitoring stations from 55 stations in 40 cities right now to 268 stations in 67 cities and 50 stations in rural areas.

The plan in draft concept note of government is an admission of the fact that pollution is not an urban problem or a region specific problem and thus a comprehensive action is required on national scale—something that activists have been pointing out for years.

The draft noted that air quality in “rural areas remain a neglected issue so far" and also put a huge emphasis on monitoring of “indoor air pollution". It also discusses the need of extending monitoring of one of air pollution’s most deadly constituent—PM 2.5 (Particulate Matter).

“The common belief is that rural areas are free from air pollution. On the contrary, air quality in rural areas all over the world and particularly in the developing countries may be more polluted than some of the urban areas. Rural areas suffer from outdoor air pollution as well as indoor air pollution," the draft note observed.

The emphasis on rural region is significant as experts and environmentalists—from past few years—have repeatedly advocated for a national holistic policy for pollution stressing that it is not just a problem of Delhi-NCR area or of other metros but a nationwide issue.

A recent study had revealed that coal combustion, dusts, transport, diesel, and brick kilns were the other major contributors to air pollution in India. Of the total 1.1 million air pollution related deaths in 2015, the burden falls disproportionately (75%) on rural areas.

The draft plan also reveals how upset Indian government is with foreign studies that report data on mortality due to air pollution using “extrapolation techniques" noting that “probably may not be realistic". It batted for indigenous studies with authentic Indian data.

“While there is no denial on serious health implications, attributing one to one correlation and number of deaths due to air pollution needs to be further investigated and supported by indigenous studies. More authentic Indian data and studies may further strengthen our efforts and public participation in improving air quality," the draft plan added.The draft note of NCAP also discussed setting up of a 10 city super network. “This network may capture overall air quality dynamics of the nation, impact of interventions, trends, investigative measurements etc. The cities may be identified for capturing possible variations (metro city, village, mid-level town, coastal town, industrial location etc). Each city may have one well equipped monitoring

station representing the city background. IT should generate high quality controlled data and will represent national air quality dynamics," the draft note added.

The draft plan also called for setting up of an “air information center", need of an "air quality forecasting system", carrying out an “extensive plantation drive" to combat pollution, setting up of a “national emission inventory" for accounting pollutants discharged into air, extensive awareness drive and review of the ambient air quality standards.

Air pollution is bad for productivity, even in office jobs

Date: 12-March-2018 Source: Quartz at Work

It seems reasonable that breathing in pollution would affect worker productivity, but only recently has the damage been documented.

In a series of studies that match readings from air monitors with the results of workers who are paid for daily piece work, researchers demonstrated that breathing polluted air impedes the ability of workers to pick berries, pack fruit, or even make phone calls from office cubicles.

The studies, which were collected in the journal Science (pay wall) in January, were conducted over 10 years by team of researchers at Columbia, the University of Southern California, and the University of California, San Diego.

The biggest impact of air pollution was measured in farm workers in California’s Central Valley, who were paid by the volume of grapes and blueberries they collected. On days that had higher readings of ground-level ozone—a harmful gas formed when tailpipe emissions mix with sunlight—worker productivity slumped. Over the two years they measured the ozone, readings ranged from 10 to 86 parts per billion, and averaged 48 ppb. For every 10 ppb increase in ozone, worker productivity fell 5.5%. For farm workers paid about $9 or $10 an hour, the lost productivity translates into about 45 cents an hour of lower pay, said Matthew Neidell, an economist at Columbia and an author of the studies. Neidell and his colleagues then moved the study indoors, and looked at how pear packers in a Northern California factory were affected by particulate matter, a pollutant caused by carbon emissions, forest fires, or dust in the air. (While ozone is less present indoors, particulate matter can infiltrate all but the most air-tight buildings.) The impact was less pronounced, but still significant: A 5 microgram per cubic meter

increase in particulate matter—a fluctuation that wasn't uncommon during the study—reduced productivity by 3%, or about 21 cents an hour, for the factory workers.

Finally, the researchers examined how particulate matter affected office workers, looking at call-center workers for a travel agency with offices in Shanghai and Nantong, cities in China with pollution levels comparable to that of large US cities. "We found a similar pattern," Neidell said. "When pollution went up, their productivity—the number of calls they made—went down." Because the workers were more sedentary that those packing fruit in factories, the decline in productivity was much smaller, only about 0.3% of change for a roughly 4-5 microgram increase in particulate matter. In an environment where call center workers make about 100 calls a day, the effect was about one less call a day for every four workers.

For individual companies, investing in air filters might improve the productivity of indoor workers enough to pay for the devices and add to the bottom line (not to mention potentially reducing health care costs). But the finding also argue there are clear economic benefits for increasing government air-pollution standards. Using a rough analysis based on the pear factory data, the researchers calculated that the improvements in air quality between 1999 and 2008 saved the US manufacturing industry $20 billion a year in productivity, or 2.6% of the industry's wage bill. Manufacturing is only 12% of the US economy, and according to the research, gains would be felt across all sectors. When policy makers consider new pollution standards, there's usually a predictable divide, with environmentalists and healthcare groups on one side, and industry lining up to oppose them. If tighter regulations can boost profits, the contours of those debate may begin to change.

Pollution reduced by signs prompting drivers to switch off engines

Date: 14-March-2018 Source: Localgov.co.uk

Strategically-placed road signs can help tackle air pollution by prompting drivers to turn their engines off at traffic lights, new research reveals. A study conducted by the University of East Anglia (UEA) has revealed that road signs placed at a busy junction can lead to an increase in the number of people turning their engines off at red lights.

The signs used in the study, which cost £1,000 in total, had messages such as: 'Turn off your engine when the traffic lights are red. You will improve air quality in this area.'

Before their introduction only 9.6% of people turned off their engine while waiting at a red light - this increased to 17% when a sign was present.

Carried out in collaboration with Norwich City Council and funded by Norfolk County Council's Transport for Norwich initiative, the study also found motorists continued to switch of their engines after the signs were taken down.

'Traffic and vehicle pollution is a primary contributor to poor air quality and idling traffic is of particular concern,' said Dr Rose Meleady, a lecturer in psychology at UEA.

'Our research shows that using psychological theory to inform the design of road signs can help bring about changes in driver behaviour.

'Rather than simply telling people what do to, the signs are designed to tap into the underlying motivational basis for behaviour.'

'While there are stop-start technologies being developed for cars, this is a simple, cheap, site-specific method of encouraging positive behaviour change,' Dr Meleady continued.

'It is also a good example of working together with local authorities on an important issue - how to get people to turn off their engines and ultimately reduce air pollution. We'd like to work with others in this way.'

Cllr John Fisher, chair of Norwich Highways Agency Committee, commented: 'Air quality is an important issue facing cities across the country and work like this is a valuable step in understanding what measures we can take to keep emissions as low as possible.

'Initial findings from the Riverside Road study are promising so we'd like to continue our collaboration with UEA and look for funding opportunities to explore this approach to behaviour change further.

'We're pleased to have supported the research through Transport for Norwich - it's a real asset to have this sort of expertise on our doorstep and I'm delighted we're using it to look at ways of addressing such an important subject.'

U.K. Air Pollution a National Health Emergency, Report Finds

Date: 15-March-2018 Source: Bloomberg

The British government is facing a national health emergency because of its failure to tackle illegal levels of pollution that cause about 40,000 early deaths a year, a group of lawmakers said.

The Conservative government is more concerned with box-ticking and compliance exercises than in developing a clean air plan that tackles public health concerns, which cost the U.K. taxpayer 20 billion pounds ($28 billion) a year, four separate parliamentary committees said in the report published Thursday.

The government has consistently been called out by British and European judges, as well as the United Nations, for repeatedly breaking domestic and international law on acceptable pollution levels. Theresa May's government says it's taking action, and the most recent statistics show that renewable energy policies have driven down toxic particles in the air to historic lows in 2016, largely because coal-fired power stations have either shut down or been converted to biomass plants.

Breathe Easy

U.K. coal plant closures have seen air pollution levels drop to record lows

London breached its annual air quality limits by the end of January even under government policies aimed at reducing reliance on oil and coal as well penalties against the most polluting diesel vehicles.

"The government's latest plan does not present an effective response to the scale of the air quality catastrophe in the U.K.," Conservative lawmaker Neil Parish and chair of the Food and Rural Affairs Committee said.

Among a raft of suggested measures, lawmakers want car makers to pay into a clean air fund that follows a "polluter pays" principle; and they called on the government to bring forward the 2040 deadline for manufacturers to end the sale of petrol and diesel cars.

A 220 million-pound clean air fund has already been announced by the government, although it excludes London. Electric cars will outsell fossil-fuel powered vehicles within two decades as battery prices plunge, and by 2040 almost 80 percent of new car sales in the U.K. will be electric, according to research from Bloomberg New Energy Finance.

“The U.K. automotive industry is investing billions in technology and other measures to help address the challenge," said Mike Hawes, chief executive officer of the Society of Motor Manufacturers and Traders. “Vehicle manufacturers are funding scrappage schemes themselves to get the older vehicles off the road. Other sectors must also play their part in improving air quality."

The Guardian view on air pollution: moral pusillanimity, political ineptitude

Date: 15-March-2018 Source: The Guardian

Britain needs to do more to clean up its dirty air as it is a “major public health scandal”. So says the environment secretary Michael Gove. He’s right. The UK has been unlawfully breaching nitrogen dioxide limits since 2010. The government has been taken to court and lost three times. Finally a minister is committing to a clean air strategy that restricts diesel use “to ensure our air is properly breathable”. These words won’t be easy to walk back from. Neither should they be. Pollution cuts short an estimated 40,000 lives each year, and affects neurodevelopment and foetal growth.

Until Thursday the cabinet minister appeared unwilling to do much about it. Mr Gove was unmoved by the admonitions of the UN when it said Britain was flouting its duty to protect citizens from pollution. Mr Gove, a Brexiter, no doubt did not care that the European Union is preparing legal action against Britain for breaching air-quality laws. It was under the European acquis that the high court said the government’s clean air plan was “unlawful”. In Mr Gove’s view, foreign courts should not hold ministers of the crown to account and their influence should end at our shores. In Brexit Britain it will not be judges but voters, whose lives are being shortened by breathing in filth, who will hold ministers to account. This spectacle of moral pusillanimity, political ineptitude and Brexit confusion could not continue. MPs on the select committees cannot be faulted for portraying diesel vehicles as the main villains. Carmakers

were exposed for playing with people's lives by cheating emissions tests. Diesels are much more polluting than petrol cars, and the biggest proportion of pollution in UK cities does come from road transport. Scolding ministers for their timidity, MPs are right to say the government has to be much more ambitious and bring forward the ban on the sale of new diesel and petrol cars from the current 2040 deadline. Many European cities want to ban diesel by 2025. Mr Gove's a big thinker. He should be bolder.

The environment secretary has willed the ends, but he cannot solely will the means. The levers to address the problem of air pollution lie with colleagues in the Treasury and transport. Mr Gove, the epitome of politeness, needs to cajole and flatter his colleagues into submission. To make a big difference ministers need to curb dirty-vehicle use. They will need to implement a diesel scrappage scheme, in which drivers would be paid for trading in dirty old vehicles for cleaner ones; set up clean air zones so that city centres can charge motorists for using road space; and provide cash for large-scale public transport schemes. Most acutely, ministers must face up to the political cost of angering diesel drivers, previously encouraged to buy the vehicles because of their lower carbon-dioxide emissions. Whitehall could produce a national policy but it would be better if it was devolved to local authorities, along with the cash required to pay for the step change in motorists' behaviour. London's Sadiq Khan has blazed a trail that others should be able to follow. What should not be devolved to metro mayors is the responsibility to tackle air pollution without the policies or cash to deal with it. Mr Gove sold Brexit as a way to bring power back from Brussels. It should not end up concentrated in Whitehall.

Plan to cut Glasgow air pollution is a failure, say campaigners

Date: 16-March-2018 Source: The Guardian

Campaigners have criticised plans for Scotland's first low emissions zone to combat illegal levels of air pollution in Glasgow city centre.

Last October, World Health Organisation testing found that Glasgow was one of the most polluted areas in the UK, with poorer air quality than London, Manchester and Cardiff. Public Health England estimates the equivalent of 300 lives are lost in the city every year due to air pollution.

The Scottish National party made national and local manifesto commitments to tackle the problem, with the first minister, Nicola Sturgeon, announcing at her party conference last autumn that the first low emissions zone was planned for Glasgow by the end of 2018, with zones in Aberdeen, Dundee and Edinburgh due in 2020.

Friends of the Earth Scotland is furious that Glasgow city council's proposals, published on Friday, would apply to only 20% of buses by the end of the year, would fail to catch dirty vans and lorries and make no provision for signs to indicate that the zone exists or cameras to catch offenders.

Describing the plans as a "no-ambition zone", Friends of the Earth's Scotland air pollution campaigner, Emilia Hanna, said: "Councillors must recommend these proposals be significantly improved when they discuss them next week or they will have failed the people of Glasgow who suffer daily from the health impacts of air pollution. What Glasgow does also sets the benchmark for the LEZs to come in Aberdeen, Dundee and Edinburgh in 2020, so it is critical to set the bar high.

"A low emission zone should keep polluting vehicles out of the most polluted places. Not only will the planned zone fail to catch dirty vans and lorries but it will only apply to a tiny fraction of buses. A low emission zone which has no signs to mark it, no new cameras to catch offenders and continues to allow almost every dirty vehicle into the city centre, is not a low emission zone."

Hanna believes that lobbying by the bus industry may have weakened the proposals. She said: "The bitter irony is that the Scottish government has already allocated more than £10m for developing LEZs and at least £10m in loans for companies to buy cleaner buses, which is enough to retrofit or replace every older bus in Glasgow by the end of 2018."

The Scottish government set its own target date for compliance with EU safety standards by 2020, having missed an earlier deadline in 2010 because of Glasgow's high levels of NO2 pollution. While air quality is currently devolved, there is a great deal of uncertainty about whether the EU withdrawal bill will adequately retain EU air quality directives, and whether aspects of environmental policy will be once again be reserved to Westminster.

China further tightens air pollution targets - Environment minister

Date: 18-March-2018 Source: ICIS

SINGAPORE (ICIS)--China has tightened its targets for improving air pollution levels in the country under a new three-year plan, its environment minister was quoted as saying by state media over the weekend.

The targets for the concentration of PM2.5 –tiny, toxic particles or droplets in the air which can lead to fatal diseases - will be stricter than the current plan that is due to end in 2020, the Minister of Environmental Protection Li Ganjie was quoted as saying by state-owned China Daily on the sidelines of the 13th National People's Congress on 17 March. Li did not elaborate on the details of the new plan.

Li heads the newly-approved Ministry of Ecological Environment, which was transformed from the former Ministry of Environmental Protection, it said.

The new ministry will absorb duties held by other authorities that relate to river, marine and soil pollution as well as climate change, according to China Daily.

Moreover, the new ministry plans to set up a nationwide inspection system, which will give responsibility for regular checks on polluting companies and factories to local authorities in addition to the central government, Li said.

The central government launched its first round of national environmental inspections in December 2015, according to China Daily.In a separate report, state-run Xinhua said that about 18,000 people were disciplined or punished for environmental problems discovered in the inspections.Four rounds of central environmental inspections have been launched since 2016, it said.About 2,100 local officials, including three at provincial level, were found responsible during the follow-up examinations of those problems, Xinhua added.China had previously set an official PM2.5 target of 35 micrograms, which is still higher than the World Health Organization's recommendation of no more than 10 micrograms.In October last year, China's Ministry of Environmental Protection said that the average PM2.5 reading across 28 northern cities stood at 61 micrograms.

London air pollution activists 'prepared to go to prison' to force action

Date: 19-March-2018 Source: The Guardian

Air pollution protesters say they are prepared to go to prison as they step up their campaign against the poisonous air that kills tens of thousands of people in the UK each year.

A group of campaigners including pensioners and young parents, were arrested on Monday after

targeting the offices of London mayor Sadiq Khan, spraying slogans on the walls calling for tougher action on air pollution.

The group – called Stop Killing Londoners – has previously brought traffic to a standstill at some of the capital's busiest junctions in a series of direct action protests highlighting the scale of London's air pollution crisis.

On Monday six of them were arrested and vowed to continue their protests until Khan takes more drastic action to improve the capital's air quality.

One of the protesters arrested, Genny Scherer, 71, said: "We all pay the price for the continuing illegal levels of air pollution. It threatens all our health and environment. I do not want to go to prison but I will if that is what it takes for our politicians to sit up and take action."

There is growing concern about the UK's poisonous air that causes 40,000 early deaths a year. Last week an unprecedented joint inquiry by four committees of MPs described it as a "national health emergency". In the report the super committee was scathing about the government's clean air plans which have been judged illegal three times in the high court. The latest proposal, rejected by the high court earlier this year, was condemned as "woefully inadequate" by city leaders and "inexcusable" by doctors.

The scale of London's air pollution crisis was laid bare last year with new figures showing that every person in the capital is breathing air that exceeds global guidelines for one of the most dangerous toxic particles.

The findings, described as "sickening" by Khan, have serious health implications – especially for children – with both short- and long-term exposure to these particulates increasing the likelihood of respiratory and cardiovascular diseases. Health experts say young people exposed to these toxic pollutants are more likely to grow up with reduced lung function and to develop asthma.

During Monday's protest, 15 campaigners dressed in black and white striped suits spray-painted messages, calling for action to reduce air pollution, on the walls of the mayor's office, on the South Bank.

Six of them were arrested by police and taken into custody. Campaigners say the demonstration is the first of a series which will continue in the coming week.

The campaign is calling on the mayor to commit to proposals put forward by the London Coalition for Clean Air, a network of community groups representing people across London.

Its demands include bringing forward the introduction of the Ultra Low Emissions Zone and for it to be expanded to cover the area inside the M25. It also calls on London to become “emission free by 2025” through a system of charging, and a sit-down meeting with the mayor.

Clare Bairstow, 32, a university lecturer who was arrested during Monday’s protest said: “We are simply insisting that he sits down and engages with this coalition of community groups. We will all do this again, and go to prison if necessary, until the mayor meets with community groups.”The impact of air pollution is of growing concern globally. A separate report published on Monday found that as many as 153 million premature deaths linked to air pollution could be avoided worldwide this century if governments speed up their timetable for reducing fossil fuel emissions.The study led by academics at Duke University predicted the number of lives that could be saved, city by city, in 154 of the world’s largest urban areas if nations agree to reduce carbon emissions and limit global temperature rise to 1.5C in the near future rather than postponing the biggest emissions cuts until later, as some governments have proposed.

The mayor’s office said senior city hall officials had met the protesters twice. A spokesman added that while the mayor believed everyone has a right to protest “they must remain within the boundaries of the law”.

“He is doing all he can to clean up London’s filthy air and has laid out the boldest plans of any city in the world to tackle air pollution – including introducing the T-charge and bringing forward the ultra-low emission zone. He started tackling this problem as soon as he entered City Hall and it’s now time the Government faces up to our toxic air crisis and does more to help. Instead of blocking the capital from accessing the new national clean air fund, they should be delivering a diesel scrappage scheme to get the filthiest cars off our roads.”

This Bench Absorbs More Air Pollution Than A Small Forest

Date: 19-March-2018 Source: IFL Science

It’s no secret that London’s air is grimy as hell. Within just one month, “the Big Smoke” reached its air pollution limit set by the EU for the whole of 2018. But a novel piece of urban furniture hopes to serve as a footsoldier in the capital’s big battle to "go green".

Germany-based tech startup Green City Solutions has recently

“planted” a CityTree outside the pubs and organic supermarkets of Glasshouse Street in London, a short walk from the notoriously busy Piccadilly Circus. It’s a kind of hybrid between a city bench, a pollution-sucking filter, and an environment-tracking smart device. It works using a combination of plants and mosses that naturally remove dust, nitrogen dioxide, and ozone gases from the surrounding air. It’s also hooked up to the “Internet of things”, providing data on pollution levels, soil humidity, air temperature, and water quality. On top of all this, it’s been designed to be resistant to vandalism and features solar panels that satisfy all of its electricity demands.Although only small, this device claims to have the same benefit of up to 275 real trees by filtering the air of up to 240 tonnes (265 tons) of carbon dioxide per year, plus all the other nasty fine-matter particulates and nitrogen dioxide found in inner-city pollution.While this bench alone is not going to address all of London’s wheezy woes, it serves as a great example of how design and technology are taking up the challenge of solving our planet’s environmental problems.“There is no simple solution, so alongside our work to reduce carbon emissions from our buildings and reduce the number of vehicles on our roads, we want to test and learn from new technology,” James Cooksey, Director of Central London at The Crown Estate, said in a statement. London is just the latest city to have its own CityTree. So far the startup has installed over 20 CityTrees in urban areas, including Berlin, Oslo, Paris, Drammen in Norway, Amsterdam, Brussels, and Hong Kong, as well as Newcastle in the north of the UK.

“Our ultimate goal is to incorporate technology from the CityTree into existing buildings," Zhengliang Wu, co-founder of Green City Solutions, told CNN last year. "We dream of creating a climate infrastructure so we can regulate what kind of air and also what kind of temperature we have in a city."

Asia a Key Battleground in Fight Against Killer Air Pollution: UN

Date: 21-March-2018 Source: News 18

Bangkok: Asia is a critical battlefield in the global fight to rein in air pollution, registering about 5 million premature deaths each year, delegates at a United Nations conference said on Wednesday, as urged tougher enforcement of curbs.

The World Health Organization (WHO) calls air pollution the greatest environmental risk to

human health. About 90 percent of related deaths take place in low- and middle-income countries, most of them in Southeast Asia and the Pacific.

"There is a sense that if you're developing economically it doesn't mean that you have to live in a city where you can't breathe the air," Dechen Tsering, the Asia-Pacific director of the U.N. Environment programme, said at the two-day event.

"There is also a growing sense that there are technologies, there is financing (to help)," said Tsering, adding that the region was a key battleground in the fight.

Air pollution grew more than 5 percent between 2008 and 2013 in more than two-thirds of Southeast Asian cities, the WHO said in a report in 2016.

Children are "uniquely vulnerable", said Karin Hulshof, East Asia and Pacific director for the U.N. children's agency UNICEF, adding that about 300 million children worldwide live in areas where the air is toxic.

"What we are seeing, more and more, in cities like Ulanbataar, is hospitals full of children suffering from diseases related to air pollution," said Hulshof, referring to a public health crisis in Mongolia's capital caused by toxic smog.

Emissions limits are simply not being enforced in Asia, however, said Andreas Kock, managing director at Scheuch Asia, which develops and produces environmental cleaning technologies.

"Basically, they are not investing because the pressure is not there," said Kock, who called for efforts to spur industries in Asia to adopt pollution-reducing technology.

Major cities, such as Bangkok, need to build comprehensive public transport networks and push citizens to use them, Tsering said, as well as environment-friendly vehicles, like bicycles.

That is the aim of Mobike, a bike-sharing smartphone application that allows people to find bicycles and unlock them by scanning a QR code.

"In Bangkok, we operate in two locations and we hope to expand in a few months," Sam Nathapong, a representative of China-based Mobike, told Reuters.

Invest in walking and cycling to cut pollution, charity demands

Date: 21-March-2018 Source: Air Quality News

Government initiatives to improve cycling and walking infrastructure need to be joined up with efforts to address air pollution in towns and cities, the sustainable transport charity Sustrans has claimed.

A report published today by the charity – 'Actively Improving Air Quality' – claims that cycling and walking programmes have a 'key role to play' in reducing emissions from vehicles, which are responsible for the 'majority' of air quality limit breaches, through a shift away from car journeys.

However, Sustrans has claimed that local authorities face challenges in effectively implementing these programmes, through challenging timescales, a 'lack of leadership on air quality', funding and 'car dominance' in urban areas.

Findings of the report were compiled after a round table session involving local authorities and the Greater Manchester cycling commissioner Chris Boardman. Among the measures highlighted in the report are a national campaign to increase awareness of issues related to air pollution, direct measures to limit private vehicles in city centres and dedicated funding for walking and cycling initiatives.

Sustrans also claims that local government should place health practitioners in transport and planning teams, to 'integrate cycling and walking infrastructure that promotes a healthier lifestyle and better air quality'.

'Crisis'

Commenting on the proposals today, Anita Konrad, England director for Sustrans, said: "We face an air quality crisis. This is an invisible issue that kills tens of thousands of people prematurely every year in the UK; and will be the greatest environmental cause of mortality worldwide by 2050.

"One of the best ways to improve air quality in the UK is to reduce the number of motorised vehicles on the road and offer alternatives to private vehicle travel, such as walking and cycling.

“We’re calling on the UK government to take joined-up action on linking policy and funding for walking, cycling and reducing air pollution and to help local authorities to encourage more people to travel by bike and on foot for shorter journeys. It is time for the Government to take the lead and work with others to deliver tangible solutions to save lives.”

Beyond compliance

The proposals have been welcomed by Neil Tuck, sustainable city team leader at Southampton city council who has called for measures that will help councils to go beyond compliance with air pollution legal limits.

He said: “We want to see a long term commitment by Government to delivering ongoing improvements to air quality that go beyond compliance to EU standards by 2020.

“Accessing funding for, and developing, walking and cycling schemes needs to be made as easy as possible, and a priority for Government, if we are to enable healthier lifestyles, improve air quality and see long term transformation in UK cities. Promoting the health benefits associated with active and sustainable travel is essential for creating an environment where people want to live and work.”

This Just In: Shampoo Produces Air Pollution?

Date: 22-March-2018 Source: Earth911

When we talk air pollution, it’s standard to take a look at our gas-guzzling cars. Until electric cars become the norm in America, vehicles will be a major environmental concern.

But there’s a surprising category that could be preventing the U.S. from reaching our zero-emission goals: personal care products.

A recent study published in Science reveals new discoveries in air pollution, showing common household items to be significant contributors. When we talk air pollution, we should also take a look at our medicine cabinet. Products like shampoo, deodorant and perfumes are now degrading air quality as much as cars.

Volatile Organic Compounds

For this study, air quality scientists collected samples in Pasadena, California, where pollution-infused smog is in abundance. Perched in the Pasadena hills, the team measured alarming amounts of volatile organic compounds, known as VOCs.

VOCs are chemicals with high vapor pressure at room temperature, causing their molecules to evaporate into the air invariably. They can either be generated biologically or made by humans.

In fact, most scents and odors are VOCs. They're in the air of practically every indoor and outdoor setting and are common ingredients in commercial products.

Environmental Health Impact

Not all volatile organic compounds are dangerous, like those secreted by plants and bacteria.

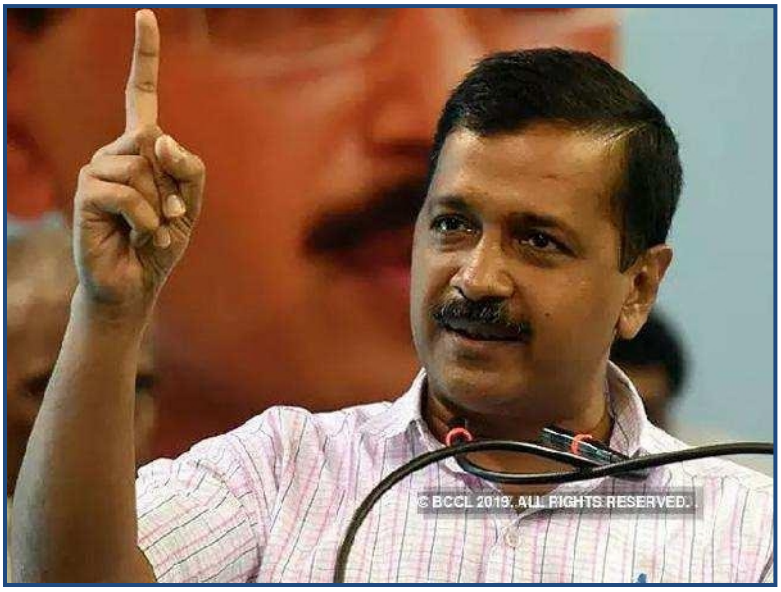
They can be essential communication methods between plants and animals and utterly harmless to human health.There are, however, extremely harmful VOCs. Consider those emitted from vehicles, a cocktail of carbon-containing compounds, which are widely known to have detrimental human and environmental health effects. These VOCs react with other airborne chemicals to form smog and haze, contributing to air pollution and climate change. VOCs are linked to numerous health concerns including headaches, nausea, asthma and heart attacks.Researchers have now discovered household products — including shampoo — contribute to America's air pollution dilemma. Nearly half of all VOCs studied by the researchers in California came from household products.Because these VOC-laden products are typically used indoors, they pose health risks that must be addressed by indoor air quality regulations.

The Good News

Could this study be a sign of success? The researchers behind the study seem to think so.As the transportation industry in the U.S. has gone greener in response to initiatives like the Clean Air Act, other sources of emissions are inching their way into the spotlight. The VOCs from commercial household products found in this study were seen only because VOCs from transportation have dramatically dropped in recent years.This study proves regulation works. Authors are optimistic about their findings, pointing out that their research doesn't necessarily indicate worsening air pollution. Instead, we can use this information to identify what we can do to improve our air quality.

Delhi govt plans to add 1000 electric buses; proposes Rs 53K Cr 'green budget' to curb pollution

Date: 23-March-2018 Source: Auto from The Economic Times



New Delhi: Industry bodies today lauded the Delhi government's budget, saying the focus on the environment will lay a strong foundation in making the national capital more habitable, while a green body said although it is ambitious, it needs proper implementation to go beyond the rhetoric.

The AAP government today presented a Rs 53,000-crore budget, laying a major thrust on "green" initiatives for pollution reduction. Deputy Chief Minister Manish Sisodia said this was the government's first "green budget" to effectively curb pollution.

Apex industry body ASSOCHAM congratulated the Delhi government for presenting a forward-looking budget for 2018-19 fiscal.

"Special focus on further sprucing up education and health infrastructure together with tackling Delhi's air pollution crisis is laudable and lays strong foundation for making the national capital more habitable thereby providing a green, clean and safe living environment to Delhiites," said its secretary general D S Rawat.

He said at ASSOCHAM, we are confident that these policy announcements if implemented timely and effectively will help make Delhi a world-class city.

"The Delhi government through its policy initiatives has shown it means business and is committed to improve lives of its inhabitants, added the ASSOCHAM secretary general.

CII Delhi state welcomed the "green budget" and said it was a comprehensive effort in addressing issues of citizens and industry and meeting their expectations.

The members also appreciated the AAP government for incorporating many of recommendations and suggestions submitted by CII in its pre-budget memorandum.

"For the first time anywhere in the country, a green budget was presented. This has been a very positive budget that has kept the needs of the common man in focus. It is heartening to see the government's clear focus on areas like education, environment, infrastructure and healthcare.

"I am sure the 26-point plan to clean the environment will certainly improve the quality of life of Delhi's citizens in the short to medium term. The announcement of the government to conduct energy and water audits is highly appreciated," said Nikhil Sawhney, chairman-Delhi state, CII.

He said that this will help the authorities in finding leakages in their supply lines. He pointed out that the decision to put a water meter for the state is also good.

"I must congratulate the deputy chief minister for also announcing the timelines under which all these projects would be completed," he said.

He said real-time monitoring of pollution in different areas was needed and the data collected from this should help us prepare ourselves better for curbing pollution in Delhi.

Sunil Dahiya, senior campaigner, Greenpeace India, said the budget looks like a "mixed bag". It shows promises to strengthen the public transport system by adding 3,000 (1,000 each for CNG, electric and cluster) new buses to the fleet along with creating associated enabling infrastructure, he said.

"The push towards electric vehicles both in public transportation and their intent to shift large two-wheelers base to EV shows promise that we have started thinking about reducing our oil dependence.

"Publicly sharing the pollution levels data on screens and forecasting system along with real-time source apportionment to be completed in the coming FY year is a good move," he said.

He said it is promising to see such emphasis on air pollution in the budget.

"But what remains is the implementation of these announcements along with some more concrete focus on changing our energy consumption and mobility behaviour which are not fuelled by polluting fuels of past, that is coal and oil and we move towards technology of future which is renewable energy at all levels," he said.

Pujarini Sen, campaigner, Climate and Energy, Greenpeace India said that where the budget is weak is on renewable energy.

"The proposed budget is rehashing old promises like net metering and generation based incentives. In both these aspects there have been little progress in the past years.

"There is only a year left for the earmarked period for generation based incentives, yet the Government has not done enough to promote the policy or solar. A strong promotional push is required from their side urgently," Sen said.

‘Poor’ air returns to Mumbai, pollution levels won’t improve this weekend

Date: 25-March-2018 Source: Hindustan Times

Pollution levels in the city entered the ‘poor’ category on Saturday after 20 days of ‘moderate’ air quality.

The pollutant-measuring indicator – air quality index (AQI) – was recorded at 212 during the day, which fell to 210 by the evening – both falling under the ‘poor’ category. The System of Air Quality Weather Forecasting and Research (SAFAR) predicted an AQI of 202 (poor) for Sunday.

Mumbai’s air quality was worse than Delhi, Pune and Ahmedabad, the cities where SAFAR records AQI levels. While Delhi recorded 142 (moderate), Pune recorded 143 (moderate) and Ahmedabad 150 (moderate).

Of the 10 locations in Mumbai where SAFAR monitors air quality, Navi Mumbai was the most polluted with an AQI of 316 (very poor). At a close second was Mazgaon at 315 (very poor) and Bandra-Kurla Complex (BKC) at 301 (very poor). Worli had the cleanest air in the city at 79 (satisfactory), followed by Malad at 110, Colaba at 123 and Bhandup at 132 – all falling under the ‘moderate’ category. Remaining locations recorded ‘poor’ air.

HT had reported on March 6 that after 12 days of high pollution levels, Mumbai’s AQI on March 5 was recorded at 149 (moderate) as AQI levels before that were between 233 and 251(poor) from February 21 to March 4. March 5 onwards, AQI levels have been ranging between 125 (March 20) and 196 on Friday, all falling under the moderate category.

Researchers attributed the rise in pollution to a drop in temperatures. On Friday, the day and night temperature in the suburbs was 2 degree Celsius below normal, and close to the normal mark in south Mumbai. “With a drop in temperatures, an automatic rise in pollution levels is observed as the pollutant particles get suspended close to the surface. Dust particles are also high in the air, and speedy dispersion has not taken place because of calm winds,” said Gufran

Beig, project director, SAFAR. The weather bureau, however, said dust was the primary cause. “An upper air anti-cyclonic circulation over north Maharashtra is changing the weather pattern over Mumbai. From cool northerly to northwesterly winds during late evenings and early morning and warm easterly winds are bringing dust over the city,” said KS Hosalikar, deputy director general, western region, India Meteorological Department. “We expect a rise in temperatures from Sunday.”

From below normal temperature on Friday, a marginal rise was recorded on Saturday. Colaba and Santacruz recorded 31.5 degree Celsius and 33.2 degree Celsius, both close to the normal mark. The night temperature at both locations continued to be below normal as Colaba recorded 23 degree Celsius, 0.1 degree Celsius below normal and 21.2 degree Celsius was recorded at Santacruz, 0.6 degree Celsius below normal.

The weather bureau has predicted a clear sky for Sunday with maximum temperatures to rise to 35 degree Celsius and the minimum temperature at 21 degree Celsius.

Competing to reduce air pollution at Beirut Urb-Hackathon

Date: 25-March-2018 Source: The Arab Weekly

BEIRUT - Pollution in Lebanon has many causes, including car-jammed roads, uncontrolled dumping of garbage and lack of proper waste management, which deeply affect the air, soil and water.

The issue of air pollution caused by transport in urban centres was the focus of the recent Beirut Urb-Hackathon, in which young professionals met to tackle the problem.

The event, under the theme “Data-Urbanism: Reducing City Air Pollution from Transport,” was the first hackathon in the region and the third worldwide after Paris and Seoul. It was organised by e-EcoSolutions and IPT Energy Centre (IPTEC) with the support of Berytech Digital Park, the Order of Engineers & Architects of Beirut, the UN Development Programme (UNDP), the Global Compact Network Lebanon (GCNL), Universite St Joseph and the French Institute in Lebanon.

Organisers explained that hackathon participants collaborate to resolve problems and find innovative solutions to a specific issue. In the case of Beirut's Urb-Hackathon, innovators brainstormed on how to reduce air pollution in Beirut and other major cities, with the support of experts from La Cite Des Sciences et De L'Industrie in Paris.

University students, coders, programmers, architects, artists, environmentalists, designers and others broke into teams that debated solutions to the problem over three days. They delivered their proposals to a jury, which selected three winners.

"The thinking is done on a group level. The jury looks at different aspects of the proposed projects such as feasibility, innovation, sustainability and the possibility of turning them into start-ups in the future. They should be simple solutions that people individually can start using to reduce the emissions from transport," e-EcoSolutions CEO Gilbert Tegho said.

"While the government works on the infrastructure, the people will be able to accelerate, adopt and even implement some changes."

More than 27% of air pollution in Lebanon is from means of transportation, UNDP studies stated.

"Definitely, the transportation sector is one of the main contributors to CO2 [carbon dioxide] emissions and other criteria pollutants in Lebanon," said Karim Hammoud, deputy general manager of IBC Household Solid Waste Management Centre.

He said that, while emissions were inevitable by-products of fuel combustion, their concentration is magnified by driving patterns, the high rates of congestion in cities, the age of the vehicle fleet and the absence of proper public transport.

"We have a large number of cars on the road. Buses and trucks operate on dirty diesel, which is highly pollutant, and regular cars are a problem as well because they produce carbon dioxide and carbon monoxide," Hammoud said.

"Other sources of air pollution are mostly industrial. We have a number of plants near the coast that are known to be big pollutants in Lebanon, like cement factories and power plants. The problem in Lebanon is that we have narrow coastal plain and high mountains that block the air from circulating easily."

Burning garbage in open municipal dumping grounds across the country is another source of air pollution, Hammoud said.

“It is very dangerous because we do not know exactly what kind of pollutants it is producing. We do not know if they are burning plastic or whether the waste contains cancerous material; this is relative to the type of garbage you are dealing with,” he said.

However, much can be done specifically through revitalising the public transport system, renewing the vehicle fleet, adopting eco-friendly driving patterns in addition to monitoring and managing air quality.The Detox Beirut — Beirut Rah Tondaf team won first prize at the Beirut Urb-Hackathon for its project “Smarter Bus.”“Our idea provides for purchasing used smartphones and installing them on buses. Each driver would know the exact position of other drivers and at the same time, passengers would know when to expect the bus. It is a way to facilitate and organise the buses and the services they provide,” explained Shadi Farah, a member of the team.Hackollution, which won second prize for “Safayna” (“We Parked”), focused on finding parking places. The group devised an application like Google Maps that people could use to spot free parking spaces and reserve them 5 minutes before arrival, saving time and cutting back on CO2 emissions. Third prize was awarded to Breathe for the “Breathe App,” which informs commuters about air pollution levels and traffic conditions around the city to help them choose routes and means of transportation to use.

Exhaust emissions from vehicles exacerbate air pollution in Lebanon, where more than 1.5 million cars circulate in an area of 10,452 sq.km, a figure that is considerably higher than it could be if a good public transportation system were in place.

“It is extremely urgent that Lebanon takes measures to stem pollution. The government should have acted yesterday, like 20 years ago. Unfortunately, today the problem is not being handled by technical professionals but by politicians who are not really the right people to handle such a technical issue,” Hammoud said.

Air quality takes turn for worse

Date: 26-March-2018 Source: The Asian Age

Mumbai: The city witnessed a dip in the air quality on Sunday with Mumbai’s Air Quality Index (AQI), the indicator that measures air pollution, recorded as 237. The AQI comes under “poor” category.

Since last two weeks, the city had moderate air quality. Officials

from System of Air and Weather Forecasting And Research (SAFAR) have attributed the rise in pollutants in the air to dipping temperatures.

“The maximum temperatures have comparatively decreased in Mumbai and the winds are relatively calmer now. As such the dust particles remain suspended in the air for longer time,” said a senior official from Indian Meteorological Department (IMD). Officials have also stated the weather conditions are going to prevail for another one week.

The maximum temperature recorded for Sunday was 33.2 degrees, at par with the normal average for March. With the deteriorating air quality, parts of Mumbai reeled with ‘very poor’ (300-400) air. The city recorded worst air than Delhi, Pune and Ahmedabad on Sunday, as per SAFAR. Poor AQI could lead to health problems like coughing, eye-irritation and breathlessness to sensitive people, while it can cause fatigue in healthy people.

Mumbai sizzles at 41° Celsius

Date: 26-March-2018 Source: The Indian Express

WHILE SUMMER has not completely set in, Mumbai is sweating it out. On Sunday, the Santacruz observatory of the India Meteorological Department (IMD) recorded the highest maximum temperature of the season in Mumbai at 41 degrees Celsius, eight degrees above normal. This is the second highest maximum temperature in the last decade.

“The easterly winds are over the region and the anti-cyclonic winds can be seen over the Arabian Sea. This has led to a rise in the maximum and minimum temperature,” said a senior IMD official.

The highest temperature recorded this season uptil now was 37.8 degrees Celsius on March 1. While the hottest March day ever recorded was 41.7 degrees Celsius on March 28, 1956, the maximum temperature has previously touched 41.3 degrees Celsius on March 17, 2011.

Marking a huge gap between the highest and the lowest temperature of the day, the minimum temperature was recorded at 21.2 degrees Celsius, one degree below normal.

“The lower level inversion creates this difference in the minimum and maximum temperatures. This inversion is likely to persist for the next 1 to 2 days and then the maximum temperature may return to normal. But the minimum temperature is likely to remain on the higher side,” added the official.

The fluctuation in temperature often takes a toll on the health of people. “People should generally avoid going outside the house during afternoon and they should drink more fluids,” said the official.

According to the IMD's seven day forecast, the maximum temperature is likely to dip to 32 degrees Celsius by Saturday while the minimum temperature will remain constant. "The summer season has not fully begun yet and this is the transition period between the two seasons. The temperatures are likely to become high from April," added the official.

The pollution level in Mumbai has also deteriorated. On Sunday, the Air Quality Index (AQI) was recorded at 237, considered to be 'poor' air. According to the data obtained by System of Air Quality Weather Forecasting and Research (SAFAR), the air quality levels in Mumbai were worse than in Delhi, Pune and Ahmedabad. Delhi recorded an AQI of 143 on Sunday.

"The easterly winds do not allow the sea breeze to set in early and this has an effect on the air quality. Also, the the lower level inversion ensures that the pollutants remained trapped in the air," added the IMD official.

Of the 10 locations in Mumbai where SAFAR monitors air quality, Mazagaon recorded the worst AQI at 394 (very poor). Air quality at Navi Mumbai, BKC and Andheri was also very poor. While air quality was poor at Borivali and Chembur, the pollution levels at Malad, Bhandup and Colaba were 'moderate'.

Air pollution high in Uttar Pradesh's unmonitored cities: Report

Date: 27-March-2018 Source: Hindustan Times

Gorakhpur and Mau have high levels of air pollution but are not monitored for pollutants, according to an environment report.

"The PM 2.5 level in Mau was 342 while in Gorakhpur it was found to be 225. Though the levels are high, these cities are not under continuous monitoring like Lucknow and Noida," said Ekta Shekhar of the Climate Agenda that prepared the report 'Air Kills' which was released here on Monday. The PM2.5 level is measured in microgram per cubic metre air and the permissible level is 60 as per Indian standards.

The report is based on the air quality data of 14 districts – Ballia, Mau, Ghaziabad, Azamgarh, Kanpur, Varanasi, Gorakhpur, Sonbhadra, Allahabad, Mirzapur, Agra, Lucknow, Noida, Moradabad and Shamli.

“We have included some districts where monitoring is done, particularly to compare with districts where there is no monitoring. Districts in both the categories have air pollution,” Ekta said.

“Air pollution is not limited to urban areas. As a result of limiting our efforts to cities only, places like Gorakhpur and Mau have become more polluted than cities like Delhi and Lucknow. Efforts should be made to check pollution in all parts of the state,” she said.

“National Air Quality Monitoring (NAAQM) network is in place only in seven cities of Uttar Pradesh while 90% of the state’s population remains unmonitored,” she said, adding it was unjust that the general public was still struggling to breathe clean air.

Members of Clean Agenda have decided to share the report with the ministry of forest and environment and demand expansion of air quality monitoring facilities in all the districts.

“Garbage burning and heavy diesel consumption is polluting environment in UP. Diesel gensets, uncontrolled construction activities, dusty roads, chemical fertilisers and pesticides used in agriculture are increasing pollution,” she said.

India: Delhi, Mumbai and Kolkata on alert for dangerous heat wave this week

Date: 28-March-2018 Source: AccuWeather

Intense heat will put millions at risk for heat-related illness across India through at least Friday.

The first widespread long-duration heat wave of the year is gripping much of the country, impacting areas from Mumbai to New Delhi and Kolkata.

Temperatures soared to our past 40 C (104 F) around Mumbai, Akola, Surat, Rajkot and New Delhi in recent days.

Temperatures peaked at 41 C (105.8 F) in Mumbai on Saturday, making it the hottest March day in seven years.

Mumbai can expect some relief in terms of high temperatures in the coming days; however, high levels of humidity will make it feel even hotter at times with AccuWeather RealFeel® Temperatures as high as 40-43 C (104-110 F).

A dry but intense heat will continue into this weekend from Akola into northwest India with daily high temperatures reaching at least 40 C (104 F).

Other locations that can expect dangerous heat to last through at least Friday include New Delhi, Patna and Kolkata.While temperatures have been above normal in these areas much of March, the intensity of the heat will climb to another level this week, putting people at risk for heat-related illnesses such as heat exhaustion or heatstroke.The temperature climbed to 40 C (104 F) on Wednesday in New Delhi, making it the hottest day of the year so far. Similar temperatures are expected across the National Capital Region on Thursday and Friday.

"For New Delhi, this is well above the normal high temperature for late-March, which is around 31 C (88 F)" said AccuWeather Senior Meteorologist Adam Douty.Both Patna and Kolkata reported temperatures near 38 C (100 F) on Wednesday and can expect even higher temperatures on Thursday and Friday.People are urged to avoid strenuous activity during the midday and afternoon hours and drink plenty of fluids to reduce the risk of heat-related illnesses.The elderly and children are most susceptible to heat-related illness, especially when nighttime temperatures remain well above normal levels, not allowing homes to cool from the extreme daytime heat.

Additionally, unhealthy air quality conditions are anticipated over much of the country. The conditions could cause difficulties for those with respiratory problems.

Will introduction of BS VI fuel help reduce pollution?

Date: 29-March-2018 Source: Live Mint

Why the Bharat Stage (BS) fuel norms?

India is the third largest consumer of oil after China and the US. India's oil consumption is growing at a steady 4-5% a year despite a surge in renewable sources of energy warranted by more stringent air quality norms to address the effects of pollution.

The vehicular pollution norms introduced in the early 1990s have been tightened over time, with BS VI scheduled to be implemented in Delhi from 1 April. According to the plan, Delhi NCR will have BS VI fuel supplies from April 2019 and the rest of the country from April 2020. The deadline was advanced for Delhi on account of the high level of pollution in the capital.

How serious is India's pollution problem?

According to a January 2018 survey by Greenpeace Environment Trust that covered 630 million Indians, 550 million live in areas where particulate matter exceeds the national standard, and many live in areas where air pollution levels are more than twice the stipulated standard. Air quality is measured based on the number of small particles in every cubic metre of air capable of entering the bloodstream through the lungs.

What is BS VI's key improvement in fuel quality over BS IV?

BS VI norms seek to cut down sulphur content to 10 parts per million (ppm) from 50 ppm. Sulphur in the fuel contributes to fine particulate matter emissions. High sulphur content in the fuel also leads to corrosion and wear of the automobile engine. BS VI norms also seek to reduce the level of certain harmful hydrocarbons in the emissions that are produced due to incomplete combustion of fuel.

How prepared are fuel retailers?

Retailers usually start supplying fuel of superior quality specifications weeks ahead of the deadline to flush out the fuel already flowing through the pipelines. Replenishing the supply chain with the specified quality fuel is a gradual process as new supplies get mixed with the old stock. State-owned refineries in Mathura and Panipat are already producing BS VI fuel. The shift from BS IV to BS VI, skipping a stage, is estimated to cost refiners Rs28,000 crore.

Are automobile companies ready?

Industry watchers say some automobile manufacturers are already exporting Euro VI-compliant vehicles and that they are ready to sell these in the domestic market. However, it is unlikely that any automaker will launch a BS VI-compliant vehicle before the April 2020 deadline for the national rollout, due to fears that their higher price could result in a loss of market share to a rival who prefers to wait. Industry observers add that automakers would prefer to switch to BS VI-compliant vehicles in all cities at the same time as otherwise people would tend to buy cheaper older versions from neighbouring states. To be sure, pre-BS VI vehicles will continue to be in use even after BS VI fuel and compliant vehicles become the standard. gireesh chandra Prasad

Tips to minimise indoor air pollution

Date: 30-March-2018 Source: CanIndia

New Delhi, March 31 (IANS) Add more plants to your decor and keep a tab on your appliances to keep a check on the indoor pollution at your home, say experts. Gita Ramanan, Architect and Interior Designer, Founder, Design Cafe, and Anuj Srivastava, Co-Founder and CEO, Livspace, share some tips.

* Plants not only brighten up a space, but also are a source of fresh air. These Indian plants: Areca Palm, Mother-in-Law's Tongue and Money Plant (all common names) will actually grow fresh air for you indoors.

* No smoking should be allowed inside homes. Smoking and second hand smoke are the biggest contributors of air pollution indoors.

* Ensure you use low VOC (Volatile organic Compounds) paints in your home, which ensure that toxic gases and substances are not released indoors during hot/cold variations in temperature indoors.

* A common problem that is not addressed indoors is fixing your water leakages. Very often, we ignore water leakages into the home, which then allow the growth of fungus, mould, and mildew, which causes or worsens conditions such as asthma, wheezing, and sinus. Taking precautions such as fixing of leakages, maintenance repairs to prevent loss of heat/ cold indoors, will ensure better air quality inside.

* Keep a tab on your appliances. Appliances like your refrigerator and oven can emit harmful gases without regular maintenance. Make sure you take up the scheduled services and have a professional look at your devices at regular intervals.

* Regular dusting is important. Every home is prone to dust and dirt accumulation. While you clean your floors and upholstery regularly, you might miss out on the nooks and corners and also the roof of tall furniture sets. In this scenario, a deep cleaning can reduce the risk of dust particles that can become irritants.

* Open the windows. The air at home can be more harmful as it can high concentration of pollutants compared to the outdoors. Keep your windows open for 5-10 minutes daily or strategically place ventilation ducts to tackle the issue. Sunlight and ventilation can go a long way to keep you and your family healthy.

* Another good idea is to minimise the use of pesticides at home. Use bio-friendly products instead. Limiting the number of toxic products you introduce in to your indoor air will also make the space as less polluted as possible.

To combat air pollution, ultra-clean Euro-VI grade petrol, diesel in Delhi from April 1

Date: 31-March-2018 Source: Financial Express

Ultra-clean Euro-VI grade petrol and diesel, at no additional price, will be supplied in the national capital from tomorrow in a bid to combat alarming levels of air pollution. Delhi will be the first city in the country to leapfrog from Euro-IV grade petrol and diesel to Euro-VI. Cities in the national capital region like Noida, Ghaziabad, Gurugram and Faridabad as well as 13 major cities including Mumbai, Chennai, Bengaluru, Hyderabad and Pune will switch over to cleaner Euro-VI grade fuel from January 1 next year. Rest of the country will follow suit from April 2020. State-owned oil firms will begin supplying the BS-VI petrol and diesel (equivalent to fuel meeting Euro-VI emission norm) at all their 391 petrol pumps in the national capital territory (NCT) from tomorrow, said Indian Oil Corp (IOC) Director (Refineries) B V Rama Gopal.

While the oil companies have invested heavily to produce cleaner fuel, the consumers are not being passed on any of the cost for the time being, he said. “Rest assured we don’t have plans of passing on the cost to consumers. There are no plans to recover (the cost) from customers immediately,” he told reporters here. Costing wise, the cleaner fuel should cost around 50 paisa a litre more. He said a mechanism of recovering the cost when the whole country shifts to Euro-VI grade fuel would be worked out. To meet Delhi’s annual consumption of 9.6 lakh tonnes of petrol and 12.65 lakh tonnes of diesel, Mathura refinery in Uttar Pradesh, Panipat refinery in Haryana, Bina in Madhya Pradesh and Bhatinda in Punjab have started producing Euro-VI grade fuel. About Rs 183 crore has been spent on Panipat refinery alone for producing cleaner fuel. Other refineries are in the process of being upgraded, he said. India had in 2015 decided to leapfrog to Euro-VI emission norm compliant petrol and diesel from April 2020, from the Euro-IV grade at present.

While the deadline for the rest of the country stands, the same for Delhi, which is choking on thick toxic smog, was brought forward. Euro-VI grade fuel contains 10 parts per million (ppm) of sulphur as against 50 ppm in Euro-IV fuels. Gopal said the cleaner Euro-VI fuel and lesser grade cars and two-wheelers, which are presently available in the country, would result in 10-20 per cent reduction in particulate emission but for full benefits, the vehicles too need to have Euro-VI engines. “BS-VI petrol and diesel supplies from tomorrow give comfort to automobiles manufacturers that supplies of cleaner fuel would not be a problem,” the official said. IOC, the nation’s biggest oil firm controlling roughly half of retail fuel market, will source the BS-VI fuel to meet Delhi’s requirement from its Mathura and Panipat refineries, while Hindustan Petroleum Corp Ltd (HPCL) will do so from its joint venture refinery at Bhatinda. Bharat Petroleum Corp Ltd (BPCL) will supply the fuel from its Bina refinery.

According to IOC, for petrol engines, one of the most critical specifications is Research Octane No. (RON), which has improved from 88 in BS-II to 91. It is at par with regular 91 octane gasoline (petrol) required for Euro VI emission norms. Sulphur specification for petrol and diesel will be reduced 50 times from a level of 500 ppm for BS-II fuel to 10 ppm in BS-VI. Previously, the fuels meeting Euro-IV or Bharat Stage (BS)-IV specifications were to be supplied throughout the country by April 2017 and BS-V or Euro-V grade fuel by April 1, 2020. But now the government plans to switch over directly from BS-IV to BS-VI auto fuels. Oil refineries had previously upgraded technology and invested over Rs 55,000 crore for production and supply of BS-III/IV fuels. Oil refineries will need to invest Rs 28,000 crore in upgrading petrol and diesel quality to meet cleaner fuel specifications by 2020.

Delhi to become first city in India to jump from Euro-IV grade petrol and diesel to Euro-VI

Date: 31-March-2018 Source: New Indian Express

NEW DELHI: Ultra-clean Euro-VI grade petrol and diesel, at no additional price, will be supplied in the national capital from tomorrow in a bid to combat alarming levels of air pollution.

Delhi will be the first city in the country to leapfrog from Euro-IV grade petrol and diesel to Euro-VI.

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April 2018

Crop Fires Can Push Delhi Air Pollution 20 Times Beyond Safe Levels, Study Finds

Date: 3-April-2018 Source: ecowatch.com

As of 2016, New Delhi was the 11th most polluted city in the world, which was a positive development compared to 2014, when it had the dubious honor of being number one, according to World Health Organization (WHO) data reported by The Huffington Post.

Now, research by the Harvard John A. Paulson School of Engineering and Applied Sciences (SEAS) published Friday found that a dangerous new tradition can double air pollution levels in the entire state of Delhi on some fall days.

Since around 1980, farmers in the agricultural region of northwest India have switched from traditional to mechanical agricultural techniques, which leave crop residue behind after harvesting. Farmers have taken to burning the residue in order to clear their fields after the fall harvest, in October and November, a practice that sends clouds of black carbon and particulate matter downwind to the larger National Capital Region of Delhi, which is home to more than 46 million people.

The practice is technically illegal, but, as the Harvard press release announcing the results pointed out, the law isn't often enforced, partly because it was not known to what degree the crop-fire smoke was actually contributing to Delhi's air problems.

The results, published in *Environmental Research Letters*, have changed that. "On certain days during peak fire season, air pollution in Delhi is about 20 times higher than the threshold for safe air as defined by the World Health Organization," SEAS graduate student and study author Daniel H. Cusworth said in the release.

In order to determine the link between fires and air pollution, researchers used satellite images of fires obtained from NASA for October and November of 2012 to 2016. They then plugged that data into models that tracked how smoke particles would travel based on geography, physics and wind patterns. The particularly stagnant air following monsoon season makes the autumn the absolute worst time to burn crops, since the smoke doesn't disperse into the atmosphere as it otherwise would.

The results confirm the fires as a major contributor to an already serious public health issue. According to the introduction section of the study, deteriorating air quality in Delhi led to a 60 percent increase in mortality between 2000 and 2010. People in the region suffer from air-pollution-related illnesses at a rate 12 times higher than people in India overall.

The study's findings give officials another tool to help combat the problem. "This information can provide policymakers with a quantitative sense of the consequences of current agricultural burning practices in regions upwind of the city in order to inform decision-making," the study concluded.

11 new stations set to monitor air quality in Mumbai from May

Date: 3-April-2018 Source: hindustantimes.com

The project is a year behind schedule, but 11 air quality monitoring stations will start functioning from May. The centres will provide real-time air updates to citizens about the quality of air in their localities.

HT had first reported on November 10, 2016, about the plan to construct these real-time air pollution monitoring stations across the city, eastern and western suburbs by April 2017, but the state pollution control board failed to acquire all amenities and begin construction on time.

Air quality experts said it is important to expand the air quality monitoring network in Mumbai because the current monitoring is extremely inadequate. “A massive city like Mumbai cannot do with just two government run air quality stations (Sion and Bandra). Delhi currently has 30 such stations. Therefore, this is a right step and crucial because real-time data is important for developing a graded-response action plan,” said Anumita Roy Choudhury, executive director, Centre for Science and Environment, Delhi.

The Maharashtra Pollution Control Board (MPCB) said it has completed construction of the air quality monitoring stations and they are expected to start functioning from May 1. Apart from Mumbai, six other real-time air quality monitoring stations will be inaugurated in the Mumbai Metropolitan Region (MMR), with one each at Thane, Navi Mumbai and Dombivli. Vasai and Pune will get two continuous air quality monitoring stations of its own. MPCB is developing a smartphone application and display boards, which will provide real-time air quality updates to citizens.

Liverpool to run city-wide air quality awareness campaign

Date: 4-April-2018 Source: airqualitynews.com

These proposals, and other work to tackle air pollution in the North Western city will be highlighted at a meeting of the council's cabinet on Friday (6 April), at which councillors will be asked to approve the delegation of powers to officers over anti-idling enforcement.

Liverpool council is one of the local authorities pulled into the scope of the government's air quality plan following the latest High Court ruling

on the issue in February – and is now required to submit a feasibility study to determine whether it can speed up compliance with air quality limits, by the end of July.

In a report published ahead of Friday's meeting, council officers reveal that the city, along with Mersey travel and the Liverpool City Region have already commissioned a feasibility study, due to report back at the end of March, which will detail a range of measures to improve air quality in the city.

Air pollution: NGT slaps Rs 2 lakhs costs on Delhi government

Date: 4-April-2018 Source: asianage.com

New Delhi: The National Green Tribunal (NGT) has slapped Rs 2 lakh as costs on the Delhi

government for not filing an action plan for providing perks and infrastructural assistance to farmers to stop them from burning crop residue to prevent air pollution.

A bench, headed by acting NGT chairperson justice Jawad Rahim, took exception over the report filed by the AAP government, which was signed by the joint director, agriculture and refused to accept it.

The bench said: "As far as the NCT of Delhi is concerned, neither the action plan nor the affidavit is filed. Mr Khehar (lawyer for Delhi govt) submits that he has got the report under the

signature of joint director, agriculture and it should be accepted. We decline… Our order expressly directed chief secretary must file an affidavit and produce the action plan."

"There can be no exception to the NCT Delhi and hence for non-compliance of this direction

dated February 20, 2018, the NCT of Delhi is imposed with costs of Rs 2 lakh."

The green panel directed 25 per cent of the costs imposed would be deposited with the Central Pollution Control Board, 25 per cent with the Delhi Pollution Control Committee and the remaining with the Legal Aid Committee of the NGT.

The NGT granted a week to the Rajasthan government for filing the action plan and posted the issue for hearing on April 20.

Punjab had faced the wrath of the NGT for not taking measures to provide financial aid to the farmers to promote them not to burn agricultural residue in their fields.

It had said two years had elapsed since its verdict in the Vikrant Tongad case, in which it had passed many directions to stop crop burning, but the government had shown a lethargic approach.

As India battles air pollution, this tech solution could help us act against the hazard

Date: 5-April-2018 Source: thenewsminute.com

The neighbourhood of Minjur, with a population of about 25,000 people, lies in the northern periphery of the city of Chennai. Like any other suburb, most of Minjur's business establishments, hospitals, schools and colleges, marriage halls and other community establishments are located on its arterial road, the State Highway 56. Unlike most other neighbourhoods though, thousands of container trucks carrying cargo to and from the city's major ports, that are located about 12-kilometres away, ply right across Minjur. This

necessitates its residents to navigate their lives around these road trains and the toxic fumes they emit.

The state and central government's pollution control boards do not monitor the air quality here. Until recently, the people of Minjur had no way of knowing how bad the pollution really was in their region. Not anymore though; they now know in real time how bad their air quality is. They can show Air Quality Index (AQI) numbers that support their pleas for rerouting the port traffic around their little suburb, thus saving Minjur's denizens, especially its children, from the disastrous health consequences of the air pollution that they are subject to everyday.

"Even during peak hours, it was like someone had bombed the area – there was so much thick, black smoke everywhere," says Shweta Narayan of the Health Energy Initiative (HEI), who setup Atmos, a low-cost Air Quality Monitor (AQM) in Minjur.

She adds, "Their fight on air pollution is one big demand, basically change the route of the trucks. Since no one is monitoring air quality, there is no recognition of the problem of air pollution here. We now have data that indicates what the quality of air is in the area and that is helping them tremendously."

Oxford study links household air pollution to cardiovascular disease

Date: 6-April-2018 Source: airqualitynews.com

Exposure to household air pollution from using wood or coal for cooking and heating is associated with higher risk of death from heart attack and stroke, according to a study from Oxford University and researchers in China.

The study, published in the Journal of the American Medical Association this week, looked at the association of long-term use of solid fuels for cooking and heating with the risk of death from cardiovascular disease in around 271,000 residents in five rural areas in China.

Researchers from the University of Oxford, Huazhong University of Science and Technology, the Chinese Academy of Medical Sciences, and Peking University in China contributed to the study.

According to the research team, around three billion people worldwide use solid fuels (e.g. coal, wood, charcoal and crop wastes) to cook and to heat their homes. When burnt, these fuels produce smoke that contains fine particles – PM2.5 – and other substances, especially in houses without adequate ventilation.

It is estimated that worldwide about 2.5 million deaths in 2016 were related to the resulting household air pollution.

Beef cattle feedlot settles with state in air pollution case

Date: 7-April-2018 Source: idahobusinessreview.com

A company that operates a beef cattle feedlot in southeastern Washington has reached a settlement with the state over a charge of failing to manage air pollution.

Idaho-based J.R. Simplot Co. agreed to pay a $5,000 fine and spend at least $30,000 to put asphalt on a road to keep trucks from kicking up dry manure and dust at its beef cattle feedlot north of Wallula.

The Washington Department of Ecology initially fined the company $50,000 for allowing small particles into the air. The company unsuccessfully appealed the fine to the state Pollution Control Hearings Board.

“We’re happy to reach this resolution,” Simplot spokesman Josh Jordan said April 6. “The safety of the community where we work is extremely important to us, so if there are concerns, we want to address that. The road should help significantly.”

State officials say the agreement also requires Simplot to update its dust-control plan and improve particle pollution prevention. That will require improved staff training, and using water to control dust from roadways and cattle pens.

State law requires feedlots to keep dust and emissions from blowing onto neighbors by taking reasonable precautions. The Department of Ecology said the company failed to take those precautions between April 1 and June 20 in 2015.

Simplot contended it took appropriate preventive measures to prevent the dust from escaping.

The feedlot has a capacity of 80,000 cattle.

Air quality remains poor in southern Taiwan after sandstorm

Date: 8-April-2018 Source: taiwannews.com

TAIPEI (CNA) The largest sandstorm to sweep across Taiwan in five years gradually dissipated on Sunday, but the air quality in Kaohsiung and Pingtung in the south remained poor as the condition was not right for dispersing atmospheric pollutants there, according to the Environmental Protection Administration (EPA). As of 12 a.m. Sunday, the EPA's Air Quality Index (AQI) flashed an orange warning, indicating unhealthy air for sensitive groups, at 10 stations in Kaohsiung and Pingtung and one station in the outlying island county of Kinmen, according to the EPA's Taiwan Air Quality Monitoring Network.Air quality was rated as either good or fair in the rest of Taiwan, the monitoring data showed.With the high number of

monitoring stations flashing orange alerts in the southern parts of the country, Taipower reduced power generation at the coal-fired Hsinta Power Plant in Kaohsiung to cut air pollution emissions, according to the EPA. The EPA's AQI takes into account ozone, PM2.5 and PM10 particulates, carbon monoxide, sulfur dioxide and nitric oxide concentrations in the air. On Saturday, air quality ranged from fair to unhealthy across the country due to the effects of a large sandstorm that developed in Gansu Province in northwestern China earlier that week, according to the EPA. Although air quality in most areas of Taiwan improved on Sunday, it remained poor in parts of western Taiwan due to the lack of wind to disperse atmospheric pollutants, the EPA said.

Underground travel 'increases pollution exposure', study suggests

Date: 9-April-2018 Source: airqualitynews.com

Using overground transport routes, instead of London's Underground network, could cut exposure to air pollution for commuters travelling into and out of the capital, research has suggested.

This was among the recommendations in a study carried out by King's College London's Environmental Research Group on behalf of the Northbank Business Improvement District, looking at the particulate air pollution exposure characteristics of workers commuting into the area on a daily basis.

Funded by the Mayor of London's Air Quality Fund, the study followed the personal commutes of eight professionals, over two weeks, in and around Trafalgar Square, through to the Strand and the Aldwych area.

The study is thought to be one of the largest and most comprehensive assessments of the personal exposure characteristics of commuters undertaken in London.

For the first week participants took their usual route to and from work and in the second, they changed their route or mode of travel.

Pollution: Considering nationwide ban on pet coke use, Govt tells SC

Date: 10-April-2018 Source: outlookindia.com

New Delhi, Apr 10 (PTI) Government is considering a nationwide ban on the use of pet coke by various industries and a decision is likely to be taken within a month, the Supreme Court was informed today.

Stating this, the Environment Ministry also told the top court that several key issues relating to steps to curb air pollution were under its "active consideration" and details have been sought from all states and union territories in this regard.

The ministry told a bench of Justices Madan B Lokur and Deepak Gupta that on the issue relating to import of pet coke, they have received responses from the Ministry of Petroleum and Natural Gas (MoPNG) and the Directorate General of Foreign Trade (DGFT).

"MoPNG has said we should consult the DGFT. We have communicated to the DGFT and they have also responded. The MoEF has to take a view. Ban (on pet coke), if done, will be for the whole country," Additional Solicitor General A N S Nadkarni, representing the Ministry of Environment, Forest and Climate Change (MoEF&CC), told the bench, adding that the exercise would take three to four weeks.

He said the MoPNG has suggested that the use of pet coke should be discouraged and the industries should be asked to switch over to alternate environment-friendly fuels.

The bench then listed the matter for hearing after six weeks while noting the submissions of the ASG, who also said that "the matter is under active consideration of MoEF and information and statistics have been sought from all the states and UTs".

Advocate Aparajita Singh, who is assisting the court as an amicus curiae in the matter, raised several issues, including finalisation of pollution emission standards for five categories of industries.

The amicus said the Centre had earlier said that for five categories of industries, the emission standards would be finalised by March 31.

Regarding the issue of strengthening power distribution in the national capital region (NCR), Singh said there was power surplus in the region but the issue was of distribution. Besides, the use of generators was a cause of pollution.

The amicus also raised the issue of a comprehensive action plan for control on air pollution in other cities with high pollution.

However, the ASG said that several things have already been done and the remaining steps would also be taken soon.

The bench asked the ministry to file a comprehensive status report giving details of all the issues within three weeks.

The environment ministry had earlier told the apex court that a National Clean Air Programme (NCAP) to comprehensively deal with the rising air pollution levels across the country would be finalised soon.

NCAP is a medium term national level strategy to tackle the increasing air pollution problem in a comprehensive manner and its overall objective includes evolving effective ambient air quality monitoring network across the country.

The court had earlier asked the Centre to look into the problem of air pollution on a nationwide basis and not confine it to Delhi-NCR only.

The court is hearing a PIL filed in 1985 by environmentalist M C Mehta who had raised several issues relating to air pollution in the Delhi-NCR.

Noida: District admin seeks Rs433.5 crore to improve air quality

Date: 11-April-2018 Source: hindustantimes.com

The district administration of Gautam Budh Nagar has submitted a proposal, seeking Rs433.5 crore to implement the Air Pollution Abatement Action Plan, to the Union ministry of environment, forest and climate change.The proposal has been submitted by the district magistrate BN Singh.

“In a meeting of a high-level task force constituted for management of air pollution in Delhi-NCR on February 20, we were asked to prepare a proposal and also mention funds the district needs to implement the action plan. We have submitted a detailed proposal for the same. We will take every possible measure to ensure clean air,” Singh said.

On Wednesday, a final proposal for strengthening the infrastructure to implement the action plan was submitted after departments and authorities concerned had submitted their inputs.

The estimate of Rs433.5 crore is required for purchasing vehicles and machinery essential for monitoring and controlling air pollution, operation and maintenance of the same and issuing contracts.

Officials said they have set winter 2019 as the target to implement the plan.

Strengthening of air quality monitoring network, increasing existing network/length of roads covered by mechanised sweepers, increasing network of water sprinklers for dust suppression, increasing green areas by developing vertical gardens as well as covering unpaved areas with green belts to suppress dust and covering stretches with interlocking/paver bricks/tiles, where ever possible, needs to be done for implementing the Graded Response Action Plan (GRAP)

UPPCB has sought Rs6.3 crore for strengthening air quality monitoring network. The Noida authority has sought Rs192.50 crore (for a five-year contract) to increase existing network/length of roads covered by mechanised sweepers and Greater Noida authority sought Rs2 crore for the same.

To increase the network of water sprinklers for dust suppression, Noida authority has sought Rs8.84 crore to buy vehicles and equipment and Rs54,46,80,000 for operations and maintenance. The Greater Noida sought Rs1.79 crore for the same. The fire department has asked for more three fire tenders but did not provide a quotation.

For increasing green areas and covering unpaved areas with green belts, the Noida authority sought Rs26.8 crore (five-year plan) and the Greater Noida authority sought Rs6.4 crore for vertical gardens & composting pits.

To cover roads with interlocking/paver bricks/tiles, the Noida authority sought Rs134.4 crore, which will cover 80 sectors.

The district administration also raised the issue of solid waste management in the district. It suggested the development of a mechanism by which municipal solid waste from individual domestic households and upcoming residential societies is collected, segregated, recycled and only inert material is sent to a scientifically developed sanitary landfill.

Officials said that development of a secure, sanitary landfill site for disposal of municipal solid waste is important. “Presently, around 900-1,000 tonnes of waste generated per day is being disposed of in low-lying areas as no landfill site has been developed. An area of around 125 acres in Astoli village of Greater Noida has been earmarked for development of a landfill site but no development has happened on site, barring construction of a boundary wall,” the proposal stated.

“One C&D waste site for processing and disposing of waste has been earmarked in Noida area and it will be established in due course of time, but considering large-scale construction activities and future prospects, C&D waste processing and disposal site may also be developed in Greater Noida or the Yamuna Expressway area,” the proposal stated.

The viability of providing U-turns/underpasses for heavy traffic should be worked out keeping in view the feasibility of districts adjacent to Delhi and not for Delhi in isolation, the proposal stated."Agricultural crop residue burning is one of the major sources of air pollution in October and November, depending on harvesting and sowing cycle. It is important to make farmers aware and support them by giving machinery such as happy seeders, rotavators, etc., and assist them by introducing a scheme to incentivise them for not burning crop residue," the proposal stated.

Electric Vehicles This Week: Pininfarina Eyes $500 Mn Business From EVs, Wipro Partners With SBI Under EV 100 Initiative

Date: 12-April-2018 Source: inc42.com

One of the most important news in the electric vehicle space this week was global software major Wipro and India's largest public sector lender State Bank of India (SBI) committing to transition their respective global fleets into electric vehicles by 2030. Both became the first major Indian businesses to join the international non-profit organisation, The Climate Group's global electric vehicles initiative, EV100, for accelerating the rollout of electric vehicles worldwide.Wipro will begin rolling out its plan in New Delhi, Bengaluru, Hyderabad and Pune, involving nearly 2,000 vehicles, before addressing international markets, according to The Climate Group. It has already leased around 50 electric vehicles in Hyderabad and New Delhi.Also, globally the electric vehicle market is heating up as the companies are trying to collaborate with each other in order to reduce the electric vehicles cost.

Failure to manage dust, check air pollution: Environment ministry tells 25 construction sites to stop work

Date: 13-April-2018 Source: indianexpress.com

The government projects include three sites of the Delhi Metro Rail Corporation, four of the National Highway Authority of India, seven under the Delhi Public Works Department, two Delhi Development Authority sites and one each under the Delhi Jal Board and MTNL.

The Ministry of Environment and

Forests (MoEF) has ordered 25 construction sites, including road and Metro construction, to "stop work" for failing to implement mandatory dust mitigation measures meant to check air pollution in the capital. The projects will be allowed to start again after complying with dust control norms.

The government projects include three sites of the Delhi Metro Rail Corporation, four of the National Highway Authority of India, seven under the Delhi Public Works Department, two Delhi Development Authority sites and one each under the Delhi Jal Board and MTNL.

Three under BSES and two projects of Tata Power Delhi Distribution Limited were also suspended. The MoEF sent notices under Section 5 of the Environment (Protection) Act, 1986, to all the projects.

In the National Capital Region (NCR), dust is the second highest source of pollution and contributes significantly to the dip in air quality — especially during winter months.

On January 25, the MoEF notified an amendment to the Environment Protection Rules, making it mandatory for all projects requiring clearances to implement dust mitigation measures. It also asked all major infrastructure agencies to implement dust mitigation measures by March 31 or face suspension of construction work.

MoEF Secretary C K Mishra Thursday said the ministry had sent notices on April 2 to stop construction-related work pertaining to 25 projects across Delhi.

"We sent out very cordial letters asking major construction companies to comply with dust mitigation measures. Following that, we sent out 20-25 CPCB teams to check on projects. The teams came back with specific photographs, based on which notices were issued," he said.

Specifically, among the PWD projects, notices have been issued to stop certain works related to the construction of flyovers, drains, small bridges, culverts, footpaths, and the widening of the outer ring road. The reasons range from "demolished material kept uncovered" to "dust emissions from digging of roads".In the Haiderpur-Badli Metro station site, road demolition for cable work has been stopped due to emission from road digging and open dumping of excavated soil.

At another site, construction work was stopped for open dumping and lack of windbreakers.

Mishra said construction agencies need to show that they have complied with specific dust control measures, laid out in the notices, before the ministry will allow work to re-start.

Earlier, Mishra had said that the MoEF was “deeply concerned” by the lack of dust mitigation measures and that it had requested major construction agencies to put in place measures, failing which work will be constrained or suspended.

Lieutenant Governor Anil Baijal inspects Anand Vihar ISBT traffic management

Date: 14-April-2018 Source: dnaindia.com

With an aim to reduce the stoppage time at entry and exit toll counters at the Capital's one of the busiest bus terminals – Anand Vihar, Lieutenant Governor Anil Baijal has suggested implementing Radio-Frequency Identification (RFID) in the vehicles.

Baijal visited the area on Saturday to review the issues related to traffic, parking, encroachment and sanitation in and around the bus terminal. While analysing the problems in the area, Baijal maintained that traffic decongestion, smoother pedestrian movement and pollution control should be the top priority of the all the departments.

Senior officers from the Department of Irrigation and Flood Control, present during the inspection, informed the L-G that the clearance for construction near entry point has been given to ease the traffic movement.

Radio-Frequency Identification (RFID) uses electromagnetic fields to automatically identify and track tags attached to objects, such as vehicles. "He also advised the Public Works Department (PWD) to look into the demands related to the re-engineering of roads and flyovers for better traffic movement at the earliest," a release by the L-G's office said.

The L-G's visit started with the inspection of the Anand Vihar Continuous Ambient Air Quality Monitoring stations, the release said. Delhi Pollution Control Committee officials explained the working of the system and trend of different pollutants across different times of the day, it said.

"Besides, he also directed the Delhi Integrated Multi-Modal Transit System (DIMTS) and the East Delhi Municipal Corporation (EDMC) to remove all encroachments near the entry point of the area and on footpaths to facilitate easy movement of pedestrians," it said.

The issue of the skywalk connecting Anand Vihar Metro station to Patparganj Industrial Area was also raised during the visit. The L-G directed the officials from the Delhi Metro Rail Corporation (DMRC) to survey the area and execute a proposal if found feasible or suggest alternative solutions for the smoother movement of pedestrians.

Air quality in Beijing-Tianjin-Hebei region worsens in March

Date: 15-April-2018 Source: xinhuanet.com

BEIJING, April 15 (Xinhua) -- Air quality in the Beijing-Tianjin-Hebei region worsened in March compared with the same period last year, according to the Ministry of Ecology and Environment.

The ratio of average days with good air quality in March for the 13 cities in the region stood at 50.5 percent, down by 15.8 percentage points year on year.

The density of major pollutants like PM 2.5 and PM 10 both grew more than 20 percent year-on-year in March.

Beijing saw the ratio of its good air-quality days in March at 46.7 percent, down by 14.6 percentage points year on year.

However, the region saw more good air-quality days in the first three months thanks to better-than-expected air quality in January and February.

Air pollution may continue to haunt most of the northern region in late April due to weakening cold fronts, according to prediction by the ministry and the China Meteorological Administration.

Irked by pollution: Malakand natives ask PHC to take action against steel mill

Date: 15-April-2018 Source: tribune.com

PESHAWAR: Residents of the Dargai Kharaki locality in Malakand have filed a petition against the provincial government and a steel mill in the area for allegedly causing air pollution and for emitting hazardous pollutants which have been affecting lives of residents.

This was stated in a petition, signed by 26 residents of the area, and filed to the Peshawar High Court (PHC) on Friday.

Filing through their lawyers Javed Ali Ghani and Akhunzada Asad Iqbal, the petitioners argued that Dargai Kharaki is a rural area and has not been specified by the government as an industrial or commercial estate. Despite that, a steel mill has been set up in the area which has been polluting the land to the detriment of those living nearby.

Delhi Has Double Concentration Of Finer, More Dangerous Pollutant PM1

Date: 16-April-2018 Source: ndtv.com

New Delhi: Delhi has almost twice the concentration of the more lethal pollutant PM1, or particles with diameter less than one micron, as compared to other cities where its being measured, data from government agency showed.

According to the data procured by news agency IANS from System of Air Quality and Weather Forecasting And Research or SAFAR in Delhi, 47 percent of PM2.5 was composed of PM1 during winters, 44 percent during summers and 61 percent during monsoon, in 2017.

Saying that though more study is required on the subject, Gufran Beig, Project Director SAFAR finds automobile combustion to be one of the major contributor of PM1 in Delhi.

PM1 concentration was also highest during November 2017 "smog-episode" in Delhi, during which its average concentration was around 130 units. However, SAFAR experts say that stubble burning may not be major contributor for PM1, as the burning events saw a peak in PM10 and PM2.5, but no change in PM1 concentration.

"There must be other sources of PM1, beside automobile. Its a matter of investigation," Mr Beig said, pointing out that there are at least 26 different sources of emission leading to air pollution in urban regions.

PM2.5 (or particles with diameter less than 2.5 micron) is the major pollutant in Delhi. Few studies had been done on PM1 globally and agencies are yet to mark safety standards for it.

However, a recent study published by IIT-Delhi and IIT-Kanpur, finds that higher PM1 concentration on the roadside of Delhi increases risk of lung cancer.

The study, "Chemical characterisation and quantitative assessment of source-specific health risk of trace elements in PM1 at a road site of Delhi, India", collected samples in Delhi from November 2009 to March 2010. The study found that during the period, 83 percent of PM2.5 was made up of PM1.

"The PM1 are mainly emitted from combustion sources," says the IIT study, pointing out that the increased number of private vehicles in the city increased from 3.3 million in 2000 to 7.4 million in 2013. The study also pointed out that chemical composition of the fine aerosol particles pose adverse effects on human health, especially in urban cities.

According to several experts, PM1 might be the new enemy and focus may shift to the small particle soon.

As India expects implementation of the Bharat Standard-VI (Euro-VI equivalent) compliant cleaner transport fuels across the nation by April 2020, experts also warn that "finer the fuel, finer the emissions".

SAFAR actively monitors PM1 in Delhi, Mumbai and Ahmedabad.

According to its records, Delhi in 2017 saw an average concentration of PM1 at 79 units (PM2.5 169 units) in winters, 33 units (PM2.5 75 units) in summers and 31 units (PM2.5 51 units) during monsoon. The units for particle pollutant is microgrammes per cubic meters.

Meanwhile, in the same period, the average concentration of PM1 in Mumbai was 38 units in winters (46 percent of PM2.5), 31 units in summers (46 percent of PM2.5) and 17 units during monsoon (50 percent of PM2.5). Ahmedabad in Gujarat, has the most moderate PM1 average concentration of all three cities, with 35 units in winters, 31 in summers and 16 during monsoon.

According to Mr Beig, drawing such results is important, as they provide the mitigation pathways to be adopted in different cities.

"Higher the PM1 share, more severe is the problem due to fossil fuel emissions," Mr Beig said.

According to the health experts, finer the particles, more deep they penetrate into the human lungs.

Mr Beig, who is member of the World Health Organisation or WHO committee that fixes the health guidelines for hazardous pollutant, said that the issue has already been raised before the organisation.

"In last meeting in 2016, we raised the issue of PM1. Committee decided that there are not enough hard evidences of its dangers, though we know it is hazardous," he added. The current international standards for PM2.5 is 60 units and for PM10 it is 100 units.

Environment ministry comes out with draft of NCAP

Date: 17-April-2018 Source: business-standard.com

The Environment Ministry today came out with a draft national action plan proposing multiple strategies to reduce air pollution.

However, a green body claimed that the draft lacked its earlier set target of bringing down air pollution by 50 per cent in five years.

The ministry today put up the draft of the National Clean Air Programme (NCAP) on its website and invited comments from various stakeholders by May 17.

The ministry in the draft said the objective of the NCAP is to augment and evolve an effective and a proficient ambient air quality monitoring network across the country to ensure comprehensive and reliable database.

The objective is also to have efficient data dissemination and a public outreach mechanism for timely measures for prevention and mitigation of air pollution, it said in the draft.

Its objectives also include having a feasible management plan for prevention, control and abatement of air pollution.

More than 95% of world's population breathe dangerous air, major study finds

Date: 17-April-2018 Source: theguardian.com

More than 95% of the world’s population breathe unsafe air and the burden is falling hardest on the poorest communities, with the gap between the most polluted and least polluted countries rising rapidly, a comprehensive study of global air pollution has found.

Cities are home to an increasing majority of the world’s people, exposing billions to unsafe air, particularly in developing countries, but in rural areas the risk of indoor air pollution is often caused by burning solid fuels. One in three people worldwide faces the double whammy of unsafe air both indoors and out.

The report by the Health Effects Institute used new findings such as satellite data and better monitoring to estimate the numbers of people exposed to air polluted above the levels deemed safe by the World Health Organization. This exposure has made air pollution the fourth highest

cause of death globally, after high blood pressure, diet and smoking, and the greatest environmental health risk.

The war against air pollution has begun – and it will be fought in cities

Experts estimate that exposure to air pollution contributed to more than 6m deaths worldwide last year, playing a role in increasing the risk of stroke, heart attack, lung cancer and chronic lung disease. China and India accounted for more than half of the death toll.

Burning solid fuel such as coal or biomass in their homes for cooking or heating exposed 2.6 billion people to indoor air pollution in 2016, the report found. Indoor air pollution can also affect air quality in the surrounding area, with this effect contributing to one in four pollution deaths in India and nearly one in five in China.

Bob O'Keefe, vice-president of the institute, said the gap between the most polluted air on the planet and the least polluted was striking. While developed countries have made moves to clean up, many developing countries have fallen further behind while seeking economic growth.

He said there was now an 11-fold gap between the most polluted and least polluted areas, compared with a six-fold gap in 1990. "Air pollution control systems still lag behind economic development [in poorer nations]," he said.

But he added: "There are reasons for optimism, though there is a long way to go. China seems to be now moving pretty aggressively, for instance in cutting coal and on stronger controls. India has really begun to step up on indoor air pollution, for instance through the provision of LPG [liquefied petroleum gas] as a cooking fuel, and through electrification."

The number of people exposed to indoor air pollution from burning solid fuels has fallen from an estimated 3.6 billion around the world in 1990 to about 2.4 billion today, despite a rising population.

Emissions from transport are a growing concern, however, as road traffic increases. Diesel fuel is a leading cause of air pollution in some rich countries, including the UK, but in poorer countries the often decrepit state of many vehicles means petrol-driven engines can be just as bad in their outputs, especially of the fine particulate matter blamed for millions of deaths a year.

O'Keefe said governments were under increasing pressure to deal with the problems through regulation and controls, and hailed internet access as having a significant impact.

“Social media has been very important, as a growing number of people have access to it and to data and discussions [on air pollution]. People now have the ability to worry about not just the food they eat and a roof over the head, but they have the means to discuss [issues] in public,” he said.

Tuesday’s report reinforces an increasing volume of data in recent years that has shown how air pollution is increasing and causing deaths. More data has become available in the past decade from satellites and on-the-ground monitoring, while large-scale studies have revealed more of the health risks arising from breathing dirty air, which rarely kills people directly but is now known to contribute to other causes of death.

Turning crop residue into useful products

Date: 18-April-2018 Source: thehindu.com

Project will be on display at IIT-Delhi’s Open House

To come up with a solution to deal with air pollution in the Capital during the winter due to stubble burning, Kriya Labs, a start-up incubated at the Indian Institute of Technology-Delhi has come up with a method to convert agro-waste into pulp that can be used to make bioethanol, paper and tableware.

Biodegradable

The team, led by Professor Neetu Singh, said farmers currently burn rice straw in the field as it is a waste product. However, the process they have developed, will help farmers earn profits from this waste product, which when burnt in the farms of Punjab and Haryana brings down the air quality of the region.

Prof. Singh explained that a solvent system developed by Kriya Labs for the process is completely biodegradable, non-volatile, made of natural products and completely safe to use. The start-up hopes to find manufacturers who will use this technology to provide a safe alternative to crop burning.

Kriya Labs director Pracheer Dutta, who completed his BTech from IIT-Delhi, said their solution to the problem of stubble burning will not only ensure a pollution-free Delhi but create rural employment by creating wealth from waste and contribute to sustainable development by starting a bio-economy.

The project will be on display at the 14th Open House being organised by IIT-Delhi on Saturday, along with several other innovations that the students of the institute have come up with over the past year.

Other products

Some of these products include an intelligent artificial leg, refreshable Braille display to enable digital access, waterless bathing solutions and a naso-filter that cuts out air pollution

The institute said over 1,000 school students from Classes X and XII will visit the campus, apart from college students and people from the industry. Besides new technology, labs at the institute will be thrown open to the public and lectures on various topics will be given by top faculty members.

“It is our objective to create a nurturing eco-system for students to inspire them to work on innovative solutions for our socio-economic challenges,” said IIT-Delhi director V. Ramgopal Rao, while inviting people to visit the campus.

New research suggests possible link between sudden infant death syndrome and air pollution

Date: 19-April-2018 Source: birmingham.ac.uk.com

A study led by the University of Birmingham suggests a possible association between exposure to certain pollutants and an increased risk of so-called ‘cot death’.

The research, published in BMJ Open and carried out in collaboration with the University of Oulu in Finland and the Medical Research Council Unit The Gambia in Africa, examines the relationship between the effects of short-term variations in air pollution and the onset of cot death or Sudden Infant Death Syndrome (SIDS).

The study found evidence suggesting an association between SIDS and exposure to larger particulate matter (airborne pollutants) called PM10, as well as nitrous dioxide (NO2). Other pollutants were not found to be associated with SIDS. The researchers looked at levels of air pollution the day before a SIDS death and compared them to levels on a previous reference day. The study involved over 200 SIDS cases in the West Midlands, between 1996 and 2006.

The research found an increased risk for SIDS two days after exposure to NO2, while exposure to PM10 was shown to have an effect for up to five days after exposure.

NCAP to play crucial role to address air pollution: Minister

Date: 20-April-2018 Source:indiatimesk.com

New Delhi: The National Clean Air Programme (NCAP), which proposes multiple strategies to combat air pollution, is estimated to cost Rs 637 crore, the environment ministry today said, with its Minister of State Mahesh Sharma asserting that the plan is expected to play a "crucial" role in addressing the menace.

The ministry, which recently released the draft of the NCAP and invited comments from various stakeholders by May 17, was also criticised by Greenpeace India that said the absence of pollution reduction targets of 35 per cent in three years and 50 per cent in five years in the plan was a cause of "grave concern".

Union Environment Minister Harsh Vardhan had said in February that the ministry hopes to bring down air pollution in around 100 non-attainment cities by 50 per cent in the next five years under the NCAP.

The non-attainment cities are areas which have air quality below the national ambient air quality standard.

Inaugurating a two-day stakeholder consultation on the NCAP here today, Sharma emphasised the need to translate the outcome of the deliberations in the form of suggestions on the ground.

"The NCAP is expected to play a crucial role in addressing the increasing air pollution across the country in a comprehensive manner," he said while emphasising the impact of air pollution on health and general well-being of humans, floral and faunal population.

"Stakeholders are and must act as 'givers' to the society," he said.

London 'pollution pods' let you sample the smog in Beijing and Delhi

Date: 20-April-2018 Source:theguardian.com

New Delhi: the suffocating smell of old cars and industry. São Paulo: enough ethanol to make your eyes water. And in London, a scent called Living Diesel.Those are the dominant notes of those cities' contaminated air, according to an "artist's approximation" that aims to raise awareness of the problem of pollution around the world. Pant by numbers: the cities with the most dangerous air – listed Londoners are invited to taste the air of some of the world's most polluted cities – including their own – inside British artist Michael Pinsky's Pollution Pods, on display in the courtyard of Somerset House.

Inside the ring of five linked domes, Pinsky has safely recreated five different atmospheres, from the pristine peninsula of Tautra island in Norway to smoggy Beijing.

Each pod is climatically controlled to emulate the temperature and the air quality – as well as the fragrance – of each destination, inviting visitors to compare the quality of global polluted environments. "I have tried to distil the whole bodily sense of being in each place," Pinsky has said of his work.

Three column heaters channel the oppressive heat of New Delhi, while a haze machine shoots out plumes of "smog", which hangs in the pod, acrid and visible. No one lingers there, instead pressing on to the comparative comfort of "Beijing".

"Not too bad," observes one visitor passing through, as though at a wine tasting.

Two young women entering the Tautra pod from São Paulo's make a beeline for the air purifier. 'Breathe it in,' sighs one

To recreate the polluted atmosphere of São Paulo, Pinsky evoked the ethanol-based fuel used in many cars in the megacity, which produces ozone and formaldehyde when it breaks down in the atmosphere. "The sensation is to try and make your eyes water, almost," says Stephanie Pilling, a spokeswoman for Somerset House.

Warm day in Delhi, air quality moderate

Date: 23-April-2018 Source:uniindi.com

New Delhi, Apr 22 (UNI) Delhiites witnessed another warm day on Sunday with maximum

temperature settling at 35 degrees C, three points below normal for the season.

Air quality witnessed improvement on Sunday evening, falling under 'moderate' category with

the index value of 182 at 1900 hours, according to the Central Pollution Control Board. The sky was clear through the day, while relative humidity at 1730 hours was 14 per cent, theweatherman said. For Monday, the weatherman has forecast strong surface winds during daytime, with minimum and maximum temperature to hover around 21 and 36 degrees C respectively.

Minimum temperature today morning settled at 21.2 degrees C, two points less than normal for the season. On Saturday, the maximum temperature settled at 34.3 degrees C , four notches below normal for the season.

Nigerians demand air quality data over pollution fears

Date: 23-April-2018 Source:news24.com

Bolatito Joseph has strong suspicions about what is causing her breathing problems and a mucus build up: a building site near her home and noxious fumes from a rubbish dump close to her church.

"I inhale a lot of dust as a result of the construction work going in my area," said Joseph, a cleaner from the Akute area of Nigeria's biggest city, Lagos.

"I worship at a church in Ojota near a rubbish dump and the stench is... injurious to public health," she told AFP.

Joseph is not alone in having health problems in Nigeria's cities, where questions are increasingly being asked about whether the air is fit to breathe.

In Lagos, in the southwest, the southern oil hub of Port Harcourt and Onitsha in the southeast, Nigerians might be choking to an early death.

Diesel generators that compensate for an inadequate electricity grid belch acrid smoke, combining with emissions from old vehicles and traffic gridlock. Unregulated industry and burning waste further turns the air foul.

In 2012, the World Health Organisation called air pollution "the world's largest single environmental health risk" and blamed it for about seven million premature deaths globally.

Attention has largely focused on efforts to fight pollution in cities such as Beijing and New Delhi, where poor air quality can cause traffic restrictions and school closures.

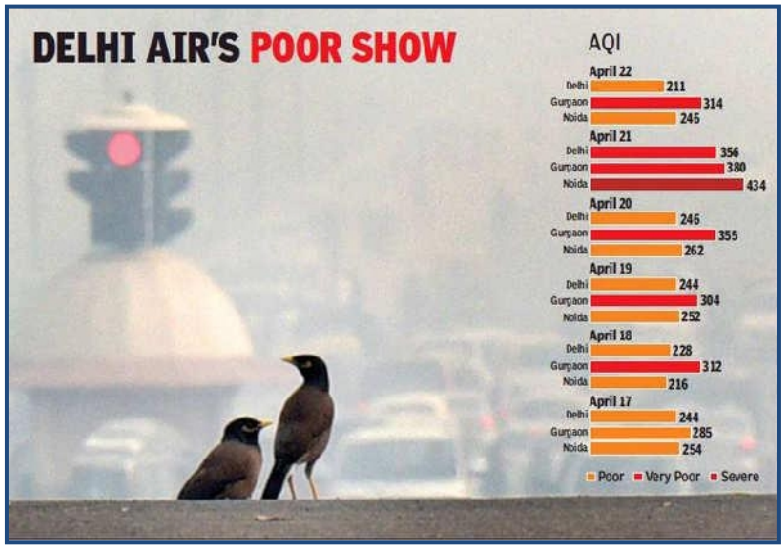
But in Nigeria, the public is largely in the dark, with data lacking and only a handful of scientific studies exploring the phenomenon.

As crop fires begin on small scale, city gets a sign of things to come

Date: 24-April-2018 Source:indiatimes.com

NEW DELHI: Farmers have started harvesting the wheat crop in Punjab, Haryana and many other parts of the National Capital Region. According to farmer groups in these states, small-scale crop fires have already begun. If not controlled immediately, there may be a peak in air pollution levels in NCR in the coming weeks. Already, Gurgaon has reported “very poor” air quality in the last week (April 18 onwards) compared to “poor” prior to that.

Delhi’s air quality is oscillating between “poor” and “very poor”, but improved to “moderate” on Monday, owing to favourable wind speed. This, however, is likely to change this week.



“We can see very small fires in Nasa images. But it’s early to say as the full scale of fires will be reported in early May. We will coordinate with neighbouring states if needed,” a senior scientist at Delhi Pollution Control Committee said.

Bharat Kisan Union Haryana president Rattan Mann said they had received reports of farm fires from Kaithal, Karnal, Panipat and surrounding areas. “But these are accidental fires. Farmers are saying these are because of short-circuit cases or other accidental reasons. But some farmers will also set the crop stubble on fire next week after reaping is over because other alternatives are very expensive. They need to prepare the farm for paddy.”

Harmanpreet Singh, a farmer and environmentalist from Fatehgarh Sahib in Punjab, said several farms around his village had set fire to stubble. “It has reduced compared to last year, but we

cannot say there is an improvement until first week of May. Even with the government subsidy to buy happy seeders or other machinery, burning is the most cost-effective method for farmers. We campaigned extensively with farmers to stop them from resorting to burning stubble, but it's not been very successful. Some FIRs against crop fires have also been lodged."

Vikrant Tongad, a Noida-based environmentalist, said reports of crop fires had also started coming in from Greater Noida.

According to Kuldeep Shrivastava, director at the Regional Weather Forecasting Centre, the wind direction till April 26 will be northwesterly, blowing from Punjab-Haryana towards the capital. On April 28, a low pressure system may develop with cyclonic circulation affecting Delhi-NCR. "The wind direction may change briefly around April 28, but will go back to northwesterly April 30 onwards," he added.

DPCC scientists said northwesterly winds, combined with crop fires, might lead to a peak in air pollution levels, particularly PM10 (coarse pollution particles) in the coming days.

This peak, however, will be brief compared to the pollution caused by paddy stubble burning in October. "Compared to the October-November paddy crop fires, the fire counts in May are lower by a factor of 4 to 5," Hiren Jethva, research scientist at Nasa Goddard Space Flight Center, said.

Punjab among top 4 states failing air quality standards

Date: 25-April-2018 Source:tribuneindia.com

Stuggling to contain stubble-burning, Punjab features among the top four states with maximum cities that have failed to meet the national air quality standards in India.

The recent report in this regard submitted by Mahesh Sharma, Minister of State for Environment, on April 6 in Lok Sabha states that Punjab features third on the list after Maharashtra with 17 cities topping the chart and Uttar Pradesh being a close second with 15 cities on that list.

In Punjab, eight cities — Khanna, Ludhiana, Dera Bassi, Gobindgarh, Jalandhar, Naya Nangal, Pathankot and Patiala – have been labelled the worst when it comes to air quality. In Himachal Pradesh, the industrial town of Baddi, Damtal, Kala Amb and cities of Nalagarh, Sunder Nagar, Paonta Sahib and Parwanoo feature on this list.

Experts say the spurt in respiratory complications is a direct outcome of the falling air quality. Even in such a backdrop, pollution board teams are threatened by farmer unions whenever they go out to check stubble-burning.

The Punjab Remote Sensing Centre recorded almost 43,800 stubble-burning incidents after the paddy harvesting season in the state last year, the highest to date. While the authorities had imposed a fine of Rs 75 lakh on offenders, a majority of them have not bothered to pay. With the political will missing, the deputy commissioners concerned, too, are yet to expedite steps to recover the penalty.

“With politicians in Punjab opposing the drive to challan farmers who burn stubble in their fields, the situation is sure to turn from bad to worse,” said a senior Punjab Pollution Control Board (PPCB) official.

Kahan Singh Pannu, Chairman, PPCB, “The real problem is the dust particles and the stubble burning which happens at the onset of winters when the air speed is low and the moisture content makes it worse as the smog engulfs the region. We are trying our best but serious steps are the need of hour at every level.”

Chandigarh also features among cities identified by the Central Pollution Control Board that failed to meet the national air-quality standards from 2011 to 2015, along with other states.

Experts say the spurt in respiratory complications is a direct outcome of the falling air quality.

Delhi saw warmest day at 42 degrees

Date: 26-April-2018 Source:dailypioneer.com

The National Capital on Thursday experienced the warmest day of the year so far with the average maximum temperature recorded at 42 degree Celsius, three notches above the season's average.

Delhi also breathed the worst air-quality of season with Air Quality Index (AQI) marked 312 on a scale of 0 to 500, labelled 'very-poor', with 'severe' at several places.

On Thursday, the mercury at some places crossed 42 mark, with Palam area suffering at 43.9 degrees, four notches above the season's average and Ayanagar at 42.4 degrees. Ridge recorded a temperature of 40.6 degree Celsius. Neighbouring Gurugram and Faridabad also recorded 42 degree Celsius, India Meteorological Department (IMD) said.

The minimum temperature on Thursday was 25.5 degrees, a notch above the season's average. While at Palam, the warmest place in Delhi, minimum temperature was 27.1 degree Celsius, three notches above the season's average.

According to weather analysts, warm and dry westerly winds coming from eastern Rajasthan -- currently the warmest place in India with 44.5 degree Celsius -- is the reason behind the abnormal warming for past three days.

Marginal respite is likely on Friday and Saturday, as wind directions are likely to change from westerly to humid and cool easterly winds.

"Temperature may drop by only a few degrees towards Saturday, also their are possibilities of thundershowers and lightning. However the respite is likely to be marginal," Skymet Director Mahesh Palawt told IANS.

The humidity on Thursday oscillated between 16 and 58 per cent. Wednesday's maximum temperature was recorded at 41.6 degree, three notches above the season's average, while the minimum temperature was recorded at 20.8 degrees, two notches below the season's average.

Meanwhile Delhi's air-quality saw drastic drop over past past four days going from 'moderate' on Monday to 'very-poor' on Thursday.

The AQI crossing 400 mark labelled 'severe' at Rohini and Wazirpur (441) in north-west, Anand Vihar (407) and Jahangirpuri (404) in east, according to Central Pollution Control Board (CPCB).

Meanwhile Siri Fort (399) and Okhla (396) in south, Major Dhyan Chand Stadium (396) in central and Ashok Vihar in northwest Delhi were among other most polluted regions with near-severe air-quality.

Gurugram's air quality drops, blame on wind direction

Date: 27-April-2018 Source:indiatimes.com

GURUGRAM: The air quality in the city deteriorated as the PM2.5 level increased three times on Thursday as compared to Wednesday. Track the pollution level in your city

The highest level of PM2.5 was recorded at 209 micrograms per cubic metre on Thursday as compared to 70 on Wednesday. Meanwhile, the air quality index (AQI) in Gurugram was 321 (considered ‘very poor’), slightly higher than that of Delhi. But the AQI in Ghaziabad and Noida were 341 and 349, respectively.

Officials of Haryana State Pollution Control Board (HSPCB) said that both change in wind speed and wind direction are responsible for the same. “Due to change in wind direction, wind is blowing from Delhi and other parts of NCR towards the city. That is why the concentration of PM2.5 reports increase every six-seven days. Also, average wind speed has decreased from -

0.38 metre per second to -0.16. No crop burning cases have been reported near the city," said an official of HSPCB.

As per the Met department, the wind speed is expected to come down and the concentration of PM2.5, therefore, might go up further. However, the maximum temperature is likely to come down slightly.

The average maximum temperature on Thursday was at 43 degrees Celsius, and the average minimum temperature was 26. Both the average maximum and the average minimum temperature are expected to go down by one or two notches on Friday and Saturday.

Aurangabad, Jalna prepare plans to improve air quality

Date: 27-April-2018 Source:indiatimes.com

AURANGABAD: High pollution levels for five consecutive years had prompted the Aurangabad, Jalna and Latur municipal bodies in Marathwada to start working on an action plan on improving the quality of air last December.

However, only Aurangabad and Latur have submitted their plans for sanction to the Central Pollution Control Board (CPCB). The draft plan of Jalna is ready but it is still to be submitted for sanction.

The CPCB had found the particulate matter having diameter of 10 micrometers or less (PM10) and nitrogen dioxide (NO2) levels in these cities to be higher levels than the permissible levels. The CPCB analysed the data of PM10 and NO2 levels between 2011 and 2015.

According to CPCB, unscientific disposal of waste has led to major air pollution in almost all 94 cities. Out of the 94, there is not a single city that meets the standards for PM10. The CPCB noted that construction activities without mitigation measures and open burning were responsible for increasing PM10 levels.

Consequently, the municipal corporations of these cities were asked to submit an action plan regarding steps to be taken to curb pollution. It identified that the emission from vehicles, gensets, poor roads, construction and demolition activities, the climatic conditions and meagre forest cover in these cities had caused deterioration of the air quality.

Air quality expert Geetanjali Kaushik said the dry atmosphere, poor condition of roads, large amount of building and demolition activities and the steep rise in number of vehicles in these cities are concerning.

"The forest cover in Latur and Jalna is dramatically low at 0.35% and 0.63% respectively. Aurangabad is a little better at 8.8%, but far less than what it should be," Kaushik said.

Kaushik had helped the municipal councils in Jalna and Latur and the municipal corporation in Aurangabad to prepare the air quality action.

"These cities also had limited systems for air quality monitoring and almost negligible efforts for awareness about air pollution through campaigns or display boards," she said.

Considering this, the key measures listed in the action plan for these cities were improving the public transport system, use of bio-diesel for running public buses, strengthening the PUC checking system and taking up tree plantation initiatives.

In addition, the focus was on building a proper air quality monitoring system, putting up display boards, taking up awareness campaigns at mass levels and holding meetings of stakeholders.

Aurangabad and Latur held meeting with different stakeholders likes industrialists, public representatives, bureaucrats and residents earlier this year. However, owing to the waste crisis, the air pollution took a back seat in Aurangabad. Latur officials cited lack of funds to initiate measures towards reducing its air pollution.

PMC initiates measures to curb air pollution

Date: 28-April-2018 Source:indiatimes.com

PATNA: As advised by the Bihar State Pollution Control Board, the Patna Municipal Corporation (PMC) has asked all its four circle executive officers to initiate measures to curb air pollution in the city within three days.

PMC deputy municipal commissioner Vishal Anand in a letter to the executive officers on Friday directed them to ensure that building construction materials were removed from roadsides.

Directions have also been given for proper cleaning of the roads and sprinkling of water on the roads in night. “All executive officers have been asked to ensure that garbage vehicles are properly covered,” Anand said and added strict action would be taken against the institutions and buildings where generators are found producing air or noise pollution.

State pollution board PRO Birendra Kumar said efforts were being made to work in close association with the PMC for pollution control.

Air quality: Punjab board challenges Centre's report

Date: 29-April-2018 Source:indiatimes.com

PATIALA: Punjab Pollution Control Board (PPCB) has decided to challenge the recent report prepared by the Central Pollution Control Board (CPCB) in which eight cities have been listed among worst for air pollution over a period of five years from 2010 onwards.

As per report tabled in the Lok Sabha on April 6 by Union minister of state for environment Mahesh Sharma, Punjab has bagged the third position after Maharashtra (with 17 cities) and Uttar Pradesh (15 cities) in term of high levels of air pollution. The eight cities of Punjab which were included in the list were Derabassi, Gobindgarh, Jalandhar, Khanna, Ludhiana, Naya Nangal, Dera Baba Nanak and Patiala.

Till date, the state has four ambient air quality monitoring stations installed at Amritsar, Ludhiana, Mandi Gobindgarh and Patiala along with 24 air monitoring stations in urban and four in rural areas.

PPCB chairman K S Pannu said the readings at these monitoring stations over the years clearly show that barring a certain period (when crop residue is set on fire) the ambient air quality remains satisfactory to moderate.

Pannu said the state authorities were never taken into confidence while preparing the report and they were not sure if the data reflected the exact readings of the monitoring stations. "We have written to the CPCB asking them for the details of the data, which has been used to prepare the report", the PPCB chairman said.

As per the CPCB report, every third city in the country failed to meet the national air quality standards. The report had also put seven cities in Himachal Pradesh including Baddi, Damtal, Kala Amb, Nalagarh, Sunder Nagar, Paonta Sahib and Parwanoo as most polluted cities of the country.

According to Pannu, the air quality becomes a cause of concern at the onset of the winters due to various reasons including stubble burning. However, he said, immediately after wheat sowing, the monitoring stations reflect fall in air pollution. He also said last year, the monitoring stations at Amritsar, Ludhiana and Mandi Gobindgarh started reflecting ambient air quality index (AQI) of 240, 283 and 286 micrograms/m3, respectively even as Delhi's air quality was still in the severe bracket.

He said the sudden rise in air pollution was due to stubble burning and the phenomena of 'winter inversion', in which suspended particulate matter gets concentrated in the lower strata of the atmosphere. He said as the dispersion of pollutants falls during the winter season, the air

quality in the state reflects poor readings for around 25 days. But this happens across the state. If the CPCB report has used this data in the report then why have they not included cities like Moga and Faridkot in the list, as air quality falls across the state during the winter months?

He said it was quite surprising that areas like Baba Dera Nanak, Naya Nangal and even Chandigarh have been put on the list.

Pakistan moves to curb urban air pollution after high court ruling

Date: 30-April-2018 Source:reuters.com

RAWALPINDI, Pakistan (Thomson Reuters Foundation) - Pakistan's environmental protection agency is installing air quality monitors and warning factories to add pollution filters after a panel of the country's top judges ordered the government to detail its efforts to control worsening air pollution.

The court ruling earlier this month followed a lawsuit by a Karachi man challenging the government's failure to control air pollution in that port city.

Chief Justice Mian Saqib Nisar, head of a three-member high court panel, ruled that the government must provide details of what it is doing to curb air pollution across the country.

He said he was shocked at how dirty the air had become, particularly in Pakistan's cities.

The ruling has spurred government authorities to action to try to reduce pollution levels, fearing they could face court orders or sanctions.

Venu G. Advani, the Karachi lawyer who filed the court petition, told the Thomson Reuters Foundation he was seeking to have air quality regulations in the country enforced.

He said he hoped the court would ensure "provision of the constitutional right to a clean environment, for which clean air is key".

"There is no hope without the Supreme Court's intervention to awaken government officials from their deep slumber" on air quality, he said in a telephone interview from Karachi.

May 2018

EPA Announces $4M Grant to Reduce Fairbanks Air Pollution

Date: 2-May-2018 Source:usnews.com

ANCHORAGE, ALASKA (AP) — The federal government will help improve air quality in Fairbanks.

The Environmental Protection Agency announced Wednesday it's granting $4 million to the Alaska Department of Environmental Conservation to reduce fine particle air pollution.

The state agency will use the money for a woodstove change-out program operated by the Fairbanks North Star Borough.

DEC Commissioner Larry Hartig says the borough has made progress toward meeting national health standards and an important component has been the woodstove change-out program.

Hartig says EPA funding will allow Fairbanks to continue replacing high-polluting woodstoves with cleaner-burning heat sources.

The borough in winter regularly exceeds limits for fine particulate, which can cause premature death in people suffering heart and lung diseases.

Wood smoke contributes up to 80 percent of Fairbanks' fine particle pollution.

Face masks available to consumers may be ineffective against air pollution

Date: 3-May-2018 Source:reuters.com

Face masks available to consumers in China for protection against air pollution vary widely in their real-world performance, suggests a recent study.

Although a mask may filter tiny particles as advertised, face size and shape as well as movement can lead to leakage as high as 68 percent, researchers report in Occupational & Environmental Medicine.

“Even if the filtration efficiency of the mask is high, and the mask fits the person initially, the mask may not continue to give a good fit as the person goes about their daily activities - walking, talking, and more,” said senior study author Miranda Loh, an exposure and environmental scientist at the Institute of Occupational Medicine in Edinburgh, Scotland.

“It is important for people to understand that not all masks are effective at reducing exposure to particles in air pollution,” Loh said in an email. “And none of these masks reduced the concentration of pollution gases such as nitrogen dioxide.”

Although masks sold for workplace use generally must meet rigorous standards, there are few controls on masks marketed to consumers and little information on which mask will offer the best protection, the study team writes.

Their assessment of a sampling of masks in Beijing is part of a larger project funded by the Research Councils UK, examining air pollution in the Chinese capital and its health effects.

Air pollution causes an estimated 1.6 million premature deaths in China each year, the study team notes.

At consumer outlets in Beijing, Loh and colleagues purchased nine different mask types that claimed to protect against fine particle pollution known as PM2.5, which includes soot, droplets and other particles smaller than 2.5 microns in diameter.

These tiny particles are components of vehicle exhaust and industrial emissions and can penetrate deep into the lungs, and from there, enter the bloodstream.

Researchers first tested each mask’s filtration efficiency by drawing airborne diesel exhaust through a section of the material for 30 minutes and measuring the particulate matter and black carbon concentrations on both sides. They also tested four masks on 10 volunteers who were exposed to diesel exhaust in a lab while performing tasks such as talking, sitting, standing, bending over and walking in place.

In the filtration tests, the average particle and carbon penetration ranged from 0.26 percent to 29 percent, depending on the mask material. In the volunteers, the average leakage around mask edges ranged from 3 percent to 68 percent during sedentary tasks and 7 percent to 66 percent in active tasks. Only one mask had an average leakage below 10 percent in both active and sedentary tests.

“If it’s important for you to protect yourself or your family with masks, choose the best one you can and look for one marketed to workplaces,” said lead author John Cherrie, of the Institute of Occupational Medicine.

“Don’t choose the cheapest option,” Cherrie said in a telephone interview. “Choose the one that’s most likely to do the best job.”

The researchers are now exploring whether people tend to wear face masks only on high pollution days. They also want to know if the proportion of particles removed by the mask is

enough to provide health benefits, and how long people must wear a mask to see those benefits.

“Air pollution is a global problem that is important for not only Beijing, but also Boston and Barcelona. Breathing pollutants, especially particulate matter, is very harmful, causing millions of early deaths across the world,” Richard Peltier of the University of Massachusetts Amherst, who wasn’t involved in the study, told Reuters Health by email.

Future studies should recruit more volunteers, Peltier said, and focus on the main reasons why masks seem to fail - whether the material itself is faulty, the masks don’t fit different people well, or they don’t seem to work well for daily living conditions.

“Air pollution exposure is a universal burden that affects us all, and somehow we are the ones obligated to find ways to reduce our exposure with these insufficient tools,” he said. “A far better solution is to prevent pollution at its source.”

Delhi environment minister seeks urgent meeting on air pollution

Date: 3-May-2018 Source:zeenews.india.com

New Delhi: A day after Delhi and another 13 Indian cities figured in a WHO list of world's top-20 most polluted cities, environment minister Imran Hussain on Thursday wrote a letter to union minister Harsh Vardhan seeking a meeting between environment ministers of all NCR states.

Delhi is notorious for its highly polluted air which becomes even worse in the winter months due to several reasons including paddy stubble burning in neighbouring states. Most environmentalists agree that despite several plans being thought of, many remain only on paper. Under such circumstances, Hussain wrote seeking collective action. "Collectively as a team, the environment ministers of various states under your guidance have been making efforts to curb air pollution, but it is clear from the latest global data that we need an urgent and concrete nationwide plan to effectively counter this growing threat, which poses major health challenge to the people of our country," he wrote in the letter, according to news agency ANI. Seeking active participation of Uttar Pradesh and Haryana, Hussain said that pollution recognises no borders and boundaries, and therefore requires to be fought together.

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Apart from Delhi, the WHO list included Gurgaon and Faridabad as the most polluted in the world. UP's Kanpur fared the worst.

PM 2.5 and 10 levels across many Indian cities are alarmingly high and medical experts agree that it can have long-term impact even on healthy individuals. For the young, the elerdly and those with breathing disorders, the toxic air can be potentially lethal. And yet, action on ground has been few and far in-between. Many also argue that alarm bells only ring when visibility drops in the winter months. They say toxic air is not just present when smog engulfs cities like Delhi but is a constant threat - each day, every day.

Choking on toxic air pollution

Date: 4-May-2018 Source:dailystar.com

BEIRUT: The Eastern Mediterranean suffers from the world's highest levels of air pollution after Southeast Asia, findings published by the World Health Organization this week revealed. For those living in Lebanon, the news comes as no surprise. The coastline of the small Mediterranean country is often obscured by thick smog, easily seen from higher altitudes. Heavy traffic often leaves motorists choking on toxic emissions.

"Lebanon has a major air pollution problem. We're not as bad as Beijing, but it's severe," said Dr. Alan Shihadeh, Dean of the Maroun Semaan Faculty of Engineering and Architecture at the American University of Beirut.

Shihadeh, an expert on air quality, ranked exorbitant car exhaust, diesel generators and cigarette smoke as the top three enemies destroying the quality of health in the country.

"Emissions are far higher than need be. Diesel generators alone increase our exposure to cancer-causing chemicals by 40 to 50 percent. If we could figure out our power supply system and traffic, we could really reduce our exposure to air pollution."

The country's natural topography does not help, he added.

Lebanon's mountains and air patterns exacerbate the contaminated air by capping pollutants and holding them along the coastline.

"We are swimming in the gases that we create and weather patterns don't help us. We're very vulnerable to our air pollution problems."

In the Eastern Mediterranean region, "an estimated 500,000 die yearly from diseases related to air pollution," WHO's Dr. A. Basel Al-Yousfi told The Daily Star. "Globally, nine out of 10 people are breathing air beyond WHO determined safe levels."

The director of the Center for Environmental Health Activities at the WHO office in Jordan added dust to the list of agents destroying our lungs. However, secondhand smoke is the main culprit inflaming air quality at the indoor and local levels, Yousfi said.

For those looking for remedies, head to the polls Sunday for Lebanon's first general elections since 2009: The specialists said the solution lies in the hands of a competent government. Clamping down on Lebanon's suffocating air pollution issues requires major changes in the country's aging infrastructure, Shihadeh told The Daily Star.

"There is no excuse not to have clean air in a place like Lebanon. We don't have [heavy] industry which is usually the main source of air pollution in other countries.

"The best thing we can do is vote in the right people in the upcoming elections ... people who actually care about the public welfare and have a plan to deal with air pollution, traffic and the electric sector," he said.

For the AUB professor, Lebanon's poor air quality is largely a result of a "dysfunctional political system."

However, following the CEDRE conference in Paris last month that raised $11 billion in grants and loans for development and infrastructure projects across the country over the next five to 10 years, change could be coming.

But while projects have been proposed for green energy production and more efficient electricity creation, Shihadeh was skeptical that lawmakers would use these funds to bring about lasting change.

New MMRDA commissioner's priority is to tackle noise and air pollution

Date: 5-May-2018 Source:indiatimes.com

MUMBAI: Newly appointed Metropolitan Commissioner RA Rajeev said he will ensure coordination with all government agencies such as BMC and traffic police to minimize noise and air pollution.

Rajeev took over charge from UPS Madan who has been promoted as Additional Chief Secretary (finance) in state government.

Speaking to mediapersons, he said, "Environment and development must happen hand-in-hand. At the same time we should also keep in mind that most of the projects are to develop the city, which is the need of the hour, and also save environment"..

Rajeev, who is taking stock of various infra projects executed by MMRDA said ," This probably is the first time that the government is supporting infrastructure development wholeheartedly and with so many projects slated for the development of the city, I consider this one of the most challenging periods of my career".

Worsening Delhi air quality fails to jolt authorities into action

Date: 6-May-2018 Source:newindianexpress.com

NEW DELHI: As Delhi makes it to the list of top 10 most polluted cities in the world for the fourth consecutive year, the Union Ministry of Environment, Forest and Climate Change (MoEFCC) has failed to address the core problem of reducing pollution despite series of orders by courts and tribunals.

The apathy of the ministry to address the issues related to clean air in the country is even reflected in the draft National Clean Air Programme (NCAP), which was unveiled for public comments in April, as it doesn't list out targets to reduce emissions, leaves its implementation on States and lack of regional focus to check highly polluted sites.

According to WHO data, Delhi has been among the top polluted cities since 2014. Delhi's poor ranking and subsequent studies that highlighted critical levels of pollution in Delhi led to a series of meetings and measures both by courts and government both at Centre and state to improve the air.

One of the most glaring omissions from the MoEFCC' draft is absence of targets from the draft plan. In March, Greenpeace India had made public documents related to air pollution plan

which talked about a target of reducing pollution in cities but the latest draft made public by the MoEFCC is silent on it.

Environment Ministry was looking at a target of reducing air pollution in around 100 non-attainment (heavily polluted) cities by 50 per cent in the next five years.But the final draft put out by the ministry in the public domain, seeking views till May 17, doesn't have any targets to be met.

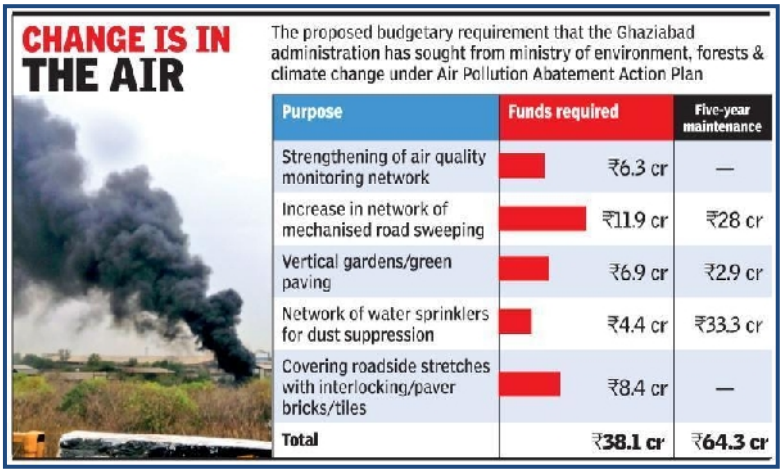
The draft also lacks proper region specific measures to be taken to check pollution and is mainly limited to strengthening monitoring stations network. In case of the Indo-Gangetic plain that has major industrial cities causing pollution, there is no specific direction on curbing emissions.

According to the Centre for Science and Environment, the real-time air quality monitoring, especially that of PM2.5, will have to be expanded significantly to assess air quality in all cities with sizeable population. Out of the 5,000 odd cities and towns in India, monitoring is being done in only 307 cities – moreover, most of this is manual monitoring that reports data with considerable time lag.

"States will also have to wake up to ensure action plans are implemented with utmost stringency and aggression. India needs massive energy transition across industries and households, mobility transition to public transport, walking and cycling, and effective waste management to control this run-away pollution," said Anumita Roychowdhury, executive director-research and advocacy, CSE.

Ghaziabad ready with action plan to curb pollution, seeks Rs 102 crore

Date: 6-May-2018 Source:indiatimes.com



GHAZIABAD: The district administration has submitted a detailed report including an action plan to the ministry of environment, forests & climate change to deal with the issue of air pollution. This is in tune with a PMO-formulated 'Air Action Plan - Abatement of Air Pollution in the Delhi NCR,' which was discussed at a high-level meeting

with the stakeholders in February this year.The report also seeks strengthening of infrastructure for implementation of air pollution abatement action plan, for which the administration has sought an assistance of over Rs 102 crore from the ministry.

“As part of the Centre’s air pollution abatement action plan, we were required to submit a report along with the budget that would be required to strengthen the infrastructure to implement the plan. For that we would be requiring Rs 102 crore which we have submitted to the ministry of environment, forest & climate,” said Ritu Maheshwari, district magistrate, Ghaziabad.

Earlier in April, the administration had sought only Rs 20 crore. “We realised that with Rs 20 crore, it would be very difficult to combat air pollution in the city as a number of projects are already underway including Phase 2 metro, Eastern Peripheral Expressway and the upcoming rapid rail project which is bound to have an impact on air pollution,” said Maheshwari.

The funds would be utilised under various heads, including installation of three Continuous Ambient Air Quality Station (CAAQMS) and five LED display boards at an estimated cost of Rs 6.3 crore. To keep a check on dust pollution, the administration has proposed to purchase 14 mechanised sweeping machines, the cost for which would be Rs 11.90 crore. A total of 212km of roads could be cleaned using the machines, sources said. Vertical gardening and green paving would be done in 1,33,000 sqm, which would require Rs 6.9 crore. Also, 25 water tankers would be required to sprinkle water on stretches for dust suppression and the machinery would come at cost of Rs 4.4 crore.

Apart from this, an area of 1,20,000 sqm would be required to cover using the inter-locking paver bricks and tiles, for which Rs 8.4 would be needed. In addition to this, Rs.64.36 crore would have to be required for maintenance for five years. The report also mentions the measures taken so far to mitigate air pollution in the city especially in the backdrop of the alarming situation in last winter when PM10 and PM2.5 constantly breached 500 mark, making Ghaziabad as the most polluted city in the country. “A fine of nearly Rs 1.4 crore has been imposed on erring agencies and departments who were found to be flouting environmental norms and over 1,500 polluting units have been closed down,” said Ashok Tiwari, RO, district pollution board.

District magistrate Ritu Maheshwari said it would take four months to implement the action plan even if the proposed budget is approved. “If we manage to upgrade the infrastructure in time, we hope that the pollution scenario in the next winter would be much improved compared to previous years,” said Maheshwari.

PM2.5 in Mumbai in 2017 was six times the safe limit: SAFAR study

Date: 7-May-2018 Source:hindustantimes.com

The level of particulate matter (PM) 2.5 – a pollutant that can enter the lungs and cause health ailments – in the city in 2017 was 60µg/m3, six times the World Health Organization's (WHO) permissible limit, according to a three-city pollution study.

WHO's annual safe limit for PM2.5 is 10 µg/m3 and the annual limit for India is 40µg/m3.

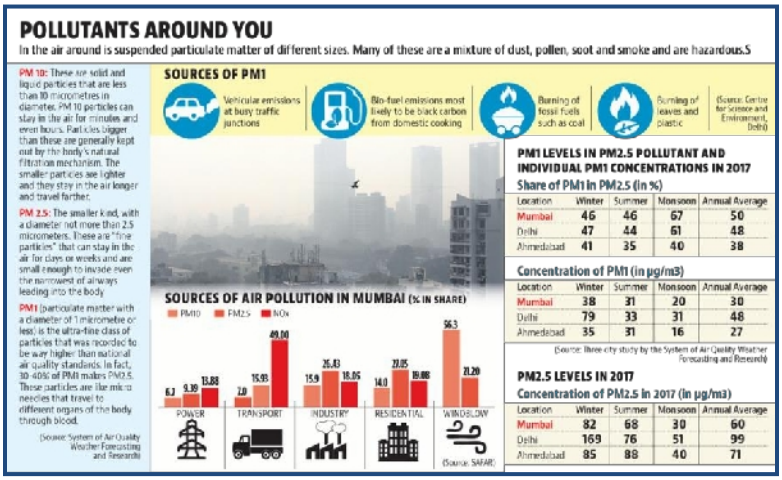
As part of the study, System of Air Quality Weather Forecasting and Research (SAFAR) studied the pollution levels across 30 stations in Mumbai, Delhi and Ahmedabad (10 stations in each city). Season-wise PM2.5 levels showed Mumbai recorded 82µg/m3 during winter, 68µg/m3 in summer and 30µg/m3 in monsoon in 2017.

The study found average PM2.5 level in Delhi was 99µg/m3, and Ahmedabad was 71 µg/m3. The level of PM2.5 in Delhi and Ahmedabad was much higher than Mumbai through all three seasons.

Last week, WHO ranked Mumbai the fourth most polluted on the list of 10 mega cities in the world with more than 14 million habitants from 2010 and 2016. Mumbai stood fourth after Delhi, Cairo, and Dhaka. WHO data found PM2.5 levels in Mumbai was 68µg/m3 in 2015 and 64µg/m3 in 2016. "Our data for 2017 indicates that PM2.5 levels in Mumbai were much lower than what was observed by WHO in 2015 and 2016. While there is pollution during winter and there is no denying that, it is doubtful that the city can be ranked the fourth most polluted globally during summer and monsoon. Here, the sea breeze disperses pollutants much faster than in Delhi, Ahmedabad and all other land-locked cities," said Gufran Beig, project director, SAFAR. "WHO should consult independent stakeholders and government agencies before releasing such results that are indicative of few stations as it might create panic among citizens."

Other researchers said instead of questioning the authenticity of the global data, citizens and the government need to accept that metropolitan cities are facing a pollution crisis. "Mumbai should not make northern India the benchmark for comparison. The benchmark should always

be the standard, and despite being a coastal city, Mumbai is exceeding even the Indian standard according WHO and SAFAR data," said Anumita Roy Choudhury, executive director, Centre for Science and Environment, Delhi. "This means there is very high exposure to these small pollutants and there is need for a strong action plan to bring back clean air."



HT had reported in February this year that a source analysis of PM2.5 by SAFAR for 2016 had revealed that emission from industries (26.43%), power (9.39%), transport (15.93%) and the residential sector (27.05%) accounts for more than 80% of particulate pollution in Mumbai. "The main contributors to PM2.5 are thermal and coal-based units located in Navi Mumbai, Thane, Dombivli, Kalyan and surrounding areas of Mumbai. Slum areas in the city, responsible for biofuel burning, emit a cocktail of pollutants from kerosene, wood burning, cow dung and biomass burning," said Beig. "It is vital to keep both these factors in check while ensuring clean fuel for vehicles by complying with Bharat Stage V and VI standards soon." In 2017, the Maharashtra Pollution Control Board (MPCB), based on the National Clean Air Programme initiated by the Centre, started the process of formulating an action plan to mitigate air pollution for multiple cities in the state. They will set up 11 new air monitoring stations in Mumbai along with existing 18 stations (10 from SAFAR, 3 from MPCB and 5 stations in Chembur Industrial area), making it the largest air quality monitoring network in India after Delhi.

"Within the next two to three months, the draft action plan put together with help from stakeholders such as Brihanmumbai Municipal Corporation, National Environmental Engineering Research Institute and the Indian Institute of Technology, Bombay (IIT-B) will be ready. Suggestions and objections will be invited then. This plan will help identify micro-pollution sources for PM1 and PM2.5," said a senior MPCB official.

He said six other real-time air quality monitoring stations will be inaugurated in the Mumbai Metropolitan Region, with one each in Thane, Navi Mumbai, Dombivli, and Vasai.

How air pollution helps urban Delhi stay cooler during the day

Date: 8-May-2018 Source:hindustantimes.com

Strange it may sound but air pollution, along with many other factors, helps to keep Delhi cooler by at least two to four degrees than the surrounding rural areas during peak summer, researchers have found. This cooling effect, which scientists call the 'urban cool island', is experienced at least two times a year — first in May-June during peak summer and again between October and December in winter.

This phenomenon is the opposite of the 'urban heat island' in which cities tend to be warmer because of the trapped heat.

Scientists said aerosol pollution, which increases during these two periods, could be one of the factors behind this effect.

Aerosols are minute particles suspended in the atmosphere and comprise almost anything from road dust, sea salt, desert sand, sulphates, nitrates, mineral dust and even moisture among others.

"Even though the night-time surface temperature remains higher in Delhi compared to the surrounding areas throughout the year, the trend of day-time surface temperatures is significantly different. A cool island forms over Delhi during the day as the temperature remains at least two to four degrees lower compared to areas outside the city," Krishan Kumar, a professor at the School of Environmental Sciences of JNU, said.

"We all know pollution is high between October and December. In summer, it has been found aerosol particles are high. The land becomes dry and there is dust pollution, which gives birth to aerosols. Sulphates have also been found to be higher," D Saha, former head of the Central Pollution Control Board's air quality monitoring laboratory, said.

Some categories of aerosols absorb the sun's rays. But most of them tend to reflect the sun's rays and doesn't allow them to reach the earth's surface, experts said.

Massive exercise underway to map air pollution sources in Delhi

Date: 9-May-2018 Source:downtoearth.org.in

A group of scientists and students are braving heat and dust this summer in the national capital to map all possible sources of air pollution, so that by winter this year we can get a fair idea of different sources of pollution in the city.

Ground level data about emissions from as many as 26 different sources of pollution is being collected throughout the city, as part of a three-month campaign to prepare an emission inventory. The last such exercise was undertaken in 2010 just before the Commonwealth Games. Since then significant changes have occurred in land use and demography. Many new sources, which were earlier not taken seriously or ignored, will now be quantified.

While industry and transport sectors are apparent sources pf air pollution, there are scores of other contributors to deteriorating air quality. Preparing a detailed emission inventory can give a clearer picture, instead of the 'source apportionment' approach.

"Emission inventory is a scientific way to identify aggregated local source contribution and their region specific spatial distribution within a confined boundary. It is more effective tool to identify hot spots and plan control measures," explained Prof Gufran Beig, Project Director, SAFAR at IITM, while speaking to India Science Wire. The emission inventory campaign has been mounted run by Indian Institute of Tropical Meteorology (IITM) Pune under the Ministry of Earth Sciences.

The data being collected promises to be more accurate than what was collected in 2010 because it will include all possible sources of emissions – from crop burning to wood burning in crematoria - and also because of finer grids in which it is being collected. The city has been divided into grids measuring 400 meterX400 meter. In all, there are 12,000 such grids. Of them data is being collected from 1000 grids.

In each of the grids, activities contributing to air pollution will be mapped. In each grid, pollution will be mapped in terms of sources such as slums, small scale industries, road conditions, traffic congestion, vendors, population density, vehicle density, road conditions and

potential of dust lifting based on paved and unpaved areas. The new sectors and factors, which are being targeted for mapping include condition of roads, pattern of transport flow from surrounding regions, construction activity, aviation, practices of immigrant workers and changing lifestyles, cooking habit etc.

The survey also covers emissions due to crop burning, solid waste burning and use of diesel generators. For the transport sector, primary and secondary data will be collected about vehicle density, vehicle kilometres travelled per day, traffic composition, age of vehicle and date of purchase, fuel used and fuel type, use of vehicle (hours per day), number of registered vehicles and existing vehicle technology.

“Once we have ward-wise and even smaller level data sets which could be mapped in terms of defined data available for broader boundaries, we will use Geographical Information System (GIS)-based statistical model with inputs from remote sensing satellite images as well as commercially available Google Live maps to develop the inventory. It will thus reflect both primary and secondary data sets for each grid,” said Prof Gufran Beig. The emission campaign will be a useful input for the SAFAR air quality forecasting system.

The emission inventory will include pollutants including oxides of nitrogen, carbon monoxide, black carbon, organic carbon, particulate matter (2.5 micron and 10 micron), sulfur dioxide and volatile organic compounds. Mapping will also focus on 35 specific locations where air quality monitoring stations various central and state agencies are located, so that data could be correlated. The final product with 400 m x 400m high-resolution emission inventory and it is expected to be ready before the start of winter when air quality deteriorates drastically in Delhi.

Students and researchers collecting data along with IITM team are from School of Planning and Architecture, Delhi, experts from Utkal University. The Environmental Information System (ENVIS) Resource Partners hub at IITM, Pune, is a partner to this effort.

Sunny morning in Delhi, mercury rising

Date: 10-May-2018 Source:thequint.com

New Delhi, May 10 (IANS) It was a sunny morning in the national capital on Thursday with the minimum temperature recorded at 21.5 degrees Celsius, three notches below the season's average.

With mercury rising and weather clearing up in the neighbouring hilly states, Delhi was likely to see a rise in temperatur, according to weather analysts.

"The maximum temperature is likely to hover around 38 degrees Celsius today. The mercury will rise over the next two days," an India Meteorological Department (IMD) official told IANS.

According to the IMD, the sky would remain clear throughout the day.

"Rains are not likely, but there is some humidity left. So some patches in the city might see light showers, although chances are slim," Mahesh Palawat, director private weather forecast agency Skymet told IANS.

Delhi on Wednesday recorded 0.8mm of rainfall. The humidity at 8.30 a.m. was 55 per cent.

According to System of Air Quality and Weather Forecasting And Research (Safar), the air quality at 9 a.m. was moderate across the NCR, with Air Quality Index (AQI) 146 on a scale of 0 to 500.

Wednesday's maximum temperature settled at 35.8 degrees Celsius, three notches below the season's average, while the minimum temperature was recorded at 22.4 degrees Celsius, two notches below the seasons's average.

Electric Vehicles Reduce Toxic Air Pollution — Pollution That Hurts & Kills Humans

Date: 12-May-2018 Source:cleantechnica.com

Many of the emissions from gasmobiles are toxic. They contribute to human health problems and numerous premature deaths each year. Heart disease, cancer, asthma, and stroke are some of the worst of human diseases and toxic air pollution is often a factor in these diseases, especially if you live in or near a densely populated area.

Brain diseases can now also be added to the list. “Some of the health risks of inhaling fine and ultra fine particles are well-established, such as asthma, lung cancer, and, most recently, heart disease. But a growing body of evidence suggests that exposure can also harm the brain, accelerating cognitive aging, and may even increase risk of Alzheimer’s disease and other forms of dementia.”

That lung cancer risk is raised by air pollution exposure probably doesn’t surprise a huge number of people, but overall cancer risk is too. “Air pollution doesn’t just increase the risk of lung cancer, new research shows. A study of thousands of elderly people living in Hong Kong showed that long-term exposure to pollution from tiny but toxic air particles increased their risk of dying from any cancer by 22 percent.”

Heart attacks are one of the leading causes of death in the US and, again, air pollution can play a role in their development. “A new academic study led by UCLA researchers has revealed that the smallest particles from vehicle emissions may be the most damaging components of air pollution in triggering plaque buildup in the arteries, which can lead to heart attack and stroke.”

Of course, the highest levels of air pollution can be found in the largest cities due to the presence of a tremendous number of gas-powered vehicles and diesel vehicles.

It’s funny how electric vehicle (EV) critics don’t mention a single thing about how toxic the emissions from gasmobiles are and that EVs don’t produce any. Environmental issues don’t just concern penguins — they concern humans too!

Now, some people say that EVs are charged using electricity from coal and natural gas power plants, and that is sometimes true. However, because electric motors are 3–4 times more efficient than gasoline/diesel engines, and because the emissions of power plants are easier to contain, electric vehicles are still significantly cleaner. Also, those power plants are often not located inside huge cities, so their emissions are not directly contributing to toxic urban air pollution in the same way gasmobiles do every day. Further, many electric vehicle drivers actually have rooftop solar panels to cover their extra electricity use and the overall grid is getting greener practically every month as it shifts more and more to renewable energy and away from coal.

If you live in a big city and have to commute during rush hour traffic, you are breathing polluted air from cars, and it’s sad to say, but doing so is very unhealthy.

Currently, most of the EVs in American are in California, but they still don’t make up that much of the state’s fleet. Gradually, they will, and air pollution within major cities like LA, San Jose, San Diego, Sacramento, and San Francisco will decrease. Eventually, there might not be many gasmobiles left at all. At that point, it will be very interesting to see how much the number of premature deaths will drop as the number of cases of heart disease, lung cancer, and so forth drop.

I’ll take an anecdotal side road for a bit here. Skip to the next line if anecdotes about California driving don’t interest you.

Have you ever lived in a city with millions of other people and millions of gasmobiles? I once lived in LA — actually, it was Santa Monica and I worked near LAX. Driving every day on the 405 freeway with a tremendous number of highly polluting gasmobiles was kind of like its own special version of hell. It could easily take 45 minutes to travel all of about 7 miles to work, and the same to get home after the work day was finished. That was 90 minutes of directly breathing toxic air pollution each work day.

One Sunday, I decided to visit a new cafe that I read about in a local newspaper. So I left my apartment in Santa Monica before noon and drove towards Melrose Avenue, a distance of about 11 miles. About one hour and forty-five minutes later, I arrived. Yes, for those 11 miles, the average speed was about 7 miles per hour, breathing gasmobile air pollution the whole time. After a not-so-great experience, it took another 105 minutes or so to get home, so it was over 200 minutes of direct exposure to toxic air pollution for a small outing.

Fortunately, I got a different job, so I started commuting from Santa Monica to Malibu, which meant avoiding the freeway and using surface streets to get to the Pacific Coast Highway, which is right next to Santa Monica Bay. There is much less air pollution because the PCH is very small compared to any LA freeway and there are far fewer gasmobiles on this coastal highway.

Even there, traffic at certain times could back up for miles, and then you have the same problem. You are sitting in bumper-to-bumper traffic breathing tailpipe emissions for an hour, at least. The air pollution is harmful to us, but we'd rather not think about it.

Once, on the way home from work, there was an accident, so traffic on the PCH was stopped. My drive home was only about 10 miles, but it took 2.5 hours. It's perhaps not the time wasted that matters most. It's the hours of exposure to harmful air pollution. If you imagine similar traffic nightmares but only with EVs, there would be zero tailpipe emissions. How much will that reduce lung cancer, heart disease, and premature death?

Prior to living in LA, I also lived in England for a while. As an American undergraduate student in London, I had never seen so many diesel taxis, or diesel vehicles of any kind. Sometimes, after classes and in my flat, I would notice that my nose was full of something like soot.

One time, when I was in a cab, I asked the driver about how many of the iconic black vehicles there were at that time. He said about 14,000. London has taken up a leadership role in this regard now, with these taxis being replaced by extended-range electric vehicles. Common sense arrives in London!

In Germany, millions of diesel vehicles may be banned from cities because they produce too much toxic air pollution. While this development may be shocking to some, it has been known for a long time that air pollution is harmful to humans. In that sense, it's not an environmental issue like the conservation of wild lands. It is a human public health issue and a very large one.

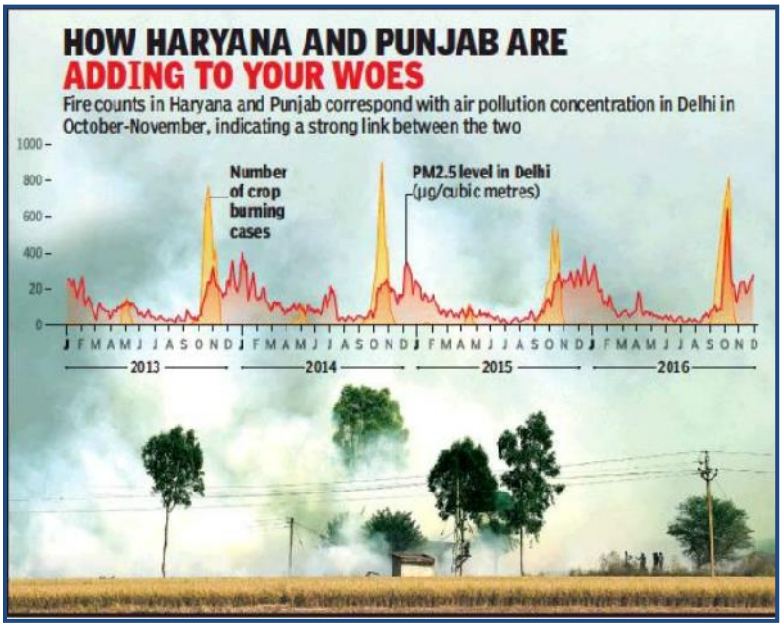
It would intriguing if in Germany there could be some kind of industry and government collaboration to replace the worst-polluting diesels with all-electric EVs in the cities with the most harmful air pollution. In other words, not to retrofit the diesels to reduce emissions, or to let them drive outside cities, but to replace them with EVs which produce zero emissions. The greater adoption of EVs will reduce very high levels of toxic air pollution in cities. Eventually,

some cities might only have EVs, and residents of these places will be healthier. To re-iterate, EVs are not only for “tree huggers” or “hippies” or “greens,” because they are better for human health. We need them in order to be healthier.

PM2.5 levels rising in proportion to stubble burning, finds Nasa study

Date: 13-May-2018 Source:indiatimes.com

NEW DELHI: A new study by Nasa scientists has concluded that there is a strong link between agricultural fires in Punjab and Haryana and PM2.5 levels in Delhi during the post-monsoon months of October and November.



PM2.5 concentrations in Delhi, which is downwind to Punjab and Haryana, show a coherent increase — rising often from as low as 50 micrograms per cubic metres (µg/ m3) before the onset of the burning season to 300µg/m3 at the beginning of November when burning is under way.During the crop burning season of 2016, the seven-day average peaked to a record high of 550µg/m3. This could also explain the severe smog episode in November 2016 when PM2.5 concentration peaked to more than 700µg/ m3 on November 5, 2016. But the study also cautions that the impact of emissions from local sources, including more than 9.5 million vehicles, industries and construction activities, cannot be ruled out. However, this study could give the government clues to averting smog episodes. While the link between crop burning and winter pollution peak was being speculated for long, this is the first scientific study to correlate fire counts in Punjab and Haryana with wind direction and parallel rise in PM2.5 concentrations in Delhi.

The study that analysed satellite data for 15 years (2002-2016) also revealed an increasing trend in crop fires. It found that there is a shift in the distribution of fires from October to November. This study, which has been accepted recently to be published in the journal of Aerosols and Air Quality Research (AAQR), uses fire data from satellites, pollution data from Nasa’s A-train sensors and PM2.5 concentrations measured at the US Embassy in Chanakyapuri.

Scientists also conducted aback trajectory (path taken by air pollution particles in the past) using a National Oceanic and Atmospheric Administration (NOAA) model. Compared to paddy stubble burning in October-November, fire counts in May (wheat stubble burning season) were found to by lower by a factor of six to eight.

As far as post-monsoon pollution is concerned, just by excluding PM2.5 data for October and November, the annual mean concentrations decreased by 10%, 7%, 12% and 13% for 2013, 2014, 2015 and 2016, respectively. “Overall, the fire counts and PM2.5 concentrations showed a linear relationship, which yields an increase in PM2.5 of 33μg/m3, given an increment in fire counts by about 100 …” the study concluded.

Back-trajectory modelling also gave scientists a clue as to why Delhi may be worst affected by crop fires. Days with extreme levels of PM2.5 were mostly associated with northwesterly winds from crop burning areas, “suggesting a profound impact of smoke transport on modulating air quality over Delhi”, the study said.

While concluding that crop fires are on the rise in Punjab and Haryana, satellite data also reveal that the number of fires was higher in October between 2002 and 2009. But this trend has now changed and a majority of fires are being recorded in November.

The number of fire counts detected between 2009 and 2016 was found to be 32% higher than those found between 2002 and 2009 by one of the satellites. But, in 2016, fires were at a record high, which also possibly explains the severe smog episode in 2016 in Delhi. “The crop burning season of 2016 has been most anomalous with maximum fire hotspots (17,804) detected over the Punjab-Haryana region … compared to average fire counts (14,310) detected between 2011 and 2015, the total fire counts in 2016 were 24% higher,” the study added.

In 2016, fire counts were up by 44% compared to the average count recorded between 2002 and 2015.

The study was led by Hiren jethva, scientist from the Universities Space Research Association at the Nasa Godard Space Flight Center; co-authors include scientists Duli Chand, Omar Torres, Pawan Gupta, Alexei Lyapustin and Falguni Patadia. The Pacific Northwest National Laboratory and Morgan State University were also part of the study.

‘Secunderabad air quality not healthy for sensitive groups’

Date: 13-May-2018 Source:indiatimes.com

HYDERABAD: A pollution monitoring station at US Consulate at Begumpet has revealed that on most days air quality is ‘unhealthy for sensitive groups’. On Sunday evening, Air Quality Index (AQI) was 126. On May 8and May 9, the index was worse and above 150. In a tweet, US Consulate General stated: “The US Consulate General’s air pollution monitor covers the area of Secunderabad. The data displays are US Environmental Protection Agency air quality index.”

A message by the Consulate says, “When AQI values are between 101 and 150, members of sensitive groups may experience health effects, but general public is unlikely to be affected.” when AQI is between 151 and 200, “everyone may begin to experience health effects; members of sensitive groups may experience more serious health effects (sic).”

The consulate is monitoring air quality about particulate matter (PM) 2.5 at the Consulate compound at Begumpet. The US Consulate doesn’t monitor other pollutants.

Central Pollution Control Board’s air quality bulletin released on Sunday afternoon categorised Hyderabad as ‘moderate’, which implies breathing discomfort for people suffering from lung and heart diseases.

Telangana PCB chief scientific officer P Veeranna told TOI, “TPCB has four continuous monitoring stations and 18 manual monitoring units in Greater Hyderabad limits. We have a particulate pollution problem.”

Dust storm pushes up pollution level in Gurugram

Date: 14-May-2018 Source:indiatimes.com

GURUGRAM: Air pollution in the city rose sharply over the weekend, with the highest level of PM2.5 reported on Sunday at 198 micrograms per cubic metre (µg/m³), compared Friday’s high of 95µg/m³.

The dust storm on Sunday evening made the situation worse.

Air quality index (AQI) also went up to 357 (considered ‘very poor’) on Sunday, from 341 (also ‘very poor’) on Friday. It was 215 and 232 (‘poor’) on Wednesday and Thursday, respectively. The situation in Gurugram is worse than neighbouring Delhi, which recorded 225 and 269 on Sunday and Saturday, respectively.

According to Haryana State Pollution Control Board (HSPCB), an increase in wind speed is the main culprit behind the rise in concentration of particulate matter. “An increase in wind speed

generally leads to dust pollution. The problem is that rain took place before the dust storm. If there is rain now, the concentration of PM2.5 will go down, reducing overall pollution levels too," said a HSPCB official.

Doctors advised people to avoid exposure to the outdoors during storms.

"A rise in concentration of PM is reported during dust storms. We're getting many cases of breathlessness. While asthma patients, elderly, children and pregnant women should avoid exposure to the outdoors, everyone can use masks during dust storms. It's good to take such precautionary measures," said Dr Himanshu Garg, a senior pulmonologist.

The meteorological department expects cloudy sky, but an increase in average maximum temperature. The wind speed is likely to be in the range of 1-2m/sec. "We're expecting cloudy skies on Monday. The average maximum temperature is likely to increase by 1-2 notches later in the week," said a met official. The average maximum temperature on Sunday was 38°C and the average minimum temperature was 27°C. The average maximum temperature is expected to be 38-39°C on Monday.

Air pollution during pregnancy tied to high blood pressure in kids

Date: 15-May-2018 Source:reuters.com

Women who breathe polluted air during pregnancy may be more likely to have children who develop high blood pressure, a U.S. study suggests.

Researchers focused on what's known as fine particulate matter, or PM 2.5, a mixture of solid particles and liquid droplets smaller than 2.5 micrometers in diameter that's found in traffic exhaust and can include dust, dirt, soot, and smoke.

They examined data on 1,293 mother-child pairs and assessed kids' blood pressure at checkups from ages 3 to 9 years. When they sorted children into three groups from highest to lowest levels of exposure to PM 2.5 in the womb, children in the highest-exposure group were 61 percent more likely to have high blood pressure than kids with the lowest exposure.

"We believe that when pregnant women breathe air with high levels of fine particulate matter, it causes an inflammatory response that alters genetic expression and fetal growth and development, on the pathway to high blood pressure in childhood," said study co-author Noel Mueller of Johns Hopkins Bloomberg School of Public Health in Baltimore.

"I think the take home message for pregnant women is not that you should change your residence, but rather that you might consider avoiding highly polluted areas during pregnancy,

particularly during heavy bouts of physical activity, which is important to keep up during pregnancy," Mueller said by email.

High blood pressure is a major risk factor for cardiovascular disease and a leading cause of disability contributes to an estimated 7.5 million deaths worldwide each year, researchers note in the journal Hypertension.

Previous research has linked air pollution exposure in the womb to an increased risk of birth defects including abdominal malformations and what's known as hypospadias, an abnormality in boys that occurs when the opening of the urethra doesn't develop on the tip of the penis and instead forms on the shaft or on the scrotum.

In the current study, children appeared to have an increased risk of high blood pressure when they were exposed to average PM 2.5 levels of at least 13 micrograms per cubic meter of air (ug/m3) during the final three months of pregnancy. That's slightly higher than the limit set by the U.S. Environmental Protection Agency (EPA) of 12 ug/m3.

Children in the group with the highest exposure to air pollution in the womb experienced PM 2.5 levels of 11.80 to 28.81 ug/m3 during the third trimester of pregnancy, the study found.

Kids with the lowest exposure had third trimester PM 2.5 levels of 3.79 to 9.57 ug/m3, well within the range permitted by the EPA.

Each 5 ug/m3 increase in PM 2.5 exposure in the womb was associated with a 3.39 percentile increase in what's known as systolic blood pressure, the "top number" that represents the pressure blood exerts against artery walls when the heart beats.

Children were identified as having high blood pressure if their systolic blood pressure was in the highest 10 percent for kids the same age.

The study wasn't a controlled experiment designed to prove whether or how air pollution exposure in the womb might directly cause high blood pressure. Researchers also lacked data on how much time women spent breathing polluted air outdoors or any exposure to PM 2.5 at work.

Still, the current study offers fresh evidence linking air pollution to high blood pressure in kids, particularly because the connection appeared for kids at all birth weights in the current study. Previous research found this connection for overweight babies.

"If maternal and early life pollution exposures increase the long-term risk of high blood pressure, then reducing early-life pollution exposure through regulation and through local and regional efforts may help protect children from having higher blood pressure in childhood, and

may improve long term cardiovascular and cerebrovascular health," Dr. Diane Gold, author of an accompanying editorial and a professor at the Harvard T.H. Chan School of Public Health in Boston, said by email.

With world's worst air, Indian city struggles to track pollution

Date: 16-May-2018 Source:gulf-times.com

In the world's most polluted city, Kanpur in northern India, the biggest hospital is so overcrowded with patients with respiratory ailments that they are often bedded in the ophthalmology ward.

Kanpur, home to 3 million people, is followed by 13 other Indian cities in a list of the places with the worst air in the world, according to rankings released this month by the World Health Organisation (WHO).

Prem Singh, head of the department of medicine in Kanpur's Ganesh Shankar Vidyarthi Memorial Medical College, said the number of patients the hospital receives with respiratory illnesses has more than tripled over the past five years to 600 a month, most of them children and people over 50 years old.

'Every week a lung cancer patient walks in; earlier we would get one in three months,' said Singh.

'Problems from air pollution are on the rise and leading to multiple diseases such as bronchial asthma, chronic obstructive pulmonary disease and pneumonia.'

In the adjoining room, a 45-year old man lay gasping as his family members circled around him amid the stench and dust. A doctor attending to him said the man was suffering from chronic respiratory disease, partly due to air pollution, that had destroyed one of his lungs.

The corridors of the hospital, one of the biggest in the country's most populous state of Uttar Pradesh, are packed with patients and their families, laid on mats or squatting in groups.

The WHO ranking is based on 2016 data from the Central Pollution Control Board on the amount of particulate matter (PM) under 2.5 micrograms - the smallest, most dangerous particles that can lodge deep in the lungs - found in every cubic metre of air.

The WHO says globally about 7 million people die every year from breathing polluted air that can lead to heart disease, stroke and lung cancer. Most of the deaths happen in poor Asian and African countries.

Kanpur's chief pollution officer, Kuldeep Misra, rejected the tag of the world's most polluted city.

'If the situation was as bad as the WHO describes, we would have been dead by now,' he said in an interview in his office.

'THIS WAS COMING'

In an article for the British medical journal The Lancet, experts from more than 100 institutions including the Indian Council of Medical Research and the Institute for Health Metrics and Evaluation at the University of Washington, said that Uttar Pradesh had the second highest incidence of obstructive lung disease linked to air pollution among all Indian states as of 2016. The neighbouring desert state of Rajasthan topped the list.

But, like most other Indian cities, Kanpur does not have the infrastructure to fight air pollution, federal environment ministry officials say.

Only a handful of the country's 100 most polluted cities have action plans to combat air pollution, despite being asked by the federal government to do so in 2015.

In Kanpur, the industrial hub of Uttar Pradesh, particulate matter such as dust and soot accounted for around 76 percent of air pollution during the winter months, according to a 2015 report by the government-run Indian Institute of Technology (IIT) in the city. Biomass burning accounted for around 15 percent and emissions from vehicles about 8 percent in Kanpur, around 475 km (295 miles) southeast of Delhi on India's northern plains.

In summer, particulate matter and vehicles emissions were equal contributors to air pollution, at around 35 percent each.

'The state government does not have the mechanism to understand the sources of air pollution, how will they tackle it?' asked Sachchida Nand Tripathi, a professor in IIT Kanpur, who is working with the federal environment ministry to track particulate matter in real time.

'The state needs to act. This was very much coming.'

Big cities such as Kanpur need at least five stations to monitor PM 2.5 polluting the air and take remedial measures, a federal environment ministry official said, declining to be identified.

Chief Pollution officer Misra said Kanpur was taking action.

Misra said the city has just one station to monitor PM 2.5, and only started tracking the metric actively in 2015. His office has asked the state's pollution control headquarters to buy four more such monitors, he said.

He said the local government planned to build new roads and set up an urban train service to cut car pollution. It would also plant more trees and promote battery-operated transport, he said, declining to give any deadlines for the cited actions.

He acknowledged that Kanpur's air exceeded government-set safe limits, based on the concentration of larger pollutants such as PM 10 over the past few years, but added that the city's own data showed pollution in general had not spiked despite higher industrial activity.

NO FREE CLEAN AIR?

In Kanpur, coal burned by industry, emissions from vehicles plying mostly unpaved roads and proliferating tanneries combine to produce a toxic cocktail of airborne pollution.

In one suburban neighbourhood on the banks of the Ganges, a river considered holy by Hindus, sewage and leather scraps flowed into the water, turning it black and slimy. A $3 billion national plan to clean the river is running behind schedule.

Kanpur's lone station tracking PM 2.5 is located in a bustling marketplace in the city's centre.

‘We have been asked to track only PM 2.5. I just have one machine to either track PM 2.5 or PM 10,’ said operator Rajesh Gupta, standing by a jumble of machines and wires, idols of Hindu gods placed nearby. On a terrace above the two-room station, a large display showed live pollution data.

The environment ministry in New Delhi, meanwhile, is considering spending about 7 billion rupees ($104 million) this fiscal year to help cities like Kanpur add more air-quality monitoring systems and buy equipment like water-sprinklers to settle dust.

‘It's the shared responsibility of the centre and state governments,’ said Nandikesh Sivalingam, a campaigner with Greenpeace India. ‘If a state like Uttar Pradesh demands funds, it's fair because it's facing some big infrastructure challenges.’

A senior environment ministry official, who declined to be named citing government policy, said states and municipalities should now budget for air like they do for water.

‘The time for free clean air may be over,’ he said

Air quality deteriorates, high concentration of PM 10 recorded

Date: 17-May-2018 Source:dailypioneer.com

Due to occurrence of dust storm, Delhi air quality deteriorated on Wednesday, System of Air Quality, Research and Weather Forecast (SAFAR), a unit of Ministry of Earth Sciences (MoES) has recorded high concentration of Particulate Matter (PM) 10. The SAFAR marked "Orange" to Capital air on Air quality Index (AQI). The PM 10 was recorded at 272 micro cubic per gram and in its air forecast the SAFAR updated the number with 355 (µgm-3)n and gave status - Very Poor.

PM 2.5 was also recorded relatively poor, the concentration was fluctuated between 64 - 84 µgm-3.

While Met and climate experts said that the reason of frequent thunderstorm is surface heat which leads to heat waves and resulting in occurrence of dust storm.

Recently , Delhi witnessed three major high -intensity dust storm (May 2 , May 13 and May 15)

While MeT has predicted and forecast more thunderstorm and dust - storm activities, air quality will further deteriorate with high ratio iof dust particles in air.

According to weather experts, there are chances that there could be more instances of gusty - dusty dust and thunderstorm with high momentum of winds.

The rising surface temperature is triggering heat wave and dust storm. Incidentally, on January 18 this year , NASA has released a research based on the MeT data of centuries and mentioned that the global surface temperature of the Earth in 2017 was the second-warmest in recorded history since 1880.

European cities take Commission to court over air quality in landmark case

Date: 18-May-2018 Source:euractiv.com

In the same week that the European Commission announced it would take six countries to court for breaking air pollution limits, three major cities said they would start legal action against the EU executive. They accuse the Commission of giving in to automotive lobbies. EURACTIV's partner La Tribune reports. Condemned in January for failing to comply with European standards for air quality, Paris, Brussels and Madrid are now taking the European Commission to court.

The three European capitals are seeking to bring a joint action for the annulment of the European regulation on nitrogen emissions (NOx) from diesel cars.

The Commission is under fire because several European capitals accuse it of double standards.

They acknowledge the EU executive has taken measures to tackle pollution from cars with the 2016/646 directive adopted in the wake of Dieselgate, but accuse the institution of giving car manufacturers too much time to adapt to real driving emissions (RDE) tests.

The regulation adopted in 2007 caps maximum acceptable NOx emissions from diesel cars during RDE tests at 80 mg/km. From September 2017 for new models and from September 2019 for new vehicles, NOx emissions can legally exceed the 80 mg/km by up to 110%.

From January 2020 for new models and January 2021 for new vehicles, NOx emissions can still exceed the limit imposed by up to 50%. If the cities win the case, they can impose the 80 mg/km NOx emissions limit but it will be based on new road tests.

Cities lead the way

On 4 May, the Court of Justice dismissed some 1,500 citizens, most of which were French, after they sought compensation following the adoption of the regulation.

"We need the European Union to support us, not give regulatory protection to air pollution. I am proud to stand beside the Mayors of Madrid and Brussels on behalf of millions of people from European cities, to say our voices can no longer be silenced," said Mayor of Paris Anne Hidalgo.This is the first time cities have taken joint action against the Commission. "Cities have to be a stronghold of conscience," said Mayor of Madrid Manuela Carmena. She believes this joint action: "reveals the leading role of cities as the main experts in the problems of citizens and, therefore, the main defenders of their causes".

In the United States, the city of New York has taken legal action against the five largest oil companies responsible for 11% of global CO2 emissions.At the same time, 17 states have filed lawsuits against the US Environmental Protection Agency (EPA) for regressions by the Trump administration on fuel and vehicle emissions standards, which were introduced by EPA under Obama's administration.

Hunter becomes the hunted

But the Commission was busy doling out justice on Thursday, when it finally confirmed it would launch legal proceedings against six member states for violating air quality rules.

After months of deliberation the EU executive decided that Germany, France, Italy, Hungary, Romania, and the United Kingdom should be referred to the Court of Justice.

The Czech Republic, Slovakia and Spain were all granted a reprieve for now but the Commission insisted that their efforts to combat bad air quality would continue to be monitored closely.

Centre approves Rs 685 crore to curb air pollution caused by stubble burning in Punjab

Date: 18-May-2018 Source:newindianexpress.com

PATIALA: Punjab Government has managed to coax the Centre to approve Rs 685 crore worth relief package to fund its relentless campaign against stubble burning, Punjab Health and Family Welfare Minister Brahm Mohindra said at an ASSOCHAM-Reckitt Benckiser joint event held here today."Considering the gravity of this issue, Punjab Chief Minister took it up with Union Government and also discussed with the Prime Minister about ill effects of air pollution caused by straw burning in the state which has highest contribution in nation's food bowl," said Mr Mohindra while launching an ASSOCHAM-Reckitt Benckiser awareness program on air pollution in Punjab.

"I feel proud in sharing with you that owing to Punjab Chief Minister's valiant efforts Centre has approved Rs 685 crore relief package so that our farmers do not have to resort to stubble burning," he said.

Terming it as a welcome step and a huge achievement, the Minister lauded the efforts of the Chief Minister and said that he is both the well-wisher and saviour of Punjab and its farmers.

Recalling once how when he went to a local village in his constituency in the evening he saw just smog and pollution all around with people from all age groups coughing and suffering from chest infections.

"I interacted with a group of village elders sitting under a tree and told them that this is why I used to request you for stop burning crop residue and now you can see everyone is coughing around and suffering from chest ailments, thus it is we who are responsible for this problem and it is only we who have to find a solution to improve the situation," he said.

Earlier, in his address at the ASSOCHAM conference, Mr Mohindra said that to combat the problem of paddy burning, the state of Punjab came up with the method of attaching the super straw management system (SMS) to every self-propelled combined harvester.

"The super straw management system will replant the leftover straw into the soil (in-situ), which also has the additional benefit of improving soil's quality, it will help us in two ways of preventing air pollution and improving soil," he added.

He further said that Punjab cabinet has also approved the creation of Directorate of Environment to check air pollution which is also a very positive development.

Talking about the importance of community participation, the Minister called up on various stakeholders viz., government, industry, academia, farmers and others to work together to improve air quality and reduce the burden of diseases caused by pollution.

"I am highly impressed and would congratulate ASSOCHAM for organising an event on issue of such grave importance, they must aggravate their efforts and help the Government in ensuring better air quality and good health for future generations of Punjab," Mr Mohindra said.

Speaking on the occasion, ASSOCHAM's secretary general D S Rawat said that ever rising air pollution levels are taking a toll on India's urban economy and sectors like tourism, hospitality, outdoor recreation and others are worst affected.

"Besides it is also leading to rise in healthcare costs to the government, driving away top executives and talented people to other cities/countries with better air quality, while it may not just hurt the country's ability to attract highly-skilled expatriates but might also severely impact inflow of investments," Mr Rawat said.

"Crop residue burning being one of the prime reasons for growing air pollution in the region, it is the need of the hour to spread awareness about its health hazards and promote alternate

solutions through co-operation and networking with peer groups, different agencies, organisations and individuals to improve ambient air quality," he added.

Further elucidating on the ASSOCHAM-Reckitt Benckiser (RB) joint campaign to raise awareness about air pollution in Punjab, Mr Gaurav Jain, SVP AMESA for RB Health, said, "Every year, stubble burning in Punjab adds to an increased level of air pollution in the state and in adjacent states including Delhi-NCR and Haryana.

With air pollution at a global tipping point, we are launching 'Ab Hogi Har Saans Swachh' campaign along with ASSOCHAM Foundation for Corporate Social Responsibility.

"With this campaign we join the Government of Punjab in their incessant initiatives to reduce the menace and induce mass behaviour change by educating and sensitizing farmers to use alternate solutions to manage stubble effectively," Mr Jain said.

Stubble burning continues to affect air pollution

Date: 19-May-2018 Source:indiatimes.com

LUDHIANA: As stubble burning continues unabated in and around Ludhiana, there is huge jump in the pollution levels in the city as the Air quality Index (AQI) values have shot up during the last ten days and are in “poor” quality bracket. The neighbouring cities of Khanna and Mandi Gobindgarh however have better air quality than Ludhiana.

As per a Central Pollution Control Board (CPCB) data, the value of Air Quality Index, that measures the quality of air in a city, for Ludhiana on Thursday at 4 pm it was 275 which comes under the poor category with possible health impacts of “Breathing discomfort to most people on prolonged exposure”. The AQI in the city as per CPCB was worse than Delhi (243), Faridabad (231), Amritsar (188), Jalandhar (179) but less than Ghaziabad (295) and Gurgaon (340).

On May 10, the AQI for Ludhiana was 166 which is considered to be of moderate value whereas on May 9 it was just 86 which is Satisfactory value. The green activists say that the increase in AQI is because of the government's failure to stubble burning by farmers.

"The pollution levels have increased as the farmers are burning stubbles at will and the concerned agencies are failing to check the same. The problem that farmers face is that they have no other option but to burn stubble as the government has not provided them with any good alternative. The air pollution will continue to increase during the harvesting season as farmers will burn stubble," said Ajaydeep Singh, a green activist.

The Punjab Pollution Control board (PPCB) authorities admit that stubble burning by farmers has contributed to the air pollution. "The number of cases of stubble burning has decreased and the number is 100 for the state. However since harvesting season is at the fag end, such incidents will decrease. However we are challaning the farmers for stubble burning," said chairman, PPCB K S Pannu. He added that AQI will improve in the next few days.

The farmers meanwhile continue to rue lack of alternatives to dispose off stubble. "We have no other option but to burn the stubble as transportation cost is very high and we cannot afford that. The government should atleast provide us some option on disposal of stubble like paying us some amount for the same," said a farmer from the Machiwara area. He added that setting up power generation units which use the stubble is also a good option, but such units should pay the farmers some nominal price and transport the stubble to such units.

Why is Ahmedabad's air action plan gathering dust?

Date: 20-May-2018 Source:indiatimes.com

AHMEDABAD: How many warnings the state government need to enact the Action Plan for Control of Air Pollution in Ahmedabad (APCAPA)? The plan is ready and awaiting approval from the chief secretary's office and the CMO for the last three months, claim highly placed sources in the state environment and forest department. The plan, prepared by participation of multiple agencies like the district

collectorate, municipal corporation, GPCB, RTO, civil supplies and other government departments, that was in draft form since June 2017, was readied in February this year.

On Thursday and on Saturday, Ahmedabad's overall air quality index (AQI) was rated 'very poor', worst than Delhi's AQI.

The APCAPA plan includes making Ahmedabad and Gandhinagar kerosene free. Focus is on increasing the number of public transport buses and ensuring that all buses run on CNG. The transport department is entrusted with the responsibility to cancel registrations of commercial vehicles older than 15 years and provide financial assistance for the purchase of commercial vehicles that run on electric or CNG.

'Very poor' AQI is a warning to citizens and the government that any delay in the implementation of the APCAPA will cost 65 lakh Amdavadis dear.

In April this year, the Union environment and forest ministry had released a draft of the National Clean Air Programme (NCAP). The main goal of NCAP is "to meet the prescribed annual average ambient air quality standards at all locations in the country in a stipulated time frame". Given the state of air quality in Ahmedabad, any initiative by the Union or state government is an urgent need.

In December last year, some members of the APCAPA had wanted a regional plan air action plan for Ahmedabad to incorporate emissions from neighbouring talukas and districts. Also a policy to integrate data from air monitoring stations installed by different agencies — GPCB, CPCB, Ahmedabad Municipal Corporation (AMC) — was also mooted.

Such integration and coordinated effort was required to formulate an action plan that takes care of enforcement of existing air pollution laws.

UK government launches plan to curb air pollution

Date: 22-May-2018 Source:businessinsider.com

LONDON (Reuters) - The British government announced on Tuesday it was launching a new plan which aims to reduce air pollution and its costs on society by 1 billion pounds ($1.4 billion) a year by 2020.

The new plan comes just days after the European Commission said it would take Britain and five other European Union member states to the EU Court of Justice for failing to respect air quality limits.

Under the EU's Air Quality Directive, member states were supposed to comply with nitrogen dioxide emission limits in 2010 - or by 2015 if they delivered plans to deal with high levels of the gas, which is produced mainly by diesel engines.

The Commission said Britain had failed to respect curbs on nitrogen dioxide which is associated with respiratory and other illnesses.

The government said its plan was on top of a 3.5 billion pound plan to reduce air pollution from road transport and diesel vehicles set out in July last year.

It would aim to halve the number of people living in locations where concentrations of particulate matter are above World Health Organisation limits, the government said.

In addition, legislation will be introduced to give local authorities powers to improve air quality and ensure only the cleanest domestic fuels were available for sale.

The government will also take action to tackle ammonia from farming by requiring farmers to invest in infrastructure and equipment that will reduce emissions.

It said it would reduce the costs of air pollution to society by an estimated 1 billion pounds a year by 2020, rising to 2.5 billion pounds a year from 2030.

Tokyo Declaration unites global cities against waste and pollution

Date: 23-May-2018 Source:japantimes.co.jp

Tokyo Gov. Yuriko Koike announced Wednesday the adoption of the Tokyo Declaration, in which 22 megacities around the world committed to reducing waste and tackling air pollution by sharing technologies and knowledge.

The announcement came during the Tokyo Forum for Clean City and Clear Sky, a two-day symposium hosted by the Tokyo Metropolitan Government in Shinjuku Ward.

During the event, governors and officials from global cities such as Tokyo and Yokohama, as well as, Hanoi, Hong Kong, Paris, Singapore, Sydney, Ulaanbaatar, Yangon and Durban, South

Africa and Tomsk, Russia — exchanged information on recycling and waste management programs that had been implemented to address environmental issues.

All participants pledged to build better recycling systems, promote zero-emission vehicles in order to reduce air pollutants, and raise public awareness in cooperation with the private sector. These goals follow the 2030 agenda for Sustainable Development adopted by the United Nations General Assembly in 2015.

“It is said the 21st Century is the century of the cities. Now, we have confirmed the Paris Agreement is active, and positive among cities, and sometimes cities can lead initiatives to make the central government go forward to build a sustainable world,” Koike said.

The central topics of discussion at the symposium were air pollution and food waste, along with cultivating circular economies for recycling, reducing, and reusing waste materials.

According to the World Health Organization, “More than 80 percent of people living in urban areas that monitor air pollution are exposed to air quality levels that exceed the WHO limits. While all regions of the world are affected, populations in low-income cities are the most impacted.”

According to C40 Cities, a network of 96 cities worldwide that are working together to address climate change, nine out of 10 people on Earth are currently breathing unhealthy air.

“The distributions of these impacts are not equal. More than 90 percent of the deaths due to pollution are currently occurring primarily in Africa and Asia,” said a C40 official at the symposium.

Among the biggest issues faced by the cities as they combat air pollutants is the lack of monitoring systems and data indicating the extent of their environmental problems. That is due to the high costs for such systems, according to C40.

“There are a number of new technologies out there that can improve cities’ access to data, but there aren’t always the means to finance those in the cities,” the official explained.

The official also said it is financially challenging to get politicians and stakeholders to accept binding agreements on climate change policies, such as banning diesel cars and accepting pricing strategies, due to the high cost of achieving such goals.

During the symposium Tokyo announced two strategic plans to tackle climate change as an Olympic and Paralympics hosting city.

One is the launch of Team Mottainai (Team Too Precious to Waste) by the Tokyo Metropolitan Government, which will bring together volunteers, nonprofit organizations and experts in

climate issues to initiate a movement and propose holistic social approaches to tackle food waste and air pollution. The other plan is to increase the sales of zero-emission vehicles by 50 percent by 2030.

Koike noted that increasing such sales by 50 percent is a bold and challenging target, given that only 2.1 percent of the new cars sold in Tokyo are environmentally friendly. “We should not think whether it’s feasible, but rather focus on how we can make it possible by creating good conditions for that goal,” said Koike.

“By setting such a high target, Tokyo can play a role in leading both a country and the world … and we can pass that legacy to the Paris Olympics in 2024 and Los Angeles Olympiad in 2028.”

The filthy air

Date: 26-May-2018 Source: thestatesman.com

Controlling pollution is one of the most widely discussed topics in our country with verbosity being inversely proportional to the actual work done. We are still not alive to the evil consequences of pollution even when the pristine white Taj Mahal has turned brown; Ganga and Yamuna, the eternal rivers, have become overfed drains; and clean air has become a sweet memory.

WHO has listed fourteen Indian cities, including Delhi, as the most polluted cities in the world, in terms of air quality. So far, the damning WHO report has elicited no outrage or even an official response.

It appears that somehow, we have rationalised pollution as a necessary concomitant of progress despite the fact that unlike India, the cities and countryside of all developed countries are spotlessly clean.

Delhi’s sixth rank in the list of most polluted cities indicates that something is seriously wrong with our efforts to control pollution because in addition to being our capital city, Delhi is the headquarters of a multitude of pollution control agencies as also the National Green Tribunal.

Around Diwali last year, extremely poor air quality brought life to a standstill in North India. The crisis took up a lot of media space and prompted a slanging match between various State

Governments and the Central Government but once rain washed away the polluted air, even the histrionics subsided.

It was not a one-off incident; every Diwali, a similar situation arises, with the intensity of pollution rising year by year. Incidentally, despite such all-pervading pollution Delhi has been listed as one of India's cleanest cities on the Swachch Bharat website.

Unfortunately, the Government is yet to articulate a holistic approach to tackle pollution. We have a Ministry of Environment, Forest and Climate Change which has pollution control as one of its many objectives. The Swachch Bharat Abhiyan, a successor to Total Sanitation Campaign (1999) and Nirmal Bharat Abhiyan (2012), focuses almost exclusively on eliminating open defecation.

The Swachch Bharat Abhiyan contains two sub-missions ~ Swachh Bharat Abhiyan (gramin or rural), which operates under the Ministry of Drinking Water and Sanitation; and Swachh Bharat Abhiyan (urban), which operates under the Ministry of Housing and Urban Affairs.

With such diffused control, it is not surprising that there is no focus in the effort to fight pollution. For example, the Swachch Bharat Abhiyan aims to make our country Open-Defecation Free (ODF) by 2 October 2019, by constructing 90 million toilets in rural India at a projected cost of Rs 1.96 lakh crore but some basic issues like lack of piped water supply in villages or the method of waste disposal has not been tackled satisfactorily.

Instances abound where toilets constructed with Government subsidy lie unused because of lack of water or are being used for other purposes. Things would have been different if chemical toilets had been promoted in areas with water shortage and all toilets had a facility for composting of waste. Also, doubts arise about the success of Swachch Bharat Abhiyan because success is evaluated on the basis of self-certification.

One reason for the large-scale riverine pollution in India is the unregulated proliferation of polluting industries like tanneries, dye manufacturers and chemicals which dump their harmful effluents directly into rivers. Municipal corporations are not far behind in spreading pollution; they also release untreated sewage water directly into the nearest river.

For example, Delhi produces more than 2,000 million litres per day (MLD) of sewage but Delhi Jal Board collects and treats only about half the total sewage generated in Delhi with 15 out of 32 sewage treatment plants working below their capacities. The 22 km stretch of the Yamuna River in Delhi is one of the dirtiest in the country. Delhi constitutes only two percent of the catchment area of the Yamuna but is responsible for 80 percent of its pollution.

According to the Central Pollution Control Board, Yamuna water in Delhi is fit only for recreation and industrial cooling. More than Rs 6,500 crore have been spent to clean the Yamuna in the last twenty years, but the river is still clogged with water hyacinth and boasts of no marine life.

The story of the Ganga is worse. The holy river, which provides water to about 50 crore people in 11 states, is now the fifth-most polluted river in the world with stretches of over six hundred kilometres being ecologically dead zones.

Even the British had recognised that the uninterrupted flow of the Ganga was a basic right of Indians and had signed the Ganges Agreement on 19 December 1916, the 'Aviral Ganga Samjhauta Divas'.

Unfortunately, the sanctity of the Ganges Agreement has been violated by our own governments which have diverted more and more river water for irrigation and other uses thereby turning the Ganga into a polluted sewer.

It is not that no efforts have been made to clean the Ganga. The Ganga Action Plan (GAP) was launched by Rajiv Gandhi on 14 January 1986 with the objective of improving the water quality of the Ganga by interception, diversion and treatment of domestic sewage and by preventing toxic and industrial chemical wastes from entering the river.

Subsequently, the Namami Gange project was announced by the present government in the 2014 budget. An estimated Rs 2,958 crore have been spent till July 2016 on this project with little to show on the ground.

Namami Gange project has a budget outlay of Rs. 20,000 crore for the next five years which is in addition to approximately Rs. 4000 crore spent on this task between 1985 and 2014.

Despite spending such humongous amounts, our failure to control pollution shows that something is definitely lacking in our approach and execution. For one, despite deterrent provisions in various environment protection laws, the Government believes more in sermonising than catching and punishing wrongdoers.

We can start by undertaking a pollution audit of all industrial units and taking action under the Environment Protection Act, 1986/Air (Prevention and Control of Pollution) Act, 1981/ Water (Prevention and Control of Pollution) Act, 1974 against the erring units.

Simultaneously, polluting industries have to be grouped and waste treatment plants (both for liquids and solids) have to be made mandatory for each group.

Also, the Government has to eschew its tendency of allowing all kinds of ecologically harmful projects to come up after imposing conditions which are routinely violated. This is often done to lure MNCs, which are relocating polluting industries to India from more developed and ecologically conscious countries.

One of the most visible sources of air pollution are the 500-odd coal-based power plants which produce 194 gigawatts of our total power production of 392 gigawatts. All such plants were required to install Electrostatic Precipitators (ESPs) to control particulate matter (PM), Flue Gas Desulphurisation (FGT) for sulphur oxides and modify burners for lowering nitrogen oxide emissions, but most plants have not installed these technologies so far.

This is the reason why more than 60 per cent units of coal-based power plants have not achieved the emission norms notified by the Union Environment Ministry. We can reduce air pollution significantly by replacing coal-based power plants with solar power units which are both pollution-free and cheaper.

We have to stop the discharge of untreated sewage and industrial effluents directly into the nearest river. As of now, despite the various river-cleaning projects, there are hardly any industrial effluent treatment plants and no city has sufficient sewage treatment capacity. We can tackle riverine pollution in another way also.

Considering that insufficient flow of water is the main reason for collection of pollutants, stagnation of water and propagation of pernicious weeds (like the water hyacinth), the water flow in our rivers needs to be augmented.

The first step in this direction could be the review of the more than 3200 dams on our rivers. Most of the dams were constructed to provide electricity and water for irrigation but with time these dams have silted up and their energy generation capacity has gone down considerably.

On the other hand, easy availability of water has changed cropping patterns in dam areas, increasing the water requirement to unsustainable levels. For example, after the advent of Narmada water, places with pastoral economies like the Saurashtra region in Gujarat have turned to wheat farming.We have to prevent an impending ecological crisis by restricting the use of water, preferably by making our agriculture micro-irrigation based. After a review, some dams could be dismantled to restore water in the dammed rivers to a reasonable level, a step which would reduce pollution substantially. We can have cleaner cities only if all of us develop better civic sense.

Heat and air pollution will cause breathing problems in Hamilton: Environment Canada

Date: 27-May-2018 Source: cbc.ca

It will be a little harder for some people to breathe today because of heat combined with high levels of air pollution, says a statement from Environment Canada.The agency has issued a special air quality statement for southwestern Ontario, including Hamilton.

It says to expect possible high levels of air pollution, which will cause "deteriorating air quality."

"Hot and sunny conditions are expected to cause increasing ground-level ozone concentrations in the area," it says.

This will continue this afternoon, and possibly into Monday afternoon.

That means people could experience increased coughing, throat irritation, headaches or shortness of breath. Children, seniors and those with cardiovascular and lung disease are particularly at risk.

Anyone with those symptoms should hold off on strenuous outdoor activities.

The weather today will be 28 C with a Humidex of 33. This afternoon brings a 30 per cent chance of showers and a risk of a thunderstorm.

Sunday night will be partly cloudy with a 30 per cent chance of showers and risk of a thunderstorm early in the evening. Fog patches will develop overnight. The low will be 17 C.

Monday will be sunny, with sun and cloud in the afternoon. Fog patches will dissipate early in the morning. The high will be 30 C and the Humidex 36.

Air quality in Beijing-Tianjin-Hebei region improves

Date: 27-May-2018 Source: xinhuanet.com

BEIJING, May 27 (Xinhua) -- Air quality in the Beijing-Tianjin-Hebei region improved in the first four months of 2018 compared with the same period of last year, according to the Ministry of Ecology and Environment.

Good air days accounted for an average of 59.1 percent of total days in the 13 cities in the region, up 2.2 percentage points year on year, the ministry data showed.

The density of PM 2.5, a key indicator of air pollution, dropped 18.8 percent year on year during the period, while the density of PM 10, another major pollutant, fell 12.9 percent.

Beijing saw the ratio of good air quality days increase by 3.9 percentage points to 64.7 percent in the period, with PM 2.5 and PM 10 density down 22.4 percent and 9.9 percent, respectively.

Nationwide, 338 cities had an average of 76.7 percent good air quality days, up 0.9 percentage points year on year.However, air quality in April alone worsened in the Beijing-Tianjin-Hebei region. The average proportion of days with good air quality was 58 percent, down 13.7 percentage points from April last year, with lower PM 2.5 density but higher PM 10 density.A ministry statement attributed the decrease from the previous month to frequent sandy and dusty days, increased industrial and construction activities, and static weather patterns, which make it difficult for airborne pollutants to disperse.

Tackling pollution has been listed by the government as one of "the three tough battles" that China aims to win in the coming three years.

Exposure to air pollution can cause infertility

Date: 28-May-2018 Source: deccanchronicle.com

Hyderabad: After heart and respiratory diseases, inflammation and even strokes, pollution is found to be a reason for reduced conception rates and increased pregnancy losses.

Emissions of hydrocarbons, soot and chemicals released from vehicles and industries contribute

to pollution along with dust from construction work sites. Continued exposure to pollutants can take a toll on the body.

Dr K. Shilpi Reddy, gynaecologist, said, “We can see increasing phenomenon of reduction in sperm count, sperm quality, egg count and egg quality among people who are living in urban areas as compared to rural areas.”

She said infertility is a multifactorial problem. “These problems can be found in people who are suffering from obesity, who eat junk food and are exposed to radiation.”

Compared to rural population, people in the urban areas are more exposed to air pollution.

Some of the other problems caused by exposure to air pollution are irregular heartbeats, development of chronic bronchitis, irritation of the eyes, nose and throat, shortness of breath, coughing and tightness in the chest.

Dr Vimee Bindra, gynaecologist, said, “It is usually difficult to correlate air pollution as the reason for any particular problem. But we can say that it is a contributing factor. Exposure to polluted air may lead to miscarriage, low birth and intrauterine death.”

The conditions in which people live, apart from the surrounds, play a major role. Dr M.S.S. Mukherjee, cardiologist, said, “One study states that people who are living near highways are more affected by heart problems. People who are living in cities are more affected as opposed to those who live in rural areas, and the reason is air pollution.”

He said the pollutants contain oxidants, which oxidizes low-density lipoprotein (LDL) in the blood and these form blocks in blood vessels.

Sulphur dioxide is a main component of the emission from vehicles, which causes respiratory problems. There are studies which say that by controlling air pollution, the lung performance can be improved.

Dr Sai Praveen Haranath, pulmonologist, said, “It is impossible to detect an individual case where air pollution is the reason behind lung problems because they are also other factors which play a role like smoking tobacco. But we can safely assume that one out of every five persons suffer from asthma is because of air pollution.”

Apart from physical health, pollution also has an impact on mental health. So much so that a doctor compared air pollution to consuming alcohol.

Dr Diana Monteiro, psychologist, said, “During very hot conditions people tend to behave violently, get angry and are irritated. It is like taking alcohol. If we consume it we behave

differently because of the chemicals present in alcohol. The same scenario can be applied to air pollution."

While people are advised to take measures against pollution, experts say that urban planning plays a key role in reducing pollution

"City planning should be done by keeping in mind the wind direction which is currently not happening due to increase concretisation. The government should remove encroachments mercilessly," said environmentalist Subba Rao.

He said the city is expected to have 20 square metres open space per person which is the national average. "Hyderabad has only 2 sq. m. open space per person. We are not looking at the root cause," Mr Rao said.

Officials say air pollution in the state is low compared to other states and the country average.

Pollution Control Board senior scientist P. Veerana said "Air pollution in Telangana especially Hyderabad is very low compared to the national scenario. We are taking measures like encouraging electric and CNG vehicles, constructing Metro Rail and offering multi-level parking. We are trying to introduce BS VI engines."

Air quality alert issued in Minnesota through Tuesday night

Date: 29-May-2018 Source: fox9.com

With temperatures expected near triple digits Monday, the Minnesota Pollution Control Agency (MPCA) has issued an air quality alert for the metro and parts of central and southeast Minnesota, effective until 8 p.m. Monday and continuing Tuesday from 12 p.m. to 8 p.m.

The affected area for Tuesday includes the Twin Cities metro, Rochester and Albert Lea.

Monday's mix of clear skies, hot temperatures and light winds is expected cause an increase in ground level ozone and bring air quality of unhealthy levels. Additionally, the MPCA says, "pollutants will collect along the warm front that will be located just south of the Twin Cities and contribute to increased ozone."

The air quality is expected to be especially unhealthy for:

- People who have asthma or other breathing conditions like chronic obstructive pulmonary disease (COPD), chronic bronchitis and emphysema
- Children and teenagers

- People of all ages who are doing extended or heavy, physical activity like playing sports or working outdoors
- Some healthy people who are more sensitive to ozone even though they have none of the risk factors. There may be a genetic base for this increased sensitivity

Ozone concentrations are expect to rise throughout the day before the air quality improves as evening thunderstorms develop in southern Minnesota and the sun lowers.

The MPCA says everyone should take precautions:

- Take it easy and listen to your body
- Limit, change or postpone your physical activity.
- If possible, stay away from local sources of air pollution like busy roads and wood fires.
- If you have asthma, or other breathing conditions like COPD, make sure you have your relief/rescue inhaler with you.
- People with asthma should review and follow guidance in their written asthma action plan. Make an appointment to see your health provider if you don't have an asthma action plan.

7 practical tips to avoid indoor air pollution and breathe better

Date: 31-May-2018 Source: hindustantimes.com

Indoor air pollution is very much real and it can be five times or more worse than outdoor air pollution. From everyday consumer products and household habits such as paints, pet allergens to cooking gas, lots of not-so-obvious things can be an additional source of air pollution. So, how do we shield ourselves?

Bornali Dutta, Associate Director Respiratory and Sleep Medicine, Medanta - The Medicity, said: "According to the World Health Organization (WHO) global air pollution database released in Geneva, India has 14 out of the 15 most polluted cities in the world in terms of PM 2.5 concentrations. It said 7 million people die every year because of outdoor and household air

pollution. Reports like these suggest that the impact of pollution on human health is fatal. Air pollution impacts most of the organs and systems of human body. The lung is one of the major sites of interaction with environmental particulates that causes and aggravates many respiratory diseases like COPD, asthma, and lung cancer."

Arvind Chabra, Country Head, Blueair suggests some tips which will help us avoid indoor air pollution:

* Say no to scented incense sticks and candles: After reading this you might think twice before lighting up those decorative candles or using agarbattis. Studies suggest incense sticks and scented candles release undesired chemicals that can cause serious health problems like skin allergies and even heightens risk of respiratory cancer.

* Say yes to some greenery: Plants are your best friends. They provide fresh oxygen to our lungs and planting a few indoor plants in your home with help you breathe clean and off course it gives that extra punch to your indoor décor. So, go ahead, buy some beautiful indoor plants and give your house a chic look.

* Remove carpeting if possible: Those aesthetic carpets and rugs can actually be a source of indoor air pollution. Carpets can capture a lot of pollutants such small dust particles, food which fall on the floor, pet hair, dust mites, pesticides, cockroach allergens and other dirt. These pollutants may become airborne while vacuuming or during renovations. Children are more exposed to these pollutants are they tend to play on the carpet.

* Indoor smoking is deadly: It affects not only the smoker but also people around them. While we are all aware about the harmful effects of smoking, it is deadlier indoor. Since there is no space for the smoke to go out so you tend to inhale the same air repeatedly, harming your nostrils and lungs.

* Ensure good ventilation: Proper ventilation in your house will prevents air pollutants from affecting you and your family's health. Not only that, having a proper flow of air inside your home can help you get rid of all the unwanted smells arising from cooking or from carpets. Also, allergens such as dusts, pollen, and other irritants which tends to get trapped inside your house can be removed to a large extent if there is a proper ventilation.

* Give away your plastic habits: Plastics are a major cause of air pollution. The by-products of plastics called microplastics are small pieces of plastic between the size of 0.1 micron to 5mm in diameter. These microplastics are immensely harmful to our health. Shockingly microplastics have found its way to our homes also. Their contributors can be simple things like erosion of synthetic carpets, synthetic clothing or cosmetics. Hence it is advisable to use less plastics products at home and switch to a sustainable way of life.

* Get an air purifier: Air purifiers are the best way to clean the indoor air. In addition to investing in your health it can prevent microplastics, allergies and impure air from harming you and your dear ones.

Air quality in Brussels “alarmingly bad” shows inquiry

Date: 31-May-2018 Source: brusselstimes.com

Some areas were selected in particular because of the presence of a school, a crèche or a hospital, where the population is likely to be more vulnerable to air pollution.

In one in five places where measurements were taken, NO2 was above the European limit of 40 micrograms per cubic metre of air. The most polluted spot in Brussels, it will not surprise drivers to learn is inside the Leopold II tunnel under the Basilique of Koekelberg, where the reading was 66.7 micrograms.

The pollution in the tunnel, however, affects not only drivers. “The system of ventilation expels heavily polluted air into the park,” said Groen parliamentarian Annemie Maes, referring to the Parc Elisabeth in front of the Basilique. “There, people go jogging, children play in the playground and families come to have a picnic.”

Long-term exposure to NO2 affects the airways in healthy people, and aggravates the problems of those with existing respiratory complaints such as asthma. Ironically, staying indoors is not a solution: NO2 penetrates the household, and because insulation nowadays tends to be better than before, the pollutant is retained indoors to affect anyone who is housebound, whether by illness or job.

Medical experts recommend reducing the limit to 20 micrograms. “If we take on the limit recommended by cardiologists,” Maes said. “It would have been exceeded at almost all of our measuring locations.”

June 2018

Glasgow announces major events for Clean Air Day

Date: 1-June-2018 Source : airqualitynews.com

Councillor Anna Richardson (centre-left) launches Clean Air Day activities in Glasgow yesterday (31 May)

With just under three weeks left until the second ever Clean Air Day, Glasgow city council has outlined a host of events that will be taking place in the city on June 21 to encourage cleaner travel.

This will focus around a major free event at George Square in the centre of the city, which is expected to attract thousands of visitors, and includes educational initiatives, cycling workshops and information on cleaner vehicles.

Councillor Anna Richardson (centre-left) launches Clean Air Day activities in Glasgow yesterday (31 May)

A section of road outside the City Chambers in the square will be sealed off from cars on the day so people can try out bicycles and electric bikes along a specially designed course.

Planned activities include cycle training sessions, the chance to try out an electric bike and mechanics will be on hand to carry out free on the spot repairs and provide maintenance tips for riders who bring their bikes along on the day.

Electric cars, vans and information will also be on display along with information about how motorists can join car clubs, to cut down on the number of cars on streets.

Events

The programme of events was launched by Councillor Anna Richardson, city convener for sustainability and carbon reduction, with the support of a group of Glasgow school children in the main square yesterday (May 31).

She watched pupils from Hyndland Secondary School fit air quality monitoring equipment with the assistance of Susannah Telfer, a senior technical consultant at Ricardo Energy & Environment which measures air quality in streets in towns and cities.

George Square in the centre of Glasgow will be the focal point of activities in the city on 21 June

Councillor Richardson said: “Reducing emissions is a top priority for the city. Events like Clean Air Day can increase awareness of what is being done to improve the quality of the air we all breathe.

“Clean Air Day will showcase a huge range of exhibits and activities such as active travel, renewable energy, car clubs and electric vehicles that can all help to improve air quality.

“We have made big improvements in air quality in Glasgow but poor air remains a public health concern and a major social justice issue for the city.”

Environmental Protection Scotland (EPS), which is coordinating the event north of the Border on behalf of the Scottish Government’s Cleaner Air for Scotland (CAFS) strategy, wants motorists to consider electric or low emission vehicles as an alternative to polluting diesel and petrol models.

Location

George Square in the centre of Glasgow will be the focal point of activities in the city on 21 June

John Bynorth, policy and communications officer for Environmental Protection Scotland (EPS) said: “Clean Air Day aims to encourage people to take at least one action to help improve air quality, whether that’s walking the children to school rather than taking the car, or walking to work, using public transport or finding out more information about an electric or low emission car – or joining a city car club.“George Square is a perfect location for this event in the heart of Glasgow as it will allow office workers, families, shoppers and the thousands of other people who will be passing by to find out more about what they can do to improve air quality.

“We would encourage everyone to come down and have a look at the electric cars, try their hand on an electric bike or get pedalling and make their own delicious smoothie on June 21.”

A spokesperson for Ricardo said: “It is a great opportunity to raise people’s awareness of what air pollution is and what can be and is currently being done to tackle the issue in Scotland.”

Glasgow is the first of four Scottish cities – including also Aberdeen, Dundee and Edinburgh – to be required to implement a Low Emission Zone before the end of the decade. Glasgow's LEZ is expected to come into effect on 31 December, with an initial focus on encouraging cleaner buses in the city.

Cllr Richardson added: "The forthcoming Low Emission Zone will make significant reductions to air pollution in the city centre. Our LEZ will be the first in the country and will deliver cleaner air for the people of Glasgow."

Across China: Less coal consumption in roasted nut factories reduces pollution

Date: 2-June-2018 Source : xinhuanet.com

TIANJIN, June 2 (Xinhua) -- Wangkou Town, one of China's largest production bases for roasted seeds and nuts, has converted all its roasting equipment from coal to natural gas over the past two years.

Wangkou, in Tianjin Municipality, is famous for its unique traditional recipes for roasted seeds and nuts, a popular snack among Chinese.

The 218 companies in Wangkou annually produce 600,000 tonnes of roasted seeds and nuts, worth 6 billion yuan (about 940 million U.S. dollars), accounting for 20 percent of output nationwide.

More than 30 food products, such as roasted nuts, sunflower seeds and watermelon seeds, have been exported from the town to more than 10 countries.

The booming industry has raised the income of 30,000 locals working in the sector, but brought serious pollution problems.

Roasting companies once emitted a total of 300 tonnes of nitrogen oxide, sulfur dioxide and smoke every year.

Yue Wei, general manager of Yuecheng Food Company, the largest roasted seeds and nuts manufacturer in town, said his company burned 80 tonnes of coal every year to roast 60,000 tonnes of sunflower seeds.

"The coal ash flew to every corner of the factory," Yue said. "We rented a large open-air space to store the coal, which also increased production costs."

In 2016, local authorities launched a campaign to eliminate coal-burning equipment to fight air pollution in Wangkou. All 309 coal-burners in the town were replaced with natural-gas burners.

Yue said his company had also invested 15 million yuan to purchase natural-gas burning equipment.

"Product buyers care a lot about the manufacturing environment of a food company," Yue said. "They think good manufacturing environment decides the quality of roasted products on a large degree.

"The environment-friendly equipment has also helped make the production process less risky."The perfect roasting temperature should be controlled between 170 and 175 Celsius degrees," Yue said. "In the past when the factories used coal burning equipment, the workers' hands were often scalded when they used them to feel the temperature.

"Wangkou's efforts have paid off. In 2017, the town cut consumption by 21,000 tonnes of coal, and achieved 'zero emission' of air pollutants in the industry, according to Yang Zhanlei, deputy director of the environmental protection agency of Jinghai District in Tianjin.Yue's company consumes 30,000 cubic meters of natural gas every day, an increase of 15 million yuan in production costs every year."The government will grant subsidies to roasting companies to encourage the use of natural gas-fired equipment," Yue said. "Some companies with heavy air pollution and low output value have been shut down. It is an opportunity for us to upgrade manufacturing equipment and enhance market competitiveness."

Sushil Modi to raise issue of high level of air pollution in the state

Date: 3-June-2018 Source : uniindia.com

Patna, June 03 (UNI) Taking serious note of alarming rise in level of air pollution across the

state, Deputy Chief Minister and Environment and Forest Minister Sushil Kumar Modi said that

he would raise the issue with the Centre during the two day conference of environment ministers commencing in New Delhi from tomorrow. Before leaving for the national capital, Mr Modi told newspersons here that he would take up the issue of non-inclusion of the state's major cities in union environment and forest ministry's Rs 637 crore National Clean Air Programme. The conference will be organised to mark World Environment Day on June 5.

Mr Modi said that Central Pollution Control Board had prepared the programme for 94 cities

where PM10 concentration was higher than the permissible limit but no city had been included

in the list despite the fact that World Health Organisation expressed its concern over the level ofair pollution in the state's three cities.

Mr Modi said that union environment and forest ministry had rolled out national clean air programme with an objective to control air pollution, increase number of quality testing centres and study the impact of air pollution on health and also reeasons responsible for air pollution.

Prominent Egyptian plan to reduce air pollution by 50% in 2023

Date: 4-June-2018 Source : egypttoday.com

Cairo Air Pollution with less smog - Nile River/ Photo by Nina Hale

CAIRO – 4 June 2018: A prominent strategy for Egypt to reduce air pollution's rate by 50 percent in 2023 was announced by the Ministry of Environment on Monday, June 4.According to Minister Khaled Fahmy, dust is considered the main problem in Egypt's air, as most of the country's nature is desert. "Dusty winds and the scarcity of rains are the main factors contributing to the increased air pollution's rate in Egypt," Fahmy said.

He explained that half of the current air pollution is basically due to "natural causes"; however, the other half comes as a result of unclean streets, and cars' and power plants' exhaust. In 2017, the air pollution's rate decreased by about 19 percent, compared to the pollution's rate during 2015, according to Fahmy. He added that the ministry has a prominent plan to reduce the pollution rate by 50 percent by 2023, as part of the sustainable development strategy for the whole country.

New regulations have been announced by the ministry to set rules to some of the factories that participate in increasing the pollution's rate, including the cement and fertilizers factories for instance; air quality monitoring stations were also announced to be increased, according to Fahmy's statements. Fahmy affirmed that strict rules were set and agreed upon by most factories that

increase air pollution through some of their daily practices. As part of the strategy, the government is working on reducing the cars' exhaust through replacing old cars with electric ones. New buses are expected to be released soon with several modifications to control air pollution.

Fahmy affirmed that Egypt is one of the few countries in the Middle East region, Africa and Asia that owns such a large number of air quality monitoring stations, which grant Egypt the privilege of predicting health effects and consequences of air pollution.

Egypt Environmental Performance Index ranked 66 in the 2018 report; meanwhile, Switzerland ranked first, and Burundi ranked last.

Vehicle emissions become major source of air pollution in China

Date: 4-June-2018 Source : gbtimes.com

Motor vehicle emissions have become the major source of air pollution in China, according to a report released by the Ministry of Ecology and Environment on June 1. China News Service

Motor vehicle emissions have become a major source of air pollution in China, according to a report released by the Ministry of Ecology and Environment (MEE) on June 1.China had about 310 million motor vehicles last year, up 5.1 percent compared to 2016, which has resulted in an increase of combined air pollution due to coal burning and vehicle exhaust emissions, says the report (PDF, in Chinese), entitled 'China Vehicle Environmental Management Annual Report 2018'.

In 2017, China's automobiles emitted around 436 million tonnes of pollutants, including 333 million tonnes of carbon monoxide (CO), 57.4 million tonnes of nitrogen oxide (NOx), 40.7 million tonnes of hydrocarbon (HC) and 5 million tonnes of particulate matter (PM).

The total amount of emissions of the four pollutants from motor vehicles was down 2.5 percent from the previous year.

In addition, studies have found that vehicle exhaust emissions contributed to between 13.5 and 52.1 percent all of major pollutants in 15 heavily contaminated cities such as Beijing, Tianjin and Shanghai. They also brought about several environmental problems, including dust haze, acid rain and photochemical smog.

Meanwhile, as motor vehicles mostly run in densely populated regions, exhaust emissions are directly affecting people's health.

A statement by the MEE said that it plans to speed up the drafting of an action plan to deal with diesel-powered trucks, which are considered to be a major air polluter among vehicles.

Also, the strictest environmental regulation mechanism for vehicle exhausts will be established soon, with the usage of clean diesel-powered vehicles and green transportation highly promoted.

Top legislator inspects air pollution control in Inner Mongolia

Date: 5-June-2018 Source : xinhuanet.com

HOHHOT, June 5 (Xinhua) -- China's top legislator Li Zhanshu called for strict enforcement of the Air Pollution Control Law to ensure "blue sky with white clouds" for the people during an inspection tour in north China's Inner Mongolia Autonomous Region from June 2 to 5.

Li Zhanshu, chairman of the National People's Congress Standing Committee and a member of the Standing Committee of the Political Bureau of the Communist Party of China Central Committee, inspects Beijing-Tianjin sandstorm source control project in Ordos, north China's Inner Mongolia Autonomous Region, June 4, 2018. Li made an inspection tour in Inner Mongolia Autonomous Region from June 2 to 5.

Li, chairman of the National People's Congress Standing Committee and a member of the Standing Committee of the Political Bureau of the Communist Party of China Central Committee, stressed the importance to persistently build a strong shield to protect the ecology in north China.

The inspection team led by Li visited the cities of Hohhot, Baotou and Ordos and inspected electricity, iron and steel, coal, chemical, and new-energy vehicle companies. He pointed out that ecological and environmental problems are in fact the problems of economic development patterns. While visiting local heating facilities, Li asked officials and enterprises to reduce coalburning air pollution but still provide enough heating for the people during winter.

As an important shield to protect the ecology and environment of north China, Inner Mongolia should step up the efforts to fight desertification, while wetland protection and pollution control should be strengthened, Li said.

Panel to check air pollution in ahmadabad

Date: 6-June-2018 Source : indiatimes.com

GANDHINAGAR: The state government on Tuesday announced that a high-level committee is being constituted to check air pollution in Ahmedabad and submit a report in a month. Chief minister Vijay Rupani announced a slew of initiatives to 'beat plastic pollution' at the state-level awareness drive on the World Environment Day, held in Gandhinagar.

He said that the state government will soon install reverse-vending machines (RVM) in Gujarat cities to recycle polyethylene terephthalate (PET) bottles. Citizens will be paid for depositing plastic bottles in these RVMs. Initially, the vending machines will be placed in major Gujarat cities and their numbers will increase in phases. Inaugurating a seminar at Mahatma Mandir, Rupani said that his government was committed to plastic recycling to save the environment. Rupani said that Gujarat's traditions have always been oriented to maintaining ecological balance through the preservation of flora and fauna, and rivers and water bodies.

Deputy chief minister Nitin Patel said that plastic has become all pervasive. He said that the stress is now on scientific recycling and dumping. He said that he is hopeful of getting full public support since Prime Minister Narendra Modi has called for tackling solid, liquid, and plastic wastes.

Pennsylvania to require gas drillers to reduce air pollution

Date: 7-June-2018 Source : ottawacitizen.com

HARRISBURG, Pa. — Pennsylvania will begin enforcing tougher air pollution standards on its booming natural gas industry, the governor's office said Thursday, with environmental advocates saying the standards will put the state among the leaders in going beyond federal requirements.

The new permits will take effect in August and begin requiring the Marcellus Shale exploration industry to use better equipment to reduce methane emissions and other air pollutants, check for leaks more frequently and repair those leaks within a tighter time frame.

The permits will apply to new or updated well sites and compression, processing and transmission stations along pipelines. Democratic Gov. Tom Wolf's administration has signalled that it will eventually move to apply tougher standards to existing equipment.

Pennsylvania is the nation's second-largest natural gas-producing state behind Texas, and the Marcellus Shale is the nation's most prolific natural gas reservoir.

Preventing methane leaks from well-site equipment and pipelines has become important for regulators because methane is a potent greenhouse gas.

Industry officials point to government data that says methane pollution is falling, even as production rises, and that companies have every incentive to ensure methane makes it into the pipeline, rather than the atmosphere.

Environmental advocacy groups praised the move.

Andrew Williams, director of regulatory and legislative affairs for the Washington-based Environmental Defence Fund, said the new requirements give Pennsylvania some of the toughest methane regulations in the nation, going beyond federal requirements in the breadth of facilities covered and the frequency of leak-detection checks that companies must perform.

The administration has worked on the proposed new permits for several years, and companies have been able to win changes that they had sought in the forthcoming standards. However, industry officials have maintained that the regulations will still mean steep new costs.

Companies also have criticized the lack of clarity in the permits, said they will face longer waiting periods to secure necessary equipment and suggested that a phase-in period would help them plan for the new rules.

Stephanie Catarino Wissman, of the Associated Petroleum Industries of Pennsylvania, said Thursday that the state still hasn't justified its need to regulate methane or prove that it has adequate authority to do so through the permitting process.

Vehicle pollution charges to cover whole of inner London

Date: 8-June-2018 Source : dailymail.co.uk

Tens of thousands of cars and vans will face daily pollution charges of £12.50 in London as Mayor Sadiq Khan confirmed plans for a large-scale emissions zone.The ultra-low emission zone, being brought in for central London in April 2019, will be expanded to the North and South Circular roads from October 2021, Mr Khan has announced.

It means polluting vehicles across the whole of inner London – an area 18 times greater than the central zone – will face a daily charge of £12.50 to drive in the area 24 hours a day, seven days a week all year.

Mr Khan made the announcement as he launched a new study of more than 3,000 primary school children in polluted areas of London and Luton, Bedfordshire, to test if policies to improve air quality help their health.

The charges across inner London will cover vehicles which do not meet certain emissions standards, including petrol cars that are more than 15 years old in 2021 and diesel cars that are more than six years old by that time.

The mayor also revealed plans to tighten standards for the most polluting heavy vehicles including buses, coaches and lorries across the whole of London from October 2020.

It is estimated that 100,000 cars, 35,000 vans and 3,000 lorries might be affected by the expanded zone every day, City Hall said.

Confirmation of the expanded ultra-low emissions zone (Ulez) comes after research showed the health damage from cars and vans across the UK costs £6 billion a year to the NHS and society, with the bill in London £650 million.

Officials said expanding the Ulez and stricter standards for heavy vehicles across London would result in more than 100,000 Londoners no longer living in areas exceeding legal air quality limits in 2021, and all areas in the capital are expected to see reductions in pollution.

Mr Khan said: “Tackling London’s lethal air and safeguarding the health of Londoners requires bold action.

“Air pollution is a national health crisis and I refuse to stand back as thousands of Londoners breathe in air so filthy that it shortens our life expectancy, harms our lungs and worsens chronic illness.

“I promised hard-hitting measures to tackle our shameful air pollution and today City Hall is confirming the next stage of our plans to expand the ultra-low emission zone up to the North and South Circular roads.”

Research into the health impacts of pollution on children will examine whether policies to improve air quality, such as London’s new Ulez, are associated with improved growth of youngsters’ lungs and reduced chest symptoms.

The new Children’s Health in London and Luton (Chill) international study is funded by the National Institute for Health Research led by Queen Mary University of London, whose researchers along with the University of Bedfordshire are recruiting schools to take part.

Children are particularly vulnerable to traffic pollution, which can cause stunted growth of their lungs, putting them at risk of lifelong problems, and can also trigger asthma, asthma attacks and chest infections.

Professor Chris Griffiths, from Queen Mary University of London, said: “Air pollution in UK towns and cities is a major health problem, and this study is the first in the world to test the impact of targeted pollution control measures on the long-term lung growth and health of children.”

He said the study would show whether low emissions zones helped improve children’s lung growth and whether they should be implemented in towns and cities in the UK and globally.

China toughens supervision in key regions to reduce air pollution

Date: 9-June-2018 Source : xinhuanet.com

BEIJING, June 9 (Xinhua) -- China will start a massive environmental overhaul on June 11 to ensure the effective curb of air pollution in key regions, said sources with the Ministry of Ecology and Environment Saturday.

The inspection is expected to last until April 28, 2019, during which approximately 18,000 environmental supervisors will aim to discover environmental protection problems in the

Beijing-Tianjin-Hebei region and the surrounding areas, the Yangtze River Delta, and the Fenhe and Weihe river plains.

A total of 28 cities will be targeted, including 11 cities in the provinces of Shanxi, Shaanxi and Henan situated in the river plains of Fenhe and Weihe, as well as the Shanghai Municipality, and the provinces of Jiangsu, Zhejiang and Anhui in the Yangtze River Delta.

Although air quality in these areas has continuously improved on the whole, pollution remains serious in individual regions, the sources said.

The Beijing-Tianjin-Hebei region is the worst, while in some provinces like Henan and Shandong, the annual share of days with good air quality is less than 60 percent.

In the Fenhe and Weihe river plains, air pollution has worsened in recent years, the sources said.

The supervisors will be professionals selected from local environment protection departments and the ministry to uncover structural problems in industrial development, energy use, transportation and land use that are detrimental to air pollution control.

The inspections will revolve around prominent public complaints, such as emergency responses to cases of heavy pollution, crop straw burning and coal-fired boilers.

Cities failing in their responsibilities will be openly questioned. When necessary, inspection teams at the central level will be sent to supervise local governments, according to the sources.

French envoy airs pollution worry

Date: 10-June-2018 Source : telegraphindia.com

Calcutta: Damien Syed, the French consul-general in Calcutta, has said he has "respiratory difficulties" in the city and urged authorities to act with "urgency" against air pollution for the sake of the children.

"I love Calcutta. For three years I'm here and I like everything about Calcutta excepting one thing. The only problem, the only drawback, is the air pollution," Syed said at a June 5 panel discussion on the occasion of World Environment Day.

"I cannot go for running, I cannot go for jogging, because the air pollution is high. That's what I missed the most. Personally, I have respiratory difficulties in Calcutta, and I did not experience it before."

Syed, who has taken several initiatives to showcase Calcutta in France and attract investors to the Bengal business summit, added: "It's a matter of concern, it's a matter of urgency (and) we need to act now. Many people do not care for it but it will impact everyone, especially the children."

Several state ministers were at the meeting along with the then environment secretary, Arnab Roy (who has since been transferred), and state pollution control board chief Kalyan Rudra. Several environment experts were present too.

According to pulmonologists, sustained exposure to air pollution may lead to or aggravate respiratory diseases like chronic bronchitis, asthma and emphysema.

During most of last winter, Calcutta had outstripped Delhi in its levels of PM 2.5, the tiniest pollutants that can reach the deepest crevices of the lungs and trigger diseases.

Asked for his comment, Rudra said: "Like many other cities, Calcutta's air pollution remains beyond limit during winter. But if you consider the whole year, there are many cities with poorer air than Calcutta. I or my family have never suffered for air pollution."

Primary schools sought for air pollution study

Date: 11-June-2018 Source : schoolsweek.co.uk

Primary schools in London and Luton are being invited to take part in a major new study into what impact policies to improve air quality have on pupils' health.

The Children's Health in London and Luton (CHILL) study, funded by the National Institute for Health Research, will monitor 3,000 primary school pupils over four years to test whether clean-air policies can improve growth of lungs or reduce chest infections and asthma attacks.

It will coincide with the launch of central London's new ultra low-emissions zone (ULEZ) in April 2019, to directly test whether the new anti-pollution measure has an identifiable impact on children's health.

Last week, the capital's mayor Sadiq Khan confirmed that the ULEZ would be expanded to north and south circular roads from October 2021 which, along with stricter rules for heavy vehicles,

should cut the number of schools in areas with illegal levels of air pollution by more than two thirds.

Researchers will compare two groups of 1,500 primary school pupils aged between six and nine, and monitor the air pollution the children are exposed to. Half the children will be from central London primary schools where the ULEZ is implemented, and half from primary schools in traffic-restricted zones in Luton, which has a "broadly similar" population and air quality. Pupils will have an annual health check for four years, during which the size and function of their lungs will be monitored. With parental permission, researchers will check their health records to monitor how often the children have respiratory infections, visit a doctor or are admitted to hospital with chest problems. They will also test whether better air quality encourages children to spend more time exercising outdoors.

Participating schools will receive £1,000 for taking part (£250 a year) and pupils will receive a certificate and an interactive science lesson on air pollution and health.

Lead researcher Professor Chris Griffiths said the study was being carried out because it is still unknown if low-emission zones can benefit health.

"This study will tell us whether this type of low-emission zone improves children's lung growth and development, and whether they should be implemented in towns and cities in the UK and globally," he added.

City air pollution at record high

Date: 13-June-2018 Source : tribuneindia.com

CHANDIGARH: As dust continued to envelop the region for the second day, Chandigarh witnessed the highest-ever concentration of PM2.5, a pollutant which is so fine that it can reach our lungs directly and then the blood system, both on June 14 and 15.

As dust continued to envelop the region for the second day, Chandigarh witnessed the highest-ever concentration of PM2.5, a pollutant which is so fine that it can reach our lungs directly and then the blood system, both on June 14 and 15.

The observatory of the Chandigarh Pollution Control Committee (CPCC) at Sector 50 measured PM2.5 at 572 microgram per cubic metre of air on an average from 6 am to 4 pm on Friday. However, from 1 pm on Thursday to 6 am on Friday, it was 360 microgram per cubic metre.

The standard value of PM2.5 is 60 microgram per cubic metre for a 24-hour period. Scientists at the CPCC said it was unprecedented and the highest ever in the city.

Thursday was equally worse

According to the data provided by the CPCC, its Kaimbawala station recorded PM2.5 at 178 (24-hour average) on Thursday. However, it was 120 at the Institute of Microbial Technology (IMTECH), Sector 39, and 139 at Sector 17 the same day.

If we compare it with the standard value of 60 microgram per cubic metre for a 24-hour period, the concentration of PM2.5 was about three times more at Kaimbwala, two times more at IMTECH and over two times more at Sector 17.

Pollution in neighbourhood

According to the Central Pollution Control Board (CPCB), the average of PM2.5 at 5 pm in Panchkula was the highest at 474 microgram per cubic metre, followed by Mandi Gobindgarh at 440, Patiala at 404, Khanna at 351 and Ludhiana at 336.

Doctor's advice

Dr Ravindra Khaiwal, Associate Professor, School of Public Health, PGI, said such concentration of dust could cause eye irritation, respiratory discomfort to people suffering from cardiovascular diseases. "Those who have dust allergy or a compromised immune system should avoid going out."

He advised people to wash their hands and face regularly and cover their face while going outside. "If possible, use the N-95 mask as it blocks PM2.5," he said.

"Our body has its own fighting mechanism. These dust particles have lesser toxicity than automobile exhaust and particulate matter produced by burning of crop residue," he said. On the idea of the Panchkula MC sprinkling water on roads, Dr Khaiwal said, "When a vehicle moves, it makes dust fly. Heavier particles settle down but finer ones remain suspended and affect human health. Sprinkling of water settles down the dust, so it is helpful."

Hopes rest on rain

The Director, Met Department, Chandigarh, Surender Paul, said rain was approaching due to western disturbances and would hit Chandigarh either on Friday night or early Saturday morning. "It could hit northern districts of Punjab any time," he said.

Dust storms from Rajasthan to blame

Explaining the reasons behind the dust blanket, he said dust storms from Rajasthan were behind it. "The anti-cyclonic circulation in the troposphere has hindered convection and movement of air, making the dust remain around in the region," he said. "The visibility further

slumped to about 1,000 metre on Friday as the moisture rose due to the approaching western disturbances. The water vapours have got trapped in dust particles, which lowers visibility," he said.

What is PM2.5 and why do we have to worry

Particulate matter of the order of size of 2.5 microns is called PM2.5. According to the World Health Organisation (WHO), PM2.5 can penetrate the lung barrier and enter the blood system. "Chronic exposure to particles contributes to the risk of developing cardiovascular and respiratory diseases, as well as lung cancer, says the WHO website. The particles with a diameter of 10 microns or less (PM10) can penetrate and lodge deep inside the lungs.

Doctor's advice

Those who have dust allergy or a compromised immune system should avoid going out

If possible, use the N-95 mask as it blocks PM2.5

People to wash their hands and face regularly during such a scenario and cover their face while going outside

The CPCC started counting PM2.5 since 2017 and since then, the figures of June 14 and June 15 are the highest. In view of the high pollution, it has issued an advisory for the public.

Construction activities, including carpeting of roads, be stopped

Don't smoke as it harms not only you but others too

Sand, soil and municipal waste should not be carried in open trolley/trucks

Players, athletes, walkers and senior citizens should avoid exercises/walks during these days

Patients, particularly asthmatic or those suffering from heart and eye ailments, must remain inside. If it is necessary to go outside, they should use masks.

Parents are advised not to let their children play outside.

Go to the nearest hospital if you feel breathless or palpitation

Air quality hazardous in Panchkula

Panchkula: The air quality continues to be hazardous in Panchkula. As against the permissible limit of 60 microgram per cubic metre, it was recorded at 488 microgram per cubic metre on Friday. PM2.5 continues to be the primary air pollutant in Panchkula.

The level of PM2.5 was 488 ug/mg3 (micrograms per cubic metre) on Friday, which was around 500 ug/mg3 on Thursday.

Rajesh Garia, a senior scientist, the Haryana State Pollution Control Board (HSPCB), said dust particles less than or equal to 10 micrometers in diameter were so small that they could get into your lungs, potentially causing serious health problems. “The gas content is within limits. It is minute dust particles that are causing problem,” he said.

The MC deployed three fire engines throughout the city to sprinkle water on main roads, trees and road berms to settle down the dust.

MC Commissioner Rajesh Jogpal said one fire engine was covering the city. The other two covered the Mansa Devi area and and the trans-Ghaggar sectors.

The dust has been caused due to strong and dusty winds blowing from Delhi and Rajasthan. — Rajinder S Nagarkoti.

Air pollution soars to hazardous levels in new delhi in once-in-a-decade phenomenon

Date: 14-June-2018 Source : firstpost.com

Air pollution soared in New Delhi on Thursday to hazardous levels rarely seen outside winter months as sand blown from deserts enveloped the Indian capital in a once-in-a-decade phenomenon.

Doctors warned the grit carried by hot summer winds posed serious health risks to the city of 20 million and there was little to do "but pray for rain".

Smog spikes during winter in Delhi, already one of the world's most polluted cities, where air quality eclipses the World Health Organisation's safe levels on any given day.

Pollution levels usually ease in summer, providing some relief from the smog as temperatures soar to mid-40 degrees Celsius (113 Fahrenheit).

But the city woke up to stifling heat and smog 20 times safe levels Thursday, as strong winds blew dust from deserts in western India and beyond across the plains where Delhi lies."It is a very unusual phenomenon seen once in a decade or so. The dust is not settling down and the sky is obscure," said Mahesh Palawat, vice president of meteorology and climate change at SkyMet Weather, a private forecaster.

"It is quite different from winter pollution. It is the dust this time that is the culprit. It may cause breathing problems to many," he told AFP.

Levels of PM10 — dust and larger particles with a diameter of 10 micrometres — exceeded 900 per cubic metre in parts of Delhi on Thursday, according to the US embassy website. The WHO considers 50 the maximum safe level for PM10.

Readings from India's own pollution monitor on Thursday detected PM10 closer to 1,300 — or 26 times safe exposure levels.

Summer winds have been especially violent this season, experts say, with hundreds killed by powerful dust storms and freak winds across India's north.

The sand blowing into the capital is colliding with dust from open construction sites and car and factory exhaust, compounding the crisis.

Usually during winter, smog chokes Delhi as cool air traps pollutants close to the ground.

During these months it is PM2.5 — microscopic particles that can lodge deep into the lungs — that cause the most harm.

Ozone levels, usually a lesser concern given the magnitude of air pollution woes in Delhi, are also causing particular grief this summer, according to a recent report by the Centre for Science and Environment.

"The surprise this year is the number of days when the daily air quality index has shown ozone also as a dominant pollutant along with the particulate matter," said the centre's executive director Anumita Roychowdhury.

Arvind Kumar, a lung surgeon at a medical facility in New Delhi, said the smog threatened all, but children, the elderly and those with asthma were at particular risk.

"If such a situation was seen in the western world, cities would have been evacuated but for us we just need to pray for rain and the dust to settle down," he told AFP.

Air Quality: Construction banned for 48 hours

Date: 15-June-2018 Source : dailypioneer.com

Haryana Environment Minister Vipul Goel on Thursday said that due to dust storm in various parts of Haryana, the State Pollution Control Board has advised that no construction activities be carried out for the next 48 hours.

Besides, no hot mix plants and stone crushers will be operated for the next 48 hours, in NCR districts of Haryana, said the Minister.

He said that Delhi, NCR areas and other parts of Haryana have been experiencing a very severe air pollution due to dust storm with the PM2.5 value crossing even 500µg/m3 and considerably higher PM10 values. These dust storms have been attributed to storm and the winds coming from the regions of Rajasthan and beyond. Meteorological Department has informed that similar conditions will continue to prevail for next few days, he said.

Taking cognizance of the above facts, Haryana State Pollution Control Board has issued an advisory to all the Deputy Commissioners and Municipal Commissioners of NCR districts of Haryana to ensure frequent sprinkling of water to settle down the dust in all required places, to keep strict vigil on the garbage burning activities through deployment of special teams, increasing the frequency of mechanized cleaning of roads and identifying road stretches with the high dust generation for addressing the issues, said the Minister.

He said that the Board has also requested the Health Department to issue an advisory to general public on the precautions to be taken during the dust storm. They have also been requested to publicize the same through newspapers and electronic media, informed Goel.

He added, the Board is monitoring the pollution level and will advise further necessary steps in consultation with EPCA and CPCB.

Delhiites witness partly cloudy day, air quality moderate

Date: 18-June-2018 Source : uniindia.com

New Delhi, June 18 (UNI) Delhiites on Monday witnessed a partly cloudy sky while the

maximum temperature settled at 36.8 degrees C, three notches lesser than seasons average.

The air quality in the city witnessed improvement and was under 'moderate' category with an

index value of 167 at 1900 hours, as per the CPCB. Relative humidity varied between 60 and 41 per cent.

The Met official has forecast a partly cloudy sky on Tuesday, while their is a slight possibility of light rain with maximum and minimum temperature to hover around 38 and 28 degrees respectively. In the morning, the minimum temperature settled at 27.9 degrees C, normal for the season.

Efforts by civic bodies helped better Delhi's air quality: Environment minister Imran Hussain

Date: 19-June-2018 Source : dnaindia.com

The air quality in the national Capital improved to 'moderate' on Monday after a week of high pollution levels caused by the dust storm in the western parts of the country. The Delhi government's environment minister Imran Hussain, in a review of ambient air quality on Monday, said the efforts by the various municipal corporations have helped improve the air quality index (AQI). Delhi's AQI on Monday stood at 171 units in the moderate category, which means the air is breathable now.

The AQI was between 441 and 447 from June 13 to June 15 in the 'severe' category, which improved to 369 units on June 16 to 'very poor' category. However, the AQI on June 17 was 289 units in the 'poor' category, which on Monday finally improved to 171, leading to moderate conditions, officials said.

The environment department in the review report said that anti-dust pollution measures such as the sprinkling of water on roads were carried out extensively while heavy penalties were imposed on violators.

Air Quality The Environment Minister appeals people to not burn garbage in open

"Civic agencies have also sealed under-construction buildings which were not complying with norms. Construction activities were also stopped at a number of sites. Unauthorized diesel generators found running was also seized during this operation," a statement issued by the minister's office stated. While air pollution had reached alarming levels, all civic construction activities were stopped in the city till June 17.

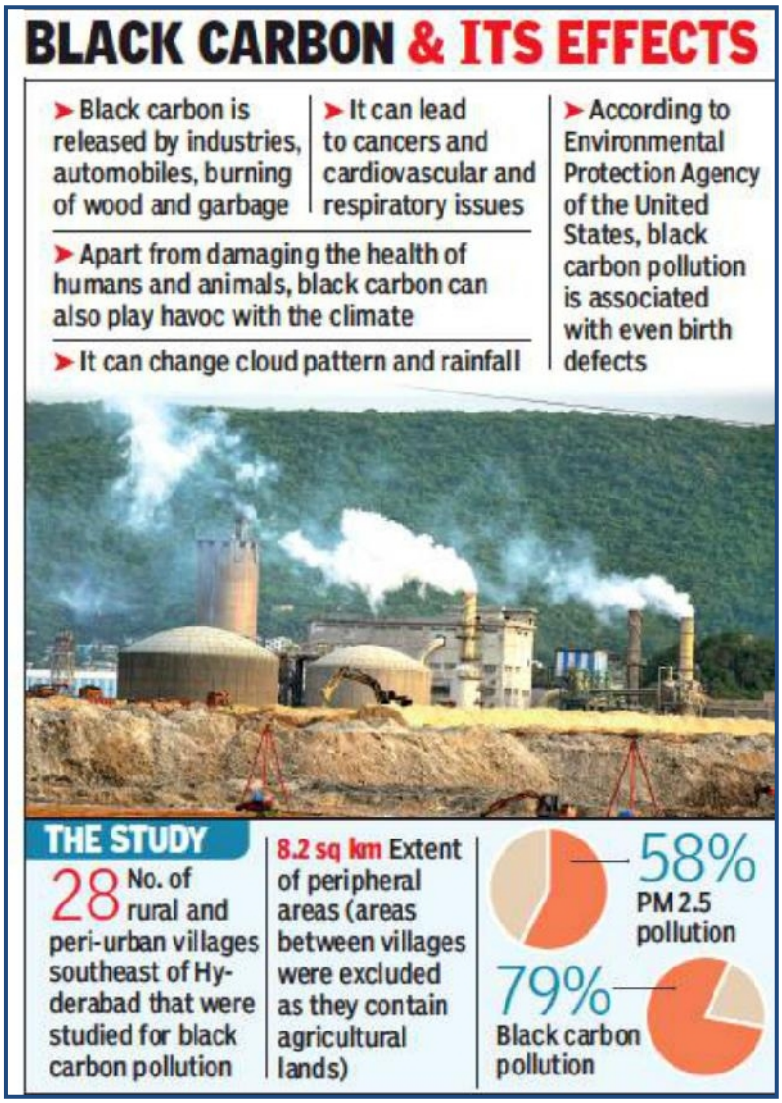
Meanwhile, Hussain appealed to the public to do their bit to control air pollution by reporting instances of air pollution including garbage burning in the open and not taking dust control measures at construction sites on their helpline numbers.

DATE MISSED

The national capital missed its date with rain and thundershowers that were predicted to lash the city on Monday morning. With this possibility gone, the coming week will remain hot and humid according to the weather department. The Indian Meteorological Department had predicted a spell of rain/ thundershowers accompanied with gusty winds at a speed of 50-60kmph in Delhi and its National Capital Region in the morning.

Black carbon pollution high on Hyderabad outskirts too

Date: 20-June-2018 Source : indiatimes.com



HYDERABAD: Forget the core city of Hyderabad; even peripheral or peri-urban areas are now under the threat of poisonous black carbon particulate matter. A research study conducted in about two dozen areas abutting Hyderabad has revealed high concentration of black carbon in the atmosphere — an indication of unchecked use of fossil fuel at homes and increase in vehicular traffic along the outer ring road (ORR).

If findings of the study are any indication, areas around Hyderabad are now choked in carbon pollutants. Those near ORR are highly affected.

An international team of researchers studied the particulate matter 2.5 (PM 2.5) and black carbon levels in the

atmosphere in peri-urban Hyderabad for two seasons at 23 different locations on a daily and hourly basis. The study revealed high concentration of black carbon. However, pollution in Hyderabad is not as high as in north India.

Black carbon pollution is notorious for ailments related to lungs and other vital organs. It is the cause of slow death in people exposed to high levels of fossil fuel emissions. Apart from damaging the health of humans and animals, black carbon can also play havoc with the climate. According to Environmental Protection Agency (EPA) of the United States, black carbon pollution is associated with even birth defects and "contributes to climate change causing changes in patterns of rain and clouds".

The international team of researchers was drawn from Barcelona Institute for Global Health, Spain, Universität Pompeu Fabra, Barcelona, Spain, CIBER Epidemiología y Salud Pública, Spain, Department of Environmental Health Engineering, Sri Ramachandra University, Chennai, and Department of Civil and Environmental Engineering, University of Washington, USA. The team developed land use regression (LUR) models for PM 2.5 and black carbon in peri-urban Hyderabad. The study was also based on local built environment survey and satellite imagery.

The study published in the recent issue of the scientific journal, Science of the Total Environment, revealed that PM 2.5 and black carbon models reached 58% and 79% of explained variability. Data for the study was collected as part of the Cardiovascular Health Effects of Air pollution in Telangana (CHAI) project.

Annual mean pollution level was 34.1 micro grams per metre cube for PM 2.5 and 2.7 micro grams per metre cube for black carbon. The study indicated that even areas outside Hyderabad are not free of black carbon pollution.

Millions of British children breathing toxic air, Unicef warns

Date: 21-June-2018 Source : theguardian.com

More than 4.5m affected, says UN group, while tests suggest children's shorter height increases exposure on busy roads

More than 4.5 million children in the UK are growing up in areas with toxic levels of air pollution, the UN children's organisation Unicef has warned.

Tests suggesting that children walking along busy roads are exposed to a third more air pollution than adults, as their shorter height places them close to passing car exhausts, were also released on Thursday.

The Unicef report found that almost a third of under-18s live in places with unsafe levels of small particulate pollution, including 1.6 million under-fives and 270,000 babies. The analysis is based on the World Health Organization limit set in 2005, which is 60% lower than the legal limit in England and Wales.

The UK government has lost three times in the high court for failing to deal with illegal levels of nitrogen dioxide pollution and is now being taken to Europe's highest court. On Wednesday, MPs from four select committees said serious concerns remained over the government's commitment to reducing the impact of air pollution on public health. The latest government action plan sets a goal to halve the number of people living in areas above WHO particulate limits by 2025.

Amy Gibbs, at Unicef UK, said: "The findings force us to face a shocking reality about the acute impact on children's health. Worryingly, one third of our children could be filling their lungs with toxic air that puts them at risk of serious, long-term health conditions.

"It's unacceptable that the most vulnerable members of society, who contribute the least to air pollution, are the ones suffering most from its effects," she said. "The government must accept this is a children's health crisis and offer targeted action and funding to reduce their exposure."

The tests on children's exposure next to busy roads are relevant to the millions of children walk to school each day, with experts are advising that where practical parents choose quieter routes, away from traffic, as this can cut pollution exposure by almost two-thirds. Other scientists have suggested parents use covers on their prams and buggies during the school run to protect their infants from air pollution. Half of all children walk to school, but being driven to school by car instead can actually result in greater pollution exposure for those inside the vehicle, previous research has shown.

Prof Jonathan Grigg, at Queen Mary University of London, said: "My research has shown that exposure of young children to higher amounts of air pollution from traffic has a major impact on their lungs. Although parents can reduce this impact by walking on less polluted roads, the UK government must take further steps to reduce toxic emissions on all roads."

The environment secretary, Michael Gove, said the school run tests were troubling: "This a further demonstration of why we need to take strong action now to improve air quality." He said the government was acting, but added: "By taking simple steps, like leaving the car at home for the school run, we can work together to reduce air pollution and protect our health."

Lack of funding for local authorities to tackle air pollution is a key issue, the select committee MPs said. "The car industry is partly responsible for our toxic streets, and seeing the

government resist calls for an industry-financed Clean Air Fund is incomprehensible," said Neil Parish MP, chair of the environment committee.

The school run tests analysed particulate pollution on different routes taken by primary and nursery schoolchildren in London, Manchester and Leeds. Small measuring devices were carried by each child and adult, with one measurement taken on each route in each city. In Manchester, a test found that the upper deck of a bus was much less polluted than the lower deck.

The tests were commissioned by Global Action Plan for Clean Air day, which falls on Thursday and is supported by the government and 180 organisations. The organisers are calling on people to leave their car at home where possible. When streets were closed to traffic for the 2018 London marathon, pollution levels dropped by 89%.

Mala Kapoor, who took part in the tests in Leeds with her daughter Ariyan, said: "I was shocked to hear that children are more exposed than adults to air pollution from exhaust fumes. When going out I do try to take more back routes – it might take me a couple of minutes longer but if it reduces Ariyan's exposure to air pollution, then it's worth it."

As Austin's air quality dwindles, TxDOT urges drivers to help keep air clean

Date: 23-June-2018 Source : kvue.com

AUSTIN — When it's hot, Austin's air quality can fall into the unhealthy category fast, which is why the Texas Department of Transportation is stressing the importance of keeping a clean air quality while on the roads.

"The air definitely takes its toll," said Samuel Borrego, who has been driving around Austin for more than 20 years. "When we see all the traffic here in Austin, it makes me wonder about the air quality."

With traffic troubles comes more pollution, so TxDOT is working to clear the air up through the 'Drive Clean Texas' campaign.

"Once the pump is done while getting gas, don't try to keep pumping because it all goes into the air"," explained Erika Mendez, brand ambassador for the TxDOT campaign.

Mendez said that it's best to always pump in the cooler hours, which would help decrease car emissions.

"Once we get to that pollution state, it's hard for us to clean up our air that's why we're asking people to do something about it now so we don't get there," said Mendez.

According to the TxDOT website, the following are simple steps you can take to help reduce air contamination:

- Keep cars well-maintained and inflate tires to recommended air pressure levels.
- Properly fuel vehicles by tightly sealing the gas cap.
- Stop at the click when fueling your vehicle, Overfilling the tank releases harmful fumes into the air.
- Avoid idling the vehicle for extended periods of time.
- Avoid aggressive driving with rapid starts and stops.

China unveils guideline to win battle against pollution

Date: 24-June-2018 Source : xinhuanet.com

BEIJING, June 24 (Xinhua) -- China has unveiled a guideline to comprehensively enhance ecological and environmental protection and win the battle against pollution of air, water and soil.

The guideline, published Sunday by the Central Committee of the Communist Party of China (CPC) and the State Council, specified pollution prevention and control targets the country expects to achieve by 2020 and beyond.

China will develop and implement a three-year plan to fight air pollution, with much focus on regions like the Beijing-Tianjin-Hebei region and its neighbouring areas, and the Yangtze River Delta. Efforts will be made to improve the region's industry, energy, transport and land use structures.

By 2020, cities with low air quality standards should see their density of PM 2.5, a key indicator of air pollution, fall at least 18 percent from 2015 levels, while cities at prefecture level and above should see the number of good-air days reach over 80 percent annually.

Emissions of sulfur dioxide and nitrogen oxides should drop at least 15 percent from 2015 levels, while chemical oxygen demand and emission of ammonia nitrogen should decrease by over 10 percent, according to the plan.

For water quality improvement, the country will continue to implement the action plan on fighting water pollution as well as the systems of river and lake chiefs.

China aims to see over 70 percent of its surface water to be drinkable by 2020, while the share of polluted surface water should be controlled within five percent. Meanwhile, about 70 percent of the country's offshore area water should be of good quality.

To address soil pollution, China will comprehensively implement the action plan with specific measures taken to control soil pollution and restore polluted soil, promote classified disposal of waste and enhance prevention and control of solid waste pollution.

By 2020, about 90 percent of the polluted farmland can be utilized safely while over 90 percent of the contaminated land will be able to be used safely, according to the guideline.

Air pollution is causing tree malnutrition: British study

Date: 25-June-2018 Source : ecns.cn

Air pollution from farms, diesel engines and factories is leaving trees malnourished by killing off the fungi that feed them nutrients, and "alarming" levels of disease in British trees are being caused by air pollution, a study has found.

Trees across Britain and Europe have recently shown signs of illness, including discoloured leaves and sparse growth of leaves.

Toxic levels of nitrogen in rainwater also appear to be breaking up ancient fungal highways, known as the "wood-wide web," through which trees exchange essential compounds.

Between 15 and 90 percent of forests in the UK are thought to be stricken by pollutants that trickle down into the soil and disrupt the communities of microbes gathered around tree roots.

Now it has been found that the culprit is air pollution -- causing "malnutrition" in trees by harming beneficial fungi in the roots.

The roots rely on the mycorrhizal fungi to extract soil nutrients such as nitrogen, phosphorus and potassium. In return the roots pass carbon to the fungi, a mutually beneficial relationship crucial to the tree's health.

But tougher fungi, which return fewer nutrients, now thrive instead -- making the tree suffer from a lack of nutrition. As a result, researchers say legal limits on air pollution are set too high and need to be reduced.

Researchers from Britain's Imperial College and Kew Gardens studied 13,000 soil samples at 137 forest sites in 20 European countries.

The authors, writing in the journal Nature, said that recent studies recorded signs of tree malnutrition across Europe.

Over the past ten years, they examined the funghi's tolerance to pollution.

Lead researcher Martin Bidartondo, from the department of life sciences at Imperial College and Kew Gardens, said: "There is an alarming trend of tree malnutrition across Europe, which leaves forests vulnerable to pests, disease and climate change."

"A major finding of the study is that European pollution limits may be set far too high," he said. "In North America, the limits are set much lower, and we now have good evidence they should be similar in Europe."

The team found that the characteristics of the tree and the local environmental conditions were the most important predictors of which species of mycorrhizal fungi would be present and how many there were.

Electrification of Midlands Mainline 'could cut Nottingham air pollution'

Date: 26-June-2018 Source : airqualitynews.com

Nottingham city councillors are calling on the government to reverse its decision to scrap the electrification of the Midland Mainline in order to improve air quality in the city.Plans had been in place to fully electrify the train line between Derby, Leicester and Nottingham, but were scrapped by the Transport Secretary Chris Grayling in July 2017.

At the time the government said that it would instead explore the potential of using 'bi mode' rolling stock and 'alternative technologies' to achieve benefits similar to high speed electric trains.

However, according to the city council, electrification of the line would have reduced the number of diesel trains coming into the city centre every day. As part of its activities to mark the second annual Clean Air Day last week (21 June), Nottingham council Leader Jon Collins urged Transport Secretary Chris Grayling to return electrification of the line to the table.

Nottingham councillors have called upon the government to support electrification of the Midlands Mainline

Benefits

Councillor Sally Longford, Portfolio Holder for Energy and Environment, said: "We've talked a lot about the economic benefits of electrifying the Midland Mainline, but the environmental benefits are equally important.

"The health of our citizens is a top priority, and the harmful effects of air pollution are well known. We're proud of the work we've been doing to address this; introducing greener transport, including one of the largest all-electric park and ride bus fleets in the country, and expanding our successful tram network, as well as investing in cycle infrastructure and ultra-low emission vehicles.

"But now we need the government to step up and fulfil its promise to electrify the Midland Mainline, especially as they increasingly talk about the importance of clean air and put pressure on councils to address air quality. They need to practise what they preach.

"Our monitoring shows significantly higher emissions of nitrogen dioxide in the vicinity of the station, compared to other heavily trafficked roads elsewhere in the city, and its evident dirty diesel trains are contributing to this.

"The new trains being proposed by the government – bi-mode trains – would continue to emit high levels of nitrogen dioxide into the city centre – an area of our city that the Government has already identified as having poor air quality. It's simply not good enough.

Report suggests air pollution in Las Vegas ranks among worst in country

Date: 27-June-2018 Source : 8newsnow.com

A new report suggests air pollution here in Las Vegas ranks among the worst in the country. According to the report, back in 2016, the Las Vegas valley had more than 100 days of poor air quality. However, local experts are disputing the numbers. Tom Brown and his 3-year-old son Logan just moved to the valley.

"This is kind of an area where you do a lot of stuff outdoors," he said.Brown likes to be outdoors, but he said he's also concerned about the air pollution."I think it's important no matter what city you live in that the air in the town that you live in is clean enough for you to

breathe and not make you ill, especially if you have kids and stuff," Brown said.The new report by the Environment Nevada Research and Policy Center says that in 2016, more than two million people in the Las Vegas Metro Area experienced 145 days of degraded air quality. According to the report, that's the second worst in the country."It's kind of surprising that it's that high on the list," Brown said.

Experts in Clark County say the air quality in the valley is not as bad as the new report suggests."We showed 20 days of air quality that was impacted to sensitive groups," said Mike Sword, planning manager, Clark County Department of Air Quality.

The sensitive groups include the elderly, pregnant women, and people with heart disease. With that said, Sword says the air pollution in Las Vegas has actually been going down."With exception of days like today where we're impacted by smoke from forest fires outside the state, our air quality is generally good, we've been in attainment for everything for the last few years," Sword said. There's still always plenty of room for improvement. The number one cause of air pollution in the valley comes from cars."About the only thing personally that I can do is kind of limit my driving," Brown said.

Air pollution is killing young children in African cities, say scientists

Date: 28-June-2018 Source : qz.com

In 2015, pneumonia alone caused the deaths of 500,000 children under five years of age in sub-Saharan Africa and air pollution is known to be a leading contributor to this disease. That same year, 400,000 African children under five died prematurely because of the bad air they breathed, according to research from Stanford University and the University of California, San Diego published in the journal Nature this week.

Africa has an air pollution problem in its urban and rural areas but the scale of the problem is not easily quantifiable because of the absence of air quality monitoring systems on the ground in many countries. In industrialized countries, factories, cars and power stations are usually blamed for polluting the air. In Africa, the causes are hiding in plain sight. Kerosene, used in homes all over the continent to light homes and cook foods, is a deadly threat of which many people simply unaware.

Other research has shown dirty air has leads to the premature deaths of 712,000 Africans each year, more than the toll of unsafe water, malnutrition and unsafe sanitation. In September last year, researchers calculated the monetary cost of air pollution in Africa for the first time: $215 billion from outdoor pollution and $232 billion from indoor pollution (based on 2013 figures).

For the Stanford study, the researchers relied on big data to come to the conclusion which they describe as a “robust relationship”. They assessed satellite data from 30 African countries to estimate the pollution levels and compared that to 65 demographic health surveys from these countries between 2001 and 2015.

It showed “air pollution is actually a much more important cause of excess mortality in sub-Saharan Africa than previously thought,” said Jennifer Burney, one of the study’s co-authors, Even for the children that make it past age five, air pollution can stunt brain development, trigger asthma and cause strokes and cancers later as adults, the WHO says.

The researchers point that even a modest improvement in the quality of air in some of these countries could have “health benefits to infants that are larger than most known health interventions.”

Report: Las Vegas' air pollution ranks among worst in US

Date: 28-June-2018 Source : theprovince.com

LAS VEGAS — A new report says the air pollution in Las Vegas ranks among the worst in the country.

The report by the Environment Nevada Research and Policy Center says the Las Vegas area had 145 days of poor air quality in 2016, a little higher than Los Angeles, which had 138 days of poor air quality.

KSNV-TV reports breathing degraded air quality can put people at risk for heart problems, asthma attacks and other adverse health problems that can affect people’s lungs.

Experts in southern Nevada dispute the report and say the air quality in the Las Vegas area is not as bad as the report suggests.

Mike Sword with the Clark County Department of Air Quality tells KLAS-TV that air pollution in Las Vegas has actually been going down.

Report: Las Vegas' air pollution ranks among worst in US

Date: 29-June-2018 Source : foxreno.com

LAS VEGAS (AP) - A new report says the air pollution in Las Vegas ranks among the worst in the country.The report by the Environment Nevada Research and Policy Center says the Las Vegas area had 145 days of poor air quality in 2016, a little higher than Los Angeles, which had 138 days of poor air quality.

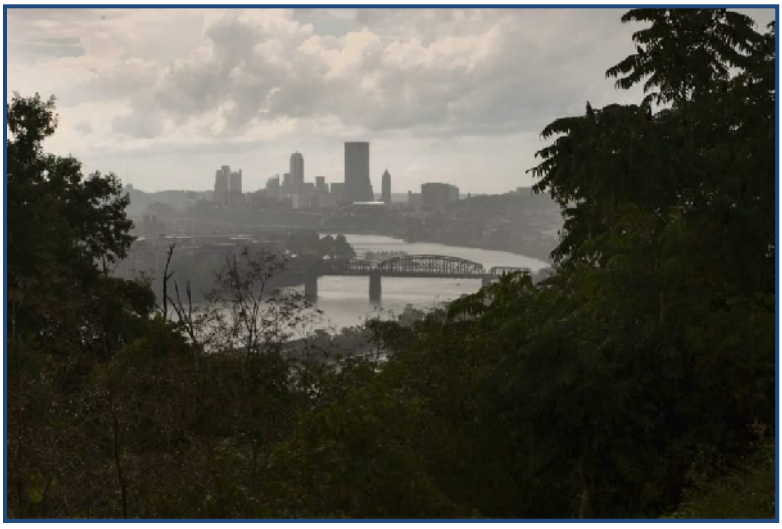
KSNV-TV reports breathing degraded air quality can put people at risk for heart problems, asthma attacks and other adverse health problems that can affect people's lungs.

Experts in southern Nevada dispute the report and say the air quality in the Las Vegas area is not as bad as the report suggests.

Mike Sword with the Clark County Department of Air Quality tells KLAS-TV that air pollution in Las Vegas has actually been going down.

Sunday forecast adds bad air to predicted heat

Date: 30-June-2018 Source : archive.triblive.com



The heat won’t be the only reason for residents to stay inside Sunday. The Pennsylvania Department of Environmental Protection issued an air quality warning starting tomorrow covering 20 counties. With temperatures expected to peak in the mid-90s and very little wind expected, DEP says most of the state could see potentially dangerous air quality starting Sunday and possibly continuing through the week.

“The combination of the heat and the increase in humidity are likely to contribute to higher ozone levels across much of the Commonwealth, which is why the DEP is issuing an Air Quality Action Day,” the agency said in a Saturday release.

According to DEP, Air Quality Action Days are declared to help sensitive populations cope with changes in ambient air quality.

“On Air Quality Action Days, young children, the elderly and those with respiratory problems such as asthma, emphysema and bronchitis are especially vulnerable to the effects of air pollution and should limit outdoor activities,” DEP said in a release.

Sunday’s air quality is coded “orange,” according to the Environmental Protection Agency’s air quality index. A code orange indicates unhealthy pollution levels for those sensitive to environmental changes. Air pollution affecting the entire population is coded “red.”

July 2018

PODCAST: What We Know About Air Pollution Around the World

Date: 2-July-2018 Source : undispatch.com

New Dehli Taken from Jama Masjit Flickr / CC Commons

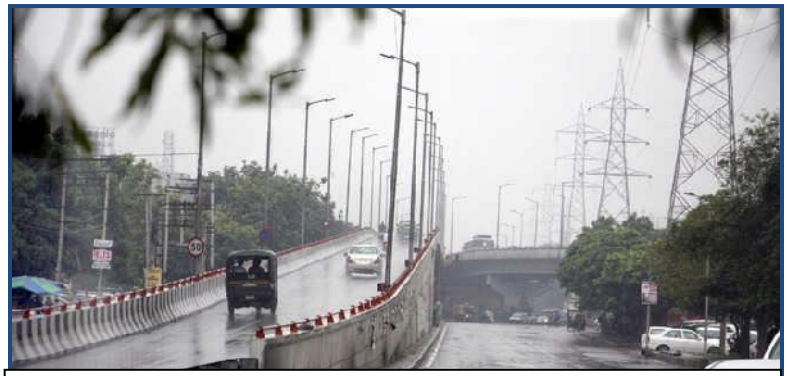
Air pollution is a major killer around the globe and one that disproportionately affects low and middle income countries.

The World Health Organization estimates that around 7 million people die every year from the air they breathe.There are two kinds of air pollution.

The first is called ambient air pollution, this is the air we breathe when we are outside. The second is called household air pollution, and this is air pollution driven by the use of dirty burning stoves inside the home.The WHO recently released a report about the global burden of air pollution, and what communities around the world are doing to combat it. Here to discuss that report and the challenge of air pollution more broadly is Dr. Maria Neira, director of the department of public health, environment and social determinants of health at the WHO.We talk through some of the big data and root causes of air pollution and have a longer conversation about global and local strategies to improve air quality around the world.If you have 20 minutes and want to learn about this under-appreciated global killer, have a listen

City records its best-ever air quality index

Date:3-July-2018 Source : tribuneindia.com



Owing to the continuous rain in the past three-four days, the city recorded its best-ever AQI of 55 on Monday morning.

Owing to the continuous rain in the past three-four days, the city recorded its best-ever air quality index (AQI) of 55 on Monday morning. The AQI went up marginally to 20 by the evening. Air quality is measured by the level of the main pollutant in the air — particulate material 2.5 or

PM 2.5 particles that measure less than 2.5 microns.

An AQI of under 100 is considered to be in the “good category”, which means the air pollution poses little or no risk. While, AQI between 51-100 is satisfactory, 101-200 is moderate, 201-300 is poor, and 301-400 is very poor, while 401 and above is severe.

It’s the lowest recorded AQI until now. However, in the past the AQI of the city has been 150-180 and even above.

“As it was raining continuously for the past three-four days, accompanied by extremely fast winds, this does not allow any emission to accumulate in the air and convert into pollution. Even if the rain has stopped now, the AQI will fluctuate between 50-90 for at least a week”, said Punjab Pollution Control Board Chairman KS Pannu.

People should also contribute towards keeping the air quality good. They should not unnecessarily pollute the air by burning garbage and letting the hazardous smoke go into the air as it could cause health issues, he added.

National Clean Air Programme likely to be notified by July end: Env Min

Date:4-July-2018 Source : outlookindia.com

New Delhi, Jul 4 (PTI) The National Clean Air Programme (NCAP), which proposes multiple strategies to combat air pollution, is likely to be notified by the end of this month, a top environment ministry official said today.

"It (notification of NCAP) should be done soon, say, by the end of this month," Union Environment Secretary C K Mishra told PTI on the sidelines of an event here.

The Environment Ministry has prepared the draft NCAP with an objective to come up with a comprehensive plan for prevention, control and abatement of air pollution, and to augment the air quality monitoring network across the country.

Various green groups have submitted their recommendations to the ministry on the draft.

In February, Union Environment Minister Harsh Vardhan had said that the ministry hoped to bring down air pollution in around 100 non-attainment cities by 50 percent in the next five years under the NCAP.

Non-attainment cities are areas with air quality worse than the National Ambient Air Quality (NAAQ) Standards.

The key components of the NCAP include city-specific air pollution abatement action plan for 100 polluting cities of the country increasing the number of monitoring stations, data dissemination, public participation on planning and implementation.

The other components include setting up of air information centre for data analysis, resource apportionment studies, national inventory and rural monitoring stations, besides guidelines for indoor air pollution.

Last month, Greenpeace India had urged the ministry to speed up the pace of rolling out the programme as a thick haze of dust enveloped Delhi and the pollution levels spiked to an alarming "severe" category.

State Grant to Fund Expansion of Air Quality Network in San Ysidro, Calif.

Date:5-July-2018 Source : govtech.com

(TNS) — Casa Familiar, a San Ysidro-based social services nonprofit, has secured $492,000 in state funds to continue and expand a project that tracks air quality across the border community.

The grant from the California Air Resources Board will continue to fund the existing network of 12 sensors that measure air pollution in San Ysidro, where its proximity to the world's busiest border crossing has long led to concerns about health risks associated with air pollution.

Vehicles lined up for US immigration and customs processing at the border entry point in San Ysidro, California.

The grant will also pay for an additional 10 $2,000 sensors, as well as 100 lower-cost sensors that will be placed in 50 locations, such as schools to measure air pollution indoors and outdoors.

"Our immediate proximity to the busiest border crossing in the world makes San Ysidro a special place, but it also creates special air quality challenges for our communities," said David Flores, community development director for Casa Familiar.

CSE: Delhi thermal plants can't meet pollution deadline

Date:6-July-2018 Source : indiatimes.com

NEW DELHI: Delhi's fight against severe air pollution may slow down because the thermal power plants — one of the largest source of sulphur dioxide (SO2) and particulate matter (PM) pollution in NCR — are not prepared to meet the pollution norms by the stipulated deadline of December 2019.

A study by the Centre for Science and Environment (CSE) released on Thursday found that most thermal plants will not be able to meet this deadline. Another survey carried out by them along with the Environmental Pollution (Prevention and Control) Authority (EPCA) in terms of brick kilns in NCR found that though a number of such kilns had agreed to shift to cleaner 'zig-zag' technology, poor conversion quality is threatening to throw the gains off-gear, the report said.

Delhi and NCR region has an installed coal power plant capacity of around 13 GW, about 39% of the installed capacity is government owned. CSE researchers met personnel from power companies, state electricity regulatory commissions (SERCs) and state pollution control boards (SPCBs) to identify the steps being taken for meeting the 2019 compliance deadline issued by the Central Pollution Control Board (CPCB). But found most are unprepared.

"Given the current status, about 8.5 GW, or about 65% of the overall installed capacity is on track to meet the PM norms. Of this, 7 GW is supposed to be compliant already, but there is no data to verify this; another 1.5 GW will comply by December 2019. The rest won't," the CSE report stated.

As per data received by CSE from Pollution Control Boards, none of the plants in Delhi NCR region are presently compliant with the SO2 standard of the new norms. "As things stand, 80 per cent of the plants will not meet the 2019 deadline. The concerned regulatory authorities must take immediate steps to prevent further delay in achieving the target," said Priyavrat Bhati, programme director, energy unit, CSE.

Greens win court case seeking stronger air pollution rules for brick makers

Date:7-July-2018 Source : thehill.com

A federal appeals court on Friday ruled that parts of the Environmental Protection Agency's (EPA) latest air pollution rule for brick makers don't go far enough.

The Court of Appeals for the District of Columbia Circuit accepted arguments from environmental groups, saying that the EPA acted improperly when it downplayed cancer risks from certain pollutants and set low pollutant thresholds for hydrogen chloride and hydrogen fluoride emissions.

The three-judge panel also completely rejected arguments from the brick and tile industries that the 2015 rule was too strong.

Although the Obama administration wrote the rule and denied petitions in 2016 to rewrite it, the Trump administration defended it in court and has so far resisted pressure from the brick and tile industries to change it.

Central to the judges' decision is their conclusion that while the EPA's final rule might have set acceptable standards, the agency did not properly justify them.

"The EPA has not provided a sufficient record to determine that there is no cancer risk," Judge David Sentelle, named to the bench by President Reagan, wrote for the unanimous court.

"This is not merely a situation in which the EPA relies on the results of scientific studies that were unable to demonstrate a cancer risk to 'prove a negative.' Rather, the EPA relies on the lack of any significant studies," he wrote.

Sentelle made similar conclusions about hydrogen chloride and hydrogen fluoride emission risks.

"The EPA's statement that 'low confidence' reference concentrations are suitable for regulatory purposes lacks any supporting reasoning," Sentelle wrote about hydrogen fluoride.

The court instructed the EPA to reconsider the rule, with the judges' arguments in mind.

The brick industry is one of the country's significant contributors to hazardous air pollution. While the number of brick kilns has fallen from its peak, there are still hundreds in the United States.

James Pew, a lawyer at Earthjustice who represented environmental groups in the case, said it is a major victory for fighting pollution.

"The agency just sort of made these patently arbitrary claims that it wouldn't be a health problem. But, as the court found, there was no basis for those claims," Pew said.

"People who live near brick kilns will get some relief, at last. EPA will have to do the standards that the Clean Air Act requires."

In response to the ruling, an EPA spokeswoman said only that agency officials "are reviewing the decision and evaluating all available options."

Republicans in Congress have backed the brick industry in its objections to the regulation.

The House voted in March, mainly along party lines, to pass a bill by Rep. Bill Johnson (R-Ohio) that would delay the EPA's rule until all litigation options against it are exhausted.

Humid morning in Delhi, air quality moderate

Date:8-July-2018 Source : uniindia.com

New Delhi, July 8 (UNI) National capital on Sunday woke up to a humid morning with

minimum temperature settling at 28.5 degrees Celsius , a notch above season's average.

Relative humidity was 62 per cent at 0830 hours, said the weatherman.

Sky is likely to remain partly cloudy through the day, while maximum temperature is to hover

around 39 degrees Celsius, as per the Met office.

Air quality was "moderate"in the city with an index value of 174 at 1300 hours, according to the

CPCB. On Saturday, the maximum temperature settled at 38.3 degrees Celsius two points more than seasons average.

Environmental group pushes for stepped up air pollution rules for gas industry

Date:9-July-2018 Source : meadvilletribune.com

HARRISBURG – Environmentalists want the Wolf Administration to roll out tighter controls on methane pollution from existing wells and compressor stations to go along with those on new ones.

The state Department of Environmental Protection in June announced stepped-up requirements for new wells and compressor stations, facilities that help keep the gas moving through pipelines.

The additional move to add already-producing wells and operating compressor stations would be even more important as "protections are being rolled back at the federal level," said Andrew Williams, director of regulatory and legislative affairs for the Environmental Defense Action Fund.

In announcing the new limits last month, Gov. Tom Wolf said that as Pennsylvania is second to only Texas in natural gas production, the state is "uniquely positioned to be a national leader in addressing climate change while supporting and ensuring responsible energy development."

Neil Shader, a DEP spokesman, said the agency is "in the early stages" of developing new regulations for methane emissions from existing wells and compressor stations.

Methane has become a hot-button because it's considered "a potent greenhouse gas, with more than 80 times the climate warming impact of carbon dioxide over a 20-year timespan," according to Williams' group.

The rules put in place in June came over the objections of the natural gas industry.

"Methane does not appear to be increasing at levels that make specific limits and controls necessary," the Marcellus Shale Coalition said in comments submitted to DEP.

The group also complained that the limits set by the state appear "arbitrary."

In a statement provided Friday, the coalition's president David Spigelmyer said the group would not welcome additional rules to limit methane pollution.

"Our efforts to manage the resource have improved air quality as noted by the DEP and other independent reports," Spiglemyer said. "Despite this positive and continued progress, we remain concerned about imposing additional requirements through operating permits."

Williams spoke before Environmental Protection Agency administrator Scott Pruitt announced his resignation on Thursday. Even so, environmentalists have little optimism that the agency will change course under Pruitt's apparent successor Andrew Wheeler.

"We now face the stark reality of a coal lobbyist, Andrew Wheeler, running the agency that is supposed to protect our air, water, and climate," said Environmental Defense Fund president Fred Krupp. "Changing name plates is not enough."

State data released by DEP shows that less methane escaped into the air in 2015 than 2012. However, the methane pollution in 2015, the most recent year for which data has been released, was more than either of the prior two years.

Estimates released by the EPA show that methane emissions dropped 16 percent nationally from 1990 to 2016, even as natural gas production increased.

The Environmental Defense Fund, however, points to evidence that the EPA data has under-estimated how much methane is escaping into the atmosphere from natural gas operations. In a study published in the journal Science, researchers concluded that the oil and gas industry are emitting 60 percent more methane into the atmosphere than the EPA has said.

Delhi-NCR's clean air action plan floundering: CSE

Date:10-July-2018 Source : downtoearth.org.in

Thermal power and brick-making sectors, two of the key contributors to severe air pollution in Delhi-NCR, might continue to add to the overload of toxic pollution despite regulations and some action, a new survey by the Centre for Science and Environment (CSE) indicates. Most thermal power plants and brick kilns will miss the December 2019 deadline for meeting new emission norms set by the Ministry of environment, forests & climate change (MoEF&CC) in 2015.

What does the CSE survey say about thermal power plants?

According to the survey, 83 per cent of the plants will not be able to comply with the 2019 deadline when it comes to sulphur dioxide (SO2) emissions, unless they fast-track the entire process starting from feasibility studies to construction and installation work.

Half of the region's installed capacity may be able to meet the 2019 deadline for nitrogen oxide (NOx) control, but the remaining have not reported any plans to achieve compliance. In case of particulate matter (PM), about 35 per cent of the overall installed capacity will not meet the deadline.

80 per cent of thermal power plants will not meet the 2019

"As things stand, 80 per cent of the plants will not meet the 2019 deadline. The concerned regulatory authorities must take immediate steps to prevent further slippage on achieving the target. State pollution authorities must ask power plants to furnish, immediately, the current emissions data and milestones with deadlines. Also, a suitable penalty mechanism should be introduced as a deterrent to ensure that plants stay on track to meet the norms," says Priyavrat Bhati, programme director, energy unit, CSE.

What does the CSE survey say about brick kilns?

Brick kilns in the region continue to pollute despite some actions being taken. The Delhi-NCR region has over 3,000 legal brick kilns, which had been largely practicing the extremely polluting FCBTK process of manufacturing bricks. While these kilns have agreed to convert to a cleaner technology–zigzag process—a new CSE assessment reveals that more than half of the kilns have not converted to the zigzag technology efficiently, thereby negating any gains that might have accrued from them.

If the quality of conversion to zigzag technology is good, the emissions reduction can be as much as 50-70 per cent. However, only about 20 per cent of the surveyed kilns had done good conversion. About 30 per cent of the kilns had average conversion quality and will be able to reduce emissions by 20-30 per cent, compared to the FCBTK technology.

"Proper conversion of FCBTK to zigzag can reduce the pollution from brick kilns significantly. But our survey clearly shows that only about 20 per cent have done good conversion. The conversion quality of more than 50 per cent of the kilns is highly unsatisfactory and such conversions will not lead to any real gains in pollution control," says Nivit Kumar Yadav, senior programme manager, CSE.

"Delhi-NCR's comprehensive clean air action plan is floundering because of the apathy of the regulatory agencies. Our survey of brick kilns and thermal power plants shows that despite regulations and intervention of the Supreme Court and the EPCA, the implementation on the ground is highly compromised. Thermal power plants will not be able to meet stringent emission norms by 2019, and brick kilns' conversion to a cleaner zigzag technology will not lead to real reductions in emissions," says Chandra Bhushan, deputy director general, CSE.

"The bottom-line is that Delhi-NCR cannot afford poor implementation of the comprehensive clean air action plan. Winter, the season of severely polluted air quality, is approaching fast. It is time the government agencies on the ground, especially the central and state pollution control boards, ensure that the conversion of brick kilns to zigzag is done appropriately and thermal power plants expedite the setting-up of pollution control systems to meet the 2019 deadline," Bhushan concludes.

Niti Aayog proposes 15-point action plan to deal with air pollution

Date:11-July-2018 Source : moneycontrol.com

Niti Aayog has proposed 15-point action plan for combating air pollution in ten most polluted cities in the country, including Delhi, Kanpur and Varanasi. The draft action plan titled 'Breathe India' includes encouraging electric vehicles, phasing out private diesel vehicle and development of crop residue utilisation policy.

According to a recent WHO database (2018), Kanpur, Faridabad, Gaya, Varanasi, Agra, Gurgaon, Muzaffarpur, Lucknow and Patna are the top ten most polluted cities in India.

Last month, air quality of Delhi had deteriorated beyond severe level because of a ground-level dust storm in western India, as per the Central Pollution Control Board data.

Every year, air quality of Delhi plummets to very poor levels during the winter season.

The action plan also includes expediting strategic decommissioning of old and inefficient power plants and implementation of a large-scale feebate programme from 2020 onwards.

"Increase distribution of electric and hybrid vehicles: This should be carried out through necessary financial measures and infrastructural support. The procurement of electric vehicles (EVs) should be mandatory for vehicles for Central Government use and certain public facilities.

"All central government offices should replace existing fleets older than 15 years to electric vehicles in the next 3 years i.e. by 2021 April," the draft paper said.

It also pitched for encouraging electric two and three-wheelers, saying a scheme to convert existing ICE (internal combustion engine) autos into electric ones either by retrofitting or by discounting the residual value of the existing auto from a new electric auto should be launched.

"Additional incentives like free registration and ease of getting permits for electric 2 wheelers and 3 wheelers should be immediately notified by MoRTH. In addition, all public transportation and 3 wheelers should adopt ZEVs (zero emission vehicles) by 2020," the paper suggested. The report also said there is a need to enact strong measures to curb vehicular emissions.

"Prohibit transition traffic in these cities and phase out private diesel vehicles by 2022," it suggested. The paper also favoured for implementing a large-scale feebate programme from 2020 onwards. A feebate is a policy by which inefficient or polluting vehicles incur a surcharge (fee), while efficient ones receive a rebate (bate).

Austria, Denmark, France, the Netherlands, Norway, Ontario (Canada) and Singapore have introduced variations of feebates.

The paper also suggested for ensuring high grade low polluting coal to the power plant, implementing a National Emissions Trading System, adopting cleaner construction practice and implementing a business model to utilise crop residue and an integrated waste management policy. It also called for concerted action from all levels of governance, cutting across ministries and departments.

Thanks to heavy rains, Delhi's Air Quality Index now falls in moderate level

Date:12-July-2018 Source : newindianexpress.com

NEW DELHI: Incessant rain in areas surrounding Delhi kept the pollution level in check as clean, moisture-laden winds replaced the polluted air, officials said today.

The Air Quality Index of Delhi was reported to be at 110 which falls in the moderate level. An AQI between 0-50 is considered "Good", 51-100 "Satisfactory", 101-200 "Moderate", 201-300 "Poor", 301-400 "Very Poor", and 401-500 "Severe".

The PM10 level (presence of particles with diameter less than 10mm) was beyond severe at 132 in Delhi-NCR and 126 in Delhi.

The PM2.5 level (presence of particles with diameter less than 2.5 mm) was 43 in Delhi-NCR and 45 in Delhi today, according to Central Pollution Control Board data.

Gufran Beig, a scientist at the Centre-run System of Air Quality and Weather Forecasting and Research institute (SAFAR), said incessant rain in surrounding areas of Delhi has led to the flow of clean moisture-laden winds into the city that is cleansing the air.

Delhiites breathed clean air last month after nearly a year.

The pollution level has since been in check and has remained at satisfactory or moderate level.

There was a dip in the air quality on June 13 due to dust storms in western India that pushed the pollution level to "severe plus", bringing to light that emergency level pollution could be a "summer-time problem" too.

Illegal sand mining causing air pollution in Gaya, say experts

Date:13-July-2018 Source : indiatimes.com

AYA: Stakeholders and domain experts deliberated on the issue of rising level of air pollution in Gaya at a workshop organised in Bodh Gaya by the Centre for Environment and Energy Development (CEED), a Delhi-based NGO.Incidentally, Gaya was listed as the fourth most polluted city in the world as per recent WHO report. Participating in the discussion, Rai Madan Kishore, retd special secretary in state government said instead of clamouring for new laws, focus should be on strict implementation of existing laws to curb pollution.

“The greatest contributor to air pollution in Gaya are suspended dust particles released by unregulated building construction activities and sand mining. Use of coal by local dhabas and smoke-emitting diesel- driven three wheelers also make major contribution to city's air pollution,” Kishore said.

CEED Programme officer Ankita Jyoti, quoted study reports

suggesting spurt in chest diseases and pollution related deaths. “Till about 30 years back, 90% of cancer patients were smokers. The percentage of smokers among cancer patients has now come down to about 50% and non- smokers inhaling highly polluted air develop cancer,” said the study.

Munger University VC Ranjit Verma, while questioning the credibility of recent WHO report, demanded installation of more pollution monitoring units in Gaya for proper assessment of air quality. “The present monitoring station was installed at a point, which apparently was the most polluted part of the city and generalisation about the whole town should not be made on the basis of single point data,” said Verma.

Conceding that air pollution offered a real threat for Gayaites, Prof Verma who taught chemistry to PG students in Magadh University before being appointed as Munger University VC said that non-medical use of plaster of paris should be discouraged. “As on date plaster of paris was indiscriminately used for wall smoothing and other decorative purposes,” said Verma.

Central Bihar Chamber of Commerce president Kaushalendra Pratap said water retention in Falgu river bed was a must to prevent upward movement of Falgu sand dust that significantly added to Gaya's air pollution. “The business body has already presented a nine point charter of demands to control air pollution,” said Kaushalendra.

A $75 million attempt to end indoor air pollution ended up siding with fossil fuels

Date:14-July-2018 Source : qz.com

Each year, more than 4 million people die prematurely from air pollution inside their own homes because they burn wood in inefficient cookstoves.In 2010, the Global Alliance for Clean Cookstoves—promoted by the likes of Hilary Clinton—was formed to combat this problem. A new investigation by ProPublica has found that, after spending more than $75 million, the effort has made little difference in the lives of people. So far, none of the cookstoves designed to burn wood cleanly work well enough. Instead, the alliance has admitted that affordable stoves that can cut indoor air pollution are those burning cleaner fossil fuels, such as propane.

Beyond food, water, and clothing, energy is a fundamental human need. In most poor countries, this

energy is secured by burning wood collected from nearby shrubs or forests. The process doesn't just produce greenhouse gases, but also soot. These fine particles of carbon are easily inhaled and lodged deep inside lung cavities, making the people benefiting from that energy vulnerable to diseases, like pneumonia. Indoor air pollution also leads to low birthweight in newborns.

One of the promises of the alliance was to build cookstoves that could burn wood more efficiently and thus drastically cut particulate emissions. To support the cause, the US government put up $50 million. A further $10 million was given by Germany and Norway. And even the oil giant Royal Dutch Shell's philanthropic arm added some $13 million.

After spending many of those millions in grants to designers and academics, the alliance was able to offer some cookstoves but they hardly reduced particulate emissions. The evidence of the lack of benefits from the use of such cookstoves began piling up a few years into the program, ProPublica reported.

Cookstoves that burn some form of petroleum gas, such as propane, LPG, or CNG, are much cleaner. Among the multiple tiers of clean cookstoves, the ones burning petroleum gases are classed as the cleanest and thus capable of providing maximum health benefits. But despite the warnings of the lack of benefits from clean wood-burning cookstoves, the alliance persisted with its rollout of distributing 100 million of them. It was then hit with more bad news; the users of the cookstoves complained that cooking wasn't as easy on them as it was on the open-fire ones that they used previously.

Once the win-win solution was proven to be a mirage, it became a problem. Should a philanthropically funded operation support fossil fuels? Burning propane produces greenhouse gases, which will eventually accelerate climate change, but in the short term it cuts particulate pollution, which will have immediate benefits on people's health. "Renewable energy sounds sexy," says Praveen Kumar, who works on environmental health at Boston College. "But right now, it cannot solve the challenge of providing energy to everyone."

Officials of the alliance told ProPublica that they remain optimistic that truly clean wood-burning cookstoves can be designed. But looking at the slow progress, the alliance has finally begun offering gas-burning cookstoves on their website and newsletters.

A clean, renewable solution to the cooking needs of the poor would ideally be a solar-powered electric cookstove. It essentially combines three technologies: solar cells that generate electricity, batteries that store some of that electricity, and then that electricity is used whenever needed to run an induction cookstove. So far, however, the combo is too expensive to deploy. But that may change.

A team at the Indian Institute of Technology, Bombay recently won a competition for building a working “solar chulha” (the Hindi word for cookstove). Now, they have to make it cheaper.

Air quality in W. MI may depend on where you live

Date:15-July-2018 Source : woodtv.com

GRAND RAPIDS, Mich. (WOOD) — It’s a summer staple in West Michigan: Hearing the declaration of a Clean Air Action Day and the recommendations that come with it.

“There are quick and easy, simple things that you can do to make a difference for air quality,” said Andrea Faber, transportation director for the Grand Valley Metro Council — then she lists them off. “Waiting to mow your lawn, waiting until 6 p.m. to mow your lawn, put gas in your car, keeping your tires properly inflated, skip the drive-thru, park your car and go in, limit idling, avoid idling… Burn cleanly or not at all, carpool, take the bus or the Rapid and Max transit in Holland offer free bus rides.”

The call comes when it is determined that there will likely be an increase in the number of pollutant particulates in the air higher than 70 parts per billion, which can trigger asthma in some people and have an impact on the air quality.

“Any time you’re pumping anything into the atmosphere, there is that chance of a long-term impact no matter how slight,” said Ellen Bacca, 24 Hour News 8 meteorologist.

The vast majority of scientists believe these man-made chemicals have an impact in terms of changing climate.“Pollutants do have a long-term impact,” Bacca said.

The decision to declare a Clean Air Action Day is made by the Michigan Department of Environmental Quality.

“Clean air action days is just a forecast saying these are the locations that will likely have high ozone today,” Bacca said

After the forecast, the scientists do actual measurements of the particulates in the air to see what happened.

24 Hour News 8 looked at the Michigan DEQ measurements from this year and found that in many cases, Grand Rapids did not hit that 70 parts per billion measurement, while Holland and Muskegon was often much higher.

The air comes over the lake from Gary, Chicago and elsewhere and as it travels over the lake, the sun heats it up and causes a photochemical reaction that creates more ozone in the air.

“It’s kind of like a double-bake oven, so those pollutants up over the lake get a double shot of solar radiation once passing through and again when it passes through on reflection,” said James Haywood, senior meteorologist, DEQ Modeling and Meteorology Unit.

A southwest wind means the air often hits the lakeshore with its highest concentration of pollution.

“Holland and Muskegon seems to be really the bullseye of where those things tend to hit,” Haywood said.

The scientists say the particulate count may drop as the air travels and the amount of sunlight decreases. But there is also the yet unproven possibility that people are getting the message.

“We have a lot of people who are participating on at least some of those days, think of all the emissions, that’s a lot of cars that aren’t on the road, people taking the bus that’s all stuff that’s not going into the air,” Faber said.

Of course, there is no real way to measure whether people waiting to cut their lawns or top off the tank is making a difference, but the Grand Valley Metro Council has done surveys that show that 90 percent of people know about and some 70 percent participate at least some of the time.

“I would hope that that would be the case, that people are listening and are taking action, maybe it’s keeping things below that threshold,” Bacca said.

Tell us: how has air pollution affected your life?

Date:16-July-2018 Source : theguardian.com

Air pollution is invisible, toxic and, according to the World Health Organisation, a global public health emergency. In the UK an estimated 40,000 premature deaths are caused by a combination of illegal levels of nitrogen dioxide, primarily from diesel traffic, and particulate matter, according to the Royal College of Physicians and the Royal college of Paediatrics and Child Health.

Across the country in schools, at workplaces and in hospitals air pollution is causing increasing concern as the human cost of toxic air starts to emerge. A recent Guardian investigation found that over 2,000 primary schools in the UK are situated in pollution hotspots.

Asthma sufferers, the elderly and children are most at risk from illegal levels of air pollution, but healthy individuals can suffer too. This month a leading expert linked the death of 9-year-old Ella Kissi-Debrah, from an acute asthma attack, directly to air pollution from the traffic thundering down the south circular in London near her home. Her mother is campaigning for an new inquest to cite air pollution as a cause of her daughter's death in what would be a legal first.

Humid day in Delhi, air quality moderate

Date:18-July-2018 Source : uniindia.com

New Delhi, July 18 (UNI) National capital on Wednesday witnessed humid weather, with maximum temperature settling at 37.3 degrees C, two notches above season's average here. Relative humidity today oscillated between 73 and 63 per cent, said the weatherman. The day was generally cloudy and the condition improved a bit towards the evening. Air quality in the city was 'moderate', with an index value of 105 at 1900 hours, according to the

Central Pollution Control Board.The Met official has forecast a generally cloudy sky with one or two spells of rain or thundershowers for Thursday, while maximum and minimum temperature to hover around 34 and 28 degrees C respectively.

Environment ministry expects approval for Rs 700 crore National Clean Air Programme soon

Date:19-July-2018 Source : energy.economictimes.indiatimes.com

New Delhi: The environment ministry expects approval from the expenditure department for the ambitious Rs 700 crore National Clean Air Programme (NCAP) to come within the next three months. The scheme is aimed at tackling air pollution by implementing steps to meet the prescribed annual average

ambient air quality standards across the country.

“The proposal has gone to expenditure (department). We expect anywhere between one month and three months for their approval to come,” a senior official from the Ministry of Environment, Forests and Climate Change (MoEFCC), who did not wish to be identified, told ETEnergyWorld on the sidelines of an industry event.

He added the government is concerned about the problem of air quality, not just in Delhi but in other parts of the country, too. “Because of this seriousness, the centre is in the process of launching NCAP for 100 non-attainment cities with a budget of around Rs 700 crore that will look into air quality monitoring network to have valid data with regards to the air quality status and also to have an air quality management programme for these 100 cities by having right studies,” he said.

The government has formulated NCAP as a medium-term national level strategy to tackle the increasing air pollution problem across the country. The overall objective is to evolve an effective ambient air quality monitoring network across the country apart from ensuring comprehensive management plan for prevention, control and abatement of air pollution.

The programme focuses on a participatory approach covering all the sources of pollution and coordination between different central government ministries, state governments and local bodies. In order to ensure use of new technologies to combat air pollution, the scheme also has a separate component on ‘Technology Assessment Cell’.

TaxiBot to add to DIAL’s green drive, cut fuel cost

Date:20-July-2018 Source : indiatimes.com

NEW DELHI: Indira Gandhi International (IGI) Airport will get special taxiing machines — TaxiBot — to decrease congestion and reduce emissions and fuel consumption for the airlines. The machines are semi-robotic and controlled by the pilot of the aircraft being taxied without using the plane’s own engines. The airport operator, Delhi International Airport Ltd (DIAL), said the technology could be introduced by mid-September for three months, following which its performance would be analysed for large-scale implementation.

Officials said the technology was approved for being environment-friendly, aligning it with the airport's objectives to reduce environmental impacts. It will help in reducing damage to airplane breaks, congestion and emissions of noxious gases like CO2, they added.

The technology, which is developed by Israel Aerospace Industries (IAI), recently conducted its certification trials at the Frankfurt airport in association with Lufthansa Airlines and TLD, a ground support equipment group. "TaxiBot trials will be carried out in association with KSU Aviation Pvt Ltd, which is bringing two TaxiBots for the purpose," said a DIAL spokesperson.

The machine works by attaching itself under the nose-wheel of the aircraft, following which the pilot can use TaxiBot to navigate the plane without using its engine. During the certification trials, it was found that the machine could reduce the aircraft's fuel consumption cost by around 85% and has a top speed of 23 knots, an official said.

"The Delhi airport has always been in the forefront of adapting any technology that is environment-friendly. We have taken various initiatives to improve air quality management and reduce emission at the Delhi airport," the spokesperson said, adding that the step will significantly improve the air quality at IGI and its vicinities. "It will also help reduce noise pollution," he claimed.

China's air pollution control brings health benefits: research

Date:21-July-2018 Source : xinhuanet.com

BEIJING, July 21 (Xinhua) -- China's action plan on air pollution prevention and control has generated great health benefits, according to a recent research.

China issued the Air Pollution Prevention and Control Action Plan in 2013 and accomplished all the major tasks set out in the action plan last year.

Researchers from Peking University's School of Public Health analyzed national air quality monitoring and mortality data to estimate the health impact of air pollution control in 74 Chinese cities from 2013 to 2017.

The result showed that annual average concentrations of PM2.5, PM 10 and sulfur dioxide dropped by 33.3 percent, 27.8 percent, and 54.1 percent, respectively, in the 74 cities between 2013 and 2017.

In 2017, there were 47,000 fewer deaths and 710,000 fewer years of life lost attributable to air pollution in the 74 cities than those in 2013, a substantial improvement for public health.

The research, published in the journal Lancet Planetary Health, also indicated that emission control efforts for ozone and nitrogen dioxide should be strengthened in China.

China released a three-year action plan on air pollution control in July, solidifying a timetable and roadmap for improving air quality. According to the plan, China's air quality and people's satisfaction with it should significantly improve over the next three years.

China's air pollution improves, deaths reduced in 74 cities: Report

Date:22-July-2018 Source : hindustantimes.com

China's efforts to control air pollution have "measurably" reduced smog in 74 cities, a new report says, however noting higher than accepted PM 2.5 levels and a substantial growth in ozone pollution.

The report, compiled by researchers from the Peking University's School of Public Health, studied data between 2013 and 2017 in 74 cities across China and found that annual average concentrations of PM2.5, (fine particulate matter) PM 10 and sulphur dioxide had dropped by 33.3%, 27.8%, and 54.1%, respectively.

Using the "latest and widely recognised" integrated exposure-response functions, the researchers found there were 47,000 fewer deaths and 710,000 fewer years of life lost attributable to air pollution in the 74 cities in 2017 in comparison to 2013.

China issued the Air Pollution Prevention and Control Action Plan in 2013 and pumped in billions of yuan to reduce emissions from vehicle and fuels, coal-fired electric generating units and the industrial sector.

Five years later, progress has been made but a lot more needs to be done.

"Having documented this progress, the investigators are also careful to note the challenges in undertaking such an analysis—and in making continuing air quality progress in China," says the July edition of The Lancet Planetary Health, where the report was published.

The researchers, for one, noted that even with the improvements in air quality, "levels still substantially exceed China's air quality standards for fine particulate matter (PM2.5), and about

365,000 premature deaths could still be attributed to PM2.5 air pollution, even accounting for the 47,240 fewer deaths reported".

"Although five years is a reasonable initial time to test air quality trends, the multiple atmospheric and meteorological variables argue for continued surveillance to ensure that progress is real and lasting," the journal said about the research.

The research also showed there has been "substantial growth in exposures to, and health effects from, ozone air pollution".

"Clearly, the issues surrounding air pollution in China pose public health challenges. The actions of the Chinese Government—and this new analysis by J Huang and colleagues documenting the substantial progress—augur very well for continued learning and improvement in tackling this important issue," the science journal noted.

"Nowhere is this public health impact (of air pollution) more keenly felt than in two rapidly developing countries, China and India, which together account for more than half of the public health burden."

Delhi faced several days of critically high pollution level this summer, with PM10 levels in June eight times higher than the daily safe standards. AK Anwar, a researcher at the London-based International Institute of Environment and Development said compared to the residents of Beijing, Delhiites breathe three times as much fine particles that cause cancer.

"The government of China was able to bring down the pollution levels because they created an action plan ushering in strict traffic curbs, and also brought about regulations on the city's construction activities. This plan is put into action starting November every year, when the particulate levels spike," Anwar said.

"The trick that has worked for them is to 'pre-plan' their action, instead of acting after the situation starts getting bad. Even then, pollution levels will not come down overnight."

Prashant Ranade, a professor of environmental engineering at IIT-Delhi, said the exercises implemented in Beijing are not difficult to replicate in Delhi. "Beijing is much larger but its structure is quite similar to Delhi's. If they can do it, so can we," he said.

However, he felt the Chinese government, unlike India's, does not have to deal with the problems of multiple agencies and political differences while applying strict norms. " If we keep addressing people as vote banks, who might turn against us for policies that restrict parking space and push people to use public transport, then we headed towards doomsday," he said. Earlier in July, China released a new three-year action plan on air pollution control, drawing up a timetable for improving air quality.

Proposal to take up source apportionment studies in 93 cities: Government on pollution

Date:23-July-2018 Source : newindianexpress.com

NEW DELHI: There is a proposal to take up source-apportionment studies in around 100 non-attainment cities under National Clean Air Programme (NCAP), the government today said.

A non-attainment area is an area considered to have air quality worse than the National Ambient Air Quality Standards.

Minister of State for Environment Mahesh Sharma in a written reply in Rajha Sabha said on the basis of analysis of data for five years generated under National Air Quality Monitoring Programme (NAMP) during 2011-15, 94 cities have been identified as non-attainment cities.

In addition, few cities have also been identified as polluted cities as per WHO data base, he said."It is proposed to take up source-apportionment studies in these cities under NCAP.

A woman wearing face mask to protect against air pollution

A timeline of two years has been indicated in NCAP with reference to source apportionment studies for all non-attainment cities," he said.

He pointed out that organizations, institutions and universities having expertise and background in air pollution studies will be involved along with Central Pollution Control Board (CPCB) and State Pollution Control Board (SPCBs) for conducting these studies.

He said the CPCB is conducting a nationwide programme for monitoring ambient air quality across the country under NAMP.

At present there are 703 manual ambient air quality monitoring stations covering 307 cities and towns in 29 states and six Union Territories.

"Under NCAP, it has been proposed that manual monitoring stations shall be strengthened from 703 operating stations to 1000 stations to cover the uncovered district & towns," he said.

The overall objective of the NCAP is comprehensive management plan for prevention, control and abatement of air pollution, besides augmenting the air quality monitoring network across the country.

Sharma said that in addition, there are 132 Continuous Ambient Air Quality Monitoring Stations (CAAQMS) installed in 68 cities in 17 states and UTs.

He said 108 CAAQMS are proposed to be installed in 62 Cities in 31 states and UTs.

"The Budgetary allocation under Central Public Sector Undertaking (CPSU) project for 60 stations in 38 cities in 27 states and UTs are to be met from the Corporate Social Responsibility (CSR) funds of CPSU," he said.

These stations are proposed to be installed by June, 2019 and the budget for other 26 CAAQM stations in 24 Cities in 19 states and UTs are to be met from grant in aid from Environment Ministry by sharing capital cost percentage with states and UTs - - 50 per cent for states, 90 per cent for the North-Eastern States and 100 per cent for UTs, he said.

"These stations are expected to be installed and commissioned within a year. Budget for total 14 CAAQM stations in five cities in two states and UTs are allocated under Environment Protection Cess (EPC) fund from CPCB. These stations are under installation and will be commissioned by December, 2018," he added.

Welsh Government misses air pollution deadline

Date:24-July-2018 Source : bbc.com

The government was taken to court by campaigners ClientEarth in January for failing to tackle pollution levels.

Welsh ministers were told to have a plan in place by 31 July. The High Court has agreed an autumn extension to ministers.

Welsh Government spokesperson said the situation was "more complicated than originally thought".

In May, the government was warned the timetable proposed in its consultation draft suggested it would not meet the deadline.

- Wales must set out reduction plan rules High Court
- Life on Wales' most polluted roadk
- How can Wales tackle air pollution?

The government's urgent application for an extension was granted by the High Court on Monday, giving ministers until 30 November to produce a plan.

A deadline to deliver a plan on combating air pollution in Wales has been missed, it has been confirmed.

"Not only is it astonishing that ministers have left it this late to apply for an extension, when we'd warned them of the issue in the spring, it's incredible that we even had to warn them in the first place," said ClientEarth lawyer Katie Nield."It doesn't inspire confidence.

"Pushing back the timetable for production of an air pollution plan will lead to further delays to action being taken to protect the health of people in Wales."

A spokesman for the Welsh Government said: "When the minister gave her interview, she had every reason to believe the deadline was achievable. However, the situation has proved to be more complicated than originally thought.

"An interim plan will be published by 31 July setting out current actions being taken in Wales with a final plan being published on or before the 30 November 2018."

"We are committed to tackling air pollution in Wales and have already put in place a range of measures to improve air quality in areas where targets are not currently being met."

Air pollution advisory issued for Portland and Vancouver metro areas

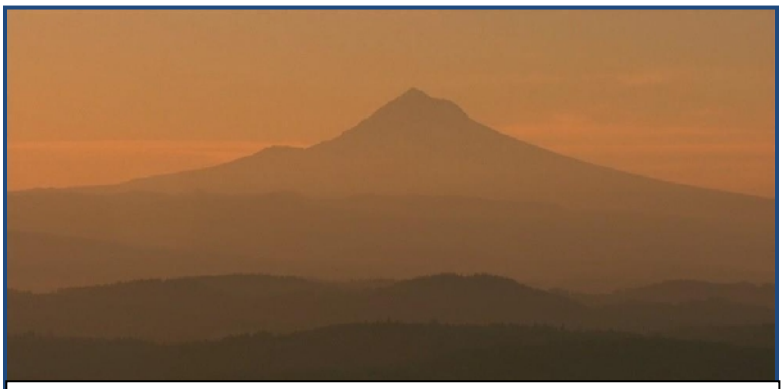
Date:25-July-2018 Source : kotu.com

PORTLAND, Ore. – The Oregon Department of Environmental Quality and the Washington Southwest Clean Air Agency issued an air pollution advisory Tuesday for the Portland and Vancouver metro areas.

Officials say the advisory is due to elevated levels of ozone pollution, or smog.

Smog forms when hot temperatures and low winds combine with pollution from cars, gas-powered engines and chemicals in paints and aerosols.

Smog can irritate the eyes, nose, and lungs and contributes to breathing problems, reduced lung function and asthma.



Smog clouds Mt. Hood on July 24, 2018

The DEQ recommends that children, pregnant women, asthma sufferers and those with lung or heart conditions, and adults 65 and older, limit outdoor activity.

Officials urge the public to limit activities that cause pollution.

The air quality alert is in effect through Thursday, July 26. A heat advisory is also in effect for the area through Thursday evening.

Delhi's air quality turns good for the first time this year: Authorities

Date:27-July-2018 Source : indiatimes.com

Minto bridge in Delhi after heavy rain on Friday morning

NEW DELHI: Delhi's air quality turned "good" on Friday for the first time this year due to continuous rains that have washed away the pollutants in the air, authorities said. The Air Quality Index of New Delhi was recorded at 43 which falls under the "good" category, Gufran Beig, a scientist at the Centre-run System of Air Quality and Weather Forecasting and Research institute (SAFAR), said.

An AQI in the range of 0-50 is considered "Good", 51-100 "Satisfactory", 101-200 "Moderate", 201-300 "Poor", 301-400 "Very Poor" and 401-500 "Severe".

The PM10 level (presence of particles with diameter less than 10mm) was recorded as "good" at 39 in Delhi-NCR and 32 in Delhi.

The PM2.5 level (presence of particles with diameter less than 2.5 mm) was 39 in Delhi-NCR and 21 in Delhi today, according to the Central Pollution Control Board data.

Beig said the monsoon had led to a flow of clean moisture-laden winds into the city that was cleansing the air. Delhiites breathed "good" quality air for the first time this year.

There was a dip in the air quality on June 13 due to dust storms in western India that pushed the pollution level to "severe plus", bringing to light that emergency-level pollution could be a "summer-time problem" too.

Delhi Breathes 'Good' for First Time This Year as Rains Wash Away Pollutants

Date:28-July-2018 Source : news18.com

New Delhi: Delhi's air quality turned "good" on Friday for the first time this year due to continuous rains that have washed away the pollutants in the air, authorities said. The Air Quality Index of New Delhi was recorded at 43 which falls under the "good" category, Gufran Beig, a scientist at the Centre-run System of Air Quality and Weather Forecasting and Research institute (SAFAR), said

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Delhi air quality improved due to meteorological factors, not by addressing 'source of pollution', says Greenpeace

Date:29-July-2018 Source : firstpost.com

New Delhi: Noting that air quality in the national capital had improved due to meteorological factors and not by addressing the "source of pollution", a green body stressed the need for taking comprehensive action to contain such sources for sustained clean air days.

Authorities had said that Delhi's air quality turned "good" Saturday for the first time in 2018 due to continuous rains that washed away the pollutants in the air.

Greenpeace India said instead of being euphoric about few improved air quality days, the Environment Ministry along with Central Pollution Control Board (CPCB) should prioritise to immediately enforce the National Clean Air Programme (NCAP) by setting up time-bound emission targets.

The ministry has prepared a draft NCAP with an objective to come up with a comprehensive plan for prevention, control and abatement of air pollution, and to augment the air quality monitoring network across the country.

Various green groups have submitted their recommendations to the ministry on the draft.

"The 'so called' improvement in Delhi's air quality is governed by the meteorological factors, not by addressing the source of pollution. This much talk about improvement is a natural phenomena as rain washes out the dust particles leading to improved air quality," said Sunil Dahiya, senior campaigner Greenpeace India.

"This is momentary to have few clean air days. The fact is that air pollution is present all year around, irrespective of seasons. More comprehensive actions on sources of pollution are required for sustained clean air days," he said.

The Air Quality Index (AQI) of New Delhi was recorded at 43 which falls under the "good" category. An AQI in the range of 0-50 is considered "Good", 51-100 "Satisfactory", 101-200 "Moderate", 201-300 "Poor", 301-400 "Very Poor" and 401-500 "Severe".

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"The government must realise that air pollution has become a health emergency not just for India but globally as well," Dahiya said.

"China has released its second clean air action plan, though it still has long way to go to solve its air pollution problem, the progress of the past few years shows what works: region-wide, time-bound targets that hold decision-makers accountable, strong emission standards and strong enforcement, as well as a shift away from polluting energy sources," he said.

He added that the the draft version of NCAP had missed out on timelines, emission and sectoral targets, which has defeated the purpose to have an action plan.

China Releases 2020 Air Pollution Action Plan

Date:30-July-2018 Source : lexology.com

The plan's stricter and more targeted requirements will impact a broader range of provinces, including the Fen-Wei Plains.

China has released a new three-year action plan for 2018 to 2020 to combat air pollution. The previous air pollution action plan, published in 2013, has played a significant role in improving air quality in major cities. China's updated plan, which was released on July 3, draws on additional information and research to provide more targeted requirements.

Success of the 2013 plan

The former plan set a coal cap across China with varying limits in different provinces. For example, the plan required Beijing to reduce its coal consumption by half from 2015 to 2018. The plan's success was due in part to the state's ownership of a large number of China's worst polluters, making them easier to control. Furthermore, because half of China's pollution comes from coal-burning power stations, the country needs a less varied range of policies to order to target pollution compared with other countries.

Key policies of 2020 action plan

PM2.5 limits

The 2013 plan set strict limits for fine particulate matter (PM2.5) at an estimated cost of US$38 billion. In Beijing, coal power stations were actually forced to shut down and inhabitants of nearby areas were prohibited from burning coal for heating. Although arguably drastic, these measures proved effective: Beijing's PM2.5 levels fell by more than a third; and the Beijing-Tianjin-Hebei region, the Pearl Delta, and the Yangtze Delta all beat their PM2.5 reduction targets.

Yet despite these successes, no major cities in China meet the World Health Organization's recommended annual average PM2.5 standard of 10μg/m³.

The new plan sets even stricter targets, requiring cities to achieve a decrease of a minimum of 18% in PM2.5 levels compared with a 2015 baseline in cities of prefectural or higher level, and where these targets have not yet been achieved. The new plan also goes much further in its scope than the 2013 action plan, which applied solely to the city clusters of Beijing-Tianjin-Hebei and the Pearl and Yangtze Deltas. The 2020 plan covers 82 cities throughout China (including Linfen in Shanxi) that will also need to initiate anti-smog measures.

Ozone exposure protection measures

High concentrations of ozone at ground level can harm people's health by causing respiratory issues (among other problems), and its production has been increasing amid hotter conditions. In fact, ozone has become the main polluter in the Pearl River Delta. On an even broader scale, studies have shown that average ozone levels in China in June have increased by 11% compared with 2017.

Against this backdrop, the plan sets further targets for the reduction of volatile organic compounds (VOCs) by 10%, and for the reduction of nitrogen oxides by 15% by 2020 (based on a 2015 baseline).

New regional target for the Fen-Wei Plains

The new plan identifies the Fen-Wei Plains as China's most problematic region. The Fen-Wei Plain area contains the country's highest levels of sulphur dioxide pollution, as well as some of the highest levels of PM2.5 — which increased by more than a quarter between 2015 and 2017.

As a result, the local government of the Fen-Wei Plains will face greater scrutiny from China's central government. On the other hand, the Fen-Wei Plains will benefit from increased financial

and technical assistance to help achieve necessary changes under the action plan — including a significant decrease in coal consumption by 2020.

Conclusion

China's new action plan represents notable progress in combatting climate change and air pollution, by requiring "large reductions in total emissions of major pollutants in coordination with reduction in emissions of greenhouse gases". Under the stricter and more targeted requirements, a broader range of regions are likely to substantially cut PM2.5, VOC, and nitrogen oxide production, while decreasing coal consumption. As a result, the plan will likely shape how business is done in China's manufacturing economy, both immediately and for the long-term.

This post was prepared with the assistance of Olivia Featherstone in the London office of Latham & Watkins.

How Trump Is Targeting California's Air Pollution Standards

Date:31-July-2018 Source : citylab.com

California's ability to create its own fuel efficiency standards for cars sold in the state is under threat, Environmental Protection Agency director Andrew Wheeler confirmed Friday, as are Obama-era fuel standards for cars and light trucks. A proposal, expected to be released as soon as this week from the EPA, would revoke permission granted to California in 2012 by the Obama administration that allows the state to establish its own automotive emission regulations.

A long courtroom battle would surely follow any attempt to end that relationship. But how did California end up with the ability to set its own emissions rules anyway—and what would happen if that suddenly goes way?

The state was first granted this unique ability in 1970, when the Clean Air Act established the first federal air pollution limits. But California already had its own, more stringent emissions standards for vehicles, thanks to the California Air Resources Board (CARB), an earlier clear-air watchdog formed in 1967 in response to the dangerous smog that afflicted greater Los Angeles and other parts of the state. (Here's a helpful short film about that saga.)

Had the new federal standards preempted California's rules, smog control would have become less strict, so the state was exempted from the rule and allowed to set its own pollution benchmarks for cars sold in the state. Currently more than a dozen other states also follow California's standards; collectively, this market comprises 30 percent of all cars sold in the United States.

This represents a challenge for a Trump White House that is determined to undo environmental regulations established by the previous administration. In April, then-EPA chief Scott Pruitt said that the administration planned to walk back Obama-era guidelines requiring an average fuel efficiency of 54.5 miles per gallon for light trucks and cars by the end of 2025. Instead, the EPA will enforce guidelines through 2021 only. "Cooperative federalism doesn't mean that one state can dictate standards for the rest of the country," Pruitt said in a statement at the time.

Air pollution causing lung cancer among youths: Study

Date:31-July-2018 Source : indiatvnews.com

Air pollution has emerged as a major factor for lung cancer in India, especially among those below the age of 40, suggests a new study. The study, conducted by Sir Ganga Ram Hospital (SGRH), Delhi, along with Lung Care Foundation, found that 50 per cent of cancer patients are non-smokers. Of the 150 patients who were successfully treated from March 2012 to June 2018, 74 were non-smokers, while 76 were smokers.

"Pollution is contributing a lot to the rise in lung cancer cases. Industrial and vehicular emissions and stubble burning are some major reasons for lung cancer. Young people and women are victims of lung cancer mostly due to pollution," Neeraj Jain, Chest Physician, Ganga Ram Hospital said.

According to Arvind Kumar, Chairman, Centre for Chest Surgery, SGRH, children are being exposed to bad air quality since their birth and therefore even before one starts smoking, the lungs are infected due to pollution.

"PM 2.5 level pollution in air is equivalent to smoking one cigarette a day. And therefore, new borns inhaling this bad air have higher chances of being diagnosed for lung cancer. That is why we recommend check-ups," he said.

It is also found that 30 per cent of the patients, studied for the report, had been initially misdiagnosed as tuberculosis and were treated for the same for many months before starting cancer treatment.

August 2018

Need to find new ways to bring down air pollution in bigger cities: Minister

Date:1-August-2018 Source : uniindia.com

Bengaluru, Aug 1 (UNI) As increase in air pollution levels is causing a great concern in growing cities like Bengaluru, newer ways to tackle the situation was needed and Karnataka government would work towards introducing electric and CNG vehicles in the city and phase out public transport vehicles using fossil fuel, Deputy Chief Minister G Parameshwara today said. Speaking to reporters after meeting London Deputy Mayor Shirley Rodrigues and other representatives from London here on Wednesday, he said during the past 10 years the city had grown exponently and air pollution levels had also crossed the stipulated 60 ppu. However the air quality in the city was better compared to New Delhi, Mumbai and other bigger cities. ''To ensure improvement in air quality first we need to stop registration of petrol and diesel vehicles, at least in public transport and promote CNG and electric vehicles in the lines of London city,;'; he added. Mr Parameshwara who is also the Minister for Bengaluru Development, discussed other problems related to the city like waste disposal and traffic management besides pollution control. He requested the delegation to prepare a plan with regard to garbage disposal which was posing a major challenge in the State Capital. He also requested the delegation to find ways to ensure effective cleaning of a number of lakes in the city which were polluted. Bengaluru Mayor Sampat Raj and BBMP Commissioner Manjunath Prasad were present in the meeting.

Delhi to plant 5 lakh trees, shrubs in a day

Date:2-August-2018 Source : thestatesman.com

Delhi Environment Minister Imran Hussain on Wednesday announced that the government would carry out a massive one-day plantation drive by planting five lakh trees and shrubs this month. The date, he said would be announced soon.

Hussain reviewed preparations for the massive exercise in a meeting with various greening agencies. He said the government proposed to seek active involvement of local residents, resident welfare associations, market associations, school and college students so that green cover of Delhi could be increased to combat the ill-effects of air pollution.

Meanwhile, Delhi Parks and Gardens Society (DPGS) was directed to ensure free distribution of saplings so that the plantation drive could be carried out smoothly.

All the greening agencies were directed to send the locations for proposed plantations to the Forest Department by Friday so that a comprehensive action plan could be prepared for the drive.

Hussain said there was a need to create mass awareness about plantation drive and the importance of green cover for the overall environment conservation and pollution control.

The Minister directed all greening agencies to ensure the digging of pits, supply of manure, saplings and other essential facilities for the plantation drive. Hussain also emphasised upon providing good quality saplings.

He directed that sufficiently tall and mature saplings should be planted as they not only grow faster but have high survival rate.

The minister asked the Department of Environment and Forest to undertake a mass awareness campaign so as to make the plantation drive a successful event.

Delhi air quality likely to drop again due to storm in Oman

Date:3-August-2018 Source : millenniumpost.in

NEW DELHI: Delhi will have poor air quality for next two to three days, due to dust storm building up in Oman, said officials of CPCB. Delhi's air quality was satisfactory last week. On Friday, the air quality index (AQI) was recorded at 235, which falls under the 'poor' category as per the Central Pollution Control Board (CPCB) data. The PM10 (particulate matter) levels increased to settle at 261 micrograms per cubic metre (µg/m3) on Thursday. This is over two times the prescribed standard of 100 µg/m3. PM2.5 was in the moderate category at 67 µg/m3. An AQI between 0-

50 is considered 'good,' 51-100 'satisfactory,' 101-200 'moderate,' 201-300 'poor,' 301-400 'very poor,' and 401-500 'severe.'

According to experts, the reason for the sudden 'poor' air quality is the percolation of emissions at a faster rate after the rain showers in the city. "The atmosphere was totally cleaned up owing to the continuous rains, which washed away the pollutants. Hence, a vacuum was created that has let the emissions to percolate faster. There was a space created for the pollutants, which accumulated faster and hence the air quality turned poor in just a few days," said Gufran Beig, the project director of SAFAR (System of Air Quality and Weather Forecasting and Research). "The dominant pollutant, however, is PM10, which is less dangerous. It is likely to increase further in the next three days as per our prediction," he added. As per SAFAR's forecast, the levels of PM10 are going to increase to 287 µg/m3 on Friday.

Delhi's air quality improves a day after it slipping into the 'poor' category

Date:4-August-2018 Source : indiatimes.com

NEW DELHI: Delhi's air quality improved slightly a day after it slipped into the 'poor' category due to a dust storm that originated from the Arabian peninsula, authorities said on Saturday. Last week, the air quality became 'good' for the first this year. But after a dust storm from Oman, the air quality index slipped to 'poor' category, an official with the Central Pollution Control Board said.

But as the dust started subsided, the air quality improved and has now come under 'moderate' category, he said.

The air quality index (AQI) was recorded at 195, which falls under the 'moderate' category as per the Central Pollution Control Board (CPCB) data.

The PM10 (particulate matter) levels increased to settle at 254 micrograms per cubic metre (g/m3) today. This is over two times the prescribed standard of 100 g/m3.

The PM2.5 was in the moderate category at 66 g/m3 as per CPCB.

An AQI between 0-50 is considered 'good', 51-100 'satisfactory', 101-200 'moderate', 201-300 'poor', 301-400 'very poor', and 401-500 'severe'.

"The dominant pollutant, however, is PM10, which is less dangerous. It is likely to reduce further in the next three days," the official added.

DELHI AIR QUALITY TO IMPROVE FURTHER, LIGHT RAINS LIKELY

Date:5-August-2018 Source : skymetweather.com

Delhi rains have remained far away from the national capital for a few days. To top it all, pollution levels seemed to have increased and had slipped into the poor category about a day before.

Currently, the western end of the axis of Monsoon trough is passing over the foothills of the Himalayas across Jammu Kashmir, North Punjab, North Haryana and northern parts of Uttar Pradesh. Due to which, westerly winds are prevailing over Haryana, Delhi region.

However, Rajasthan region, which has been observing dry and very warm conditions, is seeing southwesterly dust laden winds. These winds have been having an effect over the city of Delhi as well.

Due to presence of local smoke, and in association with this dust, the pollution levels have increased during the last few days. However, relief seems in sight as during the next 24 hours, the axis of Monsoon trough is likely to shift southwards, close to Delhi as a low pressure will form over Northwest Bay of Bengal.

During the shifting of Monsoon trough, light rain and thundershowers may be seen over some parts of Delhi. Sky conditions will remain cloudy.

Due to these rains, pollution levels are likely to see an improvement. Some rainfall activity is expected over the city of Delhi around August 7 and 8 as well.

Air pollution cannot be taken lightly. And here's proof

Date:6-August-2018 Source : indiatimes.com

In February, artist Avril Stormy Unger spent 10 hours each day for five days on Old Madras Road, sitting with wilted flowers and an anti-pollution mask, on an over-sized chair, next to an air quality index monitor with giant lungs that showed just how bad the air is that we breathe in the city.

The lungs were made of HEPA filter (the material used in anti-pollution masks), which, over the months, turned from pristine white to charcoal black in colour — proof of how bad the air quality is in the city.

Avril's installation work was in association with Jhatkaa.org, which has been working for nearly three years to bring awareness on the deteriorating air quality in Bengaluru. A few weeks ago, the giant lung installation was taken down and the now charcoal black lungs have been cut into tiny pieces and made into 'evidence packages' that the team is sending out to the Ministry of Environment, Forest and Climate Change, the State and Central Pollution Control Boards, and other decision makers, to show them that air pollution cannot be taken lightly and requires urgent attention.

Divya Narayanan of Jhatkaa.org says, "The lungs were exposed to around 2,000 hours of air pollution on a busy road in Bengaluru, turning it completely black. This shows what will happen to your lungs if you spend just two hours a day on the roads in Bengaluru, over a span of three years."

Shikha Kumar, another campaigner, adds, "A lot of the conversations around air pollution are centered in Delhi, since that city makes news every winter due to the smog. But air quality in other cities is also decreasing rapidly. It is about time that air pollution is taken seriously and policies are implemented by authority figures to tackle it. And we hope that our 'evidence packages' will begin that process."

Maharashtra Pollution Control Board's air quality data yet to go 'Online'

Date:7-August-2018 Source : dnaindia.com

In what is one of the most important projects by MPCB for monitoring the air quality, the pollution body proposed setting up of 15 CAAQMS across Mumbai Metropolitan Region. Even as Maharashtra Pollution Control Board (MPCB) has commissioned and inaugurated 10 new Continuous Ambient Air Quality Monitoring Stations (CAAQMS) across the city since June 6, citizens continue to wait for the real-time updates online.

In what is one of the most important projects by MPCB for monitoring the air quality, the pollution body proposed setting up of 15 CAAQMS across Mumbai Metropolitan Region (MMR) by end of 2017- of which 10 were located in Mumbai that would monitor air quality based on 12 parameters mandated under the National Ambient Air Quality Standards (2009). While the delay in initiating the work hit the project, MPCB officials then claimed that the project would be ready by May 2018.

Finally it was on June 6, during environment day function that Ramdas Kadam, State Environment minister inaugurated the air monitoring stations located at Colaba, Worli, Santacruz airport, Kurla, IIT- Powai, Mulund, Vile Parle, Kandivali, Borivali but till date the real time update from different stations is not available to Mumbaikars promised via a dedicated app and through website.

As per MPCB officials while the data from the monitoring stations was available on the VMS boards installed at Sanjay Gandhi National Park (SGNP), Borivali and Mahindra, Kandivali and other locations- the data was not available online except for Bandra and Sion, which are the old stations.

"There is no delay in the project infact we have completed the project in advance. There is some 'calibrations' remaining, which we expect to complete soon and within few days the data from all monitoring stations will be available online via the MPCB website," said VM Motghare, Joint Director MPCB.

At the moment Mumbai also has 10 station where System of Air Quality Weather Forecasting and Research (SAFAR) monitors Air Quality Index (AQI) based on five parameters including- PM10, PM2.5, Carbon Monoxide, Nitrogen dioxide and Ozone and the data is available through a dedicated smartphone application as well as website. However officials from MPCB claimed that their monitoring stations will be more accurate and will offer much more data.

Air pollution cost India $55bn in 2013

Date:8-August-2018 Source : dailypioneer.com

Between 2013 and 2017, including the period when Delhi turned into a "gas chamber", nearly 1,000 people died due to air pollution. The national Capital also saw 10 per cent of its population suffer from acute respiratory infection (ARI) during the same period. With a population of 1.69 crore, Delhi had over 17 lakh ARI cases.

Overall, the country's labour losses due to air pollution in 2013 stood at 55.39 billion dollars or about 0.84 per cent of its gross domestic products (GDP).

The pollution-related banning of construction activities resulted in loss of livelihood to thousands of the poor and the needy, especially labourers.

A Parliamentary Standing Committee on Earth Science, Environment and Forest headed by Congress MP Anand Sharma has cited a World Bank Report on air pollution in Delhi, saying worldwide India reported the highest loss in labour output in 2013 due to air pollution. The loss was pegged at $55.39 billion (2011 PPP-adjusted), or 0.84 per cent of its GDP. China followed close behind with $44.56 billion, or 0.28 per cent of its GDP, lost due to forgone labour output.

"Adding welfare costs and costs of lost labour due to air pollution puts India's GDP loss at more than 8.5 per cent in 2013. India's GDP growth at constant prices was less than 7 per cent in 2013-14. So air pollution alone might be offsetting the Indian economy's growth efforts," it said. The report was tabled in Parliament on Tuesday.

The report said contribution of vehicles to ambient PM2.5 concentration during winter and summer are 25 per cent and 9 per cent respectively in the national Capital. The major source contribution during winters is from secondary particles (30 per cent), bio-mass burning (26 per cent) and vehicles (25 per cent). In summers, the major sources are soil and road dust (28 per cent), coal and fly ash (26 per cent), secondary particles (15 per cent), bio-mass burning (12 per cent) and vehicles (9 per cent).

The committee expressed concern that deteriorating air pollution has been responsible for the emergence of the national Capital as one of the most polluted cities in the world. It said even

the World Health Organisation put Delhi amongst 20 most polluted cities in the world in terms of PM2.5 levels in the year 2016.

“Pollution prevention is a major global concern because of its harmful effects on people’s health and the overall environment. Air Pollution has assumed gigantic proportions in our country and Delhi, the capital of India, is not lagging behind. Growing urbanisation, rapid industrialisation and increasing population during the last few years have also adversely impacted the air pollution scenario of Delhi and NCR. In view of the foregoing concern, the Committee recommends that the Ministry, on its part, must prepare both short and long-term plans, put forth futuristic projections and ensure that all the measures planned are holistically implemented in coordination with the concerned State Governments,” the report said.

It further stated that there are many scientific organisations of Government of India such as CSIR-Indian Institute of Petroleum, Dehradun; Indian Institute of Remote Sensing; Dehradun; Indian Institute of Tropical Meteorology, Pune; CSIR-National Environmental Engineering Research Institute, Nagpur which can help in contributing towards finding solutions to many aspects associated with the air pollution problem of Delhi.

The Committee also notes that hazardous air quality in Delhi and NCR after Diwali last year and at some other times too, made headlines globally. Such reports have an adverse impact on the plan of international tourists to visit India, particularly Delhi.

The Committee in its report stated that instead of banning construction activities, which deprive the poor of their daily earnings, efforts should be made for the stringent enforcement of the construction guidelines and international best practices. “It was also observed that noxious vapours from paints, thinners, oils, cleaners etc are environmentally hazardous chemicals which are widely used at the construction sites and have been contributing to raise the levels of air pollution in the region,” it said.

According to report, the epidemiological study on Effect of Air Pollution on Human Health (Adults) in Delhi (2008) conducted by CPCB with Chittaranjan National Cancer Institute, Kolkata has showed that people of Delhi had 1.7 times more prevalence of respiratory symptoms compared with rural controls, and the difference between these two groups with respect to respiratory symptom was highly significant. “The prevalence of current asthma and physician-diagnosed asthma among the participants of Delhi were 7.6% and 3.6% respectively which were significantly higher than the corresponding prevalences in control group which were 3.9% and 2.1% respectively,” it said.

NEERI to install air pollution control devices in city

Date:8-August-2018 Source : indiatimes.com

Nashik: The city is all set to have air pollution control devices in order to improve Nashik's air quality.

On behalf of National Environmental Engineering Research Institute (NEERI), the devices will be used to control air pollution in the city. Nashik is one of the four cities where these devices will be used. Delhi, Patna and Raipur are the remaining three cities.

A survey is in process to decide upon the number of devices and locations where the devices will be installed. The device will not only suck in the dust particles and toxic elements, but will also give out purified air.

These devices will be installed in 10 cities of the state and 70 cities across the country in a phase-wise manner. Nashik is the first city chosen in the state for the project. In April, the Central Pollution Control Board (CPCB) of India listed Nashik among the 94 cities across the country that has failed to meet the prescribed standards of pollution.

The CPCB had analysed the data of these cities from 2011 to 2015. The state topped the chart with 17 polluted cities that include Nashik and Jalgaon. Nashik Municipal Corporation (NMC) officials admitted that during the period of survey by the CBCP there was improper waste management and burning of waste both by sanitation workers and citizens, but they are under control now. Moreover, majority in the city use personal transport due to poor public transport system.

Talking to TOI, director of NEERI Rakesh Kumar said, "The project will be implemented through an agency and they will be using our technology."

He added that the survey is on and after they get the report, they will take a call on how the project should be implemented.

Explaining about the devices, he said, "The device will take care of particulate matter, volatile organic compounds etc. The survey is being carried out in areas where there is lot of traffic and at all traffic junctions. After the survey is completed we will take a call where and how many such devices will have to be installed"

The device sucks in dust particles, toxic gases within the radius of 1,000 sqft area and blows out purified air. The entire pollution-related data will be available with NEERI.

Air quality monitoring in Bengaluru completes 35 years

Date:9-August-2018 Source : newindianexpress.com

A systematic assessment of pollutant levels in the air through air quality monitoring stations in and around Bengaluru has completed 35 years (File | EPS)

The worsening air pollution at Anand Rao Circle following increase in high-rise buildings, prompted the board to install the first air quality monitoring station there in 1983

BENGALURU: A systematic assessment of pollutant levels in the air through air quality monitoring stations in and around Bengaluru by the Karnataka State Pollution Control Board (KSPCB) has completed 35 years.

The worsening air pollution at Anand Rao Circle following increase in high-rise buildings, prompted the board to install the first air quality monitoring station there in 1983. However, it was relocated to the city railway station during the construction of a flyover at Anand Rao Circle.

KSPCB chairman Lakshman said the air quality monitoring programme with two stations in 1983 gradually expanded to the present 14 manual stations, seven continuous ambient air quality monitoring stations (CAAQMS) and six vehicular emission monitoring vehicles. The board hopes to cover the entire city with 42 CAAQMS, which was announced in the state budget.

Lakshman said due to the IT boom, the vehicular density in the city witnessed a whopping 242 per cent growth (about 76 lakh vehicles) within two decades. “Fuel adulteration issues (mixing of diesel with low-cost solvents like turpentine and Benzene) and diesel generator sets (7 per cent of total emission load) are the main reasons behind the high air pollution in Bengaluru,’’ KSPCB officials told Express.

Lakshman also blamed the transport sector for the high concentration of PM10 (fine particles) and poisonous gases like NOX (Nitric oxide) in the air, which aggravates asthama, reduced lung function and acid rain. The data had revealed high concentration in the mornings and evenings.

Based on the CAAQMS railway station data, concentration of respirable suspended particulate matter (RSPM), which contributes to chronic cough, was found to be higher than the national limit. “The data generated has helped the board to plan many interventions to reduce air

pollution and ensure that Bengaluru does not go the New Delhi way,'' KSPCB Member Secretary G V Ranga Rao had informed delegates at a C40 air quality network convention recently.

SOON, POLLUTION DATA ON APP

The monitoring stations equipped with analysers measure about 15 pollutants and seven meteorological parameters. The data generated every hour are transferred to the digital data display board for the public and uploaded online for analysis and reporting,'' KSPCB chairman Lakshman said, and added that the data will be made available in a mobile app soon.

Improving air quality could prevent thousands of deaths in India

Date:10-August-2018 Source : phys.org

A new study shows more stringent emission controls are key to India's future health. More than 6.1 million people worldwide die each year as a result of exposure to air pollution, which increases the risk of cardiovascular disease, lung disease, and cancer. In India, which contains many of the world's most polluted cities, the annual death toll from air pollution exceeds 1.6 million.

Now, research led by scientists from the School of Earth and Environment shows how implementing stricter emissions standards in India could save hundreds of thousands of lives each year.

One of the most dangerous components of air pollution is fine particulate matter (PM2.5), nanoscopic particles and droplets produced by burning fuels, which travel deep into the lungs and bloodstream and damage the lungs and heart.

On average, Indian citizens are exposed to PM2.5 concentrations between 15 and 32 times higher than the air quality guidelines set forth by the World Health Organization, and scientists project that India's PM2.5 levels will double by 2050 relative to 2015.

In New Delhi, one of the world's most polluted megacities, PM2.5 concentrations have reached more than 1,200 micrograms per cubic metre, 48 times the guideline established by the World Health Organization.

The Indian government has policies in place to reduce the rapid rise of pollution, such as curbing emissions from buses and trucks and expanding the household use of liquified petroleum gas to replace solid fuels.

The study, published in GeoHealth, compared India's existing and planned policies to a more aggressive plan to reduce emissions. The team used a high-resolution computer model to estimate the pollution levels people breathe at ground level throughout India and test how different emissions policies would affect their exposure and health.

The team found that under India's existing and planned policies, dubbed the New Policy Scenario, the rate of growth in Indian citizens' exposure to pollution decreased by 9 percent.

Compared to the present day, that plan of action will avert about 61,000 premature deaths in 2050. A more aggressive plan, called the Clean Air Scenario, would decrease the rate of growth in air pollution by about 65 percent and avert around 610,000 deaths.

Study lead author Luke Conibear, postgraduate researcher from the Institute for Climate and Atmospheric Science, and the EPSRC Centre for Doctoral Training in Bioenergy, said: "India's 'business-as-usual' economic and industrial growth is predicted to increase emissions and further worsen ambient PM2.5 concentrations. Our results show that small emission changes bring small improvements to air quality and human health.

"Throughout the country, the Clean Air Scenario stands out as the most effective way to reduce ambient concentrations and alleviate some of the burden from the subsequent diseases."

Study co-author Dominick Spracklen, Professor of Biosphere-Atmosphere Interactions at Leeds, said: "Our study shows that particulate pollution across India is currently so bad that really stringent emission controls are needed to bring down air pollution to levels that will result in substantial health benefits."

Even with zero emissions growth, India's rapidly growing and ageing population means that the rates of disease and premature mortality caused by air pollution will increase by 75 percent from 2015 to 2050. Despite that grim statistic, the team argues, hundreds of thousands of deaths could be avoided through tighter emissions standards—like cleaner iron and steel manufacturing—and universal access to clean household energy.

Air Quality To Worsen In India By 2050: These Foods May Help Fight Effects Of Air Pollution

Date:11-August-2018 Source : ndtv.com

A new researchled by scientists from the School of Earth and Environment at the University of Leeds has shown that implementing stricter emission standards in India can save thousands of lives.

Pollution has always been a big issue in India. Some of the most polluted cities in the world are in India, including the capital city of Delhi. Things get especially bad during winters, when a toxic fog starts taking over large parts of the colder states of the country. Breathing ailments, lung ailments and a number of other health complications result from the pollution that chokes Indians during winters every year. An estimate puts the number of deaths caused every year in India due to air pollution at 1.6 million. A new research led by scientists from the School of Earth and Environment at the University of Leeds has shown that implementing stricter emission standards in India can save thousands of lives.

The study also suggested that one of the most insidious air pollutants which wreak the most havoc on the health of Indians- the Particulate Matter PM2.5- could double in concentration by 2050, creating a dire situation. As a part of the Leeds study, scientists compared India's existing and planned policies to a more aggressive plan to curtail pollutants and exposure to them, saying that if the latter were implemented, it would bring down Indians' rate of exposure to pollution by nine per cent. The study warned that India's economic and industrial growth is likely to increase ambient concentrations of PM2.5. Although these emission control measure will go a long way in ensuring better health for Indians across the country, there are some measures that we can take on an individual level to fight diseases related to air pollution.

These include adding certain foods to our diets, which increase our capacity to fight air pollutants. Here are some such foods that you should add to your diet, ahead of the winters:

1. Vitamin C-Rich Foods: Cirtusy fruits like oranges, lemons are rich in vitamin C, which is crucial to boost immunity. Vitamin C is also an antioxidant, which scavenges free radicals and can be

easily added to your daily meals in the form of a little lemon juice squeezed over salads and in drinks. Other than this, guavas and amlas or Indian gooseberries are excellent sources of vitamin C.

2. Vitamin E-Rich Foods: Foods that are abundant in vitamin E help create the all-important first line of defence against damage to the human tissue. Plant-based cooking oils like canola, sunflower and olive oil are excellent sources of vitamin E, as are sunflower seeds and almonds.

3. Omega 3-Rich Foods: Omega 3 fatty acids are important for offsetting the effects of air pollution on our heart health and lipid profile. Foods like flaxseeds, fatty fish, kidney beans or rajma, bajra grain flour, methi or fenugreek, green leafy veggies are all rich in omega-3 fatty acids.

PM1 levels in Delhi air shoot up by five times on polluted days

Date:13-August-2018 Source : hindustantimes.com

The level of Particulate Matter measuring less than one micron (PM1) — ultrafine particles that can reach your bloodstream when inhaled — is shooting up at least five times than what it usually remains on a day when air quality in Delhi remains satisfactory or moderate.

India's most advanced air quality monitoring station, which was installed at the Town Hall in Old Delhi's Chandni Chowk area in July this year, has thrown up this data. The station was set up by SAFAR, which comes under the Union ministry of earth sciences and is India's official pollution forecasting system.

"The level of PM1 was recorded to be the lowest on July 27. It was just 10.02ug/m3. But on July 2, the level of PM1 had shot up to be 65.43ug/m3. Unlike other particulate matters, such as PM2.5 and PM10, the world is yet to come up with safe limits or permissible standards for PM1. Hence, it can't be said how much above safe limits the level of PM1 had shot up," said Gufran Beig, who heads SAFAR.

But to simplify things, experts said that the level of PM1 on July 27 (10ug/m3) could be considered as 'safe' because Delhi's Air Quality Index was very close to 'Good' on that day. The AQI on July 27 was 50, which was in the 'satisfactory' range and just five notches above 'Good'

quality air. The levels of PM2.5 and PM10 were both within their permissible limits of 60ug/m3 and 100ug/m3 on that day. On July 2, however, when PM1 was high, the AQI was 153 and levels of PM2.5 and PM10 were also above their safe standards.

PM1 is considered to be more dangerous than PM2.5 and PM10 because of its smaller size. While PM2.5 is just around 30 times finer than the thickness of a human hair, PM1 is 70 times finer than the human hair. While PM2.5 can reach your lungs, PM1 can enter your bloodstream. The primary sources of PM1 are vehicular and industrial emissions.

“We are gradually moving from polluted fuels to refined fuels like BS-VI. The finer the fuel, the smaller and finer would be the pollutants emitted. And the finer the particles emitted the more toxic would they be. Their penetration power also increases with decreasing size of the pollutants. This makes PM1 one of the most dangerous pollutants,” said D Saha, former head of the CPCB’s air quality laboratory.

But till date there are not enough studies in the world on PM1. Neither the World Health Organisation nor the United States Environment Protection Agency or India’s Central Pollution Control Board has been able to set its standards.

“Its effect on health and its toxicity are still being studied by scientists across the world. Of late, US space agency NASA is planning to study the toxicity of particulate matter with the help of satellites. Only when scientists get enough details on its toxicity and evidence on its effect on human health, that we could hope to get some standards,” said Sagnik Dey, associate professor at Centre for Atmospheric Sciences in IIT Delhi.

Experts said that this calls for stricter emission standards as any laxity in emission standards would lead to more addition of these dangerous particles in the air.

“Even though there are no standards for PM1 but usually such ultrafine particles are products of combustion. We would need much stringent emission standards to tackle these pollutants at their source,” said Anumita Roychowdhury, head of Centre for Science and Environment’s Clean Air campaign.

This becomes all the more important because a recent study said that close to 15,000 people died prematurely in Delhi in 2016 from illnesses linked to fine particulate matter pollution. The study done by researchers from India, Singapore and Thailand, assessed pollution-related deaths in 13 megacities in Asia.

City of London Corporation tackles air pollution with London's first environmentally friendly parking tariff

Date:14-August-2018 Source : news.cityoflondon.gov.uk

The City of London Corporation has announced the introduction of new charges for on-street parking in the Square Mile starting Monday 20 August 2018.

The new parking charges will use a ground-breaking parking solution, RingGo's Emissions Based Parking product, which will target high polluting transport with higher charges while rewarding drivers of low emission vehicles with lower tariffs.

The initiative aims to incentivise motorists to make more environmentally friendly choices and improve air quality across the Square Mile by reducing nitrogen oxides and harmful particulates.

RingGo's Emissions Based Parking product will automatically assess the type of vehicle being parked and charge tariffs based on the level of pollution emitted by the vehicle. Although the product is being used elsewhere in London, the City Corporation is the first to offer a range of charges dependent on the vehicle's fuel type.

The following tariff bands will operate on weekdays from 8am to 7pm when air quality is at its worst:

Type of vehicle	Cost per 15 mins	Cost per hour
Low emission (e.g. electric, hybrid)	£1	£4.00
Petrol vehicles registered from 2005 onwards	£1.30	£5.20
Diesel vehicles registered from 2015 onwards	£1.30	£5.20
Other	£1.70	£6.80

The RingGo app is a cashless parking solution. Motorists still choosing to use cash at a machine, rather than paying with RingGo, will pay the highest rate.

Chris Hayward, Planning and Transportation Committee Chairman at the City of London Corporation, comments: "We have seen other areas of London penalise worst offenders such as diesel cars. We are taking this one step further by not only applying punitive measures for these worst offenders but by supporting and encouraging motorists to consider other modes of transport and switch to cleaner vehicles in the future.

“98% of all parking in the City is paid for by mobile phone so RingGo’s Emissions Based Parking is a great way of reminding motorists of the impact of their journey each and every time they travel.

“The Square Mile is one of London’s busiest areas, therefore, it is only right that the City of London Corporation continues to prioritise providing a safe and healthy environment for its workers, visitors and residents.”

Peter O’Driscoll, UK Country Manager for RingGo, agrees, saying: “The Government is promoting Clean Air Zones as the best way to influence motorists’ behaviour. But these take several years to set up, not to mention requiring considerable expenditure. With no physical infrastructure needed, RingGo’s Emissions Based Parking provides similar outcomes at a fraction of the cost and can be set up in a matter of weeks.

“It’s the ultimate quick and easy way to encourage more responsible motoring.”

The introduction of environmentally friendly tariffs for on-street parking charges is one of the many measures being introduced by the City Corporation to improve air quality in the Square Mile.

City residents in the Barbican who use an electric vehicle now have access to 30 permanent charging points across the iconic Grade II-listed estate.

The Lower Emission Neighbourhood project works with businesses through its CityAir Programme whilst leading a London-wide crackdown on drivers who leave their engines idling. The City Corporation’s CityAir app provides over 27,000 Londoners with low pollution travel routes across the capital, with advice and alerts when air pollution is high.

This year, the City Corporation launched a clean air cargo bike delivery scheme which helps the Square Mile’s businesses tackle toxic air pollution by shifting deliveries from diesel and petrol vans to cargo bicycles.

And in 2016 it agreed a deal with Addison Lee - London’s biggest private hire taxi firm - to automatically switch hybrid taxis to ‘electric mode’ in key areas of the Square Mile. The City Corporation has banned the purchase of diesel vehicles from its own fleet of 300 vehicles, where there is a clean market alternative.

It has also introduced a City-wide 20mph zone, and its new procurement rules have brought in tight restrictions on harmful emissions from bulldozers and generators.

Basinwide Air Pollution Control Council to meet in Santa Barbara

Date:16-August-2018 Source : syvnews.com

South Central Coast Basinwide Air Pollution Control Council will discuss the 2018 Clean Air Grant programs of the Santa Barbara and San Luis Obispo counties' air pollution control districts when it meets Wednesday, Aug. 22, in Santa Barbara.

Council members are scheduled to meet at 10 a.m. in the Oak Room of the Santa Barbara County Air Pollution Control District office at 260 N. San Antonio Road, Suite A. Other items on the agenda include Ventura County's implementation of Assembly Bill 167 and Ventura County's nonattainment classification for the 2015 Ozone National Ambient Air Quality Standards.

The South Central Coast Basinwide Air Pollution Control Council promotes coordination among the Santa Barbara, San Luis Obispo and Ventura counties' air pollution control district programs.It consists of a designated elected official from the board of each air pollution control district who meet quarterly.Current members are Chairwoman Barbara Harmon, a member of the Arroyo Grande City Council; Vice Chairman Mike Morgan, a member of the Camarillo City Council; and Al Clark, a member of the Carpinteria City Council.

The council has a technical advisory committee that consists of the air pollution control officer from each district.

Smoke from Canadian fires prompts air quality alert in Minnesota

Date:17-August-2018 Source : startribune.com

The Minneapolis skyline was dulled by Canadian grass fires in this July 6 photo. Another round is expected this weekend.

Smoke drifting in from Canadian wildfires prompted an air quality alert Friday from the Minnesota Pollution Control Agency. The MPCA issued an air quality alert until noon Sunday for all of Minnesota but the southwestern portion. The affected area includes the Twin Cities along with Alexandria, Brainerd, Bemidji, Duluth, Mankato, Rochester and Albert Lea. The tribal nations of Mille Lacs, Fond

du Lac, Grand Portage, Leech Lake and Red Lake also are covered.

With northerly winds pushing the plume of smoke south and east, the agency said the Twin Cities is experiencing smoky conditions and poor air quality.

Weather observations show visibility dropping to 2 to 5 miles in affected areas, the MPCA said. Air pollution monitors showed a rapid increase in fine particles.

Air pollution can aggravate heart and cardiovascular disease as well as lung diseases such as asthma and COPD.

People with these conditions may experience symptoms including chest pain, shortness of breath, wheezing, coughing or fatigue, the agency warned.

The unhealthy air may also affect children and older adults and people engaged in extended or heavy outdoor physical activity, the MPCA said.

The alert encouraged people to carpool or take public transportation when possible, refrain from using gasoline-powered lawn and garden equipment and avoid backyard fires.

Indonesia denies reports on Jakarta's air pollution during Asian Games

Date:19-August-2018 Source : thejakartapost.com

The Meteorology, Climatology and Geophysics Agency (BMKG) has denied reports in foreign media outlets highlighting concerns over Jakarta's bad air quality during the 2018 Asian Games.

Foreign outlet Aljazeera raised concerns about Jakarta's air quality in an article published on Aug. 17 saying that the air pollution index showed an "unhealthy" level of 154 micrograms of harmful particles per cubic meter in Jakarta just three days before the start of the Games. The bad air quality was feared to impact athletes' performance given that they take in about 20 times more air than a person at rest.

Aljazeera is one of the many foreign outlets that raised the concern. Other outlets such as Channel News Asia, Sydney Morning Herald and Iran's Financial Tribune have also published articles on the issue.

However, BMKG head Dwikorita Karnawati denied the allegations based on research in recent years showing that Indonesia's overall air quality has fared better in the past few years.

"The World Health Organization's latest research on the most polluted cities in the world excluded Jakarta in its top 10 list," she said on Saturday.

This year's Climate Change Performance Index report put Indonesia as the world's 14th biggest greenhouse gas emitter. The greenhouse gas emission measurement in the BMKG's global atmosphere watch in Bukit Koto Tabang, West Sumatra also showed that Indonesia's CO2 increase rate sat at 1.94 ppm since 2004, lower than the global increase rate of 2.08 ppm.

"We [Indonesia] have often been accused of being the biggest greenhouse gas emitter, as well as a country that has a severe level of air pollution, but research and on-site observation shows that our air quality is not as bad as people think," Dwikorita added.

A review of the daily air quality index (AQI), which is observed by Greenpeace Indonesia, revealed that the test run of the car-restriction policy in Jakarta, beginning July 2, did not reduce the concentration of fine particulate matter (PM 2.5).

The concentration of PM 2.5 in Central Jakarta and South Jakarta on weekdays was above 50 micrograms per cubic meter (μg/m3), which is considered a moderate level.

Use of Hologram Stickers On Vehicles In Delhi To Reduce Air Pollution

Date:20-August-2018 Source : duexpress.in

On Monday, Supreme Court accepted the Proposal put forward by the Centre regarding the use of colour based stickers on the vehicles in order to identify the vehicles running on polluting fu

THE HOLOGRAM STICKERS WHICH WILL BE USED HAVE A BASIC COLOUR SCHEME , BLUE COLOUR FOR PETROL AND CNG POWERED VEHICLES AND ORANGE COLOUR STICKER FOR DIESEL POWERED VEHICLE IN DELHI NCR. els.

The Environment Pollution Control Authority (EPCA) also added that this system will be more effective than the Odd Even vehicle rotation system and that it will help restrict the use of vehicles on days when the pollution level is severe. They also added that this method is already in practise in Paris and has proven to be quite effective.

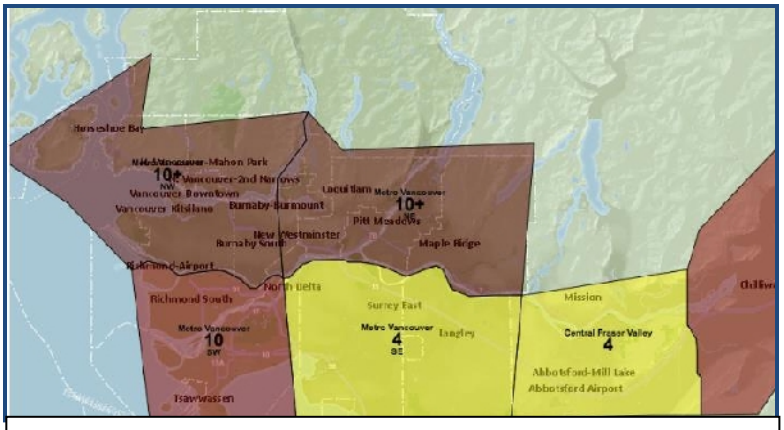
The EPCA had also told the Court that another effective measure against fighting Air Pollution would be the use of Hydrogen and CNG mixed fuel, as it was cleaner as compared to CNG, they also added that the Indian Oil Corporation has the conversion machine for this as well.

The Ministry of Road Transport and Highway (MoRTH) told the Bench comprising of Justices S Abdul Nazeer and Deepak Gupta to implement the use of the coloured stickers on vehicles in Delhi NCR latest by 30th¬†September 2018.

The Supreme Court also added that the usage of Green colour Plates for Electric and Hybrid Vehicles should also be considered but the Ministry is yet to take a decision regarding this issue.

Metro Vancouver Air Quality Moves To Highest Risk, Levels Worse Than Delhi

Date:21-August-2018 Source : hilltopmonitor.com



AQHI as provided by Metro Vancouver's AirMap

The National Weather Service in Seattle has issued air quality alerts for much of Washington state.

Smoke may not affect all areas at all times.

Only far northwestern B.C. remains clear of the air quality statement in effect for the rest of the province. Some improvement is expected by Wednesday. As seen on the images below, the index for Vancouver has unhealthy levels in nearly all areas.

Massive clouds of choking smoke from the wildfires has prompted air quality advisories for much of Western Canada and also forced the cancellations of two triathlons in B.C.'s Okanagan region on Sunday.

Multiple area high school sports have reported either cancelling or moving practices indoors.

It's a rare occurrence that also happened past year, raising concerns for many locals that it may become normal during wildfire season. Taiwan loses another diplomatic ally as El Salvador switches to Beijing.The administration of President Donald Trump has been boosting relations with Taiwan amid a brewing trade war with Beijing . Tsai said this was a clear sign of China's continuing pressure, and had moved beyond being just a cross-strait issue.

The Federal Aviation Administration said airplanes bound for the Sea-Tac International Airport, Seattle's main airport, may be delayed because of low visibility. Another day of very low air quality is affecting all of Big Sky Country.

Henderson suggested using portable air cleaners indoors to keep the air as clean as possible during smoky conditions.

More smoky, hazy air is expected to blanket much of Metro Vancouver and the Lower Mainland today as almost 600 wildfires continue to rage across British Columbia.

For current air quality conditions, health precautions, and additional information on wildland fire smoke, visit the Washington Smoke Blog at http://wasmoke.blogspot.com.

Environment Canada warns that the poor air can cause coughing, headaches, shortness of breath and throat irritation, specifically in seniors, children and anyone with cardiovascular or lung diseases.

Air pollution leads to cardiovascular diseases

Date:22-August-2018 Source : sciencedaily.com

Air pollution, and fine dust in particular, is responsible for more than four million deaths each year. Almost 60 per cent of deaths occur as a result of cardiovascular diseases. Scientists around Professor Thomas Münzel, Director of Cardiology I at the Department of Cardiology at the Medical Center of Johannes Gutenberg University Mainz (JGU), reviewed the mechanisms responsible for vascular damage from air pollution together with scientists from the UK and the USA. Their findings have been published in the latest issue of the European Heart Journal.

The large percentage of deaths from cardiovascular disease has prompted an international group of experts from Germany, England, and the USA to analyze the negative effects of air pollution on vascular function in a review article. Key research questions focused on components of air pollution (particulate matter, ozone, nitrogen dioxide, carbon monoxide, and sulfur dioxide) that are particularly damaging to the cardiovascular system and mechanisms that damage the vessels.

"This report in the latest issue of the European Heart Journal is another important contribution from our Working Group on Environment and Cardiovascular Disease. In summary, it can be said that in relation to the vascular damaging effect of air pollution, particulate matter plays a prominent role," commented Professor Thomas Münzel. "We are especially worried about ultrafine dust. These particles have the size of a virus. When ultrafine matter is inhaled, it immediately enters the bloodstream through the lungs, is taken up by the vessels, and causes local inflammation. Ultimately, this causes more atherosclerosis (vascular calcification) and thus

leads to more cardiovascular diseases such as myocardial infarction, acute myocardial infarction, heart failure, and cardiac arrhythmias. Of particular interest is the fact that with regard to the much-discussed diesel exhaust emissions, particulate matter and not nitrogen dioxide (NO2), both of which are produced by burning diesel fuel, have a negative effect on vascular function," Münzel continued.

Other participants in the expert group include the particulate matter researcher Professor Sanjay Rajagopalan of the UH Cleveland Medical Center, the vascular researcher and cardiologist Professor John Deanfield of the Institute of Cardiovascular Science at University College London, Professor Andreas Daiber, Head of Molecular Cardiology at the Mainz University Medical Center, and Professor Jos Lelieveld from the Max Planck Institute for Chemistry (MPIC) in Mainz.

"The fine dust particles are chemically formed mainly in the atmosphere from emissions from traffic, industry, and agriculture. In order to achieve low, harmless concentrations, emissions from all these sources need to be reduced," commented Professor Jos Lelieveld.

"In the future, we will work intensively with the Max Planck Institute for Chemistry to investigate the causes of cardiovascular disease caused by air pollution, especially in combination with (flight) noise," added Professor Thomas Münzel.

Nagpur yet to submit plan to curb air pollution

Date:23-August-2018 Source : indiatimes.com

Nagpur: Nagpur is one of the 31 polluted cities in the country which have not come up with an action plan to curb air pollution. In an unrelated action, the environment ministry has roped in expert agencies to use advanced technologies for better air quality management with a major focus on establishing pollution forecast and warning systems.

Under the National Clean Air Programme (NCAP), the Central Pollution Control Body (CPCB) which is a statutory body of the Ministry of Environment, Forest and Climate Change (MoEFCC), had identified over 100 polluted cities where the prescribed standards for ambient air quality are violated. Among them, the highest number of cities which have still not submitted a feasible action plan are located in Maharashtra.

While the board is hopeful that the cities will be presenting their plans soon, it is now looking at more scientific options to combat air pollution. Few months back, the board and ministry’s officials held a meeting with expert institutions to discuss application of advanced technologies.

The decision of constituting an expert group for providing recommendations on early warning system was taken during the meeting. “Controlling air pollution is an integrated subject and we

are looking at better options involving adoption of technology and long-term sustainability," said Dipankar Saha, additional director, head of Air Laboratory and Air Quality at CPCB.

The focus will be on forecasting episodic situations, like the recent dust storms that hit Delhi, said Rakesh Kumar, director of National Environmental Engineering Research Institute (Neeri). "All the expert institutions are collaborating to improve forecasting ability so that citizens can be warned well in advance about deteriorating air quality," said Kumar. Neeri is already monitoring air quality at ten locations in Delhi using sensors.

The other institutions include Satellite Application Centre of the Indian Space Research Organization (ISRO), Department of Science and Technology (DST), National Physical Laboratory (NPL), Indian Institute of Technology (IIT), Delhi, Indian Meteorological Department, IIT-Mumbai, Indian Institute of Tropical Meteorology and Bureau of Indian Standards.

The ministry aims to formulate a better framework for air quality manegment in the coming months. "DST will come up with technology interventions which can be used before onset of winters. They should provide the assessments results in two weeks so that pilots can be rolled out," stated the ministry's press release.

It added that the NPL will be the certification agency for air quality measurement instruments. "Certification of PM2.5 and PM10 volume samplers will start from September this year," the release stated.

NGT directs forming committee to reduce air pollution in Kaushambi

Date:24-August-2018 Source : hindustantimes.com

The apex body of Kaushambi residents' welfare associations, KARWA, filed a contempt petition against various Ghaziabad agencies in July 2016 for failing to implement measures to reduce pollution in Kaushambi.

The National Green Tribunal (NGT) has directed constitution of a committee to implement recommendations for reducing air pollution in Kaushambi. The committee will comprise the divisional commissioner of Meerut, representatives of the Central Pollution Control Board (CBCB)and the Ghaziabad Municipal Corporation.

The tribunal gave these directions

while disposing of a contempt petition filed by Kausmabi Apartments Residents' Welfare Association (Karwa), the apex body of Kaushambi residents' welfare associations. The Karwa moved NGT in September 2015 and later filed a contempt petition against the Ghaziabad agencies in July 2016 as several measures were not implemented.

"The Ghaziabad Development Authority erected the height barriers and the roadways concreted the Kaushmabi bus stand at a cost of Rs 5.5 crore. However, the corporation and the police were lax in their duties and we moved a contempt petition. The tribunal also ordered the formation of a committee that later gave several recommendations on our issue," VK Mittal, president of Karwa, said.

The tribunal had earlier sought a report from a team of representatives from the CPCB, UP Pollution Control Board and the Delhi Pollution Control Committee. The team was directed to inspect the site and take air quality samples for identification of pollution sources.

Accordingly, a report was submitted before the tribunal to the effect that the pollution components — PM10 and PM2.5 — were in excess of the prescribed limit. The authorities were directed to adopt short-term and long-term measures to tackle the situation.

However, only a few measures were taken, Karwa said in its contempt petition. The tribunal sought a compliance report and it was filed on March 22, 2017.

With a view to implement the recommendations, the NGT has now directed constitution of a committee to be headed by the divisional commissioner, Meerut.

SUGGESTIONS

Long-term and short term measures to be taken to control/minimise the pollutionModernise Kaushambi bus depot and Anand Vihar ISBT and ensure smooth flow of traffic in the areaShift the exit gate for buses at Kaushambi bus depot to the left side of the passenger entry gateRoads adjacent to Wave Cinema needs to be pavedTwo bin system for solid waste management needs to be implemented."The divisional commissioner may convene a meeting with the representatives within one month. The said committee may thereafter consider the matter and issue appropriate directions to the authorities concerned for implementation of the recommendations," the tribunal said in its order on August 20.

Kashambi high-rises house an estimated 10,000 persons. The area is near the Anand Vihar ISBT, Kaushambi bus stand, Site 4 industrial area and Ghazipur landfill site.

Municipal commissioner CP Singh said, "We will check the directions given by the tribunal and comply with them."

Air pollution blankets Hong Kong, with nitrogen dioxide and ozone mass causing serious health risk

Date:25-August-2018 Source : scmp.com

The Victoria Harbour skyline marred by haze. Photo: Edward Wong

A blanket of haze hung over Hong Kong for most of Saturday, with 14 of 16 air quality monitoring stations reaching the highest level of 10+ on the pollution index at 5pm, indicating a "serious" health risk. The stations in Tai Po and Tung Chung recorded a 10, meaning a "very high" health risk. The situation improved slightly in the evening, with 12 stations having an index of 8 to 9, also a "very high" health risk and the remaining stations showing readings of 5 to 7. The Environmental Protection Department (EPD), in a midday warning on Saturday, said pollution levels in the air would remain "higher than normal" until stronger winds next week bring relief.

"Higher than normal levels of nitrogen dioxide and ozone have been recorded since this morning," the department said.

"Hong Kong is being affected by an air mass with higher background pollutant concentrations. In addition, the light wind hinders effective dispersion of air pollutants."

The weather has been hot with light winds and sunny periods recently but showers are expected in the coming days. Winds are also likely to strengthen.

The wind force will be at level 2 to 3 on Sunday, meaning "light" to "moderate" but will be at level 4 to 5 next Wednesday and Thursday, meaning "moderate" to "fresh".

The Observatory said the city would likely have cloudy weather, rain and squally thunderstorms in the middle of next week.

The Post reported on Tuesday that local ozone pollution had surged 20 per cent since 2013, reaching a two-decade high while concentrations of major pollutants had dropped.

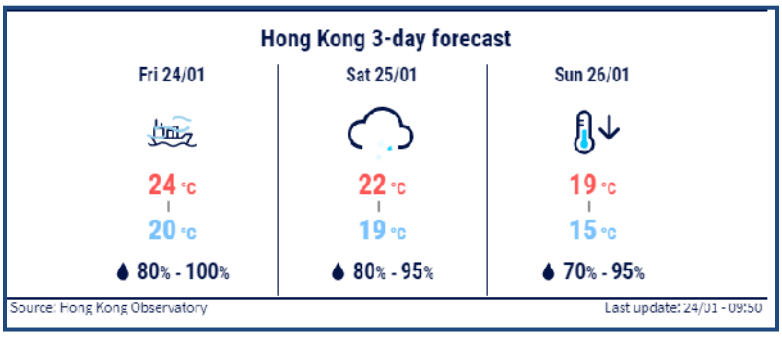
Ozone is formed when nitrogen oxides and volatile organic compounds – emitted from vehicles, industrial activities and power plants – mix in the air under sunlight. It is closely linked to regional pollution. Sources of volatile organic compounds can come from anywhere within the Pearl River Delta, including Hong Kong.

Studies have linked prolonged exposure to ozone with damaged lung tissue, particularly among the elderly and children. Pulmonary functions can also be reduced and airways sensitised to other irritants and allergens.

Family doctor Dr Cheng Chi-man said poor air quality would pose greater risks to people with existing respiratory or heart diseases.

For example, air pollution could trigger breathing problems for sufferers of asthma or chronic obstructive pulmonary disease.

“Air pollutants could irritate the windpipe ... leading to difficulty in breathing,” Cheng explained.



He said people with chronic heart disease were more likely to develop a heart attack on days with poor air quality. Cheng advised people, especially those with the underlying diseases, to reduce their time spent outdoors.

“If they have to go out, avoid going to areas with more serious air pollution. Do not engage in intense physical activities.”

The department also advised that once air pollution reaches serious levels, employers of outdoor workers should assess the risk of such labour and take appropriate preventive measures.

New study shows that air pollution is shaving months off human life expectancy

Date:27-August-2018 Source : newcastleherald.com

At first glance a new international study linking poor air quality to reduced human longevity is hardly new.

Choked up: A farm house south of Singleton with mine works in the background and dust in the air.

After all, the scientific community proved a long time ago that there is no so-called safe level of air pollution when it comes to human health. What the new study, published in the journal Environmental Science & Technology Letters highlights is the potential health effects of inhaling fine air particle pollution, or particles less than 2.5 microns in diameter.

These pollutants are generally derived from coal-fired power stations, dust storms and vehicle emissions, all of which are relevant to Hunter residents.

Despite persistent concerns from Upper Hunter residents about the impact of mining and power generation on their quality of life, the state government continues to argue the region's air quality is relatively good.

Two NSW Environmental Protection Authority (EPA) reports released in 2016 found air pollution in the Hunter was classified as "good" by world standards.

Significantly, the studies noted that fine particle pollution levels would "occasionally spike" after industrial activities or seasonal weather patterns.

One such incident occurred in January this year when hot, windy conditions resulted in numerous breaches of national 24-hour standards over several days.

Doctors for the Environment argued at a Planning Assessment Commission hearing that these types of conditions were responsible for a 28.6 per cent increase in Singleton Hospital emergency department admissions between July-September, 2016 and July-September, 2017.

Governments and regulators can not have it both ways – they can not continue to tell communities that their air quality is good at the same time as a significant number of people are suffering respiratory illnesses linked to poor air quality.

Like other forms of pollution, air pollution in places such as the Hunter can be seen in the broader context of the economic benefits that flow from the activities that produce it.

But as this new study reminds us, the cost to human health in terms of reduced lifespans should not be diminished when weighing up the true cost of air pollution.

September 2018

Pleasant day in Delhi, drop in mercury due to rain

Date:2-September-2018 Source : uniindia.com

New Delhi, Sep 2 (UNI) National capital on Sunday witnessed pleasant weather with rain while

mercury dropped and maximum temperature settled at 28 degrees C, six points lesser than

season's average here. However, rain caused water logging at various parts in the capital which affected traffic and there were reports of fallen trees at some places. The day was generally cloudy through out and more rain is expected towards the night.

According to the weatherman, relative humidity on Sunday oscillated between 95 and 86 per

cent. Air quality witnesses slight improvement towards evening and was satisfactory with an index value of 96, compared to that of moderate during morning, according to the Central Pollution Control Board.

For Monday, the weatherman has forecast a generally cloudy sky with moderate rain, while

minimum and maximum temperature is likely to hover around 25 and 29 degrees C respectively

Poles to monitor air quality in New Delhi

Date:3-September-2018 Source : hindustantimes.com

Delhi will get at least 47 new air pollution monitoring sensors by the end of September this year. To be installed on smart poles across New Delhi by the New Delhi Municipal Council (NDMC), these low cost real-time sensors will keep a track of the pollution levels in the area. So far, New Delhi has 21 such sensors – installed on the smart poles over the last two months.

According to a NDMC official, these air quality sensors will check PM10, PM2.5, NO2, SO2, CO levels, besides the temperature and humidity and send the entire the information live to the council app – NDMC311.

Speaking of the initiative, NDMC chairperson Naresh Kumar said, “The general public will be able to assess the information through the app and can, accordingly, avoid polluted stretches. Of the total of 68, 21 smart poles with sensors have already been installed near Khan Market, RML Hospital, Sardar Patel Chowk, Kasturba Gandhi Marg and Connaught Place. The other smart poles, wherein the sensors will be set up, will be installed near AIIMS, Chanakyapuri and Moti Bagh soon. We are expecting to complete the work by next month.”

New Delhi has 21 such sensors on smart poles, installed over the last two months.

Maintaining that the air quality sensor that are being installed have been approved and set up as per the Union ministry of environment and forests (MoEF) standards, Kumar said, “Already, 21 sensors have been made functional. These sensors are providing live updates. Since the city is reeling under massive levels of air pollution, this facility will help in monitoring so that proper action can be taken to curb pollution.”

The project, taken up under the Centre’s smart city mission, aims to simplify access to public services for the residents of the city. Besides monitoring pollution levels, these smart poles also have provisions for LEDs, Wi-Fi access points and CCTV cameras with a recording capacity of at least 30 days.

An NDMC official said, “These poles are at least 9 metre to 12 metre in height and are made of stainless steel. The Wi-Fi facility is already available at the 13 poles installed in the Inner Circle of Connaught Place.”

Experts have said that such low cost real-time sensors are key to curb air pollution in the future as, at present, almost 60 per cent of the country’s urban areas and the entire rural belt are off the radar of the monitoring network.

Addressing a workshop on low cost sensors earlier this week, Arun Kumar Mehta, additional secretary (MoEF), had said, “We need data, which are workable even though it may not be 100% accurate. Low cost real-time sensors can achieve this. We need to expand our monitoring network to check pollution levels in smaller towns and rural areas. This can’t be done only with sensors that can give accurate data but are very expensive.”

However, D Saha, former head of the air quality laboratory at the Central Pollution Control Board (CPCB) said these sensors are not accurate and give indicative values. “Though they cost less in comparison to conventional air quality monitoring stations, they give indicative values. The sensors inside the poles cost about Rs 2 lakh while those at the conventional monitoring stations cost Rs 70 lakh. Their lifespan is just 12 months unlike conventional monitoring stations, which work fine for 3-10 years,” he said.

Air pollution can affect your brain

Date:4-September-2018 Source : deccanherald.com

Air pollution is one of the most common causes of health issues as our bodies are exposed to the outside environment for more than 40% of the day. Apart from the lungs and heart, the brain is the third most vulnerable vital organ in the human body. There are magnetic particles present in the air that get deposited in our brain. These particlescan also cause brain disorders such as Alzheimer's, Parkinson's disease and other forms of dementia.

Air pollution can also cause a 'silent' ischemic stroke, which can lead to a blockage in the vessels that supply blood to the brain. Our vulnerability begins in the early periods of our life. It's a time when neural connections are still developing and would go on to equip the brain to function for years to come. With a UNICEF report claiming that there are over 121 million babies worldwide that live in heavily polluted environments, air pollution has proved to be one of the causes of weaker verbal and non-verbal IQ and memory, reduced test scores, and various other neurological behavioural issues.

Here are some measures you can take to steer clear of the effects of pollution:

• Avoid high-trafc areas as these polluted zones are prone to suspended particulate matter and ultrane particulate matter.

• Cover your nose and mouth with protective gear in order to lter the air as it oen consists of SPM, pollens and allergens.

• Parents should ensure that their children do not go outside without covering their respiratory organs.

Air Pollution not a priority? K'taka skips filing action plan to curb air pollution

Date:5-September-2018 Source : thenewsminute.com

In the national capital Delhi, air pollution had even led to the suspension of an international cricket match in December 2017. But if things remain the same, the situation in the country's IT capital Bengaluru, which currently has better air quality than Delhi, may suffer the same fate.

The Karnataka State Pollution Control Board (KSPCB) has not submitted any action plan to the Centre as part of the National Clean Air Programme to tackle air pollution in Bengaluru,

Davangere, Gulbarga and Hubli-Dharwad. The cities were identified by the CPCB for having PM10 levels beyond permissible limit of 60 µg/m3.

The Centre had urged the pollution control board to submit action plans by August. This information was unearthed through an RTI query by Greenpeace India.

Reacting to this, Sunil Dahiya, Senior Campaigner, Greenpeace India said, “Air pollution is not only northern India and Delhi’s problem, it’s time for Bengaluru and many other urban centres in southern India to wake up and get their priorities right. Cities like Bengaluru should not become uninhabitable due to our inaction to protect the environment. There are four identified non-attainment cities in Karnataka, but none of them have submitted their draft action plans to tackle air pollution, as asked by the central government, which raises alarm. The public as well as local governments should act before it’s too late. Our inaction bears a heavy price tag. With every passing day, we are putting our health --and that of our future generations --at risk.”

However, it is not only these four cities which have non-permissible limits of PM10. According to Greenpeace’s Airpocalypse II report, the annual average levels of PM10 were beyond permissible limits in ten cities across Karnataka.

Despite TNM’s efforts, the Mayor and KSPCB Chairman could not be reached for a comment.

Shikha Kumar, Jhatkaa.org, which also runs campaigns on air pollution across the country, echoed Sunil’s thought. She said, “It's sad that both KSPCB and BBMP are not serious about mitigating air pollution. And the evidence is right in front of us. The spiking levels of vehicular emissions in Bengaluru, construction dust and garbage burning. The BBMP had issued a penalty order against burning waste two years ago but there's been no implementation.”

“We only speak of certain cities in the north like Delhi and Varanasi when it comes to severity of air pollution. But the question is, how long till Bengaluru gets there?” she added. According to the World Health Organisation, air pollution is responsible for 7 million premature deaths globally every year. In 2016, there were over 1.1 million early deathsin India due to fine particulate matter and ozone pollution.

Incidentally, in December 2017, Bengaluru Mayor Sampath Raj had signed a treaty in New Delhi to play a mentoring role alongside London Mayor Sadiq Khan in adopting model reforms to curb air pollution. The treaty was signed as part of the C40 Air Quality Network— an international non-profit focused on tackling climate change and driving urban action that reduces greenhouse gas emissions and in the process minimise climate risks while increasing the health, well-being and economic opportunities of urban citizens.

Reducing air pollution biggest reason to buy electric vehicles, not rising fuel cost: Survey

Date:7-September-2018 Source : moneycontrol.com

About 87 percent people believe reducing air pollution is the biggest reason for them to purchase an electric vehicle and not rising fuel prices, according to a new survey that comes amid an increase in government's efforts to promote eco-friendly vehicles.

The survey commissioned by Climate Trends and carried out by Fourth Lion Technologies was conducted online between August 21-24 among 2,178 Indian drivers, vehicle owners and those who plan to purchase, own or drive a vehicle in the next 10 years, the survey said.

"Transportation accounts for about 24 percent of India's carbon emissions and is a major source of air pollution in several cities across the country. According to a recent WHO report, 14 of the top 20 most polluted cities of the world are in India," the study said.

The survey also revealed that most drivers and vehicle owners are personally affected by poor air quality.

Nearly 87 percent of the people surveyed said for them, the rising air pollution is the biggest motivation to buy electric vehicles.

About 76 percent said they – along with their neighbours, friends or family - suffer from poor air quality every day or are starting to show symptoms of being affected by air pollution, it said.

Delhi seemed to be worst affected with 91 percent of its respondents saying they or someone they knew were suffering from poor air quality.

Similarly, high percentages were recorded in Hyderabad (78 percent), Chennai (75 percent), Mumbai (74 percent), Bengaluru (71 percent), and Kolkata (70 percent).

Drivers and vehicle owners said they are 'much more likely' to consider purchasing an electric vehicle after learning that 'electric vehicles reduce air pollution through zero on-road emissions' (72 percent), the survey said.

India is the third largest market for automobiles and the world's largest market when it comes to two-wheelers.

More than four million internal combustion engine vehicles were sold in India in 2017, and 81 percent of those sales (20 million units) came from the two-wheeler segment alone.

The government is promoting electric vehicles to reduce dependence on fossil fuels and protect the environment.

The government has decided to exempt electric vehicles and automobiles run on alternative fuel from permit requirements in a bid to boost such vehicles in the country, Union Minister Nitin Gadkari said.

The government is also promoting eco-friendly vehicles through Faster Adoption and Manufacturing of (Hybrid &) Electric Vehicles (FAME) India scheme, which was launched in 2015.

The second phase of FAME India scheme will be launched by Prime Minister Narendra Modi on September 7.

According to official sources, FAME II offers incentives for mass adoption of EVs with an outlay of Rs 55 billion.

Gadkari also said the ministry has done away with the requirement of local testing for initially bringing EVs into India for sale.

"This will be available for limited number of pieces in the domestic market and if the customers' response is positive then these companies can start making the vehicles in India," he said.

Rain lashes Delhi again, air quality satisfactory

Date:8-September-2018 Source : webindia123.com

Rains lashed the National capital again on Saturday , bring the maximum temperature down to 33.6 Degree while resulting in waterlogging in some areas.

Delhi experienced a brief spell of rain in the evening after going through a cloudy day. The rain brought down the maximum temperature to 33.6 Degree C, from 34.2 Degree c on Friday.

The air quality in the city was satisfactory with an index value of 85 at 1900 hours, according to the Central Pollution Control Board.

Relative humidity on Saturday oscillated between 92 and 71 per cent , said the weatherman.

More rains are exp3ected in Delhi in Sunday with the Met official forecasting a generally cloudy sky in the next 24 hours with light rain and thundershowers in some areas .

The minimum and maximum temperatures are liklely to hover around 25 and 34 degrees C respectively pn Sunday..

Minimum temperatureon Saturday morning settled at 25.5 degrees C.

UP government has failed to take steps to reduce air pollution: EPCA chairman

Date:9-September-2018 Source : indiatimes.com

NOIDA: The Uttar Pradesh government faced scathing criticism on Saturday from Environment Pollution Control Authority (EPCA) chairman Bhure Lal, who dismissed its statements on measures taken to improve air quality in NCR as mere lip service, visible in the lack of change at the ground, be it reining in dust pollution at construction sites, vehicular congestion at usual choke points or improving green cover.

In a meeting-cum-workshop with state government officials that lasted four hours, the EPCA chairman shared his detailed assessment of the ground realities in Noida and Ghaziabad after personally inspecting several spots, concluding that the UP government had failed to implement the Graded Response Action Plan (GRAP) for NCR cities notified by the Centre in January 2017. EPCA is a Supreme Court-mandated body set up to monitor air pollution in NCR.

Bhure Lal also came down heavily on the National Highways Authority of India (NHAI) — which is upgrading NH-24 into Delhi-Meerut expressway — for violation of norms at its construction sites in the region. He also made specific references to solid waste management, decreasing green cover and vehicular pollution in NCR, all areas he was unhappy with.

The EPCA chairman said he had found construction material was still being transported without covers and being dumped at open places. “The builders should be fined again and again for construction-related pollution violations until they start following rules,” he said.

He told government officials all pollution control measures for implementation of GRAP should be bolstered and put in place by October 15. The conference, held in Sector 6, was attended by the UP chief secretary, senior officials of the central and state pollution control boards, top officials of development authorities and district magistrates of Gautam Budh Nagar, Ghaziabad, Meerut and Shamli, and the Meerut divisional commissioner.

Citing a recent World Health Organisation (WHO) report that pointed out 14 out of the world’s 20 most polluted cities are in India, Bhure Lal said, “Of these 14, several are NCR cities like Ghaziabad, Gurgaon and Faridabad. If action is not taken to completely curb air pollution in NCR, the future looks grim. Air pollution not only affects mental ability, it causes immense health issues, including cancer.”

He also pointed out that though official papers may claim so, Noida and GhaziabadThe EPCA chairman said he had found construction material was still being transported without covers and being dumped at open placesdo not have 33% forest cover. Upholding the need for electric buses and similar public transport, he said while the number of private vehicles in New Delhi was growing by 1%, in other NCR cities, it was going up by 4-5%. He made specific mention of the road stretch between Loni and Saharanpur which, he said, needs to be repaired to improve traffic movement.

In Noida, he cited the tall divider between Atta Market and Sector 18 market which, according to him, has led to traffic problems, and absence of a pedestrian pathway in the central part of the city. To reduce the use of cars, there should be more walkways, while parking rates should be increased to reduce car usage in congested parts of Noida. “Plant local variety trees like neem, pilkhan and other common trees. Why are eucalyptus planted here?” he asked, while commenting on the issue of 3,000 eucalyptus trees being cut in Sector 91.

Raising concern on crop stubble-burning, he added, “The Union government is already working on providing machines which can shred, scatter and mix crop residue in soil to be used as organic manure so that farmers so not need to burn them. Paddy straw is successfully being used in Punjab to generate electricity while there is technology to convert it into ethanol. All measures are being taken curb pollution arising from crop burning.”

Chief secretary Anup Chandra Pandey said the state government was taking proactive steps to curb crop stubble-burning, using technology, and that a biofuel policy with incentives worth up to Rs 150 crore would soon be implemented in the state for conversion of crop residue to ethanol. “Uttar Pradesh is engaging students, young technocrats and startups to come forward with creative solutions for containing pollution in the state. Pollution control should not be just a matter of fines and regulation, it should become a citizen’s concern so they can take proactive steps to prevent pollution,” Chandra said.

CPCB seeks revised pollution control plan for Bhopal, Indore

Date:10-September-2018 Source : indiatimes.com

BHOPAL: In a major setback to the Madhya Pradesh government, the Central Pollution Control Board (CPCB) rejected action plan sent by five out of six cities in including Bhopal and Indore to reduce air pollution. Sources say, Bhopal, Indore, Jabalpur, Ujjain, Sagar and Gwalior districts had submitted their plans to the CPCB, but only Gwalior has got clearance. Rest of the cities have been asked to submit a revised plan.

A Right to Information query filed by Greenpeace has highlighted the immediate need for MP to step up its efforts for combating air pollution under the much-discussed National Clean Air Programme (NCAP).

MP is home to 13 cities with high level air pollution above permissible annual levels of PM10 based on 2015 and 2016 data, which is equivalent to all cities with ambient air quality monitoring in the state.

Out of these 13 cities, six have been identified as non-attainment cities by the CPCB in 2016.

MCDs get central funds to combat air pollution, will spend it on green drive

Date:11-September-2018 Source : hindustantimes.com

Air pollution is a major problem in the Capital in winter. In the past, alarming levels of pollution forced the government to ban construction activities, shut schools and implement the odd-even car rationing policy to bring down pollution levels.

To combat Delhi's air pollution, the union ministry for housing and urban affairs has allocated a fund of Rs 35 crore each to the north, south and east Delhi municipal corporations. Civic body officials said the fund — provided under the Centre's Swachh Bharat Abhiyan — would be used to buy water sprinklers, plant saplings and shrubs and build vertical gardens in markets, roundabouts, roads and schools. Air pollution is a major problem in the Capital in winter. In the past, alarming levels of pollution forced the government to ban construction activities, shut schools and implement the odd-even car rationing policy to bring down pollution levels.

Senior municipal corporation officer said the project would be in addition to the annual plantation drive of the state government and civic bodies to increase Delhi's green cover.

"The yearly plantation drive is mainly carried out in parks, gardens and forest areas but in this project, we will plant saplings on roadsides, barren land and uncovered patches. Through greenery, we need to cover up dusty patches because Delhi's main problem is the increasing PM 2.5 and 10 levels, which is a result of dust," a senior official of SDMC's horticulture department said.

Expert and councillors said the 'ground covering plants' may help in curbing air pollution but spending money on water sprinklers is a wasteful exercise.

Padma Dwivedi, an environment activist, said, " Civic agencies should install grass pavers as they help in a plant's growth but spending money on sprinklers or other such machines should be avoided as they can't be a long-term solution."

Anil Lakra, leader of opposition and Aam Aadmi Party councillor in North Corporation said, “The agencies claim to have executed some of the works under the project but I have failed to see any changes on ground. I am still waiting for details of these works.”

The south corporation has set a target to plant 2,508 trees near the Sarita Vihar flyover and other areas in their jurisdiction. “We also plan to develop vertical gardens at 150 pillars across 11 flyovers,” said a SDMC official on the condition of anonymity. They said they would invite suggestions from RWAs.

Veena Virmani, standing committee chairman, North Corporation said, “We received Rs 22 crore from the Centre and are preparing a detail plan to implement the project. We are focussing on planting climbers at schools, flyover and markets in our area.”

The east corporation said they would also focus on climbers. “We will spend around Rs 2.86 crore on climbers and Rs 84 lakh for buying tractors with sprinklers. Some of work has already been done,”said Pradeep Khandelwal, chief engineer, EDMC.

New air quality monitoring station opened at VOC port

Date:12-September-2018 Source : indiatimes.com

Madurai: V O Chidambaranar Port in Tuticorin has opened air quality monitoring stations and launched a vehicle to bring bring down pollution levels at the port, at a cost of Rs 5.62 crore, on Tuesday.

The truck mounted fogging machine, commissioned at Rs 2.16 crore, can spray high pressure water mist with effective throw of 100m and can suppress dust particles that spread during cargo discharge on stockpiles at the coal yard and while loading and unloading trucks. Port officials said that they already have two small truck-mounted fogging machines to spray water, but they have a very short range of not more than 10m. This was insufficient to control dust and air pollution at greater heights. The ambient air quality monitoring stations with analyser units was established at Rs 3.46 crore. They have been installed near the oil jetty, port residential complex and near Hare Island. It will monitor the air for PM2.5, PM10, sulphur dioxide (SO2), oxides of nitrogen (NOx) and carbon monoxide (CO).

The data will be transmitted to the central monitoring station at the administrative building and synchronised on an hourly basis. The average value of 24hours will be displayed on LED units installed at four places - the toll gate (Check post I), green gate, red gate and administrative office. Officials said that in the near future, data will be synchronized in real time with the TNPCB and the Central Pollution Control Board and on the port’s website.

Air pollution, diet, weight: Lancet report lists what ails India

Date:13-September-2018 Source : hindustantimes.com

Establishing a definitive link between death from chronic respiratory diseases and air pollution in north India, a new study in The Lancet Global Health said high exposure to outdoor and indoor air pollution in northern states is the leading cause of the high burden of chronic obstructive lung disease (COPD) in these states, where the death rate from COPD is twice as high as states with cleaner air.

Apart from COPD, polluted air also raises the risk of heart disease, stroke, diabetes and cancers, said the first-ever

multi-centric public-private study of five non-communicable diseases (NCD) across all states.

Chronic respiratory diseases, which includes COPD (55 million) and asthma (37.9 million cases in 2016), were responsible for 10.9% of all deaths in 2016. COPD cases have almost doubled over the past 25 years.

It went from 28 million in 1990 to 55 million from 1990 to 2016. The study highlights the challenge before policy planners, although it can also be used to inform their decisions and focus. NCDs and injuries together led to 57–86% of healthy life years lost (disability-adjusted life-years, or DALYs, which is a composite metric of premature deaths and disability for monitoring disease burden) across all states in 2016, which is far more than the total loss to health and life from communicable diseases, infections, maternal, neonatal, and nutritional diseases.

There were regional variations. “One striking finding is that the rate of increase in the prevalence of ischaemic heart disease and diabetes is the highest in less developed states where the COPD and communicable diseases burden is already high and where health infrastructure is less than optimal,” said Professor Lalit Dandona, director, India State-level Disease Burden Initiative, which reported overall trends for cardiovascular diseases, diabetes, chronic respiratory diseases, cancer, and suicide in India from 1990 to 2016 for every state in India.

Deaths from heart diseases and stroke almost doubled, going up from 15.2% of all deaths in 1990 to 28.1% in 2016. Diabetes accounted for 3.1% of all deaths, leading to more deaths among women (3.4%) than men (2.9%). The number of people with diabetes went up from 26 million in 1990 to 65 million in 2016, said the study, with the estimates being slightly lower than the International Diabetes Federation’s estimates of 73 million for 2017.

Diabetes prevalence in adults who are 20 years and older increased from 5.5% to 7.7%, with every state registering an increase. Tamil Nadu, Kerala and Delhi showed the highest prevalence, but the highest rates of increase were in less developed states.

The proportional contribution of cancers to the total health loss in India has doubled from 1990 to 2016, but the incidence and types of cancers vary widely between the states. “Data guides public policy and will help in evidence-based planning in collaboration with the states for prevention, disease management and other services being provided under Health and Wellness Centres to strengthen comprehensive primary healthcare in each state,” said Union health and family welfare minister JP Nadda.

Undiagnosed mental health disorders emerged as a growing concern, with suicides among women in India being 2.1 times than the global average. Suicides in women went up from 25.3% in 1990 to 36.6% in 2016, and among men, from 18.7% to 24.3%. “The findings show that NCDs or injuries do not follow similar trends among less developed states or among more developed states... The insights provided by these findings will be useful for the state-specific planning of Ayushman Bharat,” said Dr Vinod K Paul, member (health), NITI Aayog.

A data gap is that only a small portion of the deaths in India have their cause medically certified, indicating that the cause of death reporting system in India has to be improved to enable more robust tracking of disease burden, said an accompanying editorial by Dr Balram Bhargava, director general, Indian Council of Medical Research, and Dr Paul.

Air pollution: Govt writes to neighbouring States for action

Date:14-September-2018 Source : dailypioneer.com

In a bid to combat air pollution problem in national Capital, the Delhi Government on Thursday has written a letter to neighbouring States to take action. In a letter to State Environment Ministers of Haryana, Punjab, Rajasthan and Uttar Pardesh, Delhi Environment Minister Imran Hussian said pollutants, instance SO2, NO2 and PM 2.5 coincide with agriculture/crop burning in neighbouring States.

It may be noted that during winter, pollutant values remain high in Capital's atmosphere due to wind pattern and low wind speed.

At time when the Delhi High Court and green tribunal also directed to States to take preventive steps, Hussian asked State authorities to take timely steps to avoid critical situations that may arise due to burning of crop residue.

Delhi: Pollution Board plans to deploy 30 teams to watch air pollution levels in NCR

Date:17-September-2018 Source : timesnownews.com

The CPCB would deploy about 30 monitoring teams in NCR region to look into factors which cause an increase in pollution level in the capital.

New Delhi: With the onset of winter season, the pollution control authorities in the capital are gearing up for monitoring the air pollution. The Central Pollution Control Board(CPCB) is planning to deploy about 30 teams across the national capital region to monitor factors which lead to the increase in air pollution levels. Over the past two years, breathing healthy air in and around Delhi after Diwali has become almost difficult. The government authorities have to forcibly shut schools to deal with the emergency pollution situation. Last year as well, the pollution level rapidly increased after Diwali where the air quality entered the 'hazardous' zone. According to news agency PTI, a CPCB official claimed that in a bid to control and prevent that level of pollution from occurring this year as well, the CPCB has begun taking precautionary measures.

Air pollution linked to much greater risk of dementia

Date:18-September-2018 Source : theguardian.com

Air pollution may increase the chance of developing dementia, a study has suggested, in fresh evidence that the health of people of all ages is at risk from breathing dirty air.

People over 50 in areas with the highest levels of nitrogen oxide in the air showed a 40% greater risk of developing dementia than those with the least NOx pollution, according to the research, based on data from London.

The observational study, published in the BMJ Open journal on Wednesday, cannot establish that air pollution was a direct cause of the dementia cases. However, the authors said the link

between higher pollution and higher levels of dementia diagnosis could not be explained by other factors known to raise risks of the disease.

King's College London study could not find factors other than pollution to explain higher incidence of dementia.

Air pollution has already been linked with cardiovascular and respiratory disease, but this is one of the first studies to examine links with neurodegenerative illness. Frank Kelly, professor of environmental health at King's College London and one of the authors of the paper, told the Guardian: "The study outcome suggests a linkage [between air pollution and dementia] but cannot inform on the cause. However, I believe that we now have sufficient knowledge to add air pollution to the list of risk factors for dementia. Our calculations suggest that it elevates risk by 7%, so [that would suggest] approximately 60,000 of the total 850,000 dementia cases in the UK, in mathematical terms."

The new findings add to a growing body of recent research on the wide-ranging effects of air pollution. Earlier this week, Unicef warned of the risk to children from the "toxic" school run, while evidence that particles of pollutants can cross into placentas has just been published.

A ground-breaking study from China recently found a "huge" reduction in intelligence associated with breathing dirty air, equivalent to losing a year's education.

The Kings College London study adds to previous research suggesting a link with dementia, but scientists warned that the results must be taken cautiously because the observational study could not closely track other possible causes such as lifestyle factors or the relative economic deprivation of the patients studied, or the amount of air pollution each was subject to individually.

The study used estimates of air and noise pollution levels across London and correlated these with anonymised patient health records for 131,000 patients aged between 50 and 79 at 75 GP practices within the M25. Their health was tracked for seven years from 2005, during which period 1.7% of the patients were diagnosed with dementia. Their exposure to air pollution was estimated based on their home postcodes.

Martie Van Tongeren, a professor of occupational and environmental health at Manchester University, who was not involved, said: “There is a growing body of evidence of the link between air pollution and brain health, including dementia and Alzheimer’s. This study adds to this body of evidence and fits with some of the previous studies. As most people in the UK live in urban areas, exposure to traffic-related and other air pollutants is ubiquitous. Hence, even a relatively small increase in risk will result in a large public health impact.”

The paper’s authors said a link between poor air quality and dementia could begin early in life. They wrote: “Traffic related air pollution has been [linked to] poorer cognitive development in young children, and continued significant exposure may produce neuroinflammation and altered brain innate immune responses in early adulthood.”

Campaigners called on the government to take urgent action on air pollution. Simon Alcock, head of UK public affairs for ClientEarth, which has repeatedly taken the government to court over its failures on air quality, called for a national clean air bill backed by an independent watchdog, and clean air zones in the most polluted areas. He said: “Air pollution is damaging our health from the womb to old age. It is unacceptable in 2018 for people to be risking dementia just by breathing.”

Road traffic should be the focus of efforts to clean up our air, as it is the leading cause of the health problems, added Aaron Kiely, air pollution campaigner at Friends of the Earth. “Efforts to clean up our cars, vans and lorries must be put in the fast lane – we can’t afford to wait until 2040 for most new vehicles to be zero-emission,” he said. “Greater investment is also needed in alternatives to motor vehicles, such as safer cycling infrastructure, and affordable and convenient public transport.”

A Defra spokesperson said levels of air pollution, including NOx, had fallen and the government was taking further action: “By ending the sale of conventional new diesel and petrol cars and vans by 2040, we are acting faster to tackle air pollution than almost every other major developed economy.”

Labour slammed ministers for failing to address air pollution, which regularly exceeds legal limits in many areas, particularly in London. Sue Hayman, shadow environment secretary, said: “It is simply not good enough for Michael Gove to shunt this problem on to cash-strapped local councils, publish strategies on wood burners and drag his feet on new legislation. [We] would bring forward a new Clean Air Act and a network of clean air zones to tackle the UK’s illegal levels of air pollution in the quickest time possible.”

Warmer Temperatures in Rajasthan and Air Quality Concerns in New Delhi

Date:19-September-2018 Source : weather.com

Wednesday

Heat waves expected around northeast India and temperatures may soar over 35°C.

The temperatures across Rajasthan are expected reach 40°C again.

Moderate risks of Air Quality New Delhi, West Bengal and Odisha. The expected lower visibility below 200m might lead to bad traffic conditions and more troubles for motorists.

In Andaman and Nicobar Islands, strong winds with thunderstorms are expected. The waves will be high as per the India Meteorological Department (IMD) warning.

Thursday and beyond

Precipitation accumulations around the border between Odisha and Andhra Pradesh, and also in West Bengal is expected to exceed 50mm. The possibility of torrential downpours, thunders and flash flooding especially at night.

Again, over 35°C temperatures expected around northeast India with persistent heat waves.

Temperatures across Rajasthan may persistently reach 40°C.

Moderate risks of Air Quality Maharashtra, Telangana, Bihar, Andhra Pradesh, West Bengal and Odisha. Bad traffic condition and difficulties for motorists are possible due to low visibility of below 200m.

Strong winds with thunderstorms are expected to continue in Andaman and Nicobar Islands. Heavy rain and high waves are warned by IMD.

A loose cyclonic circulation over the Bay of Bengal has intensified to become a tropical disturbance. Thunderstorms were observed around the region and the circulation is expected to become well-marked and intensified by Thursday night. The centre of the circulation is moving northwestward and might bring heavy rain across south Odisha and north Andhra Pradesh. The forecast of rainfalls around Eastern Ghats Range, decreased to 60mm for 24 hours from 100mm forecast yesterday, but the torrential downpours, frequent lightning, flooding and mudslides are still likely.

A warmer than normal temperature is expected in Odisha as the cyclonic circulation moves northwestward by Thursday; cool southerlies can cause cooler than normal temperatures in the north at the weekend.

Air pollution link to Alzheimer's mooted

Date:20-September-2018 Source : cosmosmagazine.com

Chronic exposure to air pollution may be a risk factor in developing dementia, a UK population-based study has found.

If further research throws up a causal, rather than simply observational, link, then neurodegenerative disease can be added to heart disease, stroke and respiratory illness as a known danger of exposure to airborne particles.

The apparent association between air quality and dementia was made by a team led by Iain Carey from the UK's Population Health Research Institute at the University of London. The research is published in the journal BMJ Open.

To make their finding, the researchers used anonymised patient health records contained in the UK's Clinical Practice Research Datalink (CPRD), which has been collecting information from participating general practices since 1987.

Carey and colleagues focussed on 131,000 patients who were aged between 50 and 79 in 2004, and who had not been diagnosed with dementia at the time. All of them attended practices that were located within London's giant orbital M25 motorway.

The patients were tracked for an average of seven years, until they were variously diagnosed with dementia, died, or were deregistered from the practice. Their health progress was correlated with careful analysis of the levels of three specific air pollutants -- nitrogen dioxide (NO_2), fine particulate matter ($PM_{2.5}$) and ozone (O_3) – recorded around their home addresses.

During the monitoring period, some 2181 patients – 1.7% of the total – were diagnosed with various types of dementia. Comparing these cases to ambient pollution levels revealed a distinct pattern: those living in areas recording the top-fifth of NO_3 or $PM_{2.5}$ levels had a 40% higher risk of developing the condition, compared to those in the bottom fifth.

Further analysis showed that the findings remained consistent for Alzheimer's disease, even when other potential contributing factors, such as smoking and diabetes, were taken into account.

The researchers stress that the results are purely observational, and cannot demonstrate causation. On that basis, the findings may be specific only to London.

Another important limitation is that the analysis covered only seven years. As such it cannot be used to infer a definite link between pollution and Alzheimer's, because the disease takes many years to fully develop.

Nevertheless, Carey and his colleagues note that the higher levels of dementia in the more polluted areas cannot be satisfactorily explained by other known factors, and that further research should be undertaken.

"Traffic related air pollution has been linked to poorer cognitive development in young children, and continued significant exposure may produce neuroinflammation and altered brain innate immune responses in early adulthood," they write.

UNEP says transport sector major contributor to air pollution in Africa

Date:21-September-2018 Source : xinhuanet.com

NAIROBI, Sept. 20 (Xinhua) -- The transport sector is a major contributor to air pollution in Africa, a UN Environment (UNEP) official said on Thursday.

Juliette Biao Koudenoukpo, the UN Environment regional director for Africa, attributed the situation to the importation of fuel inefficient second-hand vehicles, inadequate vehicle import regulation policies and the low purchasing power among the population.

"African countries need to put in place air quality standards to help inform their policies," said Koudenoukpo during a forum in Nairobi on transforming mobility in Africa through innovative solutions.

She said the transport sector has been identified as a major source of greenhouse gas emissions and other pollutants that have significant effects on the environment and health.

The UNEP official said in an effort to provide adequate transport infrastructure and services, many African governments are giving rise to unregulated transport systems that further complicates the quest for clean air.

She said the UN Environment is taking a leading role through research, innovation and implementation of programs that seek to tackle poor air quality.

A number of African countries like Cote d'Ivoire have developed air quality standards, and sought to further develop their monitoring capacity.

Coletha Ruhamya, director general of Rwanda Environmental Management Authority, said a 2017 study showed that motorcycles contribute 51 percent to air pollution in the country.

She said the Rwandan government is promoting an efficient transport system that includes use of low-carbon vehicles, use of public transit as opposed to personal cars.

Ruhamya said the government has entered into an agreement with a car maker that is developing electric vehicles, with the aim of introducing them into the local market.

"We need to invest in research and development to enable us come up with clean and affordable technologies," said Ruhamya.

Rob De Jong, head of air quality and mobility unit at UN Environment, challenged African governments to develop programs that promote the use of shared mobility, use of electric vehicles and use of automatic vehicles.

He said UN Environment is helping Rwanda, Kenya and Nigeria to come up with pedestrian pathways along major roads in the cities.

West Oakland slated to benefit from plan to reduce air pollution

Date:24-September-2018 Source : blog.sfgate.com

The California Air Resources Board (CARB) is gearing up to finalize a first-of-its-kind statewide plan to tackle air pollution, and West Oakland is slated to be one of 10 California communities to benefit the soonest. On September 27, the board will consider approving the first stages of the air protection program and determine whether West Oakland will be part of the inaugural group to receive additional funding for addressing local pollution.

CARB's program emerges from Assembly Bill 617, which passed in the California legislature in 2017 and was signed by Governor Jerry Brown that July. The legislation requires new community-focused actions to reduce air pollution and improve public health in areas disproportionately affected by pollutants. This means local air districts, like the Bay Area Air Quality Management District (BAAQMD), are required to identify disadvantaged communities for closer monitoring and put into action new plans to decrease pollution.

Currently, the district is considering West Oakland as a site to reduce diesel particulate matter and toxic air contaminate emissions, and Richmond for additional air monitoring efforts. The Bay Area communities are also two of the initial 10 in California that are being recommended by CARB for the first year of its Community Air Protection Program. These communities were identified as places where health effects from pollution exposure are more severe and residents experience greater levels of poverty, according to CARB's Community Recommendations Report. To make this determination, rates of cardiovascular disease, unemployment, lower educational attainment, higher housing cost burden and lower life

expectancy were considered. Actions taken in these areas will serve as models for future efforts in other places.

States asked to ensure distribution of farm implements to tackle stubble burning in 10 days

Date:27-September-2018 Source : business-standard.com

The Environment Ministry Thursday asked Punjab, Haryana and Uttar Pradesh to complete distribution of agricultural implements among farmers within 10 days so as to tackle stubble burning, one of the key reasons for air pollution in Delhi in the winter.

Ahead of the critical months of November-December, when the air pollution peaks in the national capital, the Central Pollution Control Board (CPCB) under the ministry has deployed 41 teams in Delhi-NCR for ground-level inspection of activities that cause pollution from September 15 this year.

An official statement said the number of 'Good', 'Satisfactory' and 'Moderate' days increased from 144 in 2017 to 149 in 2018, while the number of 'Poor', 'Very Poor' and 'Severe' days decreased from 125 in 2017 to 120 in 2018 till date.

Air Quality Index (AQI) in the range of 0-50 is considered 'good', 51-100 'satisfactory', 101-200 'moderate', 201-300 'poor', 301-400 'very poor' and 401-500 'severe'.

Chairing a meeting of environment ministers and officers of Delhi and four neighbouring states -- Uttar Prades, Haryana, Punjab and Rajasthan -- to ensure better preparedness towards improving air quality, Union Environment Minister Harsh Vardhan emphasised collective action by all the municipal and other agencies to ensure cleaner air in the coming months.

Harsh Vardhan said that the Centre has provided all possible assistance such as grant of Rs 1,150 crore from centrally-sponsored schemes (CSS) to tackle stubble burning to Punjab, Haryana and Uttar Pradesh.

The meeting comes after the national capital recorded its best air quality this year on Tuesday last week as incessant rains removed pollutants from the air and it was the third time this year that the quality of air was registered as good, authorities had said earlier.

Meanwhile, Harsh Vardhan said the Centre has also provided financial assistance under Urban Development Fund (UDF) to Delhi for procurement of mechanical road sweeping machines, water sprinklers and greening.

The minister also underlined that enhanced enforcement and prompt action by agencies concerned must be ensured to create a positive impact on air quality.

Various steps taken to address air pollution during the winter months and reviewed various steps taken to ensure better preparedness towards improving air quality in Delhi-NCR during the coming months, in comparison to previous years was also discussed.

"The Central Pollution Control Board (CPCB) had deployed 41 teams in Delhi-NCR for ground-level inspection of activities that cause pollution from September 15 this year.

"CPCB has also issued directions to concerned State Pollution Control Boards (SPCBs), MCDs, construction agencies, transport and agricultural departments to prepare targeted action plans for air polluting sources and to implement these plans," the statement said.

To enhance public participation, CPCB has invited proposals through crowd-sourcing and any person with any practical idea has been invited to participate in the collective endeavour.

"It was also emphasised at the meeting that NCR states should ensure that farm implements that are being distributed to tackle stubble burning should be completed in the next 10 days to ensure that no stubble burning incident takes place in the States of Punjab, Haryana and Uttar Pradesh.

"Ambient air quality monitoring network is being expanded in NCR States and more data is expected to facilitate better air quality management decisions," the statement said.

The statement said three mitigation pilot projects have also been sanctioned for deployment in Delhi.

In addition, several steps including restriction on the use of petcoke and furnace oil in Haryana, Uttar Pradesh and Rajasthan, introduction of BS VI compliant petrol in Delhi since April 2018, conversion of brick kilns to zig-zag technology are likely to have a positive impact on pollution, it said.

Other steps which also are likely to have a positive impact on pollution are issuance of list of approved fuels permissible for use within the borders of NCT of Delhi, operationalisation of Eastern Peripheral Expressway to ease congestion and diversion of traffic from Delhi, financial incentive for in-situ crop residue management in Haryana and Punjab, the statement said.

Union Minister of State for Environment Mahesh Sharma, Environment Ministers of Delhi and Uttar Pradesh Imran Hussain and Dara Singh Chauhan, and senior officials were present in the meeting.

UK's children denied basic human right to clean air, says Unicef

Date:28-September-2018 Source : theguardian.com

Children in the UK are being denied their basic human right to breathe clean air and facing a long term “health crisis” because of the toxic fumes they breathe on their way to and from school, according to leading children’s charity Unicef.

The organisation, which campaigns on children’s rights and wellbeing around the world, described the situation in the UK as “horrific” and has announced it is to make protecting youngsters from air pollution its priority across the country in the months ahead.

“I have been amazed as the picture has emerged showing us just exactly what the impact of air pollution is on children in the UK,” said Alastair Harper from Unicef UK.

“Research is coming out all the time showing us how these toxic emissions can lead to lasting and devastating health impacts, impacts that will last their entire lives, from stunted lung growth to asthma to brain developments. It is horrific.”

Unicef’s intervention follows a series of new studies which highlight the impact of the UK’s air pollution crisis on children’s health and will increase the pressure on government to intervene.

The charity, which is now working with schools across the country, as well as clean air groups, is calling on the government to introduce a fully funded national action plan to protect children from the effects of toxic air.

Harper said: “We want a national strategy specifically to protect children from harm, and a ring-fenced pot of funding to focus on the ways to reduce children’s exposure to toxic air.

“We now know that exposure is most acute when they are travelling to and from school or nurseries and even inside the classrooms. Now there is no excuse not to take immediate and determined action.”

He said measures should include vehicle exclusion zones around schools, a network of clean air zones, improved walking and cycling infrastructure in towns and cities and more child friendly urban areas.

Last year a Guardian investigation revealed hundreds of thousands of children are being exposed to illegal levels of damaging air pollution from diesel vehicles at more than 2,000 schools and nurseries across England and Wales.

Earlier this month it emerged that children were absorbing a disproportionate amount of air dangerous pollution on their way to and from school – and while in the classroom. One school was found to have several times over the World Health Organization pollution limit for the most damaging particulates inside several of its classrooms.

There is a growing campaign among some parents and schools to ban the school run and encourage walking and cycling, but Unicef said central government needs to step in to orchestrate a nationwide policy that protects young people's health.

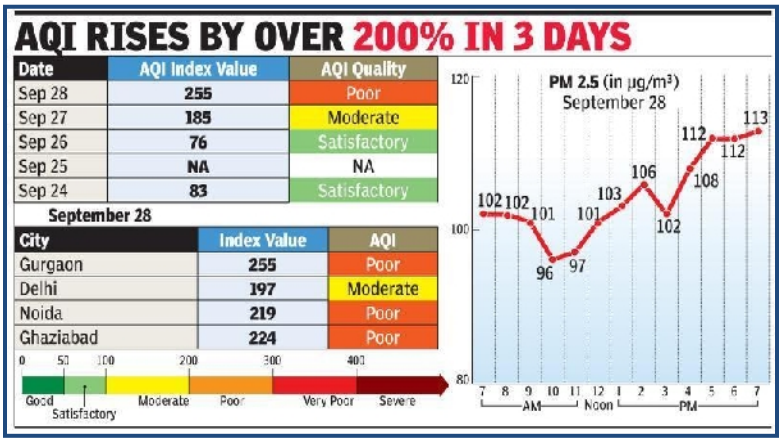
"It has taken a while to understand the true nature of the problem but now we do know and we have to act." Harper said that unlike some other problems facing young people – including entrenched poverty and obesity – air pollution was relatively simple to address, if there was the political will. "The fact is that it is so needless, we can fix this – other things are more intractable – but this is something we can resolve."

The government has been widely criticised for its lack of action on air pollution. It has lost three court cases and is one of five nations that have been referred to Europe's highest court for failing to tackle illegal levels of toxic air.

Air quality turns poor but GRAP steps not before 48 hours

Date:29-September-2018 Source : indiatimes.com

GURUGRAM: The city's air quality turned poor on Friday, prompting experts to demand the immediate implementation of Graded Response Action Plan (GRAP) measures. In the day, the AQI level shot up to 255, making Gurugram the most polluted in the NCR. According to data provided by the Central Pollution Control Board (CPCB), AQI level in Delhi was moderate at 197, while Noida and Ghaziabad recorded 219 and 224, respectively, both in the poor levels. The AQI data for Faridabad was not available.



According to officials of Haryana State Pollution Control Board (HSPCB), the city saw a sudden increase in the concentration of particulate matter after Wednesday apparently due to lack of wind speed. The AQI, which hovered in satisfactory level till Wednesday, rose to 185 (considered as moderate) on Thursday, before increasing further on Friday.

The highest level of PM2.5 was recorded at 113 micrograms per cubic metre (µg/m^3) on Friday.

However, HSPCB officials said that GRAP measures would be taken only if the AQI remained poor continuously for next 48 hours.

HSPCB regional officer Jai Bhagwan said, “If the air quality remains poor continuously for next two days, measures recommended for the poor category of GRAP will be taken. This year a meeting was held by EPCA chairperson Dr. Bhure Lal, when he had asked all departments to be ready to take anti-pollution measures. We are sure that all the departments are fully prepared to deal with the situation (high level of air pollution) this year.”

Environmentalists, however, stressed the need for taking advance measures immediately. “As the festival season is approaching and stubble burning may start soon after the monsoon, the authorities should initiate steps in advance this time,” Niranjan Raje, a former member of EPCA (Environment Pollution Control Authority).

Raje further said a major factor responsible for a rise in the air pollution level in Gurugram was open dumping of construction debris and dust emitting from construction sites. “The authorities should immediately start sprinkling water at dusty locations such as Leisure Valley in Sector 29. Also, GRAP measures must be taken as soon as the AQI reaches the poor level. We can’t wait for the pollution levels to turn severe in order to take the required steps,” he added.

Residents, on the other hand, raised a concern over the delay in installation of a second air quality monitoring machine in the city. “Air pollution in winters poses a major health threat to the people. While the authorities should take all required measures, one of the basic steps is to monitor the air quality. We can’t get a clearer picture, if the monitoring is not done properly,” said Sapna Kakkar, a resident of Sector 70.

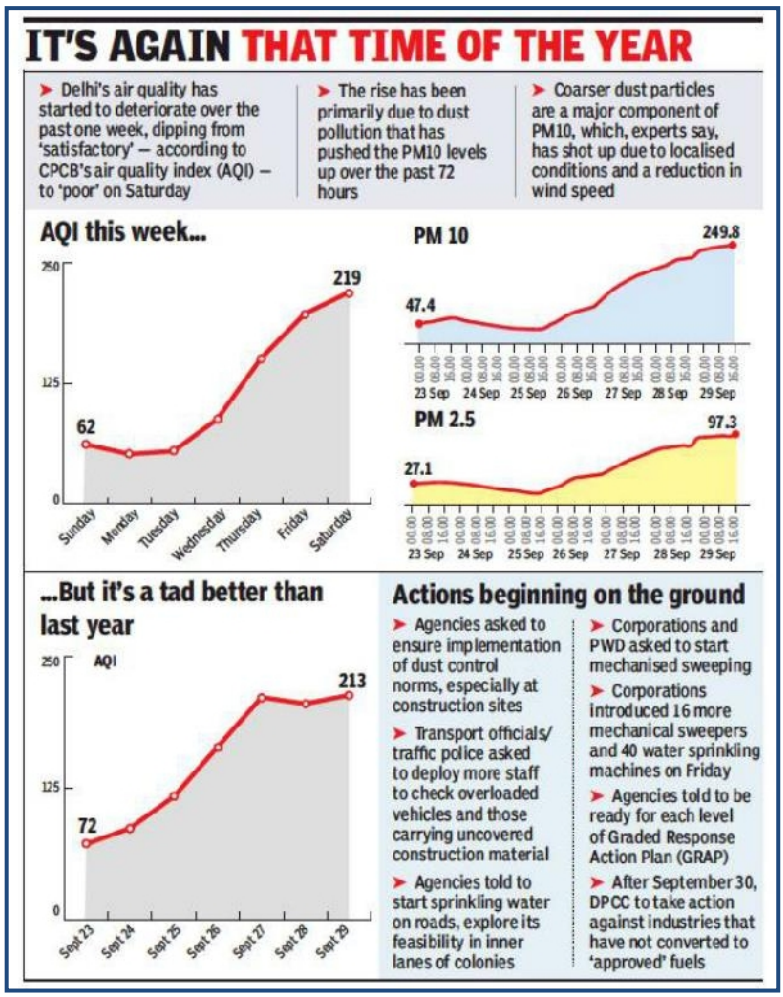
Dip in Delhi air quality triggers action meet

Date:30-September-2018 Source : indiatimes.com

NEW DELHI: That all familiar ‘winter’ feeling may soon be returning to the capital with Delhi’s air quality deteriorating to ‘poor’ on the Central Pollution Control Board’s air quality index on Saturday, with a reading of 219 – just days after it was recorded as ‘satisfactory’ and even touched ‘good’ briefly, falling below an AQI reading of 50.

The sudden deterioration in air quality over the last few days has primarily been due to local conditions according to experts, with Delhi witnessing a ‘transition’ phase where the monsoon retreats and the wind speeds drop – resulting in PM 10 levels shooting up to almost 2.5 times on Saturday.

Pollution in Delhi



D Saha, former head of CPCB's air laboratory said the change is a common occurrence around this time of the year, however things will start improving once wind speeds increase. According to CPCB's central control room data, the average PM 10 levels at 6pm on Saturday to be 254 micrograms per cubic metre – almost 2.5 times the safe standard of 100 micrograms per cubic metre.

Meanwhile, with the pollution levels spiking over the last 48 hours, the Supreme Court-mandated Environment Pollution (Prevention and Control) Authority (EPCA) is all set to meet on Friday to work on implementing the Graded Response Action Plan (GRAP) which will kick start on October 15. EPCA officials said the meeting will look at localised sources of pollution, with hotspots in Delhi like Anand Vihar and Mundka currently being analysed due to their 'high' readings.

"There is no evidence to suggest at the moment that crop burning is the reason for this problem. Wind speeds in Delhi and NCR have fallen to almost zero and locations on the outskirts of NCR like Gurgaon or Rewari are all in the 'very poor' range almost. In Delhi, locations like Mundka and Anand Vihar are also in the orange category, which is mainly due to localised pollution and we want to identify that and

start action on it," said Sunita Narain, member of EPCA and director general at Centre for Science and Environment.

Meanwhile action on polluting industries in Delhi is likely to start soon with the Delhi Pollution Control Committee's deadline for industries to shift to 'approved' fuels to end on September 30. DPCC, in its notification on June 29, had issued a list of fuels that could be used in Delhi, which included LPG, CNG, PNG, Diesel, Petrol and aviation turbine fuel among others.

October 2018

Air Pollution: Punjab Orders Massive Crackdown Against Stubble Burning

Date:1-october-2018 Source : huffingtonpost.in

Punjab Chief Minister Captain Amarinder Singh has directed the state's agriculture department to tackle the menace of stubble burning.

JALANDHAR, Punjab—The Punjab government has appointed over 8,000 officers to prevent rice farmers from clearing their fields by burning the stubble that remains once paddy is harvested.

Stubble burning is widely acknowledged as a leading cause of the seasonal winter smog that has made the air in north India one of the most polluted in the world. Punjab Chief Minister Captain Amarinder Singh has directed the state's agriculture department to tackle the menace.

Paddy is grown on 65 lakh acres of land in Punjab. After harvesting paddy, about 20 million tonnes of paddy straw is left in the fields to be managed by farmers before sowing the next Rabi crops. It is estimated that 15 million tonnes of paddy straw are burnt by farmers for early and easy clearance of the fields.

Additional chief secretary (development) Viswajeet Khanna said the officers responsible for monitoring stubble burning would be drawn from the cooperatives, revenue, rural development, panchayats, agriculture, horticulture and soil conservation departments, as well as the Punjab State Power Corporation Ltd. These officers will hold meetings with the farmers, arrange crop residue management machines, distribute educational materials in schools and disseminate information by working with local gurudwaras.

State nodal officer for the anti-stubble burning campaign, KS Pannu, said these 8000 workers would be spread out in villages across the state, and a senior officer would be appointed to coordinate efforts for every 20 villages. The concerned nodal officers would submit their detailed status reports through the coordinating officers to Sub Divisional Magistrates (SDMs) at the end of the season, and the data would be collated and stored in the offices of the concerned Chief Agriculture Officer for record and reference purpose.

The state government has also embarked on a massive programme to manage paddy straw. As many as 24,315 subsidised agro-machines are being supplied to farmers, cooperative societies and custom-hiring centres to achieve zero burning of paddy straw.

Recently, Singh had written to Prime Minister Narendra Modi seeking Rs 100 per quintal as compensation only for those farmers who abstain from burning paddy residue under the state government's ambitious programme for management of paddy straw.

Sudden surge in air pollution in Shimla is a warning call:Experts

Date:2-october-2018 Source : uniindia.com

Shimla, Oct 2 (UNI) The air quality of Shimla deteriorated just after the withdrawal of monsoon

claimed environmental experts.

The emission level of Respirable Suppended Particulate Matter (RSPM) reached about 96.5

microgram per cubic meter in the town during the last ten days.

Experts attribute the surge of air pollution to high fleet of traffic and dust particles on the road.

The sudden rise in air pollution is due to apathy of the state authorities to mend the roads

ravaged by rains and clear the muck which is dug out while repairing the roads.

As the monsoon receded, there is a rise in the number of asthmatic patients who are prone to

dust allergy. Number of internal roads baring the VIIPs area in the town including bypass are in poor conditions including Old ISBT, Khalini BCS, Vikasnagar and Dhalli.

The State Pollution Control Board data reveals that from Sep 18, a spike from 58.5 micro gram

per cubic meter to 96.5 micro gram per cubic meter was recorded in RSPM levels.

With causes of air pollution in Agra still unknown, vision document finds fresh opposition

Date:3-october-2018 Source : indiatoday.in

The much-debated 'Vision Document' prepared by the Delhi School of Planning and Architecture (SPA) for the protection of the Taj Mahal for another 100 years is scheduled to be placed before the Supreme Court of India on November 18, but not without a bevvy of angry protests against it.

With the IIT Kanpur's study on the composition of pollutants in the air of Agra and its causes still incomplete, local residents and civic organizations are demanding to know what is the hurry to present a flawed and lop-sided document before the Supreme Court.

Talking to India Today, Agra Tourism Guild President Arun Dang said that when the study of air pollution and its causes are still incomplete, why was the administration so eager to present the vision document in the apex court.

Agra Development Foundation secretary KC Jain said that information has been sought from the Central Pollution Control Board through an RTI regarding the progress of the IIT Kanpur study on pollution in Agra and in reply, the board has said that the samples of pollutants present in the air in the summer months have been sent to IIT Kanpur for analysis but the report has not yet been prepared even though the vision document is to be presented in the Supreme Court in just over a month's time.

He said that it is hard to understand how only the industries of Agra are being seen as responsible for all the pollution in the air when the factors causing pollution in the city are still being ascertained. Unless the state government presents a correctly prepared vision document in the court, it will continue to be opposed by the people of Agra.

Talking on the subject of pollution, Hindustani Biradari Vice-Chairman Vishal Sharma said that the stop-and-go vehicular traffic in Agra is the primary cause of pollution in the city, but the government and the administration have both turned a blind eye towards it. The lack of a reliable public transportation system has given rise to a behemoth in the form of the huge number of vehicles plying on the city roads, but there has been no action to control these numbers.

Also, he said, Agra is a city that is still evolving and consequently, there is a flurry of construction activity going around in the city that is unchecked and was giving rise to a lot of dust pollution, which had not been taken into account in the vision document. He demanded that the date of presenting the vision document in the Supreme Court be deferred till the exact causes of the pollution are found out.

Tracking indoor air quality can help mitigate home pollution

Date:4-october-2018 Source : indiatimes.com

WASHINGTON: Tracking the indoor air quality in real time can encourage people to change their behaviour and switch to activities that cause less pollution within their homes, a study has found.

Researchers from University of Utah in the US conducted a study to determine if homeowners change the way they live if they could visualise the microscopic air pollutants in their homes.

"The idea behind this study was to help people understand something about this invisible air quality in their home," said Jason Wiese, an assistant professor at University of Utah.

Researchers built a series of portable air quality monitors with Wi-Fi and connected them to a server. Three sensors were placed in each of six homes from four to 11 months in 2017 and 2018.

Two were placed in different, high-traffic areas of the house such as the kitchen or a bedroom and one outside on or near the porch.

Each minute, each sensor automatically measured the air for PM 2.5 -- a measurement of tiny particles or droplets in the air that are 2.5 microns or less in width -- and sent the data to the server.

The data could then be viewed by the homeowner on a tablet that displayed the air pollution measurements in each room as a line graph over a 24-hour period.

Participants in the study could see up to 30 days of air pollution data. To help identify when there might be spikes in the air pollution, homeowners were given a voice-activated speaker so they could tell the server to label a particular moment in time when the air quality was being measured, such as when a person was cooking or vacuuming.

Participants also were sent an SMS text message warning them whenever the indoor air quality changed rapidly.

One homeowner discovered that the air pollution in her home spiked when she cooked with olive oil. That motivated her to find other oils that produced less smoke at the same cooking temperature, researchers said.

Another homeowner would vacuum and clean the house just before a friend with allergies dropped by to try and clean the air of dust.

However, she found that this made the air much worse because more pollutants were kicked up when vacuuming and dusting.

Realising this, she started cleaning the house much earlier before the friend would visit.

Participants would open windows more when the air was bad or compare measurements between rooms and avoid those rooms more with more pollution.

"Without this kind of system, you have no idea about how bad the air is in your home," Wiese said.

"There are a whole range of things you can't see and can't detect. That means you have to collect the data with the sensor and show it to the individual in an accessible, useful way," he said.

Blanket of dust to cover North India in few days; air quality will be hit

Date:5-october-2018 Source : downtoearth.org.in

In the beginning of next week, North India might get enveloped by dust from the West, possibly affecting the region's air quality for a few days starting October 10. The transfer of dust from the Gulf of Aden, Pakistan and the Thar Desert into India is due to a cyclonic storm currently brewing near Lakshadweep.

The Indian Meteorological department (IMD) has predicted the formation of a low pressure area in the South Eastern Arabian Sea near Lakshadweep on October 5. This low pressure area will further get intensified into a depression and will bring heavy to extreme rainfall in many districts of Kerala and Tamil Nadu on October 7. The IMD issued a red alert for Idukki, Palakkad and Thrissur, districts still recovering from the worst floods in 150 years.

A branch of the depression is forecasted to move further north westwards towards the coast of Oman transforming into a fierce cyclonic storm. According to the National Aeronautics and Space Administration's (NASA) wind forecast, it is scheduled to make landfall around October 11.

Even before the storm hits the land, its constituent winds will start pushing dust from the region into northern India beginning around October 9. Moreover, the dust is likely to stay as the wind speeds in Delhi are predicted to dip. This will happen as the cyclonic wind system will be fed by winds from the North Indian region.

These are ominous signs for the capital city which saw a public health emergency in November first week last year when the north westerly wind brought in dust along with stubble burning smoke from North-West India and Pakistan. In 2016, Delhi had seen high levels of pollution around Diwali and the worst smog in 17 years. An anti-cyclonic system which had drastically reduced wind speeds in Delhi had worsened air quality.

Delhi's Air Quality Remains Poor For Second Day: Officials

Date:6-october-2018 Source : ndtv.com

New Delhi: Delhi's air quality remained poor for the second day due to change in wind direction, which is now flowing from the stubble burning areas, authorities said today.

The overall air quality index (AQI) of 245 was recorded at 10 am Saturday which is the poor category.

Ghaziabad and Gurgaon recorded 'very poor' air quality at 302 and 336 respectively, according Central Pollution Control Board (CPCB) data. Yesterday, the AQI of Delhi was registered at 259.

Earlier, it was predicted that a dust storm will hit the national capital which would further deteriorate the air quality, but, at present, there are no indications of a big storm. Authorities are closely monitoring the situation, a senior official at the Supreme Court mandated body Environment Pollution Control Authority said.

The drop in the air quality is due to change in direction of wind, which is now flowing from areas in Haryana and Punjab where stubble burning is taking place, a CPCB official said.

"This is the period of monsoon withdrawals and a low pressure system in the Arabian Sea is developing. Such large scale processes tends to calm the wind speed which is usual for this time.

"This tends to increase pollution level. The impact of local transport is insignificant so far," Project Director at the Centre-run System of Air Quality and Weather Forecasting and Research (SAFAR), Gufran Beig, said.

An AQI between 0-50 is considered good, 51-100 satisfactory, 101-200 moderate, 201-300 poor, 301-400 very poor, and 401-500 severe.

The PM10 level (presence of particles with diameter less than 10mm) was at 208 in Delhi and the PM2.5 level (presence of particles with diameter less than 2.5 mm) in the city was 104, according to a data by SAFAR.

Delhi: At Times Foundation event, ideas to fight bad air

Date:6-october-2018 Source : indiatimes.com

NEW DELHI: As winter draws closer, memories of last year's catastrophic winter pollution in Delhi are again rising in people's minds. With the air quality index readings beyond the maximum reading of 999, and the Indian Medical Association warning of 'disastrous health consequences', the so-called great smog of the capital drew urgent attention to the huge challenges posed by air pollution.

To address the problem and come up with innovative solutions, the Times Foundation, in collaboration with Ekta Foundation and Action Aid, organised a 12th collective social responsibility forum on Friday.

Panelists from the government and non-profit organisations took part to come up with a solution to provide sustainable methods for the farmers and put an end to stubble burning, which contributes to the rising pollution levels.

Rajarshi Bhattacharjee, National Head- Health & Wellness, Times Foundation, expressed the foundation's continuous intervention in various causes of environment and felt deep concerns about raising level of PM2.5 and PM10 in the air around us. He also appealed to the society to participate in tackling the problem.

The forum was supported by corporate partner like Sonalika, International Tractors Limited along with their knowledge partner International Maize and Wheat Improvement Center (CIMMYT).

Due to large scale pollution and erratic climatic conditions, agriculture is getting adversely affected and so are the farmers. Sonalika has taken the multi stakeholder approach and promotes climate-smart agriculture through conservation agriculture which will benefit farmers and also tackles stubble burning.

Sonalika, in association with CIMMYT-BISA, has adopted 25 villages in Haryana with a vision to "create a self-sustaining ecosystem to ensure zero crop burning in future by capacity building, awareness & equipment support" and a mission "to convert the state of Haryana residue burning-free, in next 5 years by implementing agencies like CIMMYT, local stakeholders, corporates, PSUs, embassies and NGOs."

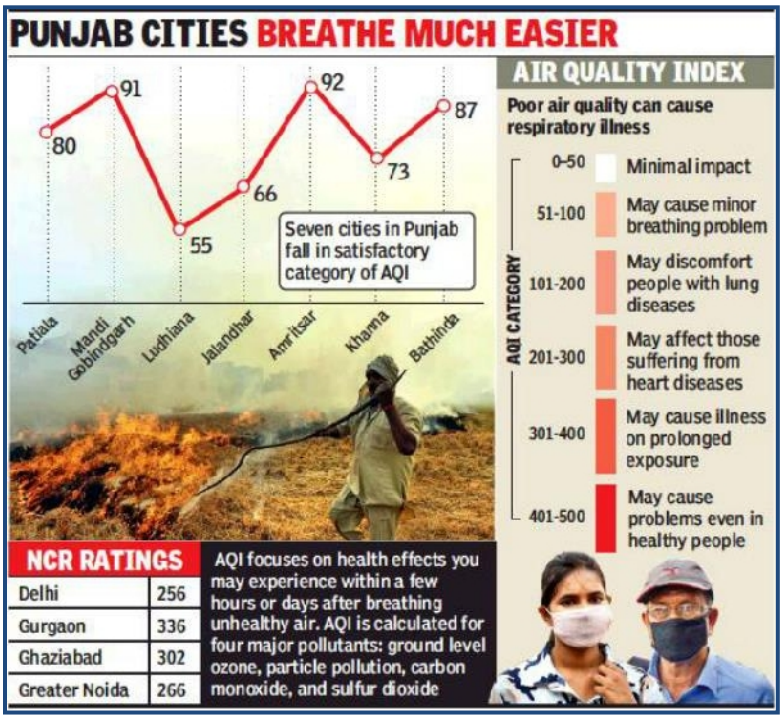
The chief guest of the forum, Ajay Vir Jhakar, chairman, Punjab Farmer Commission expressed that the Punjab government is trying out new technologies to bring in a change and declared funding of 1 million USD for addressing the crop residue issue with new innovations.

Sandeep Chachra, ED, Action Aid expressed his views and emphasised on preventive measures rather than corrective, by following good practices.

PPCB say Punjab not to blame for Delhi pollution, points to air quality

Date:7-october-2018 Source : indiatimes.com

PATIALA: The Punjab Pollution Control Board (PPCB) said on Saturday that vehicular and industrial emissions were the main cause of pollution in the national capital region (NCR) of Delhi, and not farmers in Punjab who burnt paddy stuble.



PPCB member secretary Karunesh Garg, while releasing data on pollution in the state, said air quality in Delhi, Gurgaon and Ghaziabad was very poor, while environment in Punjab was still in the safe category. Garg pointed out that the population of NCR was equal to that of Punjab, but it was much smaller in size, 100 sq km compared to Punjab's 50,632sq km.

Garg said internal pollution was the main cause of pollution in Delhi and there was a need to tackle that instead of blaming Punjab or other agricultural states where incidents of stubble burning were witnessed. Garg said "very few" cases of stubble burning were reported in Punjab in the past week and ambient air quality index (AQI) level in different areas of the state was in the safe category, whereas air quality remained poor in Delhi and surroundings. "A myth is being created among masses that Punjab farmers are polluting environment in Delhi and NCR by burning wheat or paddy remains after harvest. Punjab is being dragged into the controversy over Delhi pollution going higher due to stubble burning. AQI in Delhi has been past the 'safe' category for a week now; its air quality has been graded 'poor' and 'very poor'. Its AQI was 256 on Friday. There is a need to check pollution, including vehicular and industrial emissions, within Delhi," he said.

The AQI of Delhi is based on calculations of 34 monitoring stations. On October 5, it was 336 in Gurgaon, 302 in Ghaziabad, and 266 in Greater Noida.

On Friday, Delhi environment minister Imran Hussain wrote to the Union environment minister Harsh Vardhan to direct neighbouring Punjab, Haryana, Rajasthan and Uttar Pradesh states to take measures to control pollution due to burning of crop residue. PPCB chairperson S S Marwaha said stubble burning was not the only cause of pollution in Delhi. “Now when Punjab is at the lowest levels in pollution, the national capital is still having unhealthy air. The message is loud and clear: stubble burning incidents of Punjab are not responsible for Delhi’s pollution. We are monitoring stubble-burning cases and conducting weekly assessments.”

No respite from pollution, air quality remains poor in National Capital

Date:8-october-2018 Source : dnaindia.com

Air Quality Neighbouring cities of Faridabad, Gurugram and Noida also recorded ‘poor’ air quality

The air quality in the national capital worsened on the third consecutive day when the Air Quality Index was recorded at 258. An AQI of 258 is considered poor according to pollution watchdog Central Pollution Control Board, and can cause breathing difficulty upon prolonged exposure. PM 10 remained the prominent pollutant as wind blew from northwest direction where major stubble burning activity is taking place.

Neighbouring cities of Faridabad, Gurugram and Noida also recorded 'poor' air quality at AQI of 222, 286 and 234 respectively. Parts of Delhi like Mundka, Dr Karni Singh Shooting Range, Jahangirpuri showed alarmingly high pollution level with AQI ranging between 260 to 292. According to the CPCB data, the value of AQI value in Delhi touched 245 on Saturday while Ghaziabad and Gurugram recorded AQI at 302 and 336 respectively, turning the air 'very poor' in quality. An AQI between 0-50 is considered good, 51-100 satisfactory, 101-200 moderate, 201-300 poor, 301-400 very poor, and anything over 400 is taken as severe.

Delhi's tryst with deadly pollution around festive season started early this year with air quality turning poor in the beginning of October, as opposed to November when it is generally expected to touch 'poor' level. Unfavourable weather conditions and stubble burning by farmers in neighbouring states of Punjab, Haryana, Uttar Pradesh and Rajasthan have been

major aggregators of rising pollution levels. Speed and direction of wind plays a major role in dropping the air quality.

"The air quality has deteriorated due to change in direction of wind, which is now flowing from areas in Haryana and Punjab where stubble burning is taking place. Earlier, no wind was blowing, making it difficult for local pollutants to get dispersed, a CPCB official said.

"This is the period of monsoon withdrawals and a low pressure system in the Arabian Sea is developing. Such large scale processes tends to calm the wind speed which is usual for this time. This tends to increase pollution level. The impact of local transport is insignificant so far," Project Director at the Centre-run System of Air Quality and Weather Forecasting and Research (SAFAR), Gufran Beig, said.

Centre's pollution plan calls for stricter parking norms

Date:9-october-2018 Source : indiatimes.com

NEW DELHI:The environment ministry has come up with a Comprehensive Action Plan (CAP) to combat air pollution in Delhi-NCR in the long run, which will go hand-in-hand with the Graded Response Action Plan (GRAP) that kicks in when air quality deteriorates.

A view of Rajpath as dust envelops the sky over Delhi.

While the draft notification of the plan was finalised by the Centre in March, the final plan was released by the ministry on Monday, with deadlines set for each sector, including air quality monitoring, crop burning, traffic management and emission control. The plan also stresses the need for a strict parking policy in Delhi-NCR and for upgrading the public transport system immediately — two changes that were raised by the Supreme Court-mandated Environment Pollution (Prevention and Control) Authority (EPCA) at a meeting with the ministry on Monday. "The ministry reviewed all measures under CAP for Delhi-NCR. But EPCA has highlighted the need to focus on public transport as well as on a parking policy to encourage people to shift to public transport. With no deterrence or a suitable system in place, the number of vehicles on the roads will

increase," said Sunita Narain, a member of EPCA and Director General at the Centre for Science and Environment.

The Centre's pollution plan has called on agencies to ensure strict compliance of the shift to BS VI by 2020, expand the CNG network across NCR, introduce more battery-operated vehicles in targeted segments of twowheelers, three-wheelers and buses and to install vapour recovery systems while tightening PUC norms.

It also asks NCR to work on diverting transit truck traffic effectively and checking overloading. The plan calls for a parking policy that will physically demarcate legal parking areas and fine people found parking outside of it. The plan states each parking area should have a metering system and proper signages to reduce cruising time for vehicles.

Sunita Narain said measures that have already been implemented under CAP include the switch to "approved" fuels and ban on pet coke and furnace oil in industries. "This is already making a huge difference. But we have asked for improvement in pollution monitoring, especially for industries," said Narain.

CAP further asks for better traffic management and mentioned a need to improve the frequency of the metro while introducing more buses into the system. "The main focus at this moment needs to be on public transport improvement. We are seeing implementation in all the other areas," Narain added.

Interestingly, a number of revised deadlines proposed are of February 2018 with work on some of them yet to take off.

"The emission and fuel quality action plan failed to address the recent orders where the ministry of petroleum and natural gas committed to the court that that BS VI fuel will be made available in 17 districts out of 23 districts in NCR and two districts adjoining NCR. The ministry has also assured that by October 1, 2019, BS VI fuel will be available in districts of Haryana including Gurgaon. The availability of CNG has been in consideration of the Supreme Court for long time but the ministry has not yet submitted any fruitful solution or a timeline for availability of CNG. This clearly shows that the

government has failed in implementing the timelines as set up by them," said Ritwick Dutta, an environmental lawyer.

'Air quality remains poor for second day'

Date:10-october-2018 Source : asianage.com

The overall air quality index (AQI) recorded at 4 pm on Tuesday was 256 which falls under 'poor' category.

New Delhi: Delhi's air quality remained 'poor' for the second consecutive day Tuesday and the authorities forecast it to further deteriorate in the next couple of days due to change in direction of wind, which is now flowing from stubble burning areas in Punjab and Haryana.

The overall air quality index (AQI) recorded at 4 pm on Tuesday was 256 which falls under 'poor' category. On Monday, the AQI of Delhi was register-ed at 262, according to the data by the Centre-run System of Air Quality and Weather Forecasting and Research (SAFAR).

Ghaziabad and Gurgaon recorded 'very poor' air quality at 307 and 328 respectively, according to the Central Pollution Control Board (CPCB) data.

The SAFAR has predicted further deterioration of air quality with increase in the dangerous PM2.5 (presence of particles with diameter less than 2.5 micrometers) which is expected to fall under the 'very poor' category in the next couple of days.

The PM2.5 level is expec-ted to reach 124 by Wedne-sday, the SAFAR data sho-wed. The PM2.5, also call-ed "fine particulates," is a more serious health concern than PM10, since smaller particles can travel more deeply into lungs and cause more harmful effects.

An AQI between 0-50 is considered 'good', 51-100 'satisfactory', 101-200 'mo-derate', 201-300 'poor', 301-400 'very poor', and 401-500 'severe'.

The PM10 level in Delhi on Wednesday (presence of particles with diameter less than 10 micrometers) was at 242 and the PM2.5 level 107, the data showed.

The drop in the air quality is due to change in direction of wind, which is now flowing from areas in Haryana and Punjab where stubble burning is taking place, a CPCB official said.

“This is the period of monsoon withdrawals an-d a low pressure system in the Arabian Sea is developing. Such large scale pr-ocesses tends to calm the wind speed which is usual for this time,” Project Dir-ector at SAFAR, Gufran Beig, said. “This tends to increase the pollution lev-el. The impact of local tra-nsport is insignificant so far,” Beig said.

Gurugram’s air quality ‘very poor’ for a week, pollution board clueless on causes

Date:11-october-2018 Source : indiatimes.com

URUGRAM: The city has been topping the air pollution chart in the National Capital Region (NCR), reporting the highest rate of rise in the level of PM 2.5, an ultra-fine pollutant, over the past week.

The city’s air monitoring stations has been reflecting PM2.5 concentration at higher levels than those recorded at Anand Vihar and ITO — the most polluted localities in Delhi. In terms of the air quality index (AQI), too, Gurugram remained the most polluted city in the entire NCR since October 4.

Officials said the city’s AQI continued to hover in the ‘poor’ and ‘very poor’ regions since last week. While the AQI was ‘very poor’ on Tuesday, last Saturday and Friday, it was ‘poor’ last Sunday and last Thursday. On the other hand, the air quality in Delhi and Noida remained a tad better in the ‘poor’ level all these days. Faridabad, an industrial town located closer to the city, also reported lower levels of pollution.

To make the situation worse, the Haryana State Pollution Control Board (HSPCB) is still appeared clueless on the reasons behind the rising pollution levels in the city.

“We are in the process of analysing possible causes behind a sudden rise in pollution levels. The EPCA (Environment Pollution Control Authority) has already issued directions, asking all departments to take appropriate measures listed in the GRAP. We will soon have a meeting to decide the further course of action,” said Jai Bhagwan, regional officer, HSPCB.

Deputy commissioner Vinay Pratap told TOI, “GRAP measures have been taken for the prevailing pollution level.”

Experts and residents alleged that none of the GRAP measures had been taken by the authorities as yet. “The pollution level has been in the very poor category for days now, but the authorities seem to be least bothered. I don’t understand what they were waiting for. We can still spot open waste burning and dumping in different areas, while dust has enveloped the city,” alleged Niranjan Raje, a former member of EPCA.

Vaishali Rana Chadra, a resident, said, “Not a single GRAP measure has been implemented yet. Pollution is taken seriously only when EPCA takes stock of the situation. We request EPCA and CPCB to take action against departments not taking enough measures to contain pollution.”

As per the GRAP measures, the civic bodies should start mechanised sweeping on main road, while the pollution control board should inspect construction sites to make sure MoEF &CC norms are followed. The road and transport authority (RTA), on its part, needs to check movement of overloaded and polluting vehicles in the city.

Delhi Air Pollution Live Updates: Capital's Air Quality "Unhealthy" Today

Date:12-october-2018 Source : ndtv.com

New Delhi: Pollution in Delhi worsened today as the air quality reached the 'unhealthy' category as stubble burning in Punjab and Haryana has begun. Burning of paddy straw every year in the months of October and November in Punjab and Haryana is one of the major contributors of air pollution in Delhi and its neighbouring cities. The smoke and fine particulate matter pollute most of northwest India, especially the national capital. The air quality in north India worsens drastically during the winter months, with heavy smog covering the region. Delhi and nearby cities, the most populous region in the country, are the worst affected when particles from stubble burning combine with industrial pollution, vehicular emission and dust due to construction. Adults and children with respiratory disease, such as asthma, must avoid prolonged outdoor exertion in this pollution in Delhi.

Mumbai Air Quality Worsens As Construction Activities Rise

Date:13-october-2018 Source : ndtv.com

Mumbai: Residents of Mumbai have been breathing unhealthy air and the quality is deteriorating over the years. Despite being a coastal city, Mumbai is climbing up on the pollution list.

A recent report by the World Health Organisation ranked Mumbai as the fourth most-polluted mega city of the world, and 63rd among 400 most polluted cities of the world.

The disappearing green cover of the city is giving space to more buildings to come up and with the heightened construction across the city, it is paving way for more pollutants to get trapped in the air, say experts.

"Yes, pollution in Mumbai is increasing," said Debi Goenka, environmentalist, Centre for Conservation Action Trust. "Because of the construction of high rises, sea breeze that used to dilute the pollution earlier, is weakening... the pollutants are getting trapped and blocked and because of which there is no dilution of pollution particularly during winter months," he added.

Historically, in the months of winter, the air quality in Mumbai goes down. For instance on October 1, 2017 at 6 pm, the AQI (air quality index) read 101, which means just about satisfactory -- people can encounter minor breathing discomfort.

And a year later, on October 1, 2018, at 6 pm, the AQI read 129, which is moderate, means there could be breathing discomfort.

Unfavorable weather gives Beijing moderate air pollution

Date:14-october-2018 Source : china.org.cn

Heavy smog covers Beijing on March 16, 2016

Most urban districts of Beijing began to suffer moderate air pollution early Sunday due to weather conditions "not favorable for dispersing pollutants", according to Beijing Youth Daily on Sunday, citing Beijing Municipal Environmental Monitoring Center. But the pollution is expected to ease on Monday as weak cold air arrives in the Beijing-Tianjin-Hebei region, the pollution watchdog told the newspaper.

China has a six-level air pollution system depending on the air quality index (AQI). Excellent air requires index levels below 50, and if the index falls between 151 and 200, the day is classified as moderately polluted. Days when the index rises over 300 are considered severely polluted.

According to the center's official Weibo account, the index in southeast Beijing reached 141 by 8 am on Sunday. Northwest and northeast Beijing reached almost 130.

To maintain air quality, South Delhi's civic body asks NBCC to stop construction at Pragati Maidan

Date:15-october-2018 Source : indianexpress.com

A senior SDMC official said the NBCC appears to have ignored its earlier request asking them to follow NGT guidelines to mitigate dust pollution.

The project includes construction of 6 exhibition halls, convention centre

In the backdrop of increasing pollution levels in the capital, the South Delhi Municipal Corporation has ordered the National Buildings Construction Corporation (NBCC) to stop all construction and demolition activities at the Pragati Maidan redevelopment project site.

A senior SDMC official said the NBCC appears to have ignored its earlier request asking them to follow NGT guidelines to mitigate dust pollution. Hence, they have been asked to halt construction work with immediate effect, said the official.

The redevelopment project includes construction of six exhibition halls and a convention centre. The civic body has also asked the NBCC to obtain a sanction plan from it or produce a copy if they have acquired the same from a competent agency before resuming work.

The order to stop construction will, however, remain in place till air quality is brought to a satisfactory level as per the standards specified by the Central Pollution Control Board (CPCB), said the official. NBCC officials did not respond to calls and messages by The Indian Express.

SDMC Commissioner Puneet Kumar Goel said the civic body has also started ground-level monitoring to ensure that a common object to reduce pollution level is achieved and air quality does not deteriorate further.

SDMC has also procured 22 water tankers, in addition to its existing tankers, for water sprinkling on the roads to intensify sprinkling and increase its frequency.

Substantial changes in air pollution across China during 2015 to 2017

Date:17-october-2018 Source : eurekalert.org

The first detailed analysis of air pollution trends in China reveals a 20 per cent drop in concentrations of particulate pollution over the last three years (2015-2017).

A study by the University of Leeds has examined measurements from more than 1600 locations in China and found that more than 50 per cent of the locations showed a significant decrease in concentrations of sulphur dioxide and fine particulates that make up a large portion of air pollution.

The team used datasets from 2015 to 2017 consisting of hourly assessments of concentrations of Nitrogen Dioxide (NO2), Sulphur Dioxide (SO2), Ozone (O3), and fine particles measuring less than 2.5 µm (PM2.5).

The hourly data was used to calculate monthly averages and determine overall concentration levels as well as which regions of China have the highest and lowest concentrations. The data was then used to assess whether pollutant concentrations had changed over the 2015 to 2017 period. The team found that concentrations of PM2.5 fell by 7.2% per year over this period and concentrations of SO2 fell by 10.3% per year. In contrast, O3 concentrations increased by 5% per year.

Study co-author Professor Dominick Spracklen, from the School of Earth and Environment at Leeds, said: "Rapid economic growth and large increases in emissions has led to serious air quality issues across China. One of the most dangerous components of air pollution is fine particulate matter that measures less than the width of a human hair. These particles can penetrate deeply into the lungs causing serious health complications. Exposure to these particles is estimated to cause more than 1 million deaths across China each year.

"In response the Chinese government introduced policies to reduce emissions and set ambitious targets to limit the amount of particulates in the atmosphere. This is the first detailed assessment as to whether these policies are having an impact."

Ben Silver, study lead author and post graduate researcher at Leeds, said "Our work shows rapid and extensive changes in air pollution right across China. In particular it is encouraging to see that levels of fine particulate matter have fallen rapidly in the last few years.

"While more research is needed to fully assess what is driving the trends we've uncovered here, particularly what is causing the widespread increase in ozone concentrations, we can see that China's emissions control policies seem to be on the right track."

Indoor air pollution is more than double standard limit in Bengaluru

Date:18-october-2018 Source : newindianexpress.com

BENGALURU: In a bid to raise awareness on the reasons behind indoor air pollution, the director of Honeywell addressed the media on Wednesday in the city. “Indoor air pollution is more dangerous by five to ten times as compared to outdoor air pollution. When we mop the floor at home with a chemical cleaning agent, we are inhaling volatile organic compounds (VOCs) released by it. The sources behind indoor air pollution are different and as they are invisible, people are unaware about it. We are working with the central government, who are at present more focused on combating outdoor pollution in Indian cities,” said Sudhir Pillai, director, Honeywell, adding that growing urbanisation does not allow for ventilation of homes.

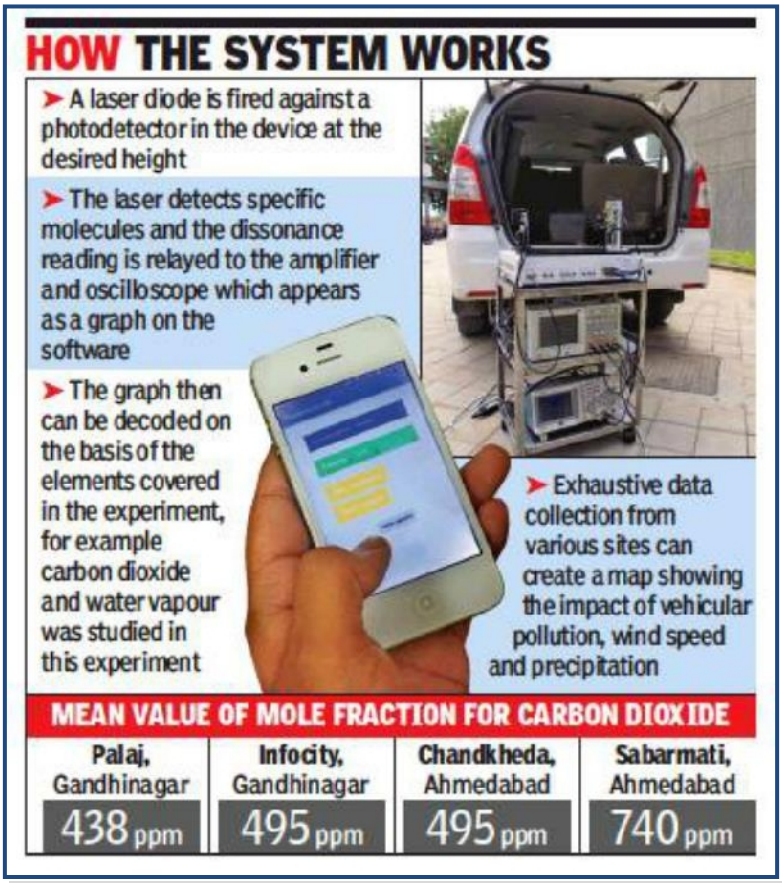
“The particulate matter (PM) 2.5 standard for indoor air quality is 25 micrograms per cubic metre as per the World Health Organisation.In Bengaluru, it touches 50 to 70 micrograms per cubic metre inside homes, offices, colleges, malls, movie theatres, conference halls, hotels, etc,” he added. Tobacco smoke, formaldehyde present in deodorants and body sprays, incense sticks, furniture, dust from carpets, cooking gas emissions, heaters and fireplaces, bacterial growth such as fungus and mold, air fresheners, danders found on the fur of pets, cleaning agents, disinfectants, paints, varnish, etc, also cause the particulate matter (PM) to increase indoors, he said. According to them, indoor air pollution can alter the way children’s brains develop and make older adults more likely to succumb to cognitive decline, especially since we spend 80 to 90 per cent of our time inside closed spaces. Chemicals such as sulphur, carbon monoxide, are present inside which are harmful to our health. When asked about their work with the government, Sudhir said, “We are working with the Central Pollution Control Board, IIT Delhi, and The Council of Scientific and Industrial Research - National Environmental Engineering Research Institute. We want the government to come up with standards to measure indoor pollution in India, which is something that is unavailable at present.”

The MNC that deals with aerospace, home, building technologies, air purifiers among other products is batting for air quality monitoring devices to be made mandatory indoors. Air purifiers within closed spaces was discussed as a solution to combat pollutants indoors, though he admitted that affordability is still an issue for middle class and lower-middle-class homes.

Alternatively, use of organic cleaning products such as baking soda, vinegar was suggested for domestic use.

Quick scan: How polluted is the air you breathe?

Date:20-october-2018 Source : indiatimes.com



AHMEDABAD: It's the time of the year again when citizens in the national capital and closer home in Ahmedabad get jittery about the very air they breathe. Given the serious air pollution problem, a team of faculty members and students of IIT Gandhinagar (IIT-Gn) developed an indigenous laser-based portable device which measures the level of pollutants in the air.

The current system, employed by CPCB or SAFAR, has fixed devices and can't ascertain the local impact of vehicular and other types of pollution. The IIT-Gn team claims to have employed the first portable tunable diode laser spectroscopy (TDLS) system in the Indian context, which provides a highly localized reading of air pollution, be it outside your home or on the road you use.

The system has been developed by a team led by Arup Lal Chakraborty, associate professor (electrical engineering) at IIT-Gn with doctoral student Anirban Roy as the primary investigator. Other members include Neetesh Kumar

Sharma from IIT-Gn and Abhishek Upadhyay from the University of Strathclyde, Glasgow. “The device has to be kept at the desired level – at ground level or a particular height – after which the laser beam, tuned for specific particle size and detection of specific components, in this context carbon dioxide, takes readings. We have also developed an accompanying mobile phone application to give realtime readings. Compared to other systems, it is portable and can be fitted to a car or even buses, to create an exhaustive pollutant map,” said Chakraborty. Roy said urban areas are battling pollution from multiple sources, from thermal power stations to vehicular population. “The global average of CO2 is 406.7 ppm (parts per million), which was found on the outskirts of Ahmedabad. Inside Ahmedabad, these values were found to be alarmingly high, 727 ppm and 877 ppm, at Chandkheda and Sabarmati, the two locations chosen for the pilot study,” he said.

The project which began in 2016 will now be expanded to more polluted locations such as Vapi and Ankleshwar, members of the team said.

Day after Dussehra, air quality dives, slight haze over Delhi

Date:21-october-2018 Source : indiatimes.com

NEW DELHI: The capital's air quality dived on Saturday, a day after hundreds of effigies were burned in the capital on Dussehra, aided by firecrackers and meterological conditions as a slight "haze" could be seen in the morning. Delhi's overall air quality index (AQI) was recorded at 326 at 4 pm on Saturday, which falls in the "very poor" category and is the highest so far this season.

According to data by CPCB, 33 locations in Delhi recorded "very poor" air quality while some locations also touched "severe" during the day with an AQI over 400. The real-time readings by CPCB also showed the AQI touching nearly 340 during the day, officials said. Other locations in NCR did not fare any better with Ghaziabad, Faridabad, Gurgaon, Noida and Greater Noida also recording "very poor" air quality. An AQI between 201 to 300 is classified as "poor", between 301 to 400 is classified

as "very poor".
EPCA to review situation tomorrow.Readings above 401 are classified as 'severe' on CPCB's index, which reaches a maximum limit of 500.

Officials said this was a phenomenon generally observed after crackers are burst and is being added by low-wind speeds and a slight increase in moisture. "Stubble burning is also going on in northern India and wind speeds have dropped. All these factors are combining to increase pollution levels in Delhi at this moment. We have asked for all agencies to fine violators on the spot and action has been intensified on the ground," said a senior CPCB official.

Data according to CPCB's central control room showed Delhi's average PM2.5 and PM10 to be over three times the safe standard and SAFAR forecasts show pollution levels are likely to spike further on Sunday before improving slightly in the next two days. Delhi's average PM 10 level on Saturday at 7pm was recorded at 334 micrograms per cubic metre, while the average PM 2.5 levels at the same time was 178 micrograms per cubic metre. The safe standard for both these pollutants is 100 and 60 micrograms per cubic metre, respectively.

EPCA, the enforcing body of the graded response action plan (GRAP), says while no additional measures are planned, they will continue to review Delhi's air quality with a meeting also to be held on Monday.

Why there is no quick remedy to Delhi's poor air quality

Date:22-october-2018 Source : businesstoday.in

As overall air quality of Delhi and the surrounding areas dipped to the season's lowest last week, a war of words broke out on Twitter between Punjab Chief Minister Captain Amarinder Singh and opposition leader and former Deputy Chief Minister Sukhbir Singh Badal on the issue of paddy stubble burning. Stubble burning is one of the primary reasons of air pollution in Delhi and neighboring states every year around winter. While Badal accused the state government of misusing central government funds meant to incentivise stubble burning, Singh stated that the funds were not sufficient to tackle the problem. He added that the funds released were only a

small portion of what was committed. The only fact both Singh and Badal agreed to was that despite the central government announcing incentives, and state government doing its bit, there is no respite to the pollution problem caused by the practice of burning paddy stubble by farmers in Delhi's neighbouring states Uttar Pradesh, Haryana and Punjab in this time of the year.

Is it the failure of the central government's policy that was meant to veer farmers away from this practice? Is it the failure of the state government in implementing the policy in an effective manner? Or both?

It was in March this year that the Narendra Modi government announced a new scheme to support the efforts of the governments of Punjab, Haryana and Uttar Pradesh and NCT of Delhi to address air pollution by subsidizing the purchase of machinery required for in-situ management of crop residue. One component of the scheme talked of providing 80 per cent of the project cost to cooperative societies of the farmers, farmer producer organisations, self help groups, private entrepreneurs, etc., to establish farm machinery banks for custom hiring of in-situ crop residue management machinery. The other part of the scheme was to provide a 50 per cent subsidy on the cost of the machinery/equipment that will be provided to individual farmers for crop residue management. Awareness creation was the third part. Of a total of Rs 1151.80 crore that was sanctioned for the new scheme, Rs. 591.65 crore was for 2018-19 and Rs 560.15 crore for 2019-20.

Singh says that Punjab received Rs 269 crore from the Centre on this account and has already spent Rs 250 crore to provide 25,000 machines, of which 15,367 have actually been delivered. Rest of the machines will be available by the month end, he adds. Haryana and Uttar Pradesh are also known to have issued circulars regarding the scheme and are in the process of implementing it in respective regions.

Delhi's pollution level indicates that despite these measures, farmers have not stopped burning their stubble.

Singh's Twitter messages tell us why. Farmers are not interested in disposing off their paddy crop residue despite the central government sops because they find the sops inadequate. "I've been seeking Rs 100 per quintal as stubble burning compensation for our farmers," Punjab CM says.

The government is also supposed to take stubble burners to task by imposing penalties. With about 20 million tonnes of stubble and straw that gets disposed off after the harvest in these regions around the same period every year, it is easier said than done. The problem in enforcing this rule is the size of the area and the quantum of stubble and straw that gets burned.

It will take several years of concerted efforts of both central and state governments to make farmers adopt new systems and practices. Additional incentives can only speed up those efforts.

CEED's action to combat air pollution in Ranchi

Date:23-october-2018 Source : dailypioneer.com

The Centre for Environment and Energy Development (CEED) organised a national conference to foster regional cooperation and to encourage an information-sharing mechanism to combat the deadly air pollution existing in the Indo-Gangetic region. The conference 'Cities' Dialogue: Air Pollution Abatement and Role of City Administration' aimed to start an inter-city dialogue for effective coordination to develop a response plan for air pollution abatement was organised here on Monday focusing on two cities.

It rolled out a platform for experience-sharing among the city of Ranchi and Lucknow to help assess the capacity of a local administration to tackle air pollution issues through urban planning. Asha Lakra, Mayor of Ranchi and Sanyukta Bhatia, Mayor of Lucknow, along with other guest speakers from various industries, environmental experts, scientists, academicians, media and doctors attended the conference.

Highlighting some points about the quality of air in Ranchi, Asha Lakra said, "Although Ranchi is not completely influenced by the outbreak of air pollution, it is still a major health hazard in the present times and we should not wait for a day when wearing oxygen masks will become a common trend among the masses. Ranchi Municipal Corporation is moving towards a major change with e-rickshaws being introduced in the city. A number of the existing city buses and auto-rickshaws that run on diesel and petrol are being connected with CNG with intent to turn the city into an eco-friendly smart city."

In an attempt to control air pollution, people are being encouraged to use public transport and opt for car pooling. A Forest Conservation Committee has also been formed to prevent the erosion of forests in Jharkhand while as per the central government's Amrut Scheme; parks are also being built in each ward of the city. "As part of the Ujjwala scheme, the government has replaced coal and charcoal with LPG and the state government has distributed several 'chulhas' across the state," she further added.

Sanyukta Bhatia Mayor of Lucknow said that the government of Uttar Pradesh is already working in tandem with the national government to develop a long-term plan to improve the air quality in a sustainable way and also appreciated the effort of CEED to initiate a cities' dialogue to improve the air quality in the region.

Air pollution and noise increase risk for heart attacks

Date:24-october-2018 Source : eurekalert.org

Where air pollution is high, the level of transportation noise is usually also elevated. Not only air pollution negatively impacts on health, but also car, train and aircraft noise increases the risk for cardiovascular diseases and diabetes, as previous research has demonstrated. Studies investigating the effect of air pollution without sufficiently taking into account the impact that noise exhibits on health, might overestimate the effect of air pollution. These are the results of a comprehensive study conducted by the Swiss Tropical and Public Health Institute (Swiss TPH), which was published today in the peer-reviewed European Heart Journal.

The study looked at the combined effects of air pollution and transportation noise for heart attack mortality, by considering all deaths that occurred in Switzerland between 2000 and 2008. Analyses that only included fine particulates (PM2.5) suggest that the risk for a heart attack rises by 5.2% per 10 μg/m³ increase in the long-term concentration at home. Studies which also account for road, railway and aircraft noise reveal that the risk for a heart attack attributable to fine particulates in fact increases considerably less; 1.9% per 10 μg/m³ increase. These findings indicate that the negative effects of air pollution may have been overestimated in studies which fail to concurrently consider noise exposure.

"Our study showed that transportation noise increases the risk for a heart attack by 2.0 to 3.4% per 10 decibels increase in the average sound pressure level at home." said Martin Röösli, Head of the Environmental Exposures and Health Unit at Swiss TPH, and lead author of the published research. "Strikingly, the effects of noise were independent from air pollution exposure."

Effect of noise and air pollution are additive

The study also found that people exposed to both air pollution and noise are at highest risk of heart attack. Hence, the effects of air pollution and noise are additive. "Public discussions often focus on the negative health effects of either air pollution or noise but do not consider the combined impact." said Röösli. "Our research suggests that both exposures must be considered at the same time." This has implications for both policy as well as future research. Hence, Röösli and co-researchers recommend including transportation noise exposure in any further research related to air pollution and health to avoid overestimating the negative effects of air pollution on the cardiovascular system.

Data from across Switzerland

The study included all deaths (19,261) reported across Switzerland from the period 2000 to 2008. The air pollution (PM2.5) was modelled using satellite and geographic data, calibrated

with air pollution measurements from 99 measurement sites throughout Switzerland. Nitrogen dioxides (NO2) were also modelled using 9,469 biweekly passive sampling measurements collected between 2000 and 2008 at 1,834 locations in Switzerland. Transportation noise was modelled by well-established noise propagation models (sonRoad, sonRAIL and FLULA 2) by Empa and n-sphere. The air pollution and the transportation noise models were applied for each address of the 4.4 million Swiss adult citizen (aged 30 years and above).

Haze engulfs Delhi as air pollution logs a big spike

Date:25-october-2018 Source : hindustantimes.com

Pollution shot up on Wednesday to a four-month high in Delhi, shrouding the national capital in a haze due to unfavourable weather conditions, including a dip in temperature, low wind speed, and a cloudy sky that combined to trap toxic pollutants in the air, according to experts from various government and private monitoring agencies.

A top view of Pragati Maidan metro station after air pollution level gone up in New Delhi

The Central Pollution Control Board's (CPCB) forecasting system and the forecast provided by SAFAR, which comes under the Union ministry of earth sciences, said pollution levels will continue to soar till Thursday, after which situations is likely to become better.

"The level of particulate matter, particularly the natural dust particles, has shot up drastically since Tuesday evening. At 6pm on Wednesday the level of PM10 (coarse dust particles) shot up to 382.5 micograms per cubic metre which is 3.8 times above the daily permissible limit of 100," said a senior CPCB official on condition of anonymity.

The level of PM2.5 ultrafine particles — emitted mostly by vehicles, industries and open garbage burning— also shot up to 172 micograms per cubic metre which is nearly three times higher than the safe limit of 60.

"Such high levels of PM10 concentration were last seen in the second week of June this year, when huge amount of dust gushed into Delhi-NCR because of a dust storm in Rajasthan. On June 14, the level of PM10 in Delhi had shot up to nearly 8.5 times above the permissible standards," said an official of CPCB who asked not to be named.

PM10, at 10 micrograms per cubic metre, is around seven times finer than the human hair and can cause irritation in the nose and eyes. PM2.5, 30 times finer than human hair, can enter deep inside the lungs and cause trouble in patients suffering from bronchial ailments if inhaled over a prolonged period.

Scientists from both CPCB and the Delhi Pollution Control Committee (DPCC) blamed the conditions this week on unfavourable meteorological conditions and not on any external factors such as stubble burning or a storm in west India.

" Wind speed has dropped to less than 5km per hour. To aggravate conditions, they are coming from the east and south bringing in moisture. The sky has become partly cloudy. Because of all these factors, the dust is getting accumulated in the city's air and pollution is rising," said a senior DPCC official who asked not to be named.

Scientists from the India Meteorological Department (IMD) said that wind speed dropped to almost zero around noon. The velocity picked up momentarily during the afternoon, but again dropped to zero at around 5.30 pm. The minimum temperature was 17 degrees Celsius, 1 degree below normal.

The result was that Delhi's average Air Quality Index (AQI) hit 328 on Wednesday – the highest so far this season. On a scale of 0–500, an AQI value between 301 and 400 indicates 'very poor' air quality. By 2pm on Wednesday, several areas in Delhi, including Anand Vihar, Mundaka, Bawana and Rohini, were reeling under 'severe' pollution with AQI levels breaching the 400 mark.

Delhi witnessed a weeklong spell of smog in November 2017, when the AQI shot up to 486, prompting chief minister Arvind Kejriwal to describe Delhi as a "gas chamber", declare a public health emergency, and order that schools be shut.

"Spike in pollution levels is not uncommon in north India when winter is approaching. The frequent change in wind directions, helping moisture to gush in, drop in wind speed and dip in temperature are to be blamed. Once the northwesterly winds picks up speed, pollution levels will drop," said D Saha, former head of the CPCB's air quality laboratory.

The Supreme Court-appointed panel Environment Pollution (Prevention and Control) Authority (EPCA) has already rolled out the Graded Response Action Plan (Grap) for very poor air quality since October 15. Diesel generators have been banned in Delhi till March 2019 and the Badarpur thermal power has also been shut down.

EPCA will meet on Thursday to see if other measures need to be implemented at this stage.

Stubble-burning in Punjab & Haryana contributing 30% to Delhi air-pollution

Date:26-october-2018 Source : business-standard.com

Stubble-burning in Delhi's neighbouring Punjab and Haryana is currently contributing to 20-30 per cent of the Capital's overall air-pollution, at a time when winds over Delhi are calm, officials said.

Central Pollution Control Board (CPCB) officials said Haryana and Punjab are monitoring the fire incidents, including stubble-burning, and apprising them of the situation on a daily basis.

"There are local polluting factors such as vehicular pollution and dust, but stubble-burning in Punjab and Haryana is contributing about 20-30 per cent to the Delhi's air pollution," said Prashant Gargava, member secretary CPCB.

The assessment is based on the data from IITM-Pune, he said.

"The wind height could be a reason behind it. Apart from that, winds in Delhi currently don't have a definite direction," he added.

The CPCB, however, warns that the wind direction may change to northerly and north-westerly around November 7, the time of Diwali, which may lead to a severe drop in Delhi's air quality.

Stubble-burning is done by farmers, the resultant smoke takes the form of smog when it reaches Delhi and regions around it leading to a spike in air pollution. Generally, the first week of November is the time of smog in Delhi, when the air quality reaches beyond severe.

Delhi: Even 'green' brick kilns to be shut if air quality dips to emergency level

Date:27-october-2018 Source : indiatimes.com

NEW DELHI: Environment body EPCA has told Delhi and its neighbours that all brick kilns will be shut if air quality hits emergency levels. This will apply even to those that have switched to cleaner technology.

Experts say brick kilns contribute significantly to PM 2.5 levels in the air though there is no specific data on this

Even though there has hardly been any study to quantify how much brick kilns contribute to Delhi's air pollution, experts say they contribute significantly to PM2.5 levels. In a meeting on Thursday, EPCA member Sunita Narain told Rajasthan and Uttar Pradesh pollution control boards: "No brick kiln which has not converted to zigzag technology will be allowed to operate. Even the ones which have, will be shut when pollution levels reach emergency severe-plus levels," Narain said. According to experts, zigzag technology reduces pollution by 70-80%. UP officials said of a total of 2,155 brick kilns in the state, 426 have converted to the technology while 471 have been shut down. In Rajasthan, 82 kilns have converted and the rest have been shut.

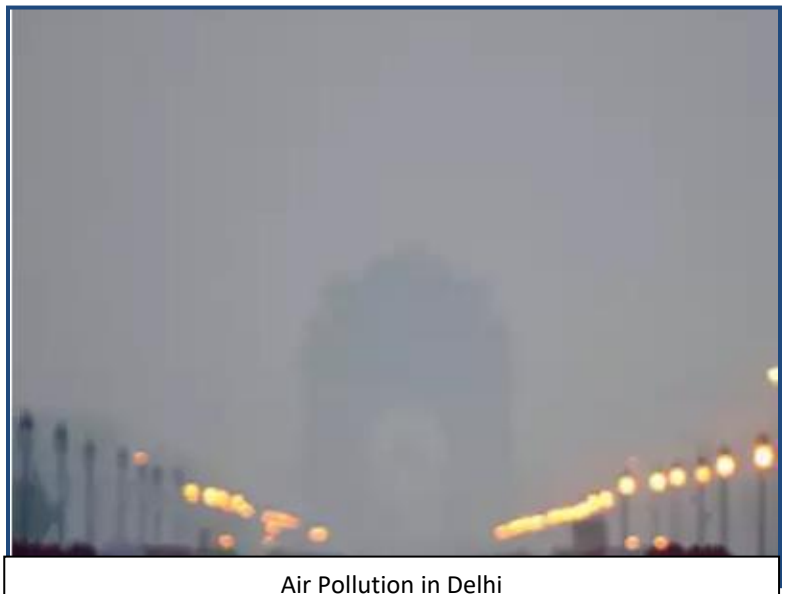
The brick industry is one of the five largest industrial consumers of coal. The Supreme Court had in 1996 ordered all kilns in Delhi to be shut down. The kilns then moved to Ghaziabad, Noida, Baghpat and Meerut.

Last year, EPCA set up a three-member team from the Centre for Science and Environment CSE, Central Pollution Control Board, and an outside consultant to compile a report on the conversions that have happened.

Delhi: TOI Green Drive strikes back to fight poison in air

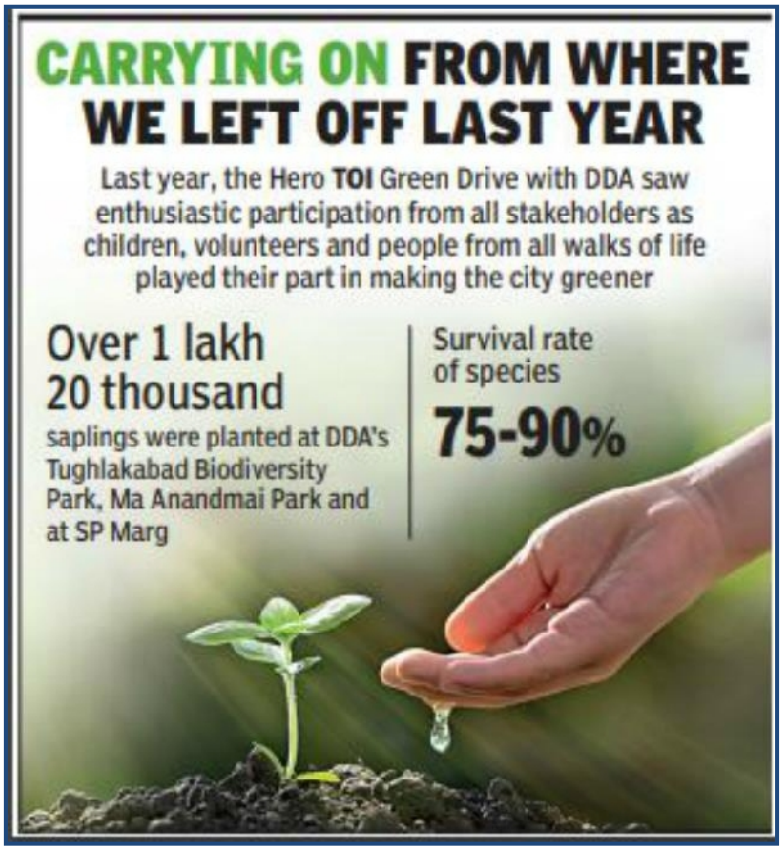
Date:28-october-2018 Source : indiatimes.com

NEW DELHI: Polluted air is not only a problem over a few winter months. In 2016, the World Health Organization said that three million people died each year due to exposure to outdoor pollution. In 2012, an estimated 6.5 million deaths (11.6% of all global deaths) were linked with indoor and outdoor pollution. Given these statistics, the air quality in Delhi and the National Capital Region is of immense concern, with the pollution index already close to 'severe' and likely to worsen in the coming weeks.



Air Pollution in Delhi

The 2016 WHO report ranked Delhi among the world's top 20 most-polluted cities with an average PM 2.5 level of 122 micrograms per cubic metre against the safe standards of 40 micrograms. The problem has not abated. In fact, it has worsened so much that between November 1 and 10, people have even been advised not to spend too much time outdoors.



Breathing in contaminated air leaves the body at risk of diseases such as cardiovascular complications, stroke, chronic obstructive pulmonary diseases, lung cancer and acute respiratory infections.

Firmly believing that one way to fight pollution is to increase the green cover in the city, TOI has been running the Hero TOI Green Drive since 2015 with Hero MotoCorp and DDA. Accordingly, around 1.2 lakh saplings were planted in 2016, 70,000 of them in the three biodiversity parks at Tughlaqabad, Neela Hauz and Tilpath Valley. In 2017, two lakh saplings were planted in Delhi, Indore and Chandigarh.

This year the aim is to plant five lakh saplings in Indore, Ahmedabad, Chennai and in the NCR town of Samalkha in Haryana. While 4.3 lakh saplings have already been planted, 70,000 saplings will be transplanted on Sant Nirankari Charitable Foundation's land on Sunday. The

foundation, which has been an enthusiastic supporter of the Green Drive, will have thousands of devotees and volunteers participating in the event.

The saplings planted at Tilpath Valley last year have now achieved a height of 15-20 metres, experts said. “The care and attention given to the species especially chosen for suitability and adaptability have resulted in a high survival rate. We expect this year’s plantation will be similarly careful and will help attract more birds and wildlife to these locations,” said C R Babu, professor emeritus, Delhi University, and head of the Centre for Environmental Management of Degraded Ecosystems.

Faiyaz Khudsar, scientist in-charge at the Yamuna Biodiversity Park, said the site in Samalkha has the characteristics of the Yamuna floodplain and the species have been selected accordingly, including bamboo, harrar, baheda, arjun, jamun, sisoo, amaltas, tota, kachnar, babool, karonda and adusa. “We want to create a three-storey forest cover to benefit not just the area but the entire city by acting as a dust barrier,” said Khudsar.

Why the Green Drive

1. Once the saplings grow into trees, they will regulate local climate and improve air quality

2. Foliage will block sunlight, and evaporation from leaves will increase the cooling effect.

3. Trees will absorb carbon dioxide and dust, as well as act as a buffer against noise Birds and wildlife might increase.

4. Erosion will reduce and the land will become more fertile as some plants fix nitrogen in soil while decaying matter (humus) adds carbon.

On the loose: Burning truth

Date:29-october-2018 Source : indianexpress.com

According to articles in all the newspapers, there has been a huge surge in air travel bookings during Diwali week. Online booking company makemytrip.com reports 1.3 times more customers from India’s metros are travelling during Diwali this year, as compared to last year. This is unusual because demand during festive season is weak — especially on Diwali — an occasion when even impious Hindus prefer to be at home to welcome Lakshmi. Clearly this has something to do with the fact that the air quality in Delhi has plummeted to “very poor” already and this is when it isn’t anywhere close to its poisonous peak. Inhaling this foul haze means you have a death wish, so it is no wonder that many people are choosing to abandon tradition and save their lungs by skipping town instead.

Plenty has been written about what the magnificent fireworks that light up Diwali skies are doing to our health and how the acrid smoke that lingers for weeks after is damaging children, irreversibly. Less explored are the myriad ways that deadly pollution is impacting our social and cultural lives. The India some of us grew up in, in the '90s was definitely more inclusive. However, Diwali has escaped being slotted rigidly on religious lines, and simply represents the pinnacle of the Indian festive season. It's a universal metaphor for the victory of light over darkness and good over evil. However, younger generations are finding it hard to remain enthusiastic about a festival that has come to represent a horrifying truth, that how we celebrate it, is utterly ghastly. Delhi's air is terrible at the best of times and the cracker bursting right now has turned the city into a veritable gas chamber.

Festivals are meant to celebrate the cycle of life. They serve as a throw back to history and legend, a yearly reminder to place our existence in a larger context. At some level, its awe inspiring and incomprehensible that Diwali has survived and thrived for thousands of years. It's the occasion that used to guide and steady us, marking the important distinction between the ordinary day and a special one. Behind the glittering lights and smog-laden atmosphere is a personal dimension of how each one of us has experienced it over decades. It's tragic that there is now a growing detachment with this ancient celebration, because of something as ludicrous as pollution. Two schools in Delhi have decided to make a fortnight break permanent this time of the year; so parents can plan to flee the city accordingly. More are likely to follow suit. Rooted though we may be in the past, tackling respiratory problems is our dire present.

Inexplicably, no amount of coverage of the air quality index, or the repeated warnings about how most of us are walking around with compromised lungs, has effected any change in, either government policy, or the way we live. Those of us still here continue like before; shopping for diyas unmindful that they release smoke, smugly satisfied that we've done our duty by rejecting fireworks. The collective feast and good cheer continue in all the self conscious acts of preparing for a festival, to reinforce family rituals. Malls and marketplaces are decorated brightly and seem busy enough, yet the cloud of deadly pollution looms large. Perhaps being Indian means forever juggling disparate elements, finding your peace somewhere between old habits and new, and philosophically accepting whatever follows.

Schools take drastic steps for children to combat air pollution

Date:30-october-2018 Source : indiatoday.in

Schools in Delhi are taking precautionary measures to combat air pollution. These include not holding early morning assembly sessions, asking students to stay indoors and organising no-cracker campaigns.

Almost every student is coughing and sneezing. Neeta Sharma said. "Last year, air pollution was so much that everyone in the family had watery red eyes and were left sneezing and coughing. To fight the problem, I have asked my 8-year-old son to stay indoors and eat amla."

With pollution levels in the Delhi hovering in the "very poor" category and post the Supreme Court order setting a limit on the number of crackers which can be burnt by citizens, schools in Delhi have been advised by the education department to create awareness among students about the ill effects of air pollution.

Avdhesh Jha, Principal of the Sarvodaya Co-ed Vidyalaya Rohini Sector 8, said, "For the past few days, I have asked teachers to hold sessions with students where they are advised to avoid taking morning and evening walks. Apart from that, I have also discontinued the practice of morning assembly in my school.

Even though pollution these days is by far less than last year, we are taking lessons from last year's levels and advising children to take care of themselves," Teachers across Delhi shared that they have been asked by their school heads to hold workshops on the importance of saying no to crackers.

"Like every year, our school will raise awareness on the ill effects of burning crackers. We organise the 'Diwali Celebration Week' days before Diwali where activities like plays, story-telling, diya making and slogan writing competitions are organized to instill in students the side effects of crackers," said Neeru Loriya, Teacher in charge at a school in Sector 4, R K Puram.

As Delhi's air quality dips, schools begin taking anti-pollution measures

Date:31-october-2018 Source : hindustantimes.com

With pollution levels in Delhi plummeting, several schools have started taking precautionary measures such as suspending morning assemblies and restricting outdoor activities for their students.

Though the Delhi administration is yet to issue an advisory for schools, several government and private schools have started taking initiatives on their own.

"We have suspended morning assemblies for the next week and also stopped outdoor activities. We have advised students not to step out early in the morning and late in the evening. Besides, we have also distributed 'amla' among students and advised them to eat the fruit everyday as it helps minimising the effects of pollution," said Awadesh Jha, principal of government co-ed Sarvodaya Vidyalaya in Rohini's Sector-8.

Officials at Rajkiya Pratibha Vikas Vidyalaya in Yamuna Vihar said they have also restricted outdoor activities. They said the school will organise "pollution day" next week wherein students will be asked to suggest ideas to curb pollution levels in the city. "We are planning to organise pollution day next week for which we will be inviting students to come up with ideas to curb pollution. Some students will also be presenting modals and prototypes of their ideas," said RP Singh, the school's principal.

Similarly, Indira Sagar, principal at government school in Srinivaspuri said the school has started sensitising programmes in classes. "We have asked the teachers to tell students about the precautions they can take to protect themselves from pollution. We are encouraging them to stay indoors and wear masks when they step out," she said.

Amita Wattal, principal of Springdales, Pusa Road, said the school is organising anti-crackers awareness campaigns ahead of Diwali. "We are encouraging students to celebrate green Diwali and say no to crackers as they also add on to the pollution levels. We have also shifted all sports and cultural practices indoors," she said.

Officials at Ahlcon International School in Mayur Vihar said they will announce suspension of all outdoor activities on Wednesday. "Every year whenever the pollution level goes bad when postpone outdoor activities. We cannot let our children expose to toxic air," said Ashok Pandey, principal at the school.

Sanjay Goel, director of the Delhi government's Directorate of Education (DoE) said that they are waiting for a direction from Graded Response Action Plan (Grap) and after which an advisory will be issued to all government and private schools.

November 2018

Delhi's air quality could worsen in coming week

Date:1-November-2018 Source : indianexpress.com

A day after Delhi recorded its first severely polluted day, the air quality improved to very poor category on Wednesday.

Air pollution experts, however, said the coming week will see high levels of particulate matter and toxic gases. System of Air Quality and Weather Forecasting and Research (SAFAR) said the coming 10 days are expected to see a sharp deterioration of air quality in Delhi-NCR. "This is due to a western disturbance system in the north of India which is bringing moisture and a cyclonic system on the eastern side which is suppressing winds. There is also the increased burning of paddy straw in Punjab and Haryana, evident from images released by NASA. The direction of the wind is now from the northwest. All this, combined with Delhi-NCR's own pollution sources, could lead to a spike in pollution in the coming 10 days," the agency said.

Particulate matter concentration increased manifold Wednesday night. At 9 pm, the PM 10 concentration at India Gate was recorded as 705 µg/m3, seven times higher than the acceptable limit of 100 µg/m3 . PM 2.5 was recorded as 272.0 µg/m3, over four times higher than the acceptable limit of 60 µg/m3.

At Anand Vihar, among the most polluted places in Delhi, the PM 10 concentration was 849 µg/m3 and the PM 2.5 concentration was 272 µg/m3.

The air quality improved slightly Wednesday, because of a slight uptick in wind speed in the early hours.

EPCA directions

-No excavation or civil construction in Delhi-NCR between November 1 and 10

-All polluting stone crushers and hot mix plants to stop between November 1 and 10

-Industries using coal and biomass as fuel to stop between November 4 and 10

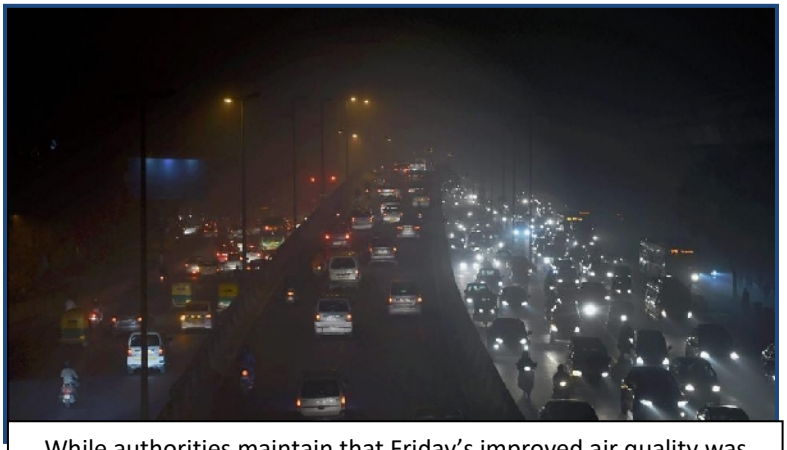
-No use of diesel generator sets in the capital

-Brick kilns in NCR will be closed between November 1 and 10

-Mundka industrial area to remain closed between November 1 and 10

Officials double down on Grap, air quality improves in Gurugram

Date:3-November-2018 Source : hindustantimes.com



While authorities maintain that Friday's improved air quality was due to stricter Grap implementation, experts said it had more to do with prevailing meteorological conditions

After three consecutive days of 'severe' air, including two days on which Gurugram was the most polluted city in the country, air quality recovered significantly on Friday with a reading of 386 ('very poor') on the Air Quality Index, down from 426 ('severe') the previous day.

The concentration of particulate matter 2.5 (PM2.5), the primary pollutant, also dropped from 481 micrograms per cubic metre (ug/m3) on Thursday to 422ug/m3 on Friday.

JB Sharma, the regional officer (Gurugram), Haryana State Pollution Control Board (HSPCB), said this was due to the implementation of various measures under the Graded Response Action Plan (Grap), which has been in effect since October 15. However, upon orders from the Supreme Court-mandated Environmental Pollution Control Authority (EPCA), Grap is being implemented with greater vigilance and stricter enforcement between November 1 and 10. "This is keeping in mind the severity of air pollution around Diwali," Sharma said.

While authorities maintain that Friday's improved air quality was due to stricter Grap implementation, experts said it had more to do with prevailing meteorological conditions. The maximum temperature in Gurugram increased from 30 degrees Celsius on Thursday to 31 degrees Celsius on Friday. "The increase in temperature, along with a clear sky, is a likely reason for the improvement in air quality," a member of the Central Pollution Control Board's air quality lab said.

The Gurugram Metropolitan Development Authority (GMDA) convened a meeting of all departments participating in the implementation of Grap on Friday. Representatives from the HSPCB, the Municipal Corporation of Gurugram (MCG), the town and country planning department (TCP), Haryana Shahri Vikas Pradhikaran (HVSP) and the police force were present. "They have been instructed to double their efforts in combating pollution," said MD Sinha.

The HSVP, MCG and GMDA officers were also instructed to double the number of vehicles currently deployed for water sprinkling. Water sprinkling has been scheduled for twice a day,

once before the morning rush hour and once before the evening rush hour, to prevent generation of dust by vehicles.

MCG's chief engineer, ND Vashisht, said that there were at least four mechanised road sweeping machines currently working round-the-clock on city streets.

"The HSPCB has put a stop to all large-scale construction sites measuring more than 20,000 square metres," Sharma said. On Thursday, a contractor in Narsinghpur was fined ₹50,000 for not adhering to the construction ban.

Since Thursday, the MCG has collected ₹6,38,500 in fines from those violating the Grap protocol. At least 121 challans have been issued against the violators. The police also made one arrest for illegal waste burning in Sector 10 on Friday.

Yashpal Yadav, MCG commissioner, said that citizens should contact authorities to report any Grap violation. "Citizens can call toll-free number 1800-180-1817 to put a stop to these," he said on Friday. YS Gupta, additional commissioner, MCG, said that this special drive will be in force till 11pm of November 11.

Air quality data goes missing from star-rating website

Date:4-November-2018 Source : indiatimes.com

NAGPUR: Instead of acting on the alarming data on air pollution, it seems that the state has shot the messenger. The ambient air quality data of over 25 cities, which was recently made accessible to public, is conspicuously missing from the Maharashtra Pollution Control Board's (MPCB) website.

About 20 days ago, the board, under its star-rating programme, made data of ambient air from almost 63 monitoring stations available on the website — mpcb.info. The aim behind this was to "let citizens know the quality of air they breathe".

The feature ‘city rating’ enabled citizens to see the Respirable Suspended Particulate Matter (RSPM) levels in different monitoring stations in urban centres. Users could also download last 30 readings from each ambient station.

But two days ago, the feature ‘city rating’ was removed from the website. TOI could not contact senior board officials but sources in MPCB said that the data was removed to avoid any criticism on deteriorating air quality in this peak time.

“Taking off the data from the website is a deliberate attempt by the board to keep a low profile. The board knows that the air quality would significantly drop during Diwali and winters and the officials did not want to face any criticism surrounding the recent Supreme Court’s observations on air pollution,” sources said.

Even though air quality monitoring data is available on MPCB’s official website, it is difficult to comprehend for a common man.

According to environment activists, the board’s move is not just “unethical” but also defeats the transparency agenda that MPCB has been touting under its star-rating programme.

“Diwali is the peak time for deterioration of air quality and unless real-time data is available for public in a comprehensible manner, how will mass awareness happen on the ill-effects of bursting crackers?” said Kaustav Chatterjee, founder of Green Vigil.

Looking at the health emergency, putting out excessive data in public domain is need of the hour, said Sunil Dahiya, senior campaigner at Greenpeace India. “There seems to be no will to reduce pollution levels. On the other hand, reducing transparency in public domain will only prove to be detrimental for building a momentum for clean air in the state,” he added.

The star-rating programme was launched by the Energy Policy Institute at the University of Chicago (EPIC-India) in association with the MPCB and other institutions in June last year. The programme monitors industrial air pollution in ten clusters of the state, and gives ratings to the industries based on the median concentration of latest stack samples for particulate matter.

Only 0.079 Per Cent Of 40 Lakh De-Registered Delhi Vehicles Confiscated

Date:5-November-2018 Source : ndtv.com

New Delhi: The Delhi government may have deregistered 40 lakh old vehicles to curb pollution in the national capital but the enforcement data shows a dismal picture with only 3,196 (.079 per cent) such vehicles impounded by agencies after they were banned by the NGT in 2014. Two different agencies are responsible for enforcing the ban on 15-year old petrol vehicles and

Delhi transport department has been able to impound only 106 old vehicles since NGT banned them in 2014

10-year old diesel vehicles imposed by the National Green Tribunal in 2014 - Delhi traffic police and transport department of the Delhi government. The ban was ratified by the Supreme Court.

The data provided under the Right to Information Act to an activist, Deepak Juneja, shows only 3,196 such vehicles have been impounded since 2014 by both agencies which is just .079 per cent of the total 40 lakh vehicles.

The Delhi government transport department data provided under the RTI paints even a grimmer picture as it has been able to impound only 106 old vehicles since the NGT banned them in 2014, till August 31, 2018.

After NGT had banned old vehicles in the capital, Delhi police mandarins have been issuing circular to impose the ban and take strict action against the erring vehicle owners but the data shows hardly any progress on the ground.

The registration numbers of the petrol vehicles which are 15 year old and diesel ones which are 10 year old have been "deemed to have been de-registered". They have been fed in mobile challan system of the Delhi police which flash as and when their numbers are entered in hand-held devices by traffic officers.

The Delhi traffic police has impounded 1,242 petrol vehicles that are 15 year old since 2014, while 1,848 diesel vehicles that are 10 year old between 2014 and till September 27, 2018.

The challan data provided by the traffic police shows 1,411 challans were issued for 15 year old vehicles and 354 challans for 10 year vehicles during the period.

Vehicular pollution is a major contributor to dangerous air quality in New Delhi which is claiming over 10,000 deaths annually, according to a study.

Nearly 15,000 people died prematurely in Delhi due to pollution by fine particulate matter in 2016, one of the major emissions from diesel vehicles, according to a study this year, which ranked the national capital third in a list of cities reporting most deaths due to air pollution.

Speaking to PTI, Anumita Roychowdhury, executive director of Delhi-based Centre for Science and Environment, said old diesel vehicles cause seven times more air pollution than vehicles with latest BS-VI certification. The Supreme Court has recently banned sale of all Bharat Stage-IV certified vehicles from April 1, 2020.

The Bharat stage emission standards are standards instituted by the government to regulate output of air pollutants from motor vehicles.

The Bharat Stage VI (or BS-VI) emission norm would come into force from April 1, 2020 across the country.

Ms Roychowdhury said emission profile of all vintage cars show that a 10-year-old diesel mid-size car or SUV that meets BS-II and BS-III standards emits 7.5 times higher toxic particulate matter compared to the current BS-IV diesel vehicles.

"Thus, emissions from one BS-II diesel car are equivalent to emissions from 7 current BS-IV diesel cars. This gap will increase even further when BS-VI emissions standards come into effect," she said.

Delhi air quality stays 'very poor': Here are some precautions to take amid disturbing pollution levels

Date:6-November-2018 Source : moneycontrol.com

A day after recording the worst air quality of the season, Delhi continued to stay engulfed under a thick blanket of haze on November 6. The PM2.5 (particles in the air with a diameter of less than 2.5 micrometres) and PM10 concentrations touched 299 and 412 respectively, putting the city into ‘severe’ category on the day, according to Centre-run System of Air Quality Forecasting and Research (SAFAR).

The national capital had witnessed its worst air quality of the season on November 5 when pollution levels reached eight times the permissible limit and inched towards 'severe plus emergency' category due to a change in wind direction and rampant stubble burning in the neighbouring states.

SAFAR has further issued a warning that the city’s air quality is expected to deteriorate to 'severe plus emergency' category after Diwali and it will be "bad" on November 8 even if "partially toxic crackers" are burnt compared to last year.

As the spike in air pollution levels left Delhiites breathless, experts have asked people to report violators of pollution norms to authorities and said that each citizen can make a difference by minimising the use of private vehicles. Doctors have also expressed concern over the rise in the number of patients suffering from respiratory problems.

The ongoing condition has also affected tourism in Delhi, as foreign tourists visiting the capital city complained of having a tough time due to the rising levels of air pollution in the city with some even cutting short their trips citing health concerns, as per a PTI report.

According to World Health Organisation standards, the permissible PM2.5 limit is 25 µgm-3 while PM10 level is 50 µgm-3. India's official permissible PM2.5 limit is 60 µgm-3 while PM10 level is 100 µgm-3.

If you are in Delhi, take note of these suggestions issued by SAFAR:

>Avoid all physical activity outdoors. Give a miss to walk today.

>Stop any activity level if you experience any unusual coughing, chest discomfort, wheezing, breathing difficulty, or fatigue and consult Doctor.

>If the room has windows, close them.

>If the air conditioner provides a fresh air intake option, close it.

>Avoid burning anything, such as wood, candles or even incense.

>Keep the room clean–don't vacuum. Do wet mopping frequently.

>Masks known as N-95 or P-100 respirators may only help if you go out.

EPA loosens air pollution permit requirements for some projects

Date:7-November-2018 Source : thehill.com

The Trump administration is implementing a policy meant to make it easier for facilities that produce air pollution to make changes without going through a complex permitting process.

The policy published Wednesday changes how the Environmental Protection Agency (EPA) determines whether changes to power plants and other facilities -- like installing new equipment -- need to go through the New Source Review process. That process is an extensive analysis meant to limit emissions of air pollutants like nitrogen oxides and particulate matter. Under the new policy, the EPA will consider different actions to be a single project for permitting purposes if they are “substantially related.” That could potentially exempt actions that increase emissions if other actions reduce them.

The policy is part of a series of actions the EPA has taken to overhaul the New Source Review process and narrow the projects that need go through permitting as if they were new construction.

"Previously, New Source Review regularly discouraged companies from employing the latest energy-efficient equipment," acting EPA head Andrew Wheeler said in a statement.

"Our updates will remove undue regulatory barriers, provide greater certainty to America's job creators and energy providers, and incentivize upgrades that will improve air quality."

Since the EPA isn't changing regulatory text, it did not do any cost-benefit analysis of the change, including how it might increase or decrease air pollution, or how much it could save industry.

The policy being implemented Wednesday, which isn't treated as a regulation and doesn't hold the weight of law, was first put forward in 2009, five days before then-President George W. Bush left office.

President Barack Obama's administration then suspended the policy after environmental groups objected and said it would increase air pollution. Officials gathered input in 2010 on potentially reversing or changing it, but never took action.

The American Forest & Paper Association, whose member companies often are subject to EPA air pollution permitting reviews for manufacturing plants, cheered the new policy.

"Currently, companies working in good faith to comply with this component of NSR must rely on interpretations of project aggregation that are contrary to historical approaches. As a result, new manufacturing investments can be forced to be grouped together for permitting when they are economically and technically very different projects that should be considered separately — a costly process that hampers strategic business planning," Donna Harman, the group's president, said in a statement.

"Clear public policy that will support their ability to continuously invest in their facilities is helping to grow the economy and create American manufacturing jobs."

Air Pollution menace: Delhi-based start-up designs 40 feet tall purifier; read details

Date:8-November-2018 Source : financialexpress.com

A Delhi-based start-up has designed a 40-feet-tall purifier which it claims could provide clean air to 75,000 people living in the three-kilometre radius around it. The purifier measures 40 feet in height and 20 feet on each side. It will have the capacity to clean 32 million cubic metres of air per day. The air will be purified by using the highly effective H14 grade highly effective particulate arrestance (HEPA) filter which can clean up to 99.99% of the particulate matter present in the air in conjunction with a pre-filter and activated carbon. The device will run on energy generated via solar panels and will be made with materials sourced locally. Puri noted that the tower can be completed within four months of getting it sanctioned from the authorities. The expected price range of the purifier would be between Rs 1.75 crore to Rs 2 crore per tower, making it not only cheaper than existing devices being used in other parts of the world, which cost upwards of Rs 2 crore, it is also more efficient and cleans up to three times more volume of air.

Particulate matter, especially PM 2.5 and PM 10, continue to be a major pollution concern. The Delhi Pollution Control Committee reports that PM 2.5 and PM 10 levels at many localities across Delhi crossed 200 and 500 µg/m3 respectively on Saturday morning as against the national standards of 60 and 100 µg/m3, representing a major health hazard. Delhi authorities have stepped up episodic efforts to combat pollution which include measures like halting construction activities and regulating traffic, besides the closure of all stone crushers and hot mix plants generating dust pollution. The purifying tower, although a great and necessary invention, is also not the permanent solution to cleaning the air of Delhi and surrounding areas, when improper crop growth pattern and public transport policies are being followed. The tower is again likely to only bring short-term relief.

Delhi air pollution: 'We are currently training in a gas chamber' admit athletes

Date:9-November-2018 Source : indianexpress.com

Junior athlete Sameeksha Nair trains at the JLN Stadium on Thursday.

Athletes who train at the Capital's Jawaharlal Nehru Stadium received an important message on their WhatsApp group this morning. The message read: "The AQI is very poor today, wear your masks and avoid training if you feel uncomfortable". But it wasn't until the evening session — morning program has been cancelled for a while due to pollution — that the athletes realised the severity of the warning. Delhi recorded the worst air quality of the year on Thursday, a day after Diwali.

The PM 2.5 levels around the stadium were recorded around 196 µg/m3 — micrograms per cubic metre of air — (average in the last 24 hours till 8 pm), nearly three times the Indian standards (60 µg/m3) for permissible levels. The PM 10 levels were also high at 355.14 µg/m3 — any reading upto 100 µg/m3 is permissible. According to experts, these levels are enough to cause throat and respiratory issues and in severe cases heart complications.

The coaches at the stadium are wary of the health hazards but an upcoming zonal meet has left them with little choice but to continue training. An off day is something that they can't afford. The intensity of the training has been reduced by several notches and endurance training has almost been abandoned.

Throat and chest pain

"The performance is naturally down because we have a set programme and when we have to tinker with it due to external factors, our wards get affected. Living in a gas chamber is something but we are currently training in a gas chamber. The effects are far more severe and we are really concerned. A lot of athletes have complained about throat and chest pain," said coach Sandeep Sarkaria.

Coach Dinesh Rawat, who has trained promising athletes like Beant Singh, decided to send his wards to the gym and work on strength training instead of their regular track regime.

Most junior athletes have arrived on Thursday after taking part in the Nationals in Ranchi, but they were in a for a rude shock when they reached the stadium. “I am an 800m runner and during practice, I have to do at least 10 kilometres of light running. I have just completed four rounds (4×400) right now and my chest is hurting and I feel as if something’s stuck in my throat. I have two more rounds to go before I take a break but I think, I can’t go any further. I’m going to ask my coach for an early leave today,” said a panting Nitin Tyagi who added that in normal circumstances he could complete six rounds effortlessly. Athletes like Nitin are under severe threat of developing health complications in prevailing conditions. Doctor SK Chhabra, a pulmonologist with over three decades of experience, said it is completely unadvisable to take up any sort of physically rigorous activities in the Capital right now.

“Walking in a green-cover area is fine, but running and training in areas especially like JLN, which is near the main road, isn’t a good idea. When you train the air intake is seven times than normal and in the process, you will inhale pollutants which can cause breathing issues. And in severe cases, where the person has a medical history, heart-related complications can occur,” Chhabra said.

Nitin wasn’t the only athlete complaining about unfavourable training conditions. Sprinter Pooja, who was also asked to do only light-intensity workouts, said she felt nauseous after taking only a few laps around the track.

“It’s so scary. We are facing great difficulty training in these conditions. I almost threw up while training today so I am going to go easy. We have been suggested to use a mask but it’s very uncomfortable and restricts breathing. Doing high-intensity workouts while wearing a mask isn’t practical,” Pooja said.

The athletics program at Thyagaraj Stadium has already been called off for a week and those athletes who don’t have any major competitions the coming months have been exempted from training at JLN. The attendance also has come down dramatically since the last few weeks.

“We have 2,400 students registered here and you can see only 300 kids at the stadium today. Delhi’s pollution is a huge pain but ‘kya karen humari toh majburi hai’ (We really don’t have a choice,” said another coach.

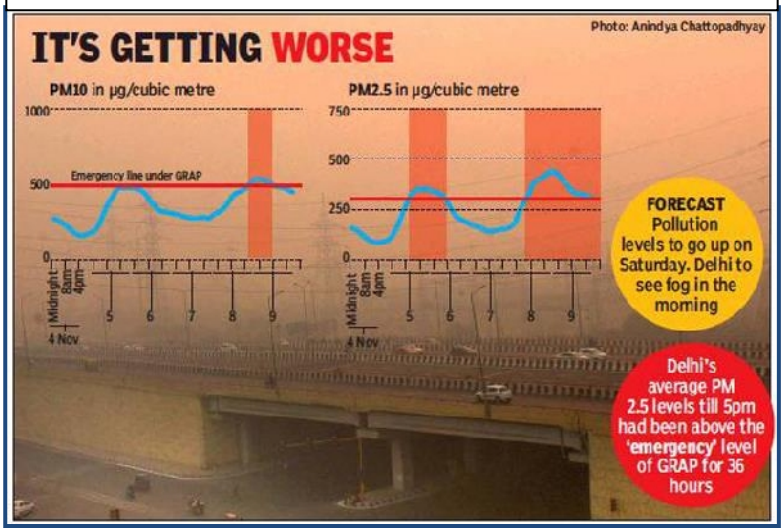
Delhi air ‘severe’, all hopes on western disturbance to clear it

Date:10-November-2018 Source : indiatimes.com

NEW DELHI: Delhi’s air quality nosedived to ‘severe’ for only the third time this season on Friday. The Central Pollution Control Board logged an overall Air Quality Index (AQI) of 423 at 4 pm, which was higher than Thursday’s 390 (‘very poor’). However, the rise in the pollution

levels in the past 24 hours is primarily due to low temperatures, sluggish wind speed and winds blowing in from the north-west. Forecast agencies say the air quality can deteriorate further on Saturday before a western disturbance in the region effects an improvement from November 11.

The rise in the pollution levels in the past 24 hours is primarily due to low temperatures,sluggish wind speed and winds blowing in from the north-west



The SAFAR forecast said on Friday that a heavy air mass was coming towards Delhi at low wind speeds. There was, thus, a possibility that the wind could pick up at the upper level late in the night and push down the polluting particles, thereby keeping the air in the 'severe' category on Saturday. There is likely to be intensified fog too, which will trap airborne pollutants from dispersing.

The forecasting agency added that heavy stubble burning was recorded in the past 24 hours, even if emissions from these were low at the moment. According to its prediction system, Delhi's average PM2.5 level, hovering around 303 micrograms per cubic metre, could spike to 340 on Saturday, while the PM10 level, recorded at 440 micrograms per cubic metre on Friday, could jump to 494 on Saturday.

Alongside the capital, neighbouring Faridabad, Ghaziabad, Greater Noida and Noida all had air classified as "severe", with only Gurgaon marginally better in the 'very poor" range with an AQI of 400. CPCB's central control room data showed Delhi-NCR's average PM2.5 levels to be not only over five times the safe standard, but also over the "emergency" limit of 300 micrograms per cubic metre. If this situation prevails for 48 hours, emergency measures will be implemented under the Graded Response Action Plan.

Till November 10, construction activities have already been stopped and trucks, except those carrying essential goods, have been barred from entering the city. EPCA said a decision on extending these measures will be taken on Saturday.

“Air pollution is still on the higher side, but it could have been worse had we not imposed these measures,” said an EPCA member. “The CPCB-led task force will take a call on Saturday whether these measures need to be extended.”

Dramatic rise in farm fires, air quality levels may hit emergency in Delhi

Date:11-November-2018 Source : hindustantimes.com

Air pollution lingered between ‘very poor’ and ‘severe’ levels in the national capital on Saturday and threatened to enter the ‘emergency’ category even as officials in Punjab reported a big spike in farm fires after Diwali.

According to scientists at pollution forecasting agencies, the air is likely to worsen over the next two days since the wind is bringing in particulates from the northwest, where farm fires have been raging.

“The concentration of PM 2.5 – the more harmful of the particulates – would remain in the severe or severe+ (emergency) category till November 11,” said an official who maintains the early warning system that can forecast pollution levels up to two days in advance.

An official at Punjab’s pollution control board said that since Wednesday, at least 10,000 instances of farm fires were recorded — nearly a fourth of the roughly 40,700 instances seen this year.

A total of 48,000 fire incidents were reported in Punjab last year and the number was 78,000 in 2016. “At this rate, the total count might cross last year’s numbers,” said the official, asking not to be named since he was not authorised to speak to the media.

Farm fires and emissions from firecrackers contribute heavily to concentrations of PM2.5 particles in the air, which can lead to major health problems since they can enter the bloodstream after penetrating deep into the lungs.

‘Emergency’ is the worst of five grades classifying pollution, followed in decreasing intensity by ‘severe’ and ‘very poor’.

Last year in November, a fortnight-long period when the air remained in the emergency category forced schools to be closed and people, especially the elderly and young children, were asked not to go out.

On Saturday, authorities extended a ban on construction work and entry of heavy vehicles into Delhi in order to help control local emissions. Industries running on coal have also been asked to cease operations.

“Several emergency measures have been rolled out while new measures were added over the past ten days. These might have worked,” said Sunita Narain, member of the Supreme Court-appointed pollution control authority Epca.

Farm fires are largely seen as the reason for the air to enter hazardous levels at the start of winters in recent years. In a bid to check this, the Union and state government in Delhi, Punjab and Haryana have announced strict penalties on farmers who burn crop residue. In Punjab, the pollution control official quoted above said that farmers are now resisting inspections.

“Most of the incidents are being reported from the Malwa districts where farmer unions are strong and are not allowing authorities to take action against violators. There have been more than 600 cases where field staff could not take action against violators following farmers’ opposition. On Friday, a Punjab Pollution Control Board (PPCB) team was gheraoed in Bathinda,” said another official.

UK government's air pollution strategy 'a shambolic mess'

Date:12-November-2018 Source : theguardian.com

The government’s plan to tackle air pollution in some of the worst affected cities in the UK is unravelling into a “shambolic and piecemeal mess”, according to environmental lawyers.

ClientEarth, which has successfully defeated the government three times in court, said the emphasis on local authorities taking action was backfiring with no joined-up strategy, delays and poorly researched proposals.

Two of the first five authorities tasked with tackling dangerous levels of poisonous air missed their targets. ClientEarth said one authority, Derby, was proposing a scheme that would lead to new traffic lights and traffic-calming measures on one road, the removal of a bike lane and “bus infrastructure”, but little else.

Morning traffic on the M6 through Birmingham, which has some of the worst pollution in the UK outside London

Katie Nield, a ClientEarth lawyer, said Derby's proposals were "deeply concerning".

"Their preferred option does not seem to be based on any kind of assessment of the possible impacts on air pollution in the city from our point of view that is totally inadequate and seems to be creating more space for more cars and little else."Derby council declined to comment when approached by the Guardian. In 2015, five local authorities with some of the worst pollution outside London – Derby, Southampton, Leeds, Nottingham and Birmingham – were ordered to produce proposals to tackle air pollution by 15 September.

Scores more councils are being tasked with tackling air pollution in their cities in the coming months, but Nield said the Derby plan would set a dangerous precedent.

She said that unless the national government took more forceful enforcement action and drove through a coordinated plan, the UK's air pollution crisis would continue.

"What we are concerned about is a lack of government leadership on this. Things are coming out in a piecemeal fashion, different schemes being put forward by different authorities of different quality, with different charging levels with different exemptions. It is creating a very confusing picture and it is coming across as pretty shambolic."

Air pollution kills tens of thousands of people each year across Britain and affects the health of hundreds of thousands more.

Last month, the UN warned that the UK government was endangering people's health by denying their right to clean air, and the world's biggest children's charity, Unicef, told the Guardian it had refocused its British operation to tackle air pollution because of the scale of the "health crisis" facing young people in the country.

In October, the World Health Organization said air pollution was the "new tobacco", causing 7 million deaths around the world and harming billions more. Health experts say that, as well as respiratory conditions such as asthma, emphysema and bronchiectasis, air pollution causes

developmental problems for children's lungs, making them more vulnerable to these conditions in adulthood.

Other effects include chronic obstructive pulmonary disease, cancer, strokes, dementia and reduced cognitive ability. A Defra spokesperson said: "Tackling air pollution requires collective action, which is why we are working with towns and cities to improve local air quality. We have published a £3.5bn plan to reduce harmful emissions and our ambitious new clean air strategy has been welcomed by the World Health Organization. Our forthcoming environment bill will also include provisions to improve air quality.

"We have given local authorities technical support in developing their plans and nearly £500m in funding for air quality improvements, but they are best placed to decide how to tackle air quality in their communities."

Potholed roads major contributor to air pollution in Delhi: EDMC

Date:16-November-2018 Source : hindustantimes.com

The EDMC said it has no money for road maintenance and the amount released by the government would be spent on repair of roads and other heads.

The East Delhi Municipal Corporation (EDMC) on Thursday, during its standing committee meeting, stressed that broken roads were a major contributor to air pollution in the national capital and passed a private resolution asking the state government to release Rs 10,228 crore to the civic body as per the recommendations of the 4th Finance Commission. The civic body said it has no money for road maintenance and the amount released by the government would be spent on repair of roads and other heads.

Air quality in Delhi had been deteriorating for the past few days and was in the 'very poor' category on Wednesday. The officials of environment department said that the levels of PM2.5 and PM 10 were way above their prescribed limit because of road dust and vehicular pollution.

A resolution moved by east Delhi civic body councillor Sandeep Kapoor said that the east corporation was sprinkling water on its roads and also conducting mechanical road sweeping but these efforts were 'not enough'.

He said that the number of dust particles was quite high due to broken roads and because of fund crunch the east corporation not being able to repair these stretches.

“Delhi government has this year nullified the plan fund of the corporation and because of this the repair of roads, which earlier was being done, has stopped. The government has this year released no fund for the maintenance of roads, drains and parks …,” the resolution read.

Last year, the Delhi government had given Rs 280 crore under urban development fund to the corporation but that money was insufficient, the official said.

Now serving: Clean air at Delhi’s restaurants and cinema halls

Date:17-November-2018 Source : indiatimes.com

Shrouded in smog, clean air has become a luxury in NCR, and stepping out for a movie or a nightout means battling the air pollution. In such a situation, increasing number of restaurants and cinema halls in the NCR are adding ‘purified air’ to the list of services they offer their patrons. While around seven-eight restaurants have already installed air purifiers, one cinema hall chain has retrofit central air purification system to combat indoor air pollution.

For restaurants, having an air purifier is as important as maintaining food standards

Last year, around the same time, what differentiated a few restaurants in NCR from the rest was an additional service on their menu – fresh air. As pollution level and smog in NCR reached its peak, a few restaurants got additional brownie points for providing purified air to their customers. This year, more restaurants have joined this list and restaurateurs say that “installing an air purifier today is as important as maintaining food quality standards.”

Says Shaaz Mehmood, partner, Ek Bar in Defence Colony, “In the last two years, air purifiers have become a necessity for restaurants in NCR. We have been getting very positive feedback from our customers since we installed air purifiers two years ago. The reason more restaurants in Delhi are installing air purifiers is because it is like improving the dining experience for the guests. And it is not a huge investment at all.”

When people are buying air purifiers for home, they expect them in restaurants too’

At a time when air purifiers are becoming a necessity in most households because of the smog and pollution, restaurateurs aren’t wrong in assuming that very soon, air purifiers might become one of the factors impacting their footfall. “Till last year, people were wondering whether they should get an air purifier for their home. Some thought that it is only for those who have breathing problems and allergies. But with pollution and smog becoming a permanent feature in Delhi-NCR post-Diwali, people are getting air purifiers even for their

homes. So, in such a scenario, when people are going out to party or for dinner, they expect air purifiers there as well. Keeping this in mind, I have ordered air purifiers for all my outlets in Delhi and Gurgaon," says restaurateur Dinesh Arora, who owns Courtyard Unplugged in Connaught Place.

'Customers may not pick a venue on the basis of air purifiers, but it's definitely a plus point'

For Piyush Jain, co-owner of Decode in Rajouri Garden, installing an air purifier a few months ago was to add to provide a better experience to diners. "When guests come and they see that we have air purifiers, they surely are happy and relieved that they would get some respite from the polluted air for few hours," says Piyush. Inderjeet Singh Banga from Pra Pra Prank at Cyber Hub in Gurgaon adds that when he opened his restaurant five months ago, air purifier came up as one of the most important things to add to guests' dining experience. "Customers might not choose a restaurant on the basis of an air purifier, but it surely is a plus point if you have it. It is not just families, but people of all age groups take note of air purifiers at a restaurant," says Banga. At some places, it is customers' feedback that is making restaurateurs install air purifiers. "A few guests asked us while dining if we have air purifiers in the restaurant and that left us with the thought that it might be better to have them. Also, a few regular customers mentioned it to us in their feedback that it will be better if we have air purifiers, so we have recently installed them at our restaurant," says Rohan Kumar, MD, Fantom bar & Brewery at Golf Course Road in Gurgaon.

For consumers, air purifiers might not be the most important factor while selecting a restaurant for partying, but when heading out with their families for dinner, they say that they would prefer a restaurant with air purifiers. "We tend to not care about air purifiers when going alone to have a drink or even with friends, but if we are going out with family, especially with kids or parents, we do check if a restaurant has an air purifier, especially around this time when pollution levels are very high," says Shivam Mehta, a resident of Panchsheel Park.

While few cinema halls have already installed them, others in NCR are mulling the need to install air purifiers

Outdoor dining no longer preferred

Open air dining in November and December was once the preferred choice for people in NCR but keeping in mind the pollution, many consumers try and make a reservation in advance for the indoor section. “Even when customers come without making reservations, they tell us that they would prefer sitting indoors. They only agree to sit outdoors if there is no option – if they don’t have time or if it’s a weekend and the indoor section is completely packed,” says Sharad Malhotra from Imperfecto in Cyber Hub, Gurgaon.

Fresh air is a basic right: Cinemas

On an average, if a moviegoer goes for a film, he/she spends at least three hours inside the theatre. And if the quality of that air isn’t good, it certainly is a health hazard. Keeping this in mind, these days moviegoers often go to cinema halls wearing masks. Noting this,cinema halls have been taking corrective measures.

While staff at multiple cinema chains told us that this is one discussion that can’t be avoided anymore, it’s only PVR cinemas which have started serving fresh air at three cinema halls in Delhi, and one in Mumbai.

Talking about it, Sanjeev Kumar Bijli, Joint Managing Director, PVR LTD, says, “The need to install air purifiers in cinema halls is obvious because if you live in Delhi now, you can’t wake up without looking at the grey sky. The air is so bad that it is impacting health. Now, when people are installing air purifiers at their homes,they should get fresh air at cinema halls too. It’s not a luxury, it’s a necessity. We are providing it without charging anything extra. This retrofit service is provided at three cinema halls in Delhi –PVR Vasant Kunj, DLF Promenade and PVR Chanakya. We are planning to extend it to other screens too.”

An exhibitor informs, “We are still figuring the issue out because at the cinema halls, air purifier installation is not enough, we will have to change the whole system of air conditioners. It will first take over the luxury section, and then will be extended further.”

Tinku Singh, Group president, SRS Cinema, says, “People are coming to the cinema halls wearing masks, which is a casue for serious concern. If Delhi’s air quality worsens further, we will install purifiers at cinema halls too.”

Joggers advised to exercise indoors to beat air pollution

Date:18-November-2018 Source : indiatimes.com

Thane: Working out in clean and controlled air temperature of gyms or at home or exercising outdoors sporting masks that filter fumes and air particles are the alternatives available for the determined morning walkers, runners and cyclists to beat the high levels of air pollution that has gripped Thane post the festive season.

Medical experts and fitness trainers are in fact advising the older people and those with lung problems to avoid morning physical exertions for next few weeks till the pollution reduces.

Advocating indoor workouts like Yoga or Zumba, the professionals say these exercises will make people feel fresh and energised and is a better option than stop doing morning workouts.

“The beginners can do the basic yoga asanas like Surya Namaskar which will help them to stretch all the body muscles which get strained and even make the person feel fresh throughout the day, instead of feeling lazy or tired. Also, people can do any kind of Pranayama, which will help their respiratory system as it involves deep breathing,” said Sneha Inamdar, yoga practitioner.

For the ones who want to strengthen their muscles or work on pumping up their bodies can do some acroyoga, can use their own body weight or use grains, books etc. as weights. There are some exercises which do not even need much space and are easier to do even in small space.

“Wall push-ups, squats, burpees, crunches, walking lunges are some of the exercises which are easy and can be done in small spaces. These can be done in sets and can be repeated; also they require minimal time like 15-20minutes but have more effect and are convenient especially for office goers. The ones who want to do weight training can hold a book in their hand near the chest and do squats and lunges. Even large cans, containers etc. can be used as weights for few other exercises,” said Durga Jena, trainer and co-owner of Machineless workout.

Also, the diet during this season plays a big role and one can make sure to eat warm food or food items that help enhance the immune system. It is even learnt that workout and diet go hand-in-hand and if both are done then the effect on the body is better.

“To get the thermogenic effect people can eat warm and high fibre food items like eggs, chicken, paneer, tofu, pulses etc. Also, in order to increase the immunity, people can consume

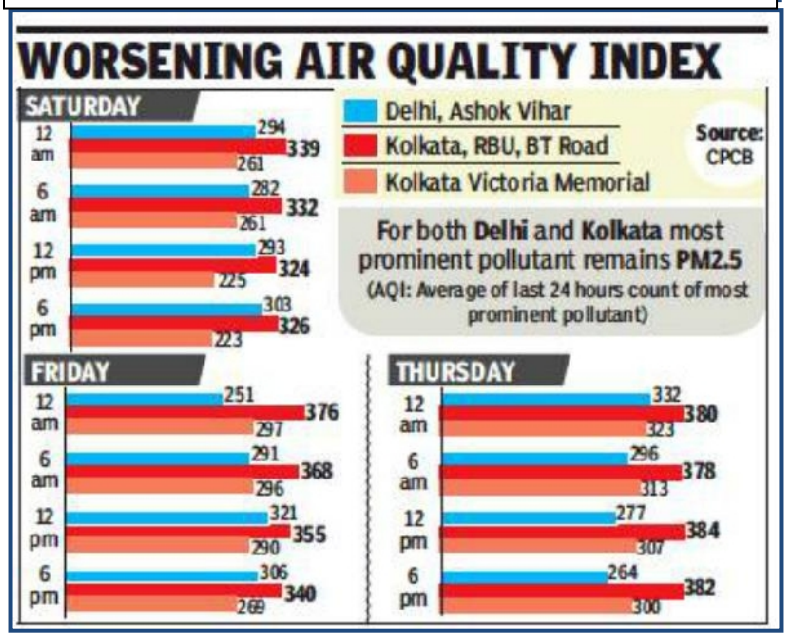
items like garlic, ginger, black pepper, cinnamon etc. by adding it in their food," said Surjit Manna, Mumbai-based sports nutritionist.

To get the thermogenic effect people can eat warm and high fibre food items like eggs, chicken, paneer, tofu, pulses etc. Also, in order to increase the immunity, people can consume items like garlic, ginger, black pepper, cinnamon etc by adding it in their food.

Kolkata surpasses Delhi to be most polluted metro

Date:19-November-2018 Source : indiatimes.com

Smog hangs over kolkata



KOLKATA: For 72 hours now, Kolkata's air quality index (AQI) has been worse than Delhi's, making it the most polluted metro in the country. With the vehicle count in Kolkata barely a fourth of Delhi, the index may seem baffling. Environmentalists say it is a result of proactiveness to improve air quality in Delhi and complacency in Kolkata that has led to this unhappy situation.

A comparison of the pollution data at two stations in Kolkata — Rabindra Bharati University and Victoria Memorial Hall — with Ashok Vihar, one of the worst polluted zones in Delhi, shows that Kolkata's AQI has consistently been above that of Delhi. There are 19 automatic stations in Delhi to monitor the city's air quality against only two in Kolkata.

TimesView

Air quality degrades every year after the festive season. Polluting vehicles push up the AQI level even further. The administration should immediately act against ill-maintained vehicles and citizens should do their bit to keep the pollution levels at check.

Environmentalists say the data from the station at RBU on BT Road is representative of Kolkata's air quality while that from Victoria memorial Hall ensconced in a green zone in a non-residential Maidan area represents the best possible air quality in the city. Kolkata's air routinely gets toxic during winter when inversion of temperature traps finer particulate matter closer to the ground, leading to adverse health effects.

Lack of cleaner fuel plagues Kol

Auto emission expert Somendra Mohan Ghosh said: "While Delhi goes with odd-even experiment (running vehicle with odd registration number on one day and even registration number the next), Kolkata has chosen to sit tight and ignore the issue. Worse, it has over the years turned into a diesel vehicle capital with more vehicles running on the fuel that is dirtier than petrol."

While the rest of India is aggressively experimenting with mixing bio-fuel with diesel to bring down particulate pollution, Kolkata has so far done nothing noteworthy. CTC, a state-owned transport operator in Kolkata, was the first PSU in the country to adopt bio-diesel experiment for its bus fleet. But for reasons unknown, it stopped using the greener fuel.

The non-availability of cleaner fuel in Kolkata is another reason why the city has turned from bad to worse. Delhi's public transport runs on CNG while 70% of Kolakta's fleet runs on diesel. That makes a huge difference. I have been calling for the need to make CNG available in Kolkata urgently but there is no such urgency on the part of the administration. No attempt has been made to bring coal-bed methane (CBM), a cleaner natural gas available in Asansol, to the city," said environment crucader Subhas Dutta, whose PILs led to a ban on 15-year-old commercial vehicles and rehaul of the autorickshaw fleet from petrol to LPG.

What bothers environmentalists most is the poor surveillance on automobile pollution.

Delhi's Air Quality In 2016 Reduced Life Expectancy By 10 Years: Study

Date:20-November-2018 Source : ndtv.com

New Delhi: During the past two decades, Delhi's air quality was the "most deadly" in 2016 as it reduced the life expectancy of a resident by more than 10 years, a new study said Monday, asserting that the national capital was the second among 50 most polluted areas of the country.

India is today the world's second most-polluted country, trailing only Nepal, it said and pointed out that loss of life expectancy was the highest in Asia, exceeding six years in many parts of India and China.

According to air quality life index and accompanying report produced by the Energy Policy Institute at the University of Chicago (EPIC), globally particulate pollution reduces average life expectancy by 1.8 years, making it the greatest global threat to human health.

"By comparison, first-hand cigarette smoke leads to a reduction in global average life expectancy of about 1.6 years," it said.

"The impact of particulate pollution on life expectancy is comparable to that of smoking, twice that of alcohol and drug use, three times that of unsafe water, five times that of HIV/AIDS, and more than 25 times that of conflict and terrorism," it said.

The study pointed out that over the past two decades, the concentration of fine particulates increased by 69 per cent on an average across India, reducing the life expectancy of a typical Indian citizen by 4.3 years compared to 2.2 years in 1998.

It said concentrations of particulate pollution in India's northern states of Bihar, Uttar Pradesh, Haryana, Punjab, and the National Capital Territory of Delhi are "substantially higher" and the impact on life expectancy exceeds six years.

It said pollution is the "single greatest threat" to human health globally, with its effect on life expectancy exceeding that of devastating communicable diseases such as tuberculosis and HIV/AIDS, behavioral killers like cigarette smoking, and even war.

Seventy-five per cent of the global population or 5.5 billion people, live in areas where particulate pollution exceeds the WHO guideline.

"The AQLI reveals that India and China, which make up 36 per cent of the world's population, account for 73 per cent of all years of life lost due to particulate pollution," it said.

The study said particulate pollution is "so severe that it shortens the average Indian's life expectancy by more than four years relative to what it would be if WHO air quality guidelines were met".

Among the 50 most-polluted areas in the country, Delhi was second to Bulandshahr.

In Delhi, the PM 2.5 concentration (particles in the air with a diameter of less than 2.5 micrometres) was 114 microgram/m3 in 2016 which is 1.6 times more than 70 microgram/m3 in 1998, the study said.

Union Health ministry plans regulations for air pollution masks

Date:21-November-2018 Source : livemint.com

NCDC advisory says that the human nose is the best filter, so one should breathe through it and not mouth

New Delhi: The government is set to unveil regulations on the sale of air pollution masks, which have spiked in the wake of Delhi's air quality hitting new lows.

"In our meeting on environmental health last week, we discussed the rising sale of air pollution masks in the market and on online platforms. As the World Health Organization (WHO) is also mulling to form a policy and issue recommendations for usage of air pollution masks to be followed globally, the government is also thinking to bring out the right protocol to use face masks," said T.K. Joshi, adviser, occupational and environmental health and chemical safety in the Union health ministry.There are several kinds of air pollution masks available in market ranging from ₹ 100 to ₹ 4,000 and their sales have escalated, especially after Diwali. Face masks filter out airborne particles present in the polluted air, but all masks are not equally effective against small particulate matters."Currently people are purchasing masks without considering the risks attached to them. Some masks can even do harm than good as they can hamper breathing. We only recommend dust mask or N95 mask. These masks can be used if the house is on the main road with lot of traffic and while going out," said Joshi."Masks must fit tightly,

should be kept in hygienic conditions, and a mask worn by an individual should not be used by others. Those with beards, facial deformity cannot use mask as it would be a poor fit. Mask will eventually get clogged when air quality is bad and will need replacement." There have been research studies that have established that a majority of face masks are not effective in preventing health risks from air pollution. “Mask makes breathing harder, and is not advised for those who have advanced heart and lung disease. If there is the slightest discomfort and uneasiness after using, take medical advice, otherwise masks can cause problems," said Joshi.“Mask will only arrest particles, and gases will pass through. There are masks that can remove gases but these are called respirators. These should not be used as these require medical clearance and continuous supervision by an expert," he said.The National Centre for Disease Control (NCDC) has also issued an advisory, saying when air pollution is high, people should avoid peak traffic hours and stay indoors. Infants and toddlers should not be taken out in peak traffic hours unless there is some important reason, and this is regardless of air quality.

Delhi-NCR air pollution level today: AQI remains ‘Unhealthy’, all hopes pinned on artificial rain

Date:22-November-2018 Source : timesnownews.com

The Delhi-NCR air pollution level remained 'Unhealthy' on Thursday, November 22, with the millions of residents in the national capital region looking towards the sky in hope of artificial rain.

The risk of permanent respiratory damage to millions of citizens in the national capital region has prompted the Ministry of Environment to bring in motion a plan to induce artificial rain to unclog Delhi’s choked lungs

New Delhi: The air pollution levels in the national capital region remained mostly in the ‘Very Unhealthy’ and ‘Unhealthy’ category and Delhi Institute of Tool Engineering (DITE), Wazirpur, recorded ‘Hazardous’ levels in Delhi-NCR. The Air Quality Index (AQI) at DITE was 437 while National Institute of Malaria Research, Sector 8, Dwarka AQI touched 324. Apart from these two hotbeds of hazardous air, the other parts of Delhi, Noida, Ghaziabad, Noida and Faridabad recorded AQI in the range of 180-

288 (PM 10).

Pollution: Delhi's air quality deteriorates, back to 'very poor' category

Date:23-November-2018 Source : livemint.com

The overall air quality index was recorded at 337 which falls in the 'very poor' category, according to Central Pollution Control Board data.

A pedestrian covers his face with a handkerchief for protection against air pollution, in New Delhi

New Delhi: Delhi's air quality slipped back in to 'very poor' category Friday due to accumulation of pollutants owing to low wind speed, even as authorities warned further increase in pollution level on Saturday. The overall air quality index was recorded at 337 which falls in the "very poor" category, according to Central Pollution Control Board (CPCB) data.

Five areas in Delhi -- Anand Vihar, Wazirpur, Bawana, Jahangirpuri and Mundka -- recorded severe air quality, according to the data. While as many as 23 localities recorded 'very poor' air quality and six 'poor', the data said.

The level of PM2.5 (or particulate matters 2.5 -- particles in the air with a diameter of less than 2.5 micrometres) was recorded at 205 and the PM10 level was recorded at 379, it said.

An AQI between 0 and 50 is considered 'good', 51 and 100 'satisfactory', 101 and 200 'moderate', 201 and 300 'poor', 301 and 400 'very poor', and 401 and 500 'severe'. According to the Centre-run System of Air Quality and Weather Forecasting (SAFAR), air quality index for the national capital is in very poor category and expected to increase further by tomorrow but will remain in very poor.

"Thereafter a slight improvement is predicted. At present, wind speed is slow and hence not good for air quality as it allows pollutants to get accumulated. Humidity continues to be high and temperature is likely to cool, both unfavourable," the SAFAR said in a report. Delhi's air quality showed a slight improvement on Thursday due to increased wind speed, favourable for dispersion of pollutants, and settled in the poor category.

Clearing the Air

Date:24-November-2018 Source : indianexpress.com

The Great Smog of India begins by clearly calling out the apathy, making all of us complicit in its severe ill effects to human health, quality of life, economic growth, and India's soft power.

In Delhi, the festive season is also the season of itchy eyes, coughing fits and unrelenting headaches. Year-on-year, air quality in Delhi nose-dives drastically come mid-October, routinely accompanied by government scrambling, political defensiveness, and widespread public apathy. Amid this, Siddharth Singh's recent book, The Great Smog of India, is not just topical but also unique in the integrated view it takes on the complex issue of air pollution. Singh's book is well-researched, referencing some of the leading scientific evidence available in the space from across disciplines and geographies. But it is more than just a summary of good research. It brings the research to the dinner table, making it chewable for all interested readers.

The Great Smog of India begins by clearly calling out the apathy, making all of us complicit in its severe ill effects to human health, quality of life, economic growth, and India's soft power. Singh doesn't mince his words when he claims air pollution to be as much a social and political problem, as it is a technological one. That claim isn't necessarily novel, but the parallel he draws between the silence around the issue of air pollution mirroring the sinister silence with which air pollution gnaws away at us is deeply compelling.

While the book focuses on India, specifically on northern India and the meteorology of Delhi, and its role in our current air quality crisis, it also provides an interesting insight into the economic history of India. Singh weaves in several first principles of economics and pays homage to the greats, from Nicholas Gregory Mankiw to Amartya Sen, PC Mahalanobis, Ronald Coase and Arthur Cecil Pigou. He cleverly narrates the history of economic progress along with the associated energy politics of each phase of growth. The book presents the skewed incentive structures at play, but decisively states that the costs to inaction remain critically high. Acknowledging, and complimenting, the recent strides made by the government in addressing energy poverty through a mammoth electrification programme, scaling up the deployment of

renewable energy, and advancing the transition to cleaner cooking fuels, the book also calls for action. Singh writes, “The task before the government is clear: use every tool available — including legislation, regulation, financial instruments, taxes, subsidies, and diplomacy — to clean up the air, both indoors and outdoors.” Even as the book discusses possible actions under each of these categories, it also instills a sense of foreboding — until the politics around air pollution, and its contributors, doesn’t change, it is unlikely that we will see any improvement in the coming years.

With dedicated sections on industry, mobility, and agriculture (residue), the book takes a keen look at the political economy of the sectors that are the principal culprits of the “great smog”. However, it is when Singh talk about the administrative lethargy, and political mud-slinging around tackling air pollution, that the real culprit is revealed. Despite the judicial institutions, right from the Supreme Court to the National Green Tribunal, playing their part and often forcing the hand of government departments, the administrative apathy, infighting, and resistance to change is deeply worrying. The cynics among us may not be surprised. Is this not how things are in India? Think again. The one lesson to take away from the book is that the scale and severity of the problem is well beyond what most of us have comprehended or internalised. Locking ourselves up in purified air sanctuaries and then disengaging with the debate will not do any longer. We have to act, together and now.

The Great Smog of India ends with a toolkit of how to think about air pollution. The 10-point guide helps navigate the science, law, medicine, economics and governance of air pollution. Once again reiterating and amplifying his call to action, Singh writes, “Only an ‘all of the above’ strategy will work’’ to tackle air pollution. Our fundamental rights and basic freedoms are contingent on targeting every single contributor of air pollution, big or small, aggressively and simultaneously. Making allowances for religious sentiments, as with Diwali firecrackers, or for agrarian productivity, as with stubble burning, would be myopic. In its conclusion, the book delivers a strong economy-wide message of how collective, comprehensive, and strategic action to address air pollution can result in economic growth, enhanced productivity, and a significantly smaller healthcare bill.

The book does not necessarily add significantly to the body of research that exists on air pollution, but it weaves narratives that deliver a blow to our inertia of inaction. It is not often that one reads a book that is balanced and equanimous in its tone, and yet leaves one terrified. The Great Smog does this effectively.

DMs asked to curb air pollution

Date:25-November-2018 Source : indiatimes.com

PATNA: Bihar State Pollution Control Board (BSPCB) on Saturday asked district magistrates (DMs) of Patna, Muzaffarpur and Gaya to initiate measures to curb air pollution in the wake of worsening air quality in the three cities. The DMs of other 35 districts of the state have also been asked to take measures to lower air pollution.

TOI has been carrying a series of reports over the past few days, highlighting high air quality index (AQI) at three of the country's worst polluted cities – Patna, Muzaffarpur and Gaya.

"You (district magistrates) are directed to implement city-specific action plan for prevention and control of air pollution and hold monthly review meetings and submit compliance report regarding the same. You are also directed to sensitize the general public regarding harmful effects of air pollution and elicit their support to control it," BSPCB chairman Ashok Kumar Ghosh wrote in his letter to the DMs.

The action plan for curbing air pollution in Patna was released by the BSPCB in May. It talks about measures to be executed by different departments and agencies of the state government within specific deadlines, including phasing out vehicles more than 15-year-old, introduction of clean fuel, such as compressed natural gas (CNG), and ban on registration of diesel-driven autorickshaws.

At 423, the AQI of Patna was highest in the country on November 21. It dropped to 370 on November 22 but again surged to 373 on November 23. The AQI, however, plunged to 347 on Saturday.

The BSPCB has asked the DMs to prevent burning of dry waste, ensure regular check of pollution under control and fitness certificates, stop farmers from burning fodder and other farm produces and sprinkle water on roads.

Delhi Gasps For Breath As Air Quality Turns 'Severe' In 8 Areas

Date:27-November-2018 Source : ndtv.com

In Delhi, Dwarka Sector 8, Jahangirpuri, Mundaka, Narela, Nehru Nagar, Rohini, Anand Vihar and Wazirpur recorded 'severe' air quality, while 23 areas of Delhi recorded 'very poor' air quality.

The overall air quality index (AQI) of Delhi was recorded at 360

New Delhi: A thick haze engulfed Delhi as the air quality deteriorated and eight areas of the national capital recorded severe pollution level, authorities said Tuesday. The overall air quality index (AQI) of Delhi was recorded at 360, which falls in the 'very poor' category, according to Central Pollution Control Board (CPCB) data.

The CPCB said Dwarka Sector 8, Jahangirpuri, Mundaka, Narela, Nehru Nagar, Rohini, Anand Vihar and Wazirpur recorded 'severe' air quality, while 23 areas of Delhi recorded 'very poor' air quality.

The level of PM2.5 (particles in the air with a diameter of less than 2.5 micrometres) was recorded at 211 and the PM10 level was recorded at 394, it said.

An AQI between 0 and 50 is considered 'good', 51 and 100 'satisfactory', 101 and 200 'moderate', 201 and 300 'poor', 301 and 400 'very poor', and 401 and 500 'severe'.

In National Capital Region, Ghaziabad recorded the worst air quality at the 'severe' level with an AQI of 407. Greater Noida, Gurgaon, Faridabad and Noida recorded 'very poor' air quality, the CPCB data said.

According to the Indian Institute of Tropical Meteorology, a haze has engulfed the national capital and the wind speed and ventilation index are "extremely unfavourable" for dispersion of pollutants. Ventilation index determines how fast pollutants can get dispersed.

The ventilation index of around 6,000 sqm/second gets rid of pollutants, but it came down to 1,500 sqm/second on Tuesday in the city.

According to the Centre-run System of Air Quality and Weather Forecasting (SAFAR), the air quality is 'very poor' and will remain in the same category with a gradual increase in pollution level for the next two days.

"The increase in pollution can be attributed to decline in wind speed as compared to past two days. All other meteorological factors were already unfavourable," the SAFAR said in a report.

Time to talk air pollutants and the monumental impact on health

Date:28-November-2018 Source : healtheuropa.eu

Over the recent decades more proof has shown that air pollutants are related to adverse health effects, so it's time to re-evaluate air quality guidelines and discuss detrimental health effects.

The European Union, through the Ambient Air Quality (AQQ) Directives, and the World Health Organization (WHO) have introduced exposure limits for NO2, PM10 and PM2.5. In addition, there is a massive body of legislation tackling air pollution at the source, this being to reduce emissions including the NEC Directive, the Euro standards and the industrial emissions Directive. An important difference is that the limit values set by the EU are legally binding, while the WHO values are recommendations. However, the latter ones are solely health-based, while EU limit values are the result of political compromise. Regardless, the health impacts of air pollutants are one that cannot be avoided, especially with the emerging evidence of pre and postnatal effects, such as diabetes and neurological conditions.

Health impacts from air pollutants

It is clear that air pollutants have large adverse impacts on human health. The main pollutants from road transport are listed below:

Particulate matter: ambient particulate matter is a form of air pollutant and is ranked as the 6th risk factor for total deaths globally, through cancer, lower and chronic respiratory diseases and cardiovascular diseases. Therefore, being the most harmful element of diesel exhaust to the human health. The severance of the harm caused is largely determined by how far a certain pollutant can penetrate into the human body after entering by the respiration system.

Soot particles (measured and also known as elemental carbon or black carbon) make up a small part of all the particulate matter in ambient air but are among the most dangerous elements emitted by road traffic.

NOx: evidence regarding the adverse health impacts of NOx have long not been attributed to the compounds itself (mainly NO2), but rather to particulate matter and ozone as these are

formed by NOx. This air pollutant has a proven relation between short-term NO2 exposure and respiratory symptoms such as inflammation, aggravation of symptoms in asthma patients and aggravation of allergic reactions in the respiratory tract.

About 10,000 premature deaths of adults over 30 in 2013 in the EU28 and Switzerland that can be attributed to NOx emissions from diesel cars and light commercial vehicles. Half this could have been avoided if the NOx emissions of those vehicles would have been at the level of the laboratory tests.

Ozone: tropospheric (also known as ground-level) ozone (O3) is a secondary air pollutant. It is formed via multiple reactions between NOx, CO and volatile organic compounds (VOCs), in the presence of light (e.g. photo-chemically). Under specific weather conditions, a high concentration of ozone in the air can lead to smog which is especially a problem in warm urban areas. In some places the occurrence of smog is highly related to the season. Short-term exposure to ozone has proven to be causally related to respiratory effects such as inflammation, aggravation of asthmatic symptoms, increase in hospital admissions and respiratory related acute mortality.

Globally, ozone is ranked as the 33rd risk factor for total deaths, due to its severe causal relation to chronic respiratory diseases.

Non-methane volatile organic compounds (NMVOCs): these are formed upon incomplete combustion of fuels such as diesel, typically found in the gas phase of diesel exhaust. They are a great contributor to the formation of ozone and therefore are indirectly responsible for health effects caused by it. Moreover, some NMVOCs have been classified as carcinogens, amongst some of which occur in diesel exhaust.

Polycyclic aromatic hydrocarbons (PAHs): this air pollutant is an organic compound and is related to the carcinogenic nature of diesel exhaust. Additionally, new evidence is arising for its non-cancer health effects, such as cardiovascular diseases, neurological and prenatal effects.

The severe impact of air pollutants

In Europe, the WHO estimate the number of premature deaths attributed to air pollution is over 500,000. In contrast to other regions in the world, household air pollution does not play a large part in this number compared to outdoor air pollution. However, road transport contributes a significant amount to air pollution in the European region, which is confirmed by data from the European Environmental Agency

Air pollution is a phenomenon that knows no borders. An emitted air pollutant does not always stay within the country in which it was emitted in. As such, it makes sense to analyse and

address this problem on a broader-than-country basis and furthermore bring the discussion to the ears of the public.

Heavy Rain in Tamil Nadu; Delhi Remains Polluted

Date:29-November-2018 Source : weather.com

Thursday

The trough (relatively low-pressure area) over southern India persists and may remain till the weekend. Heavy rain and thunderstorms are likely over Tamil Nadu on Thursday. Isolated rain and thunderstorms are also possible over Andhra Pradesh, Karnataka and Kerala. Isolated snow is possible in Himachal Pradesh and Jammu & Kashmir.The air quality of Delhi may drop to hazardous levels on Thursday with higher PM 2.5 index throughout Delhi. Air quality will also be poor to very poor around other major cities in northern, central, and eastern parts of the country. Dry weather conditions are forecast in northern, central, western, eastern and northeastern India.

Friday and beyond

The trough over southern India may continue to bring scattered rain and thunderstorms over Tamil Nadu and Kerala on Friday. Isolated rains are possible over Andhra Pradesh and Karnataka too. Dry weather and poor air quality will continue into next week over the regions mentioned on Thursday's forecast as the wind speeds are forecast to be low across India.Maximum temperatures will be higher than normal in western and southern India till the weekend.

Delhi air quality in November better than same period last year: Data

Date:30-November-2018 Source : indianexpress.com

The pollution peaks were much lesser this year, even as the weather conditions remained similar to last year

Delhi managed to control its own sources of pollution better this year as compared to the last, officials in the Delhi government said. November this year, data shows, was significantly less polluted as compared to the last.

"The pollution peaks — the lowest that the air quality dips – were much lesser this year, even

as the weather conditions remained similar to last year. One of the reasons was that the multiple administrations in Delhi have progressively been getting much stricter in implementing anti-pollution measures. There were barely any open burning cases reported this year," said a Delhi Environment department official. The environment department, transport department and civic bodies are responsible for controlling emissions in Delhi.

EXPLAINED

Diwali, crop burning closer together means better air

With Diwali and the peak crop residue burning season coinciding this year, Delhi saw better air quality in November as compared to the last. Pollution in Delhi starts increasing as temperatures dip and factors such as residue burning and increase in pollutants on Diwali come into play. Last year, there were two pollution peaks — one a day after Diwali on October 20 and in the second week of November when residue burning was at its peak. This year, both coincided and there was one peak, which was lesser than it was last November.

Air quality data from the Central Pollution Control Board shows that while there were seven severely polluted days (when the AQI is above 400) in the month last year, this year there were five. The peak pollution was also low, with the highest AQI of 486 last year as compared to 426 this year. The number of very poor air quality days (when AQI is between 301 and 400) was 19 last November as compared to 16 this year. Delhi saw 7 poor air quality days (when the AQI is between 201 and 300) this year as compared to 3 last year. A rarity this year was one moderate air quality day (when the AQI is between 101 and 200) this year. There was none last year.

December 2018

Total of 79 Chinese cities trigger air pollution alerts

Date:1 -December-2018 Source : indianexpress.com

As of November 30, five cities had issued red pollution warnings, the most severe in China's pollution warning system, 73 had issued orange warnings, the second-most severe, and one city had issued a yellow warning.

A total of 79 Chinese cities have triggered air pollution alerts as severe winter smog covers wide swaths of the country, the official Xinhua news agency reported on Saturday.

Heavy smog blanketed China's capital after the city issued its first air pollution alert for the winter season, in Beijing, China, last Monday

As of November 30, five cities had issued red pollution warnings, the most severe in China's pollution warning system, 73 had issued orange warnings, the second-most severe, and one city had issued a yellow warning, triggering the implementation of emergency management and control measures, Xinhua reported.

The affected cities lie in and around the Beijing-Tianjin-Hebei region that includes China's capital, as well as in the Fenwei plains area of Shanxi, Shaanxi and Henan provinces, and in the northern Yangtze River delta region, home to Jiangsu province, China's second-largest steelmaking hub.

China's capital issued its first air pollution alert for the winter season on November 23, and Jiangu province issued orange smog alerts in late November, forcing factories and utilities to slash output.Northern China often sees heavy smog over the winter, which runs from mid-November to mid-March, as homes and power utilities burn more coal for power and heating.

On Saturday evening, the concentration of small particulate matter, known as PM2.5, at Beijing's Temple of Heaven was 193 micrograms per cubic metre, according to data from China's National Environmental Monitoring Centre, five-and-a-half times the state standard of 35 micrograms per cubic metre.China has taken steps to broaden its campaign against air pollution, including extending a monthly air quality ranking to 169 cities from 74 to pressure local authorities to clean up dirty skies.

Vytilla sees alarming rise in air pollution levels

Date:2 -December-2018 Source : newindianexpress.com

No one has any doubt the development activities in Vytilla will benefit the public in the future.

KOCHI: No one has any doubt the development activities in Vytilla will benefit the public in the future. But if the authorities carrying out construction work do not take precautionary measures, the health of the public will go for a toss due to rising air pollution levels. The data from the Air Quality Monitoring Station in Vytilla reveals air pollution is severe as it has increased almost double fold recently. Vytilla is currently witnessing the construction of the Metro Rail and National Highway flyover.

When Particulate Matter (PM 10) till 100 µg/m3 is considered as safe, on November 26, the Air Quality Monitoring Station of Kerala State Pollution Control Board (KSPCB) recorded PM 10 level as 205.18 µg/m3. Likewise, the PM 2.5 till 60 µg/m3 is considered as safe. On November 26 PM 2.5 was 112. 92 µg/m3. Similarly, on November 24 and 25, PM 10 level was 136.47 µg/m3 and was 162.69 µg/m3. PM 2.5 was 74.08 and 79.54 µg/m3.

“We have informed the Kochi Metro and other contractors conducting construction at Vytilla to sprinkle water on a regular basis daily,” M A Baiju, Ernakulam Chief Environmental Engineer, KSPCB, told Express. “Only by sprinkling the water, the dust level can be reduced and the situation kept under control. However, it seems, the authorities are not following our directive,” he said.

The Air Quality Monitoring Station is installed inside the Mobility Hub which is one of the busiest bus stations in Kerala. “The pollution level goes up when the bus engines are revved. Several buses are parked in the Mobility Hub and the drivers frequently press the throttle of the bus resulting in air pollution level rise,” he said.

Dr Varghese Cherian, former president of Indian Medical Association (IMA), Kochi, said asthma patients will be worst affected because of rising pollution levels. Apart from it, people with allergies will have to stay away from places where air pollution is severe.

Chest infection is a commonly seen problem when air pollution goes up. “One of the main issues in Vytilla is traffic is very slow moving. Hundreds of vehicles queue up causing severe air pollution. Along with this, the construction works taking place there aggravate the situation. In Kochi, hundreds of vehicles are introduced to the road each day. We should have a proper mechanism to keep air pollution under control,” he said.

Gurgaon to get 15 new stations for better air quality study

Date:3 -December-2018 Source : indiatimes.com

Gurgaon: The Gurugram Metropolitan Development Authority (GMDA) will soon install 15 new air quality monitoring stations at various locations in the city. According to the development body, the three existing stations — one installed by Meteorological department and other two by Haryana State Pollution Control Board (HSPCB) — are not enough to get a clear picture of specific factors affecting the city’s air quality. Given that the cost of installing one of these monitors is quite high, the stations will only measure PM2.5 and PM10, said sources.

“The levels of PM2.5 and PM10 will give us a good idea of air quality, and will come at a relatively lower cost than fully equipped monitors,” said MD Sinha, additional CEO, GMDA. He added that the authority was currently in talks with some private agencies for the air monitoring stations, and that they should be in place within a couple of months.

“We’re trying to get private agencies to provide the air monitoring stations pro bono. That way, the authority won’t have to bear any cost for installing them,” said Sinha. The locations of the stations have not been decided yet.

While overall, the city’s pollution levels have been better than last year, poor air quality index (AQI) remains a major concern. On Sunday, the AQI was ‘moderate’ at 177, according to the data collected by CPCB. As of now, one air monitoring station is in Civil Lines near Vikas Sadan, while the other two installed recently are in Manesar and near the National Institute of Solar Energy. Delhi, in comparison, has around fully equipped 36 air monitoring stations.

All the three existing stations are far from the city's busy roads and junctions such as MG Road, Cyber City and Golf Course Road. Hence, their readings aren't exactly representative of the city's actual pollution levels. "Due to high construction activity in some parts of the city, AQI is likely to be much worse than that recorded at Vikas Sadan. Hence, more stations will be useful," said an official.

The development body's officials said the new air monitoring stations would help them better understand pollution levels and patterns across the city. This would further help them design short- and long- term pollution control plans, which is one of the main agendas for GMDA's urban environment wing. "As of now, our whole approach towards pollution control is reactive. We need more proactive pollution control plans, for which we need better pollution data," Sinha had told TOI earlier.

Major construction firms fined for violations of air pollution control norms: SDMC

Date:4 -December-2018 Source : business-standard.com

The South Delhi Municipal Corporation has collected Rs 3.5 lakh as penalties from seven construction companies for "violation" of air pollution control norms in the first three days of December, the civic body said Monday.

Each company has been slapped with a fine of Rs 50,000, the SDMC said in a statement.

"SDMC has taken massive action during first three days of December against seven construction companies involved in generating air pollution and deteriorating pollution level in the city. Each company has been fined with an amount of Rs. 50,000 resulting in recovery of Rs. 3.5 lakh," the statement said.

The companies are NBCC, Shapoorji Pallonji Group, ITPO, L&T Construction Transportation and Infrastructure at Bhairo Road, SJ Kumar for DMRC Sarai Kale Khan, DMRC Okhla, and Spencer ISP Network, Okhla, it said. The building department of SDMC has said that the action will continue.

Municipal Commissioner Puneet Kumar Goel on Sunday issued directions to the zonal deputy commissioners and other officials to issue challan under the National Green Tribunal rules to discourage people from littering garbage in the city, the SDMC said.

"The DEMS department has been asked to concentrate on social functions like 'bhandaras' (community meals) inside and outside religious places, marriages and birthday parties and

other events. The strict instructions issued against spreading wastes of such kind i.e. used plates, paper containers, plastic cups etc. will not be tolerated at all," he was quoted as saying.

On Sunday night, the zonal teams took action against burning of leaves and garbage, littering of streets with used plates, plastic cups, etc, and they issued 180 challans, the civic body said.

DNA Edit: NGT's push - The anti-pollution campaign has not borne fruit

Date:5 -December-2018 Source : dnaindia.com

The National Green Tribunal (NGT) deserves credit for one attribute: it never pulls punches, when it comes to combating pollution.

On Monday, it slapped a Rs 25-crore fine on the Delhi government for its failure to address the scourge. A bench headed by NGT chairperson asked the Aam Aadmi Party government to furnish a performance guarantee of Rs 25 crore with the apex pollution monitoring body, the Central Pollution Control Board (CPCB).

It held the government responsible for doing nothing concrete "except furnishing excuses and helplessness". In a way, the signal from the NGT is clear. Even if pollution has gone off the media's radar, its impact can scarcely be minimised.

One of the most baffling question of our times is why despite all the effort and several well-intended measures, the air quality in the national capital continues to be so poor. On Monday, the CPCB recorded an overall air quality index of 314, which falls under the 'very poor' category.

The green panel said that even after four-and-a-half years, pollution caused by unregulated handling of plastic, burning of leather, rubber, motor engine oil and waste continues unabated. While it is easy to hold governments liable for their slackness, it is also true that without citizens' awareness and their active participation, no plan can succeed.

The reality is that anti-pollution steps have not been thought out to the end. Merely blaming farmers for burning stubble as the main reason for pollution, is too simplistic. The petition by two Delhi residents, which provoked the Rs 25 crore fine, proves that there are several reasons that trigger the capital's toxic smog, including the disposal of mountains of rubbish.

Clearly, until the government and its agencies get to the real root of the problems, Delhi's hapless denizens would have no option but to take it lying down.

Delhi's air quality remains 'very poor' due to unfavourable weather conditions

Date:6 -December-2018 Source : outlookindia.com

New Delhi, Dec 6 (PTI) Delhi's air quality remained 'very poor' Thursday, with seven areas recording 'severe' air quality due to unfavourable weather conditions like low wind speed, according to authorities.

The Central Pollution Control Board (CPCB) recorded an overall air quality index (AQI) of 355.

An AQI between 201 and 300 is considered 'poor', 301 and 400 'very poor' and 401 and 500 is 'severe'.

The air quality in seven areas -- Anand Vihar, Ashok Vihar, Mundka, Nehru Nagar, Rohini, Vivek Vihar and Wazirpur -- was recorded in 'severe' category. It was 'very poor' in 21 areas and 'poor' in three areas, the CPCB said.

The overall PM2.5 (fine particulate matter in the air with a diameter of less than 2.5 micrometre) level was recorded at 213 and the PM10 level at 397, it said.

In NCR, Ghaziabad recorded worst air quality in 'severe' category at an AQI of 409. Faridabad and Noida recorded 'very poor' air quality, the CPCB said.

The Centre-run System of Air Quality and Weather Forecasting (SAFAR) said the overall air quality of Delhi continues to remain in the 'very poor' range.

"The overall air quality over Delhi continues to remain 'very poor'. it will remain in 'very poor' category with small fluctuations in the next three days. Meteorological conditions are improving but not yet fully favourable," it said.

According to the Indian Institute of Tropical Meteorology, the maximum ventilation index was likely around 7,500 sqm/second on Thursday.

A ventilation index lower than 6,000 sqm/second with average wind speed of less than 10 kmph is unfavourable for dispersion of pollutants, it said.

The CPCB has issued notices to the SDMC, EDMC and the Delhi government's Irrigation and Flood Control Department, asking why it should not be prosecuted for not containing open burning of waste at Shahdara drain.

A CPCB task force has identified 21 high pollution hotspots in Delhi-NCR and directed the respective municipal corporations to take "focussed actions".The task force has also asked authorities to carry out inspection in Ghaziabad's Loni Bhopura, from where repeated complaints of violation of pollution control norms have been received, according to minutes of a meeting of the task force held in Delhi Tuesday.

The task force has identified 15 hotspots in Delhi -- Anand Vihar, Bawana, CRRI Mathura Road, DTU, Dr Karni Singh Shooting Range, Dwarka-Sector 8, Jahangirpuri, Mundka, NSIT Dwarka, Narela, Okhla Phase-2, R K Puram, Rohini, Shadipur and Wazirpur.Many of the hotspots are already experiencing severe pollution levels.Six hotspots have also been identified in NCR areas -- Sector-16A in Faridabad, Vikas Sadan in Gurgaon, Vasundhara in Ghaziabad, Knowledge Park-III in Greater Noida, Sector-125 in Noida and RIICO Industrial Area-III in Bhiwadi.

Delhi's air quality to remain 'very poor' over next three days

Date:7 -December-2018 Source : hindustantimes.com

The national capital is also likely to receive some light rain early next week, owning to an approaching winter disturbance, the IMD has said.

The air quality in the national capital is likely to remain in the very poor category over the next three days at least, government agencies have said.

On Thursday, the Air Quality Index (AQI) value in Delhi was recorded to be 349, which falls under the 'very poor' category of air pollution. This is the fourth consecutive day on which the air quality has remained in the 'very poor' category.

"The air quality is likely to remain in 'very poor' category over the next three days at least. This is mainly because of low wind speed and poor ventilation index (the factor which determines how fast pollutants are dispersed)," said a scientist from Safar, a pollution forecasting wing of the union government.

A man on the banks of the Yamuna River during a foggy morning in Delhi

Meteorologists have forecasted that there could be a shallow fog in the morning and a haze throughout the day on Friday. This is because there is high relative humidity in the air and the wind speed is not favourable

for dispersal of pollutants.

On Thursday, while the minimum temperature was recorded to be 9.8 degrees Celsius, the maximum temperature was recorded to be 25.1 degrees Celsius. Both were one degree above normal. The national capital is also likely to receive some light rain early next week, owning to an approaching winter disturbance, the IMD has said.

“A clear sky will help the night temperature drop over the next few days. It is expected to drop to around 6 degrees Celsius on Saturday. The day temperature is, however, expected to rise by a degree or two because of good sunshine.”

Delhi's air quality remains 'very poor', may worsen next week due to fog

Date:9 -December-2018 Source : business-standard.com

It was a misty morning in the national capital on Sunday with the minimum temperature falling to 8.2 degrees Celsius, a notch below the season's average, while the air quality remained in the 'very poor' category, the weather office said.

Meanwhile, Supreme Court-appointed Environment Pollution Control Authority found rampant illegal activities specially garbage burning taking place at various pollution hotspots across the city.

Supreme Court-appointed EPCA said it will call a meeting specifically for industries in Delhi to discuss the progress from shifting from coal to natural gas, as it noted that the "ease of breathing" cannot be compromised for the "ease of business".

The action comes as Delhi's air quality remained very poor at an air quality index of 354 and authorities warned of increase in pollution level from next week when dense fog is expected to engulf the national capital.

"The sky will remain mainly clear throughout the day but will be covered with haze or smoke later in the day," an India Meteorological Department (IMD) official said. The average PM2.5 readings at 10 a.m. was recorded at 232 micrograms per cubic metre while the average PM10 readings at the time were 376 micrograms per cubic metre, both in the 'very poor' category.

The humidity at 8.30 a.m. was 90 per cent, an unfavourable condition for pollutants to disperse.

The maximum temperature on Sunday was likely to hover at around 24 degrees Celsius with the minimum dropping to 8 degrees Celsius.

On Saturday, the maximum temperature settled at 24 degrees Celsius while the minimum temperature was recorded at 8 degrees, both the season's average.

Delhi: Citizens want bad air to be election issue

Date:10 -December-2018 Source : indiatimes.com

Pedestrians walk amid heavy smog conditions in Delhi

NEW DELHI: Citizens and activists congregated at the Constitution Club on Sunday evening demanding action on notifying the National Clean Air Programme at the earliest. Delhiites also asked for pollution to be made an important agenda in the upcoming elections.

Called “Country With A Mask” — the townhall was organised by Sweccha and citizen groups like Delhi Tree SOS. A number of politicians, including Raman Malik from BJP, Raghav Chadha from AAP and Abhishek Dutt from Congress, were also present at the event.

“Unless there is public outrage, we will not see a change. Pollution is now not only limited to Delhi but is a nationwide problem. It reflects more on Delhi because we have 40 air quality monitors. There is a need to make this a national priority and act on it as soon as possible,” said Dr Arvind Kumar, member of EPCA.

Vimlendu Jha, environmentalist and head of Sweccha said a session on air pollution in the parliament is needed, so is an urgent notification of NCAP.

AQI slips to ‘severe’ category : EPCA to watch air quality for next 48 hours

Date:11 -December-2018 Source : thehansindia.com

Delhis air quality worsened further and slipped into severe category on Monday as heavy stagnant air prevented dispersion of pollutants, according to..

New Delhi: Delhi's air quality worsened further and slipped into 'severe' category on Monday as heavy stagnant air prevented dispersion of pollutants, according to authorities.

Supreme Court-appointed Environment Pollution Control Authority chairperson Bhure Lal said they were monitoring the situation and if severe conditions persist for 48 hours then stringent action, as prescribed under the Graded Response Action Plan, would be implemented.

The Central Pollution Control Board (CPCB) recorded an overall air quality index (AQI) of 412 which falls in the 'severe' category. Stringent actions include emergency measures like odd-even car rationing scheme.

A ban on construction activities would be automatically enforced in the city if PM 2.5 level breaches 300 micrograms per cubic metre and PM 10 level stays above 500 micrograms per cubic metre for two consecutive days.

Under the 'severe' category, even healthy people find it harder to breathe and doctors advise physical activity to be kept at a minimum.

The Centre-run System of Air Quality and Weather Forecasting (SAFAR) said the overall air quality of Delhi will further deteriorate over the next two days.

"Values are likely to remain in the same range until Tuesday which is likely to decline by Wednesday. Calm surface winds are not allowing pollutants to disperse," it said.

Lal conducted inspections at Bawana and Narela and said 45,000 tonnes of garbage was removed and one vacant land where garbage burning was taking place was found during inspection."I will bring this point to the meeting before LG and vice-chairperson of the DDA will also be there.This waste burning on vacant land was reported by people there and grievances of industrialists were also heard," he said, adding, he would conduct an inspection at Anand Vihar on Tuesday.

Air Quality 'Severe', Thick Haze Over Delhi For The Third Consecutive Day

Date:12 -December-2018 Source : ndtv.com

DelhiAirPollution Thick haze over Delhi, pollution levels 'severe', says SAFAR

New Delhi: Thick haze engulfed Delhi today as the air quality in the national capital remained 'severe' for the third consecutive day, with mild rain, further adding to pollution woes, authorities said.

The Central Pollution Control Board or CPCB recorded an overall air quality index (AQI) of 413. An AQI between 201 and 300 is considered 'poor', 301 and 400 'very poor' and 401 and 500 'severe'.

The AQI on Monday was recorded at 412 and on Tuesday it was at 415. According to experts, even healthy people find it hard to breathe when the air quality level is at 'severe' and doctors advise physical activity to be kept at a minimum.

Neighbouring Ghaziabad and Noida also recorded 'severe' air quality. Ghaziabad's air quality was the worst at an AQI of 429, the CPCB data showed. Faridabad recorded 'very poor' air quality.

Twenty-nine areas in Delhi recorded 'severe' air quality and in eight areas it was at 'very poor', the CPCB added.

Rohini, Bawana, Ashok Vihar and Wazirpur edged towards 'severe plus emergency' category, the CPCB said.

The overall PM2.5 level - fine particulate matter in the air with a diameter of less than 2.5 micrometre - was recorded at 257 and the PM10 level at 423.

The government-run System of Air Quality and Weather Forecasting (SAFAR) said that the meteorological conditions leading to insufficient rain led to deterioration of the air quality.

"There is a fall in temperature and good amount of moisture is present in the air. Moist air is passing over Delhi's cool surface leading to fog formation and calm winds are not allowing pollutants to disperse," the SAFAR said.

According to the IMD, the air quality is likely to remain under 'severe' category for next two days. Situation is likely to improve after that when wind speed picks up. The relative humidity was recorded on Wednesday at 98 per cent, the weather office said.

Pollution ke side effects: Delhi's foreign tourist inflow down by 30%

Date:13 -December-2018 Source : indiatimes.com

As Delhi's air quality continues to worsen, it is now affecting the foreign tourist footfall in the city. The increase in pollution levels and the smog has led to rescheduling, rerouting and cancellation of foreign tourists' India visit, as they are dropping the capital from their travel itinerary. An increasing number of tourists is opting for hill stations instead of Dilli darshan. Travel agencies and tour operators say that Delhi's foreign tourist inflow has gone down by 25-30% due to pollution. Even in the travel advisory issued to citizens by countries like the US, the UK and Mexico, Delhi's air pollution has become a permanent feature.

The poor air quality is affecting foreign tourists footfall in the city

Foreign travellers reschedule, reroute and even cancel their plans of Dilli darshan

The poor air quality is affecting foreign tourists footfall in the cityAn ASSOCHAM report of 2017, which was based on discussions with 350 tour operators, predicted that "Delhi is bound to drop off from the map of international tourists. The report states that even domestic tourists are avoiding Delhi, and there is a deep concern over the negative impact the pollution can cause to the economy." Tour operators say that FTA (Foreign Tourist Arrival) is highest in November-December, and mid-October to March is the peak period. But this year, the tourist inflow is down by 25-30% during this period. The Golden Triangle tourist circuit – Delhi, Agra and Jaipur – that most tourists opt for, has been affected the most because of Delhi's bad air quality.

Sharat Dhall, COO (B2C), Yatra.com, says, "The deteriorating air quality in India, especially in Delhi, has affected the influx of travelers from all around the world, impacting both hotel and flight bookings. Many travelers have complained about the deteriorating air quality, which has led them to cut their trips short. Business travelers have also rescheduled their trips." Balu

Ramachandran, Head- air and distribution, Cleartrip, told us, “Delhi is an important destination for both business and leisure travelers. The leisure travellers may start looking at other travel hubs if adequate measures to curb the increasing pollution are not implemented soon.” Make My Trip refused to comment on the issue.

Travel agents to discuss decrease in foreign tourist inflow with Tourism Ministry

Recently, the Travel Agents Association Of India (TAAI) held a meeting to take stock of the situation. Travel agents say that hotels, travel agencies and tour operators have been hit the worst due to air pollution.

Rajan Sehgal, Chairman, Public Relations, TAAI, says, “Delhi is one of the world’s favourite travel destinations. On an average, a foreign tourist spends three-four nights in Delhi, but at present, they are either not coming to Delhi or spending just one night here. There are also very few new reservations. We have observed a dip of at least 25-30% this season.”

He adds, “We can only hope that the situation will change soon. Because of the loss that the travel industry is suffering, we will be discussing the situation with the Ministry of Tourism so that they can take it up with the Ministry of Environment, Forest and Climate Change.”

Most tourists land at Delhi Airport and leave for hill stations

Travel agents say that it’s not just this year, Delhi’s tourist footfall has been going down since 2016 and has dipped further this year. Foreign tourists visiting India are either skipping the capital or cutting short their trip. Travel agencies say that the number of tourists opting for hill stations has increased by 35-40%.

Sam Petterson from the UK, who is visiting Delhi, says, “Earlier, safety used to be a major concern, but now, the toxic air is. Initially, I had planned a seven-day trip, but later I requested my travel agent to reschedule it and now I am visiting Goa for a week.” Those who organise walks for foreign tourists at Delhi’s monuments also say that they have seen a dip of 50-60% in their bookings because tourists don’t want to stay in the city. Besides, most advance bookings for December have been cancelled. Dhall adds, “Foreign tourists are either cutting their Delhi trip short or are going for destinations like Jaipur, Shimla, Nainital, etc. Travel and booking enquiries for hill stations have increased by 37% compared to last year.”

Tyler, from the UK, who is in India with four college friends, tells us, “Before heading here, I read a number of articles on travel websites and blogs about Delhi’s smog. I was given all sorts of instructions from Delhiites and international tourists. While all articles suggested carrying a mask, some said that we should avoid Delhi altogether. While planning our itinerary, we included two days for Delhi and almost a month for other cities. We will be covering hill stations

mostly." Marc, a French national, who is visiting the country for the second time with his wife, said, "When I enquired about the poor air quality in Delhi, the travel agency suggested that we visit after the second or third week of December, which is better from the health perspective. But we want to be back home before Christmas, so that wasn't possible. Earlier, this was supposed to be a family trip, but I asked my parents to not accompany us because of the pollution. For this trip, we will be visiting Agra and Rajasthan. Even though it is smoggy, we are enjoying our one-day stay in Delhi."

Now we know: Air Pollution Makes You Stupid

Date:14 -December-2018 Source : asiasentinel.com

While the toll that breathing polluted air exacts on health and physical wellbeing is richly documented, lesser known is its impact on human intelligence. In a first-of-its-kind study, conducted with our colleague Xin Zhang of Beijing Normal University, we found that continued exposure to air pollution lowers human intelligence, with the effects becoming more pronounced with age. Developing countries, which dominate the list of the world's most polluted cities, are most at risk from such effects.

India, home to six of the 10 most polluted cities in the world, has struggled in recent years to curb pollution in its capital city, New Delhi. Every year, air pollution worsens during late fall and early winter, coinciding with the crop burning season. The situation is similar in other northern Indian cities, notably Allahabad in Uttar Pradesh and Patna in Bihar, as well as central Indian metropolises such as Raipur in Chhattisgarh and Gwalior in Madhya Pradesh. Other Asian cities afflicted with heavy air pollution include Xingtai and Baoding, both in China's industrial Hebei province; Zabol, an Iranian city near the Afghan border; and Jubail, a major Saudi Arabian petrochemical hub.

These cities all have at least 12 times the number of air pollutants than the world's least polluted country, New Zealand. The quality of life in some of the world's busiest cities and hubs of rapid economic growth has been hijacked by air pollution, and their residents are unwillingly and unconsciously afflicted by diseases as a result. As our research showed, the damage goes even deeper than that. Conducted in China, which has long struggled with extreme levels and extended bouts of air pollution, our study revealed the impact of air pollution on human intelligence.

Airborne Assaults

With a sample size of nearly 32,000 people, we examined the relationship between verbal and mathematics test scores, taken from the nationally representative China Family Panel Studies longitudinal survey conducted in 2010 and 2014, and short- and long-term air pollution

exposure calculated from official air pollution index values. Both verbal and math scores decreased with increasing cumulative air pollution exposure, with a steeper decline for verbal scores than math scores. The decline in verbal scores was more pronounced among males than females. Among males, the decline in verbal scores became more pronounced with age, and this age dependence was greater in those with less than a middle school education compared to those with a middle school education or more.

The damage air pollution does to aging brains could incur substantial health and economic costs, as cognitive decline or impairment is a risk factor for Alzheimer's disease and other forms of dementia that often plague the elderly. Despite their important policy implications, air pollution's effects on cognition have thus far been neglected in policy discourses.

Any effort to reverse rising air pollution brings considerable benefits, including for cognitive abilities. We found that a reduction of fine particulate matter concentrations to the level prescribed as safe by the U.S. Environmental Protection Agency (50 μg/m3) would significantly increase verbal and math scores—by 2.41 and 0.39 points, respectively. To put it another way, an increase of just 12 units in the Air Quality Index (whose range is 0-500, with 500 indicating most polluted) could lead to the equivalent of the loss of one whole year of education for less educated older men (aged 65+). The impact is also sizable for less vulnerable groups.

Our findings about the damaging effect of air pollution on cognition, particularly on the aging brain, imply that the indirect effect of pollution on social welfare could be much larger than governments previously thought. A narrow focus on its negative effects on health may underestimate the total cost of air pollution.

It is possible that the observed negative effect of air pollution on cognitive performance is due to behavioral change rather than impaired cognition: people may become more impatient or uncooperative when exposed to more polluted air. Therefore, to check this possibility, we examined the impact of exposure to air pollution on patience and cooperation during our interviews. The results indicate that there is no significant correlation between air pollution and interviewees' patience and cooperation, ruling out the behavioral channel. Air pollution-induced changes in brain chemistry or composition are thus more plausible as an explanation.

These research findings on China are also notable for other developing countries that are undergoing rapid economic transformation and witnessing high rates of urbanization. The World Health Organization notes that the world's 20 most polluted cities are in developing countries, and almost all cities in low- and middle-income countries with more than 100,000 residents fail to meet its air quality guidelines.

Lifting the Fog

Remedying the current situation in the worst-affected countries requires sustained political will and evidence-based policy measures, which even if implemented now are unfortunately at least a decade too late. New findings about the negative impact pollution has on mental health compounds the evidence that hazardous pollution across the developing world has serious deleterious consequences for millions of lives. Policymakers need to find ways to clean up pollution, and take lessons from countries that have made significant progress on this front.

Further, as an issue that reaches beyond national borders, tackling air pollution requires well-coordinated, global actions. However, the international community has experienced major setbacks as U.S. President Donald Trump recently announced plans to dramatically relax fuel efficiency standards and regulations on coal-burning power plants, and tried to bury a climate change report issued by his own administration. Jair Bolsonaro, the newly elected president of Brazil, has threatened to quit the Paris climate agreement. The slowdown of the Chinese economy may also kick fighting climate change off the priority agenda for the world's largest carbon emitter. This probability has already reared its head, as can be seen in the recent relaxation of China's environmental regulations.

Xiaobo Zhang is a senior research fellow at the International Food Policy Research Institute and professor of economics in the National School of Development at Peking University. Xi Chen is an assistant professor of global health policy and economics at Yale University. This is reprinted with permission from Asia Global Online, the website of the Asia Global Institute, based at the University of Hong Kong.

With 50% air pollution-related deaths of people under 70, MP is 9th in India

Date:15 -December-2018 Source : dbpost.com

Bhopal: Madhya Pradesh has been ranked ninth in the list of top-10 states in India with highest death rate attributable to air pollution in people younger than 70 years. A study says that 50% of the deaths in the state in this category is linked to air pollution.

The study, called the India State-Level Disease Burden Initiative, was published in The Lancet

Planetary Health journal and released on December 6.

It was conducted by the Indian Council of Medical Research (ICMR), Public Health Foundation of India (PHFI), and Institute for Health Metrics and Evaluation (IHME), in collaboration with the ministry of health and family welfare.

The study also found air pollution contributes to more diseases in India than non-communicable diseases caused by tobacco use.

The polluted air also causes lower respiratory infections and lung cancer, says the study. It recommends the government put air pollution in the National Non Communicable Diseases programme.

Worst performing states in India

Name of Death rate attributable to air pollution the state for people under-70 (In %)

1 Jharkhand 59.2%

2 Chattisgarh 57.8%

3 Bihar 57%

4 Odisha 54.9%

5 Meghalaya

9 MP 50%

The menace of air pollution

•The annual population-weighted mean exposure to ambient particulate matter PM2.5 in India was 89.9 µg/m3 in 2017.

•Around 76.8% of the India's population has found to be exposed to annual population-weighted mean PM2.5 greater than 40 µg/m3.

•PM2.5 greater than 40 µg/m3 is the limit recommended by National Ambient Air Quality Standards in India.

•Delhi had the highest annual population-weighted mean of PM2.5 in 2017.

CPCB: Delhi's air bad, but better than last year’s

Date:16 -December-2018 Source : indiatimes.com

NEW DELHI: The capital’s air quality has improved by 10-15% this year as compared 2016 with steady improvement likely over the next few years as the Central Pollution Control Board and agencies adopt a fixed approach, CPCB member secretary Prashant Gargava said on Saturday, at an international conference on air pollution at the Maulana Azad Medical College.

Gargava said they were targeting three main factors which were contributing to Delhi’s pollution – including outside factors like stubble burning and dust from Gulf countries. “The three main reasons at the moment are dust from the Gulf which during dust storms can lead to a sudden spike in PM10 concentration, crop burning in northern India and localised emissions within Delhi. We have targeted all three and now steady improvements can be expected over the next few years,” said Gargava at the second day of the two-day event on pollution, which was also attended by several other experts and agencies.

According to him, an early warning system has been put in place which will now alert the CPCB in advance of such dust storms, allowing agencies to be better prepared and take action in advance. For crop burning, Gargava said the central government’s Rs 1,150 crore budget can bring an improvement by next year, while other localised emissions from Delhi were being tackled both in terms of long term measures and short term actions, which included the Graded Response Action Plan (GRAP).

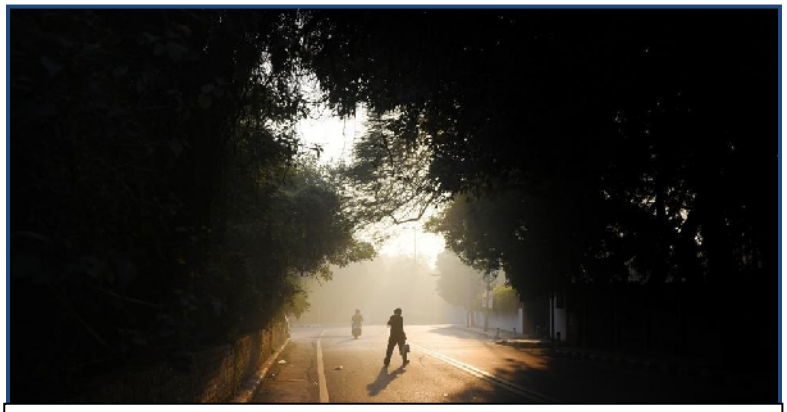
“I was going through data of the last couple of years and there has been a 10 to 15% improvement this year in terms of air quality. With the measures put in place already, like shutting down of Badarpur power plant or switching to cleaner fuels, you will see a change gradually. We cannot expect instant improvement in air quality, but we are on the right track,” said Gargava.

Experts, however, feel penal measures and better enforcement are also necessary to aid the capital.

Colder days, marginally improved air in Delhi over next few days

Date:17 -December-2018 Source : hindustantimes.com

Delhi's air quality is expected to improve marginally with the surface wind speed picking up but it will continue to remain poor over the next few days, said government agencies.



Moderate fog engulfed Delhi on Sunday.

The national Capital woke up to witness the coldest morning of the season Sunday, with the mercury dropping to 7.2 degrees Celsius — a notch below the season's average.

The city should brace for colder days ahead as minimum temperature is likely to drop to 6 degrees Celsius by the middle of the week, officials of the India Meteorological Department (IMD) said.

This was the lowest minimum temperature recorded this season. Last on December 8, the night temperature had dropped to 7.6 degrees Celsius. The season's normal minimum temperature is around 8 degrees Celsius, officials said.

The drop in minimum temperature is attributed to the cold westerly winds and snowfall in northwest India. "Snowfall in areas such as Uttarakhand, parts of Himachal Pradesh and Jammu and Kashmir has brought cold winds to Delhi, triggering a drop in the mercury. The minimum temperature may drop to around 6 degrees Celsius on December 19," the official said.

On Sunday, moderate fog also engulfed the city which is expected to witness shallow fog over the next two days. The IMD had earlier predicted a moderate-to-dense fog cover, which is likely to reduce the visibility to less than 50 metres. According to officials, strong winds did not let the fog become dense. As a result, the visibility recorded at the IGI airport in the morning was around 500-600 metres. On Monday, the visibility is likely to range between 500 metres and 999 metres, officials said.

"The fog has downgraded to shallow because wind speed has picked up. Shallow fog is likely to occur over the next two-three days. It may increase to moderate only around December 20,

when some clouds are expected," a senior official of the IMD's regional weather forecasting centre (RWFC) said.

Meanwhile, Delhi's air quality remained in the 'poor' category on Sunday. The air quality is expected to improve marginally with the surface wind speed picking up but it will continue to remain poor over the next few days, said government agencies.

Delhi's AQI was recorded as 282, inching close to the 'very poor' category. An AQI between 100 - 200 is classified under 'moderate' category, 201 and 300 'poor', 301 and 400 'very poor' and 401 and 500 'severe'.

"Though wind speed has picked up, which may improve air quality marginally, other meteorological factors such as high levels of relative humidity are still unfavourable for dispersion of pollutants," read a statement issued by Safar, the Union government's air quality forecasting system.

Delhi's air quality remains very poor: Authorities

Date:18 -December-2018 Source : livemint.com

The overall air quality index (AQI) of the national capital was 336, which falls in the 'very poor' category, according to the Central Pollution Control Board (CPCB) data.

Neighbouring Ghaziabad and Noida recorded 'very poor' air quality

New Delhi: Delhi's air quality remained 'very poor' on Monday with the authorities predicting further rise in pollution levels due to reduced wind speed.

The overall air quality index (AQI) of the national capital was 336, which falls in the 'very poor' category, according to the Central Pollution Control Board (CPCB) data.

An AQI between 100 to 200 comes under 'moderate' category, 201 and 300 is considered 'poor', 301 and 400 'very poor', while that between 401 and 500 is 'severe'.

According to the Centre-run System of Air Quality and Weather Forecasting (SAFAR), the overall air quality of Delhi slipped into the 'very poor' category Monday and the pollution level is expected to rise further.

"The air quality will remain in the 'very poor' category only for next three days with incremental changes. Other meteorological factors are not favourable for dispersing pollution," the SAFAR said.

The overall PM2.5 level (fine particulate matter in the air with a diameter of less than 2.5 micrometer) was recorded at 169 and the PM10 level at 298, it said.

The national capital recorded its best air quality in over two months on Thursday at 'moderate' category after a spell of rain washed away pollutants. The quality of air slipped into the 'poor' category on Friday.

On Sunday, while the Nehru Nagar area saw severe pollution levels, 25 places in the national capital recorded 'very poor' category air and five places came under 'poor' category, the CPCB said.

Neighbouring Ghaziabad and Noida recorded 'very poor' air quality, while in Faridabad, it was in the 'poor' category. In Gurgaon, the air pollution level was 'moderate', it added.

Cold wave forecast in Delhi for next 3 days, temperature likely to drop to 4 degrees

Date:19 -December-2018 Source : hindustantimes.com

Officials said that the cold wave conditions may be witnessed only at isolated places in the city on December 20, 21 and 22.

The India Meteorological Department (IMD) has issued a cold wave warning and has forecast that night temperature in Delhi could further drop to around 4 degrees in the coming days. The mercury dropped to 5.1 degrees Celsius in the early hours of Tuesday, making it the coldest December day since 2015.

Officials said that the cold wave conditions may be witnessed only at isolated places in the city on December 20, 21 and 22.

On Tuesday morning, the temperature plummeted to 5.1 degrees Celsius, three notches below the season's average, from Monday's 6.2 degrees Celsius. The mercury had touched 5 degrees Celsius on December 20, 2015.

According to IMD officials, the main reasons behind the unusual drop in Tuesday's minimum temperature was clear skies and strong cold winds blowing over Delhi due to heavy snowfall in parts of northwest India.

"The heavy snowfall — early for this time of the year — in Jammu and Kashmir, parts of Himachal Pradesh and Uttarakhand, has triggered cold winds that are reaching Delhi. The predicted cold wave conditions are mainly because the sky is clear and in the absence of any cloud layer, the cold winds rapidly cools the earth. This phenomenon is called radiation cooling," said Kuldeep Srivastava, head of regional weather forecasting centre (RWFC), IMD.

Meteorologists said that while a clear sky helps the night temperature drop and pushes the day temperature up, a cloudy sky does the opposite.

As per IMD forecast, the sky is expected to remain clear till December 22.

Private weather forecaster Skymet too has issued a warning for cold wave conditions in parts of Delhi over the next couple of days. "Over the next three to four days, the night temperature is going to remain below normal. It may drop to 4 degrees from Thursday, which would lead to cold wave condition," said GP Sharma, president of meteorology at Skymet.

The minimum temperature on Wednesday is expected to settle around 5 degrees Celsius while the maximum temperature is likely to hover around 23 degrees Celsius.

However, the minimum temperature is expected to rise by around 1-2 degrees Celsius from December 23, as a western disturbance is likely to approach Delhi bringing clouds with it.

Meanwhile, the Air Quality Index (AQI) value, according to Central Pollution Control Board (CPCB), on Tuesday was recorded at 353, in the 'very poor' category. The air quality in the city is likely to deteriorate, as wind speed could slow down over the next two days.

After SC order, CPCB uploads studies on impacts of pollution on health

Date:20 -December-2018 Source : downtoearth.org.in

A total of 13 studies, conducted since 2010, have been uploaded. Out of these, only four are on impacts of air pollution on health

In compliance with the Supreme Court order, dated December 10, 2018, the Central Pollution Control Board (CPCB) has uploaded studies on the impacts of pollution on health. The order, passed by Justices Madan B Lokur and Deepak Gupta, observed that even though studies had been conducted on the impacts of air pollution on health and economy, they were not available in the public domain.

The bench raised the possibility that may be the government was spending more on treatment that it was on controlling pollution. A total of 13 studies, conducted since 2010, have been uploaded. Out of these, only four are on impacts of air pollution on health.

The latest of these was on the health impact of bursting fire crackers during Diwali and Dusshera, published in 2017. The study was carried out by Maulana Azad Medical College in four areas in Delhi. People in these areas were interviewed on two days before and after Dusshera, and again on three days before and after Diwali.

The findings showed that there was not much difference in the functioning of the respiratory system pre and post Dusshera and during Diwali. There was some increase in cough and breathlessness, but this did not translate into any significant illness requiring immediate medical attention. However, there were cases of excessive watering, redness and burning sensation in the eyes post Diwali in some areas.

The results of the study, despite the fact that air pollution levels were high, can be termed as inconclusive since it was carried out after the Supreme Court banned the sale of firecrackers and limited the time for bursting them.

The other three studies, all published in 2012, looked at the impact of biomass burning in rural households, impact of air pollution on health of adults in Delhi, impact of ambient air quality, respiratory symptoms and lung function of children living in Delhi.

The study on children reported that they had 1.80 times more upper respiratory symptoms such as sinusitis, running or stuffy nose, sneezing, sore throat and common cold with fever. These children also had twice as much lower respiratory symptoms such as frequent dry cough, sputum-producing cough, wheezing breath, breathlessness on exertion, chest pain or tightness

and disturbed sleep due to breathing problems. This report emphasized on the higher prevalence of underlying respiratory diseases. The study also showed that the problems were more prevalent in children from low socio- economic background.

Most of the other studies uploaded revolve around the biological health of River Ganga.

At 4 degree Celsius, Delhi wakes up to coldest December morning in 4 years on Thursday

Date:21 -December-2018 Source : indiatimes.com

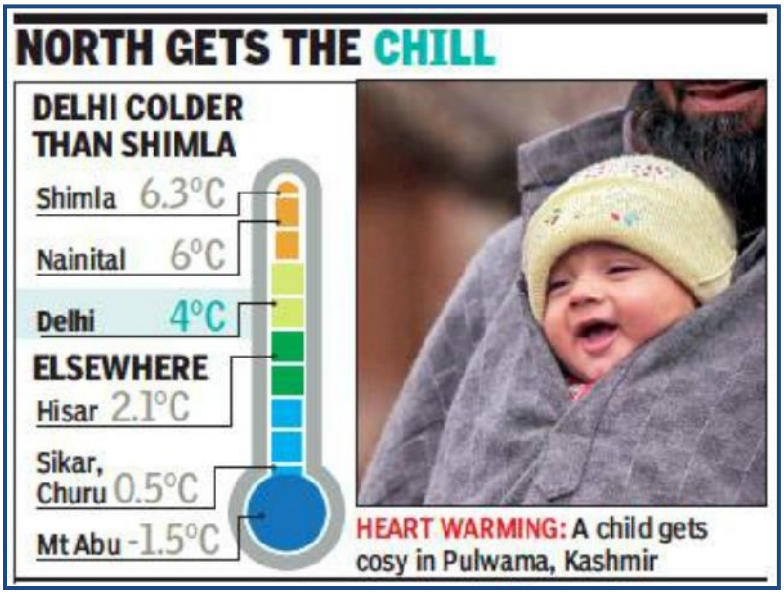
NEW DELHI: Delhi recorded its coldest December morning in four years, with the minimum temperature on Thursday plummeting to 4 degrees Celsius — four notches below normal — as a cold wave swept through the northern plains.The intensifying chill comes ahead of the peak winter period and increases the possibility of a cold end to the year. Night temperatures have already fallen below 2 degrees C at several places in north Rajasthan and Punjab, where the Met department has declared “severe cold wave” conditions.

Air Pollution in Delhi

The lowest temperature recorded in the plains on Thursday was 0.5 degree C at Sikar and Churu, both in Rajasthan. Many places in the region also reported ground frost.

In Delhi, the last time temperatures had fallen below 4 degrees C in December was in 2014 (December 28), when 2.6 degrees C was recorded in Safdarjung.

Met officials said cold wave conditions were likely to continue in the capital for at least the next two days. “Chilly northwesterly winds have been consistently blowing over the region for the past five days, bringing in the cold from the north. In addition, cloudless skies are allowing daytime heat to escape, leading to a sharp drop in night temperatures,” said a Met official. From December 23, the wind direction may change due to a western disturbance, leading to slightly warmer nights for a short period, the official added. In next fortnight, brace for cold days, nights



IMD's forecast for the next two weeks says both day and night temperatures in Delhi-NCR are likely to remain below normal, raising the probability of more cold wave spells in the coming days.

The fall in temperatures also kept Delhi's air quality in the "very poor" category with an overall Air Quality Index (AQI) of 349 recorded on Thursday.

The capital has been witnessing a steady drop in temperatures over the last week. Delhi had recorded the season's lowest of 5.1degrees C on Tuesday, while it was 5.2 degrees C on Wednesday – both three notches below normal.

The Met office has forecast clear skies for Friday along with moderate fog in the morning and haze and smoke thereafter.

SAFAR, a body under the ministry of earth sciences, forecasts air quality to deteriorate in the next 24 hours, owing to the increase in moisture in the air. Delhi's average PM2.5 levels could rise from 213 to 229 micrograms per cubic metre in the next 24 hours, while the average PM10 levels could rise from 400 to 430 micrograms per cubic metre, owing to factors like high moisture content, moderate fog impact and low wind speed (2.8km/hour), it said.

Delhi's cold conditions to continue today, says the weatherman

Date:22 -December-2018 Source : dnaindia.com

According to the Met department, the dip in temperature also led to very poor air quality in the city.

Delhi woke up to a cold morning on Friday with city recording minimum temperature at 4.7 degrees Celsius, three notches below average. According to the Met department, the dip in temperature also led to very poor air quality in the city.

Delhi Cold

As per the data available with Central Pollution Control Board (CPCB), Delhi continued to breathe 'very poor' air with air quality index being 390. The major air pollutants were PM 2.5 and PM 10. The weather department has predicted the cold wave in the national capital to last till Saturday.. Temperatures across northwest India have been plummeting, India Meteorological Department officials said. Neighbouring Punjab, Haryana and Rajasthan are also experiencing biting cold.

"The sky will remain clear through the day. There was mist and shallow fog in the morning," the IMD officials said. The maximum temperature was likely to hover around 22 degrees Celsius.

The humidity at 8.30 am was 89 per cent — a condition not favourable for dispersal of pollutants.

Bangkok air foul for fourth straight day

Date:23 -December-2018 Source : nationthailand.com

Residents of Bangkok and vicinity continued to inhale unhealthy levels of air pollution on Sunday, the fourth consecutive day the area was shrouded in a smog of airborne particulates.

Particulates measuring 2.5 microns (PM2.5) or less were recorded in at least 20 roadside locales beyond the safety limit of 50 micrograms per cubic metre. Sixteen other places also have levels dangerous to health. The worst-affected area – assigned a “red code” – on Sunday morning was Tambon Pak Nam in Muang Samut Prakan with a reading of 93 micrograms per cubic metres.Rama II Road in Muang Samut Sakron earned an orange code with 90 micrograms, while the readings were 73 along Bangkok’s Soi Lat Phrao 95 in Wang Thong Lang district and 72 on Paholyothin Road in Chatuchak. Absence of wind added to the

high accumulation of dust particles, according to the Pollution Control Department (PCD).It warned that the air quality was unlikely to improve on Monday and urged people to stay indoors or wear an N95-rated face mask if they go out.Cars and trucks that belch black exhaust smoke should not be operated, and outdoor fires are discouraged. The Bangkok Metropolitan Administration has ordered strict controls on outdoor burning and has officials advising crematorium operators about proper practices.PCD director-general Pralong Damrongthai said the PM2.5 level was unsafe in Phayathai, Din Daeng, Lat Phrao, Min Buri, Bang Khun Thien and Rama II Road.

Residents there should take protective measures because the particulates – one-tenth the size of a human hair – enter the lungs and irritate the respiratory system, he said. Anyone already in poor health would be more easily affected by PM2.5, Pralong noted. The particulates come mainly from diesel engines and the worn combustion systems of older vehicles, from burn-offs of cropland and from factories. The PCD is working with the city, traffic police, the Department of Land Transport, Ministry of Transport and Agriculture and Cooperatives Ministry. Traffic police are tagging vehicles issuing black exhaust with a sticker and ordering them off the road, Pralong said.The authorities could also bar large vehicles from inner Bangkok if the air pollution remains bad much longer, he said.

Hazardous Pollution Levels in Delhi on Cold Christmas Eve

Date:24 -December-2018 Source : weather.com

Fog engulfs Delhi as temperature falls.

Pollution in Delhi and the National Capital Region (NCR) reached hazardous levels on Monday morning as minimum temperature slightly improved to 4.6°C, the Met said.

Pollution levels depreciated to 'severe plus' category with many areas recording Particulate Matter (PM)10 levels way beyond the safe standard. "Overall air quality in Delhi is in the severe plus zone and it is expected to remain in the severe range until tomorrow (Tuesday). "It might touch very poor levels thereafter," System of Air Quality and Weather Forecasting And Research (SAFAR) said in its daily pollution analysis. The agency considered the fall in minimum temperature a major cause for the pollution to reach hazardous

levels as drop in mercury brings with it a "huge amount of moisture near the surface" and presence of humidity hampers dispersal of pollutants.

"There is a significant fall in temperature which has brought down the boundary layer significantly with huge amount of moisture beneath," SAFAR said. According to the India Meteorological Department (IMD), the minimum temperature on Monday slightly increased to 4.6 degrees Celsius from Sunday's 3.7°C (the coldest so far in December in the past four years) due to easterly winds.

The Met forecast a chilly weekend ahead as temperatures might fall to 3°C around New Year. The maximum temperature was likely to hover around 22 degree Celsius and might remain the same over the next few days.

As per the Delhi Pollution Control Committee (DPCC), the major pollutant in many areas was PM10. The PM10 and PM2.5 level in Anand Vihar was at 1,186 and 953 microgrammes per cubic metre -- being the most polluted, followed by Wazirpur with 1,055 of PM10 and 727 of PM2.5. The safe level for PM10 is 100 microgrammes per cubic metre, whereas for PM2.5 it is 60 microgrammes per cubic metre.

The other hotspots with hazardous levels of PM10 include R.K Puram (903), Mundka (826), Dwarka Sector-8 (824), Jawahar Lal Nehru Stadium (714), and Jahangirpuri (781). In terms of pollution, the SAFAR said that a shallow thin layer of Radiation fog has been developing over Delhi which increases the share of finer particles like PM2.5 and "significantly PM10".

"The levels of gaseous carbon dioxide has also increased to moderate levels due to advection," the agency said. Experts advised against all physical activities outdoors, including morning walks. "Do not to rely on dust masks for protection against pollutants. Instead, use N-95 or P-100 respirators when stepping outdoors," an expert said.

Delhi air quality in ‘severe’ category, flight operations resumes at Delhi airport after two hours

Date:25 -December-2018 Source : financialexpress.com

The dense fog condition in Palam area of the national has led to poor visibility on the runway, forcing officials to halt the operations. A minimum visibility of 125 metres is needed for flight operations.All departures at Delhi airport resumed at 9.16 am on Tuesday after a brief halt due to poor visibility. Flight operations were put on hold for nearly two hours as dense fog covered the runways. According to news agency ANI, the services remained suspended between 7.15 am and 9:16 am.

Also, three international and one domestic flight were diverted due to a dip in the visibility, a PTI report said. It, however, added arrivals were not stopped as visibility was above 50 metres.

Meanwhile, the air quality index of Delhi continues to remain in 'severe' category with PM 2.5 level recorded above the statndards. At 8 am on December 25, AQI at Jawaharlal Nehru Stadium was 451.

The Indira Gandhi International Airport is the busiest in the country and on an average sees more than 70 flight movements per hour. This includes both arrivals and departures.

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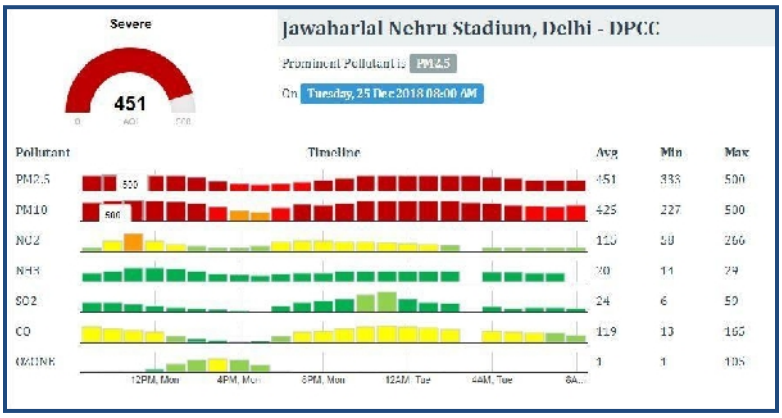

The capital on Sunday recorded its coldest December temperature in the past 12 years with mercury dipping to 3.7 degrees Celsius, as a moderate cover of fog surrounded the city dropping visibility. On Monday, several parts of the northern India witnesses dense fog.

A major accident on the Rohatk-Rewari highway due to the fog jilled eight people on Monday.

However, a new technology is going to be deployed soon to tackle the problem. The Air Traffic Flow Management (ATFM) system, in use in nine countries and being introduced in India for the first time, will provide information to airlines at the place of origin of a flight about the status of fog and congestion in Delhi so that they can plan their flights to the national capital accordingly. In case of fog at Delhi airport, the status would be conveyed well in advance to the aircraft at the place of their origin itself, asking them to delay departure.

With this system in place, passengers flying into Delhi from various parts of the country this winter will no longer have to worry about the diversion of their flights.

Meanwhile, With Delhi's air quality remaining in the 'severe' category for the last three days, city BJP chief Manoj Tiwari Monday demanded Chief Minister Arvind Kejriwal to call an all-party meeting to find a solution to the recurring crisis.

Taking a dig at the chief minister, Tiwari tweeted in Hindi, "Arvind Kejriwal ji (are) you still the CM? Why don't you call an all-party meeting and a special session of the Delhi Assembly. Do you want us to believe that you cannot do it."

The 'severe' quality of air was attributed to wind speed and other meteorological factors remaining "highly unfavourable" for dispersion of pollutants.

The Supreme Court-appointed Environment Pollution Control Authority (EPCA) on Monday imposed a three-day ban on industrial activities in pollution hot-spots and construction work across the national capital region.

Temperature drops to 3.8 degrees in Delhi! Air quality 'severe'; Dense fog disrupts rail operations, check train status

Date:26 -December-2018 Source : news.abplive.com

Delhiites woke up to the chilly December morning in the capital with the temperature dipping to 3.8°C, as the cold wave sweeping across northern part of the country.

Cold wave has continued to grip Delhi and several parts on North India on Wednesday.

New Delhi: Cold wave has continued to grip Delhi and several parts on North India on Wednesday. Delhiites woke up to the chilly December morning in the capital with the temperature dipping to 3.8°C, as the cold wave sweeping across northern part of the country. Delhi is experiencing a cold December after witnessing three consecutive years of mild weather during the month. In addition to a cold winter morning, the people of Delhi woke up to "severe" level of pollution as air quality in the city dipped once again. Besides, the dense fog has added to common man's struggle with the cold.

The Railways announcement stated that several trains have been cancelled keeping in view the forthcoming foggy weather, while many are running late. Following train services have been hit by cold foggy weather. Check train status here -

1. 12203 Saharsa-Amritsar Garibrath is running late by 17 hours

2. 12397 Gaya-New Delhi Mahabodhi Express is running late by 3.30 hours

3. 12477 Hapa-Jammutavi is delayed by 2.30 hours

4. 14257 Banares-New Delhi Kashivishwanath Express is running late by 3.45 hours

5. 12303 Hawda-New Dekhi Express is delayed by 3 hours

Flight operations were partially suspended at the Delhi airport on Tuesday due to low visibility conditions as departures were put on hold and more than 80 flights were delayed, an official said. However, today the operations at Delhi airports continue as scheduled, reported ANI.

Air quality monitoring project on anvil

Date:27 -December-2018 Source : news.indiatimes.com

Air Quality Monitoring project on anvil

SURAT: The Surat Municipal Corporation (SMC) will begin the ambient air quality monitoring project to closely watch air pollution levels in the city. This project will be undertaken jointly with the World Bank, which will provide funds and expertise to control air pollution, especially particulate matter (PM) 10 level. The World Bank has selected Surat to be developed as a 'pollution-free' city of the country.

"World Bank has given us some broad outlines based on which a detailed plan is being drawn up. The basic outlay will be ready by the month-end," municipal commissioner M Thennarasan said. "According to the requirements, we are drawing up plans for conversion of buses running on conventional fuel into e-buses, making roads dust-free among other steps," he said. Three years ago, the ambient air quality in the Diamond City was considered in the category of 'good'

according to the national air quality index (AQI). However, at present, the two parameters have put the city in the 'moderately polluted' category. The two parameters of PM10 and PM2.5 are much above the prescribed level of the AQI's 'good' and 'satisfactory.' Even as vehicular population is increasing each passing day, there has been no concrete step taken towards curbing air pollution by the city planners.

Delhi Climate & Pollution More Hazardous In Coming Days; Mizoram, Assam Facing Major Threat

Date:28 -December-2018 Source : krishijagran.com

The cold northwesterly winds will continue to blow over northern, central and western India on Friday. Cold wave conditions are likely over Punjab, Haryana, Delhi, Rajasthan, Uttar Pradesh, Madhya Pradesh, Gujarat, Jammu and Kashmir, Himachal Pradesh, Uttarakhand, Jharkhand and Bihar.

Many regions across these states except Uttar Pradesh and Madhya Pradesh are likely to have ground frost conditions (soil surface temperature falling below the freezing point of 0°C).

However, a cyclonic circulation over northeastern India may bring scattered snow and rain over Arunachal Pradesh, Assam, Meghalaya, Nagaland, Manipur, Mizoram, Tripura and Sikkim on Friday. Thunderstorms and hail are likely over Meghalaya and dense fog is likely over Sikkim.

A trough (relatively low-pressure area) over southern India brings rain and thunderstorms over Kerala and isolated rain over Andhra Pradesh and Tamil Nadu today.

Air Quality on Friday:

Dry weather is forecast in northern, central, western, eastern and northeastern India. Air quality will be poor or very poor especially around Delhi and major cities in northern, central, eastern, western and southern India. The air quality of especially, Delhi will be hazardous or unhealthy on Friday with high PM 2.5 index throughout the city.

Air Quality on Saturday & Beyond:

As the cold northwesterly winds continue to blow, the cold wave will reach east coast on Saturday. The cold wave conditions are likely to continue over Punjab, Haryana, Delhi, Madhya Pradesh, Rajasthan, Bihar, Uttar Pradesh, Gujarat, Madhya Pradesh, Chhattisgarh, Odisha, West Bengal and Jharkhand.

Ground frost conditions are likely over Punjab, Haryana, Delhi and Rajasthan on Saturday. The cold wave is likely to persist through the beginning of next week.

Isolated rain is possible over Tamil Nadu, Karnataka and Kerala on Saturday due to the trough prevailing over the region.

Dense fog is likely over Assam, Meghalaya, Nagaland, Manipur, Mizoram, Tripura and Sikkim on Saturday.

Dry weather is forecast across central, eastern and western India until Tuesday. Air quality will be poor or very poor especially major cities in northern, central, western and eastern India. Wind speeds across India are forecast to be under gentle breeze over northern and central India.

Hence, poor or very poor air quality conditions may persist until Tuesday.

There are hardly any Russians in Goa this December — blame rapes & air quality

Date:28 -December-2018 Source : theprint.in

Major players in Goa's tourism industry say there has been a nearly 50% drop in foreign visitors over the Christmas period as compared to last year.

A beach in Goa

New Delhi: The streets of Goa are still basking in the lights of Christmas but this festive season has been a dampener for the tourism industry in the country's party capital. Major players in Goa's tourism industry say there has been a nearly 50 per cent drop in foreign visitors over the Christmas period as compared to last year.

Goa depends on international tourists to sustain its tourism industry. As per industry estimates, international travellers spend Rs 87,000 per person on average as compared to the Rs 31,500 for an average domestic visitor.

According to the Travel and Tourism Association of Goa (TTAG), the Christmas season is favoured by travellers from abroad and as a result, the state witnesses an influx of chartered fights around this time.

This year, according to TTAG, there was an over 30 per cent drop in the number of chartered flights landing in the state between October and November, while the number of foreign tourists had fallen by almost 50 per cent in the same period.

Data with TTAG shows that between October and November in 2017, 423 chartered flights landed in the state bringing in 60,000 foreign tourists. In the same period this year, 283 chartered flights brought in 31,600 foreign tourists — a 33 per cent drop in the number of flights and a 47 per cent fall in tourist numbers.

“The numbers have registered disappointment in the month of December too,” Savio Messiah, president, TTAG, told ThePrint. “While the exact numbers are not yet available, the numbers of foreign tourist arrivals are expected to have fallen dramatically by almost 50 per cent in December as against last year.”

Messiah further said that the trend was the same throughout this tourism season.

According to him, in 2016-17, there were 988 chartered flights and 2.32 lakh foreign visitors between April and October. In 2017-18, there was a slight dip, with the arrival of 808 chartered flights carrying 2.15 lakh foreign visitors.

“This year, tourists from Russia have fallen by almost 55 per cent whereas tourists from the UK have reduced by 30 per cent. These are the two top nations in terms of foreign travellers to Goa,” Messiah said.

According to Aamantran Travels, the company that handles chartered flights to Goa from Russia and the UK, till last year, 15 to 16 fully packed aircraft, with at least 200 tourists on board, would land from Russia every week.

“This year, the number is down to five flights per week and the seat occupancy is less than 70 per cent,” said Deepak Bhatnagar, co-founder of the firm.

ThePrint reached IndiGo and Vistara through email but we are yet to receive a response. This report will be updated when they respond. Air India, however, said the trend of lesser foreign tourist arrivals in Goa “is not visible”.

Why the dip in tourist flow

The tourism industry cited a number of reasons for the falling numbers, including poor air quality across India, “crimes against women” and expensive stay at hotels.

“Due to the increased fees on e-visas on arrivals and increased taxation on the hotel industry, India has become less competitive against upcoming destinations such as Egypt, Thailand, Phuket, and Sri Lanka,” Messiah said.

“Moreover, while deciding on the location for vacations factors such as increasing rape incidents and poor air quality index play a major role.”

The hotel industry in Goa is also up in arms over the application of the 28 per cent good and services tax (GST) on luxury hotels with tariffs above Rs 7,500.

The tax, hoteliers claim, makes India one of the most taxed countries in the world for hotels, and this makes the destination less attractive for foreign tourists who tend to stay in upmarket hotels, unlike domestic tourists who choose budget-friendly hotels.

“Across the world, the taxation on hotel industry is not beyond 8 per cent,” said S.M. Shervani, former president of Federation of Hotel & Restaurant Associations of India (FHRAI). “Such high taxes make tourists choose other locations from South Asia that are at par with Goa minus the air pollution and crimes.”

Domestic tourist numbers up

While foreign arrivals have fallen, domestic tourists have increased by at least 20 per cent against last year.

“Our bookings to Goa for domestic tourists have gone up by 20 per cent against last year,” said Karan Anand, head of relationships and supplier management for the travel company, Cox & Kings.

Another popular travel management firm, Yatra.com, echoed Cox & Kings. “While domestic tourist is booking aggressively, the hotels are not packed, unlike last year due to lesser foreigners,” said a spokesperson of Yatra.com. “In fact, at least 30 per cent of the rooms of our partnered hotels are still vacant.”

Air pollution control final draft Action Plan discussed

Date:29 -December-2018 Source : greaterkashmir.com

Commissioner Secretary Forests Environment and Ecology, Manoj Kumar Dwivedi Friday discussed final draft Action Plan for control of Air pollution with the members of Air Quality Monitoring Committee (AQMC) here at a meeting.

The State Government had mandated AQMC for the preparation of Action Plan for control of Air pollution under National Clean Air Programme (NCAP) for Jammu and Srinagar Cities.

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The State Government had mandated AQMC for the preparation of Action Plan for control of Air pollution under National Clean Air Programme (NCAP) for Jammu and Srinagar Cities.

The Plan will be submitted to the Central Pollution Control Board New Delhi.

The Commissioner Secretary said that Installation of Ambient Air Quality Monitoring Stations along with Continuous Ambient Air Quality Monitoring Systems (CAQMS) in both the capital cities Srinagar and Jammu will be taken up on top priority.

The Commissioner said that the forth coming Inspection and Certification Centre (ICC) by the Transport Department at Samba for scientific inspection and maintenance of vehicles (I&M) along with phasing out of 25 year old age vehicles in the state were the main action points for the Action Plan pertaining to reduce the level of air pollutant in Jammu and Srinagar cities.

NCR may shut schools on 'high-pollution' days

Date:30 -December-2018 Source : indiatimes.com

NEW DELHI: The government agencies in the national capital region (NCR) are contemplating shutting down schools during high pollution days, said an expert member of the CPCB-led task force for Graded Response Action Plan (GRAP).

Dr T K Joshi, also a health expert, told TOI that in the latest task force meeting, the proposal was discussed but many questioned the move's effectiveness. "I feel it is a pointless exercise. Children are anyway running around all day in and around the house. Even the indoor air is not much cleaner," said Joshi, who is also an adviser to the Union environment ministry.

On highly polluted days, government agencies like CPCB and SAFAR ask people to avoid all outdoor physical activities. According to experts, people with heart or lung ailments, senior citizens and children should remain indoor and keep activity levels low when air quality turns severe.

"Rather than shutting down schools, it will be wise to reduce exposure of those vulnerable. Those suffering from asthma or other respiratory illness should take extra care," Joshi said, adding that no decision was taken yet.

In the first week of November in 2016, Delhi shut all schools for three days as its residents struggled with a choking weeklong smog. In 2016, the air pollution in Delhi was the worst on record, and the city had experienced its thickest smog in 17 years, with the average air quality index (AQI) hitting a peak of 497.

Similarly, in the first week of November in 2017, all schools in Delhi were closed for three days. NCR went through an unprecedented pollution crisis last year when the air became unfit to breathe for a week, staying in the 'severe' category between November 7 and 14. The worst was on November 9, when AQI hit 486. Dust from the Gulf region was later identified as the main reason for the smog crisis, contributing slightly more than the crop burning in agrarian states surrounding NCR.

However, this is not the first time that the authorities have contemplated tough actions to protect children. Last month, the GRAP task force had discussed altering school, market and office timings on days when air pollution reaches alarming levels. The idea was to push back school timings from 8am to 10am and push up office and market timings from 10am to 8am, so that the peak pollution timings of morning and evening can be avoided. The proposal was opposed by some members citing logistical issues.

जहाँ है हरियाली ।
वहाँ है खुशहाली ।।

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