

# Significant Works by Central Pollution Control Board

In Pursuit of Clean Environment



**CENTRAL POLLUTION CONTROL BOARD**

Ministry of Environment, Forest & Climate Change

Government of India

June, 2024

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# **AIM of Central Pollution Control Board**

**To provide scientific and technical leadership for evidence based environment management in the country, handle multi-disciplinary complexities of pollution control and guide policy decisions using research & technical knowledge**

# Roles & Responsibilities

Central Pollution Control Board (CPCB) is a statutory organization constituted in September, 1974 under the Water (Prevention and Control of Pollution) Act, 1974 and entrusted with the powers and functions under the Air (Prevention and Control of Pollution) Act, 1981.

Advise the Central Government

Lay down, modify or annul standards

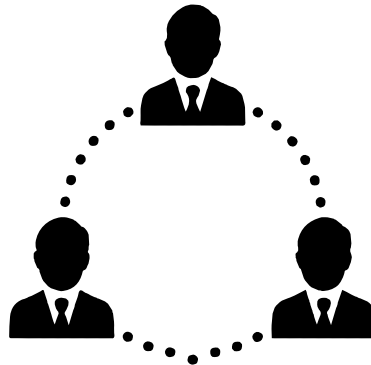
Co-ordinate the activities of the State Boards, resolve disputes & provide technical guidance

Plan and organize training of persons

Plan & cause to be executed a nation-wide programme

Perform function as prescribed

Collect, compile and publish technical data related to pollution



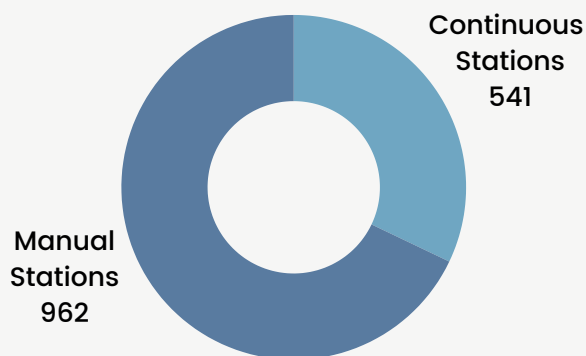
Organize through mass media comprehensive program for prevention & control of pollution



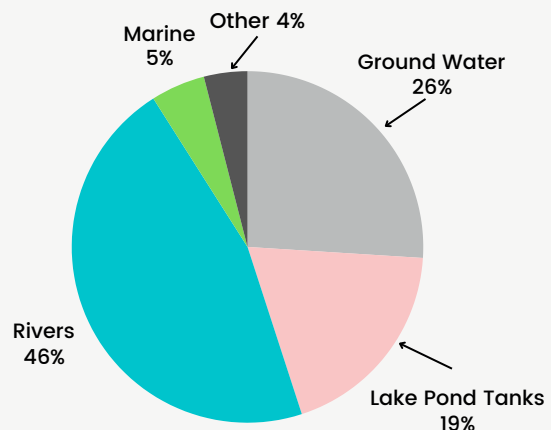
# Monitoring & Analysis Facilities: Expanding & Optimizing Coverage

- Air, Water & Wastewater, Biological, Instrumentation & Trace Organic Laboratories
- Monitoring of Ganga from Gaumukh to Ganga Sagar
- Advanced Speciated Air Quality Monitoring
- Special monitoring during Diwali and Kumbh Mela
- Analysis of Dioxin, Furan, Persistent Organic Pollutants, Pesticide Residue, Heavy metals, Pharmaceutical & Personal care products

Air Quality Monitoring Network

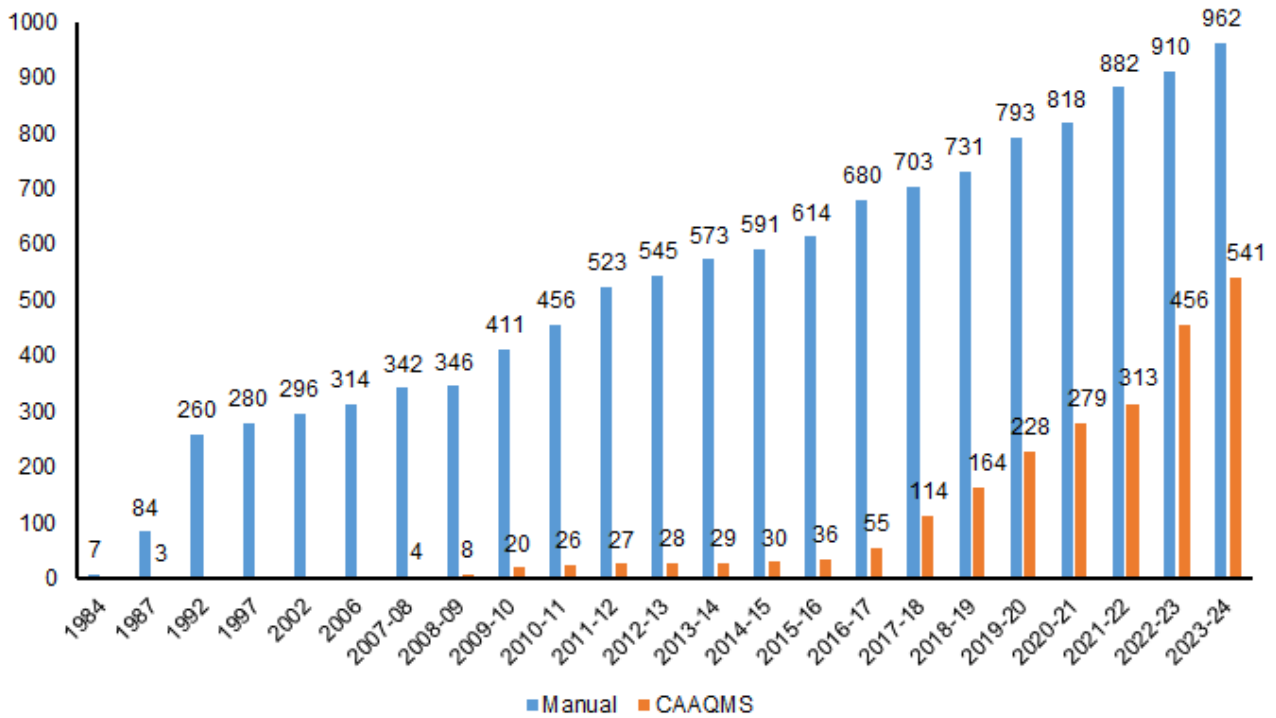


Water Quality Monitoring Network

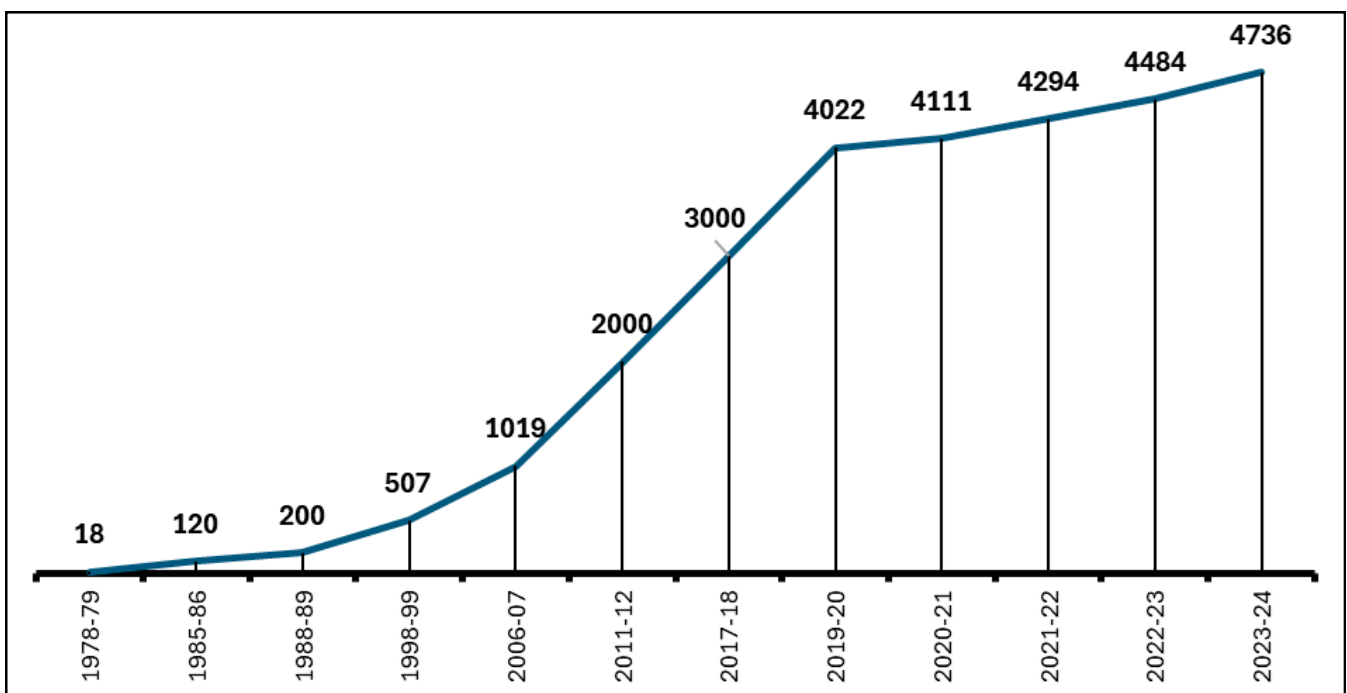


# Expansion of Monitoring Network Over the Years

Growth of Ambient Air Quality Monitoring Network



Increase in number of Water Quality Monitoring locations under National Water Quality Monitoring Programme



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# Air Quality Management

Central Pollution Control Board is committed to Prevention, Control and Abatement of Air Pollution in the country

National Air Quality Index

National Ambient Air Quality Standards

Stringent Emission Standards for polluting industries

Source Apportionment studies & Emission Inventory

Daily Air Quality Bulletin for cities

Ban on Use of Petcoke & Furnace oil

Identification of Non-Attainment Cities & periodic review

Vapour Recovery Systems in Petrol Pumps

Strict Regulatory Actions & Guidelines

CPCB is entrusted with implementation of **National Clean Air Programme (NCAP)** in Non-Attainment cities to reduce Particulate Matter by 40% till 2025- 26 from 2017 levels

Identification of Hotspots & Micro Level Action Planning

Clean Air City Action Plan

Graded Response Action Plan

Public Grievance Redressal Portal

**Reduction in PM<sub>10</sub> concentration has been observed in 96 cities out of 131 Non-attainment cities during FY 2023-24 compared to FY 2017-18**

**17 cities are meeting PM<sub>10</sub> National Ambient Air Quality Standards, 2009**



# PRANA

## Portal for Regulation of Air pollution in Non-Attainment cities



Launched by Shri Bhupender Yadav Hon'ble Minister of Environment, Forest & Climate Change (EF&CC)

Covers information on Air quality data management, Waste & Biomass dumping & burning, Industries, Vehicles, Road Dust and Construction & Demolition, Public Outreach, Capacity Building, Optimizing Monitoring Network and Source Apportionment Studies



**Shri Bhupender Yadav**

Hon'ble Minister of Environment, Forest & Climate Change addressing on 3rd International Day of Clean Air for blue skies, September 07, 2022

- Convergence of Resources
- Tracking City wise Physical and Financial performance
- Real time air quality data City wise
- National Air Quality Index
- Repository of technical studies & resource material
- Citizen Corner

# Swachh Vayu Survekshan & National Clean Air City Awards

Swachh Vayu Survekshan is an initiative by MoEF&CC to rank Non-Attainment cities on the basis of implementation of activities approved under city action plan and air quality

Best performing cities were awarded on September 07, 2023 under three population based categories with the 'National Clean Air City' award and a cash prize of Rs. 5.25 Crores for taking the actions forward.

The awards were presented by Shri Bhupender Yadav Hon'ble Minister of EF&CC



Category 1 - Indore



Category 2 - Amravati



Category 3 - Parwanoo





# Improving Air Quality in Delhi NCR

## Close Coordination with Commission for Air Quality Management



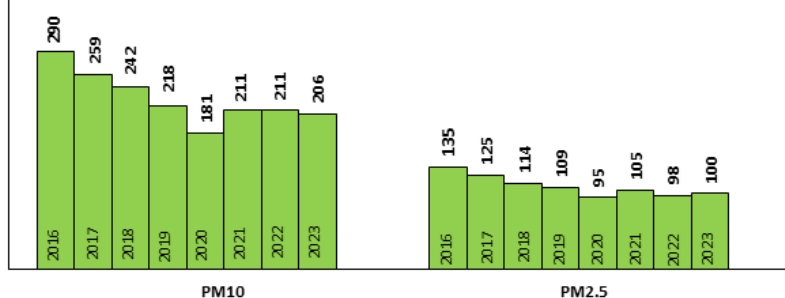
- Extensive ground monitoring coverage, Satellite-based monitoring
- Centralized Air Quality Monitoring Portal for air quality tracking & reporting to concerned stakeholders
- Regulatory actions through State Agencies & ULBs
- CAQM inspections by CPCB Scientists
- Guidelines for financial support for establishment of pelletisation and torrefaction plants to promote utilization of paddy straw
- Research & Development projects - Smog tower, WAYU, Dust suppressant, Bus filtration, etc.
- Anti- Smog Gun at large construction sites
- NCR Industries shifted to cleaner fuel

### Intensive Actions during Winters

- Tracking Crop Residue Burning
- Field surveillance by CPCB Scientists since 2016
- Coordination with State agencies for timely resolution of air pollution related complaints



Annual PM Concentration in ( $\mu\text{g}/\text{m}^3$ ) - Delhi



In comparison to 2016, during 2023 the number of ‘Good’, ‘Satisfactory’ and ‘Moderate’ days have increased to 206 against 110.

# Monitoring Pollution in the Rivers

**Polluted River Stretches reduced to 311 (2022) from 351 (2018)**

106 Stretches are out of Polluted Stretch Listing

324 Rivers are declared 'Fit for Bathing'

74 Stretches improved to cleaner category

Sikkim is out of Polluted River Stretch Listing

## COMPREHENSIVE EFFORTS

- Monitoring at 4736 locations including 2155 locations on rivers
- Tracking & Analyzing data
- Categorizing Polluting River Stretches I to V
- Identification of River Stretches & continual evaluation
- Technically guiding action plans for restoration
- Monitoring implementation

## SPECIAL FOCUS ON RIVER GANGA

- Manual water quality monitoring of river Ganga at 112 locations & Real Time Monitoring at 76 locations.
- Ensuring bathing water quality during Ardh Kumbh, 2019 at Prayagraj, Kumbh, 2021 at Haridwar & annual Magh Mela at Prayagraj
- 100 % monitoring of Grossly Polluting Industries (3186 units) located in main stem states of river Ganga and Yamuna resulting in,

28.6 % reduction in wastewater discharge (2023 compared to 2017)

47.3 % reduction in BOD load (2023 compared to 2017)

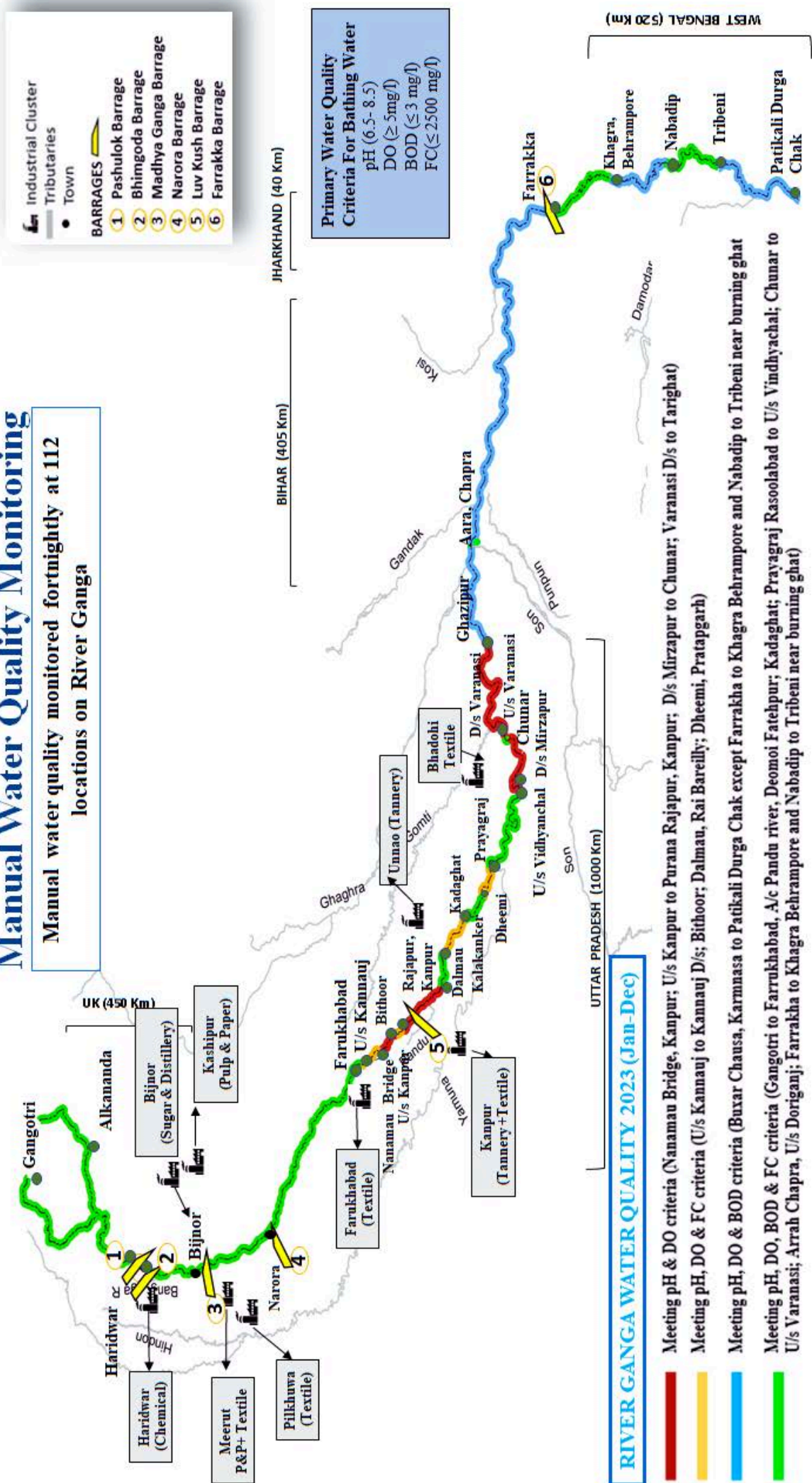
## State wise number of Monitoring Locations under National Water Quality Monitoring Programme



- Implementation of Charter based participatory programme in Pulp & Paper, Sugar, Distillery, Textile and Tannery for adoption of cleaner technologies and waste minimization practices.
- Monitoring of drains confluencing with river Ganga and its tributaries
- Monitoring of Sewage Treatment Plants & Common Effluent Treatment Plants in Ganga front towns.

# Manual Water Quality Monitoring

Manual water quality monitored fortnightly at 112 locations on River Ganga



- Industrial Cluster**  
**Tributaries**  
**Town**
- BARRAGES**
- 1 Pashulok Barrage
  - 2 Bhimgoda Barrage
  - 3 Madhya Ganga Barrage
  - 4 Narora Barrage
  - 5 Luv Kush Barrage
  - 6 Farrakka Barrage

**Primary Water Quality Criteria For Bathing Water**  
 pH (6.5- 8.5)  
 DO ( $\geq 5$ mg/l)  
 BOD ( $\leq 3$  mg/l)  
 FC ( $\leq 2500$  mg/l)

## RIVER GANGA WATER QUALITY 2023 (Jan-Dec)

- Meeting pH & DO criteria (Nanamau Bridge, Kanpur; U/s Kanpur to Purana Rajapur, Kanpur; D/s Mirzapur to Chunar; Varanasi D/s to Tarighat)
- Meeting pH, DO & FC criteria (U/s Kannauj to Kannauj D/s; Bithoor; Dalmau, Rai Bareilly; Dheemi, Pratapgarh)
- Meeting pH, DO & BOD criteria (Buxar Chausa, Karmnasa to Patkali Durga Chak except Farrakka to Khagra Behrampore and Nabadip to Tribeni near burning ghat)
- Meeting pH, DO, BOD & FC criteria (Gangotri to Farrukhabad, A/c Pandu river, Deomoi Fatehpur; Kadaghat; Prayagraj Rasoolabad to U/s Vindhyachal; Chunar to U/s Varanasi; Arrah Chapra, U/s Doriganj; Farrakha to Khagra Behrampore and Nabadip to Tribeni near burning ghat)

# Pandemic - COVID 19 : Waste Management



**Among first few countries to issue guidelines for Handling, Treatment and Disposal of waste generated during treatment, Diagnosis & Quarantine of COVID-19 patients**

**Conversion of 46 Nitrogen plants to generate 33.76 TPD Medical Oxygen sufficient for 3,300 patients**



Nitrogen to Oxygen plant by M/s. UPL Ltd. at LG Rotary Hospital, Vapi, Gujarat

## COVID-19 Biomedical Waste Tracking App



A Snapshot of the "Waste Handler" App page

Public awareness on COVID 19 waste with Pictorial Guide

Use of industrial incinerators to meet excess request in certain areas

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# Computerization of Activities

## Extended Producer Responsibility (EPR) Portals for Waste Management

EPR portal for plastic packaging	EPR portal for Electronic Waste	EPR portal for Battery Waste	EPR portal for Tyre Waste	EPR portal for Used Oil
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## Other E-Governance Portals

National Hazardous Waste Tracking System for GIS based tracking	Comprehensive Environmental Pollution Index (CEPI) Portal	Ash availability & Utilization Portal	Compostable Plastic E-certification
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Laboratory Information Management System	E-application for Laboratory recognition	Portal for Online application for utilization of Hazardous Waste under Rule 9	Portal for tracking Ganga Water quality
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TSDF portal for monitoring performance of Common Hazardous Waste Treatment, Storage and Disposal Facilities	Portal for uploading data by SPCBs and PCCs regarding environmental air and water quality
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# Citizen Centric Approach



SAMEER App - Citizens can lodge complaints related to air quality in Delhi NCR with an option to upload photos.

Application also disseminates hourly data on National Air Quality to users.

Single Use Plastic Grievance App - It empowers users to participate in enforcement of SUP ban.

It has auto transfer feature for prompt action.



Free Available on play store



Free Available on play store

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# Guiding Waste Management

## Implementation of Six Waste Management Rules

Municipal | Plastics | E-Waste | Bio-medical | Construction & Demolition | Hazardous

Guidelines for environmentally sound facilities for handling & scrapping of End of Life Vehicles

Guidelines for preparation of inventories for hazardous & other wastes and Enforcement Framework

Guidelines for handling of biomedical waste for utilization

Guidelines for pre-processing & co-processing of hazardous & other wastes in cement plants

Guidelines for Monitoring Performance of Common Bio-medical Waste Treatment and Disposal Facility by SPCBs/PCCs

Guidelines for Assessment of Environment Compensation to be levied for Violation of Plastic Waste Management Rules, 2016

Guidelines for verification of two seconds residence time in secondary combustion chamber of biomedical waste incinerator

Guidelines on Management of Pyro-metallurgical Slags, red mud, high volume low effect waste

Framework on identification of materials generated from industrial processes as wastes or by-products

Determination for Environmental Compensation for violation of Hazardous & Other Waste Rules

Guidelines for disposal of Cigarette/Bidi butts

Guidelines for management of healthcare waste by healthcare facilities as per BMW Rules, 2016

Guidelines for phasing out Single Use Plastics

Methodology to conduct gap analysis with respect to generation & treatment of biomedical waste

# Circular Economy

Reduce | Reuse | Repair | Refurbish | Re-manufacture |  
Reduce by design | Recycle | Repurpose

Dedicated cell at CPCB to coordinate the activities of Circular Economy

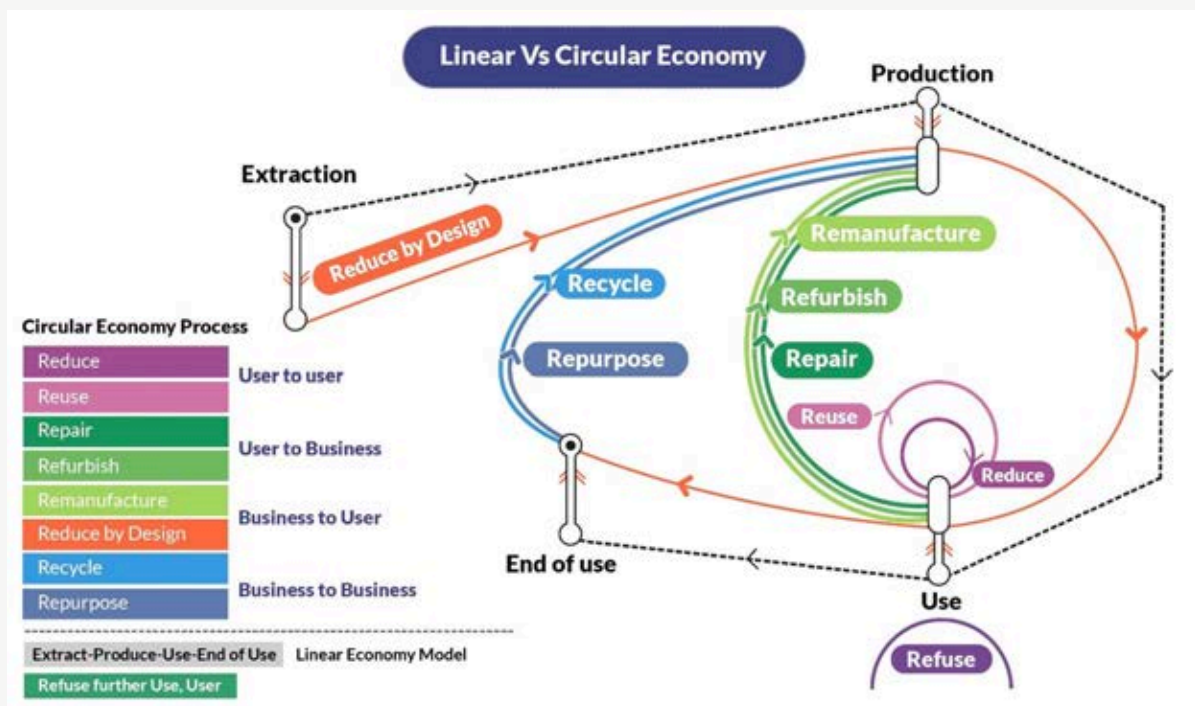
Developed 101 Standard Operating Procedures for utilization of 70 types of hazardous wastes, it resulted in utilization of 1.83 Million MT of industrial wastes

Management of pyrometallurgical slags

Assisting various nodal Ministries in implementing action points for 10 waste streams identified by NITI Aayog

7.6 Million Metric Tons of industrial hazardous wastes has been recycled and utilised

To achieve Circular Economy objectives, developed Central Portals for implementation of EPR in waste streams such as Plastic, Waste Tyre, Waste Batteries and E-Waste





# Ban on Single Use Plastic

## Realizing Hon'ble Prime Minister's Vision

"Can we free India from Single-Use Plastic? The time for implementing such an idea has come. Teams must be mobilized to work in this direction. I want to urge the citizens to give up single-use plastic. Shopkeepers should sell jute and cloth bags. Customers should adopt ways to reduce plastic usage. We must also put technologies in use to abolish plastic usage" ... August 15, 2019

### Planning , Coordination & Facilitation

- Comprehensive Action Plan for elimination of Single Use Plastic (SUP) on supply side, demand side and enabling measures
- Extended Producer Responsibility portal
- Meetings with States, Local bodies, NGOs, technology experts, etc.

### Public Outreach & Trainings

- Training programs on alternatives to plastics
- SUP grievance portal
- Mass awareness activities

### Enforcement Measures

- 8,59,202 total SUP Inspections, 1959.78 tons of plastic seized, and Rs. 19.73 Cr. fine imposed on violators nationwide from July 1, 2022 to March 31, 2024

### Direction, Surveillance & Technical Guidance

- Directions to manufacturers, E-commerce companies, sellers
- Tracking through SUP Compliance Monitoring Portal
- Guidelines on EPR for Plastic Packaging
- Co-processing of Plastic Waste in Cement Kilns

### Alternative of SUPs

- Awareness workshops for promoting eco-alternatives
- Certification of compostable plastics



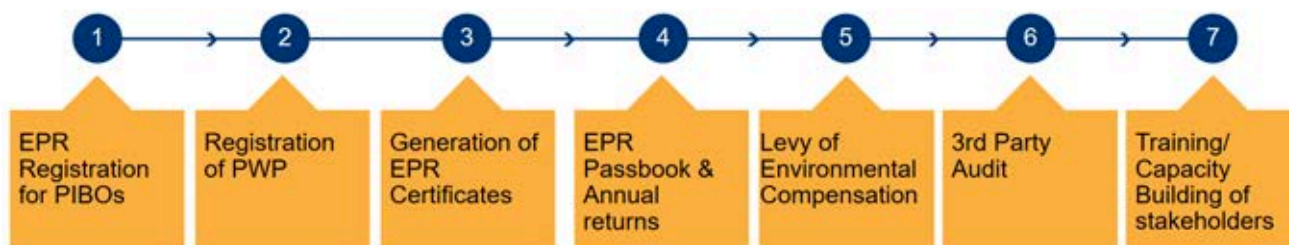
# Extended Producer Responsibility for Plastic Waste Management

Centralized Extended Producer Responsibility (EPR) Portal for plastic packaging has been developed by CPCB for Producers, Importers, Brand-owners (PIBOs) & Plastic Waste Processors (PWPs)

Registration Modules launched in April 2022

EPR Certificate Generation Modules launched in November 2022

Portal fully operational since January 2023



End to End IT Framework for EPR ensures Ease of Doing Business

EPR portal is fully functional with special features to facilitate effective implementation of EPR guidelines

Simplification of registration Flow for MSME Producers

Provisional Registration for MSME Producers based on CTO Application

Auto Registration of Importers if total plastic waste generation < 01 TPD

Alternate information for Disaster Management Plan for PWPs

Bulk Upload of transaction for registered PIBOs

Extension for EPR Certificate Generation by PWPs

UPTO MARCH 2024

UPTO MARCH 2024

**36,220**

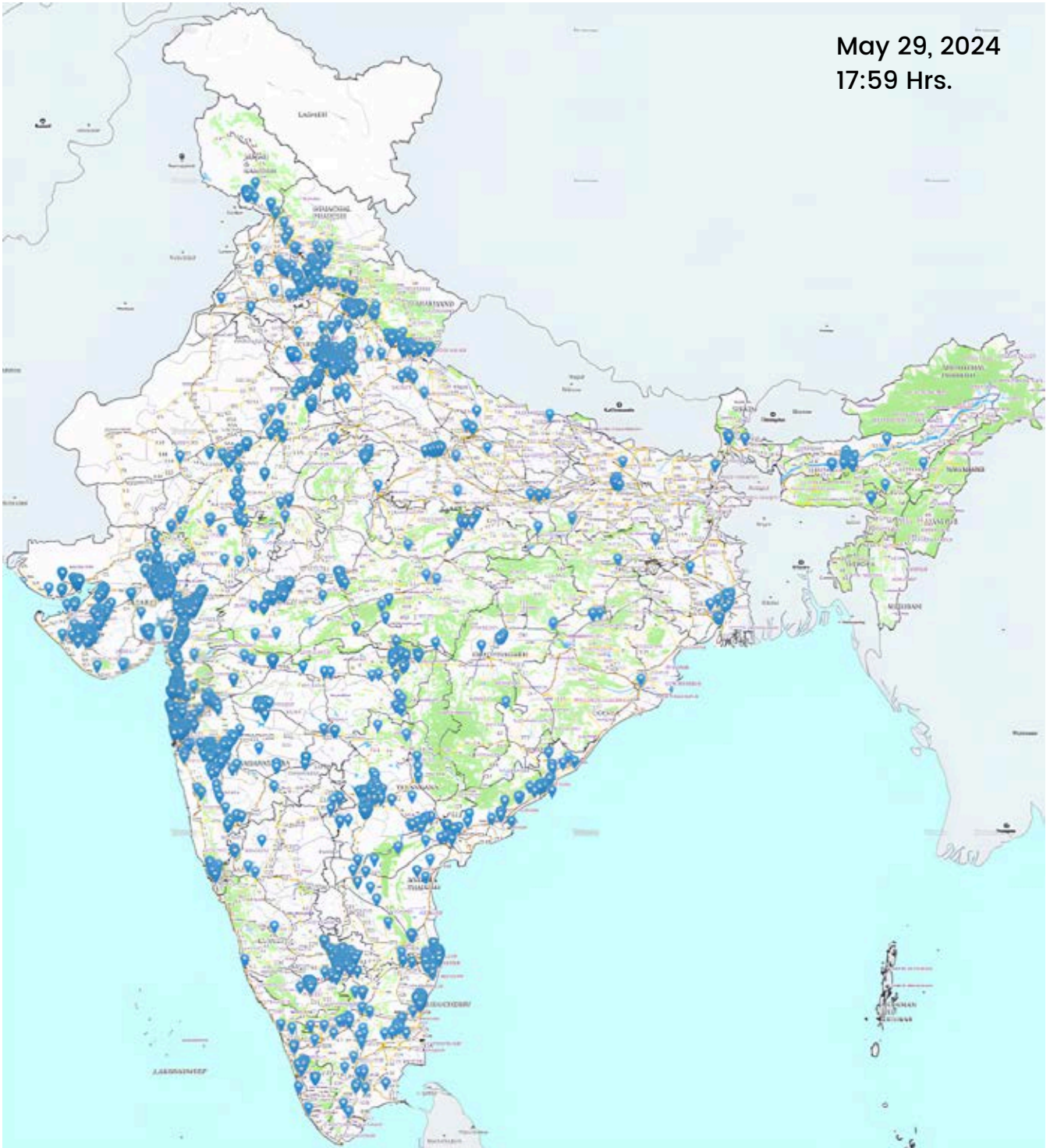
**REGISTERED PIBO**

**50,67,217 T**

**EPR CERTIFICATES BY PWP**

# Geo-tagged Location of Plastic Waste Processors in India

May 29, 2024  
17:59 Hrs.



Source: Centralized Extended Producers Responsibility Portal for Plastic Packaging, CPCB

# Extended Producer Responsibility for Battery Waste Management

Extended Producer Responsibility (EPR) Portal for Battery Waste Management has been developed by CPCB for Producers (Manufacturers & Importers) and Recyclers

Registration of Producers from March 2023  
Registration of Recyclers from August 2023  
Generation & Transfer of EPR credits since August, 2023

## Special Features of the Portal

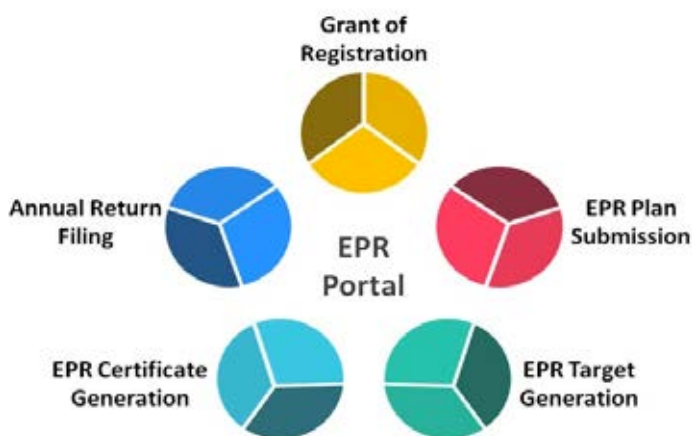
Simplified  
Registration flow  
for Producers and  
Recyclers

EPR targets for  
Producers based  
on Sales of  
Battery

Generation of  
Metal-wise EPR  
credits by the  
Recyclers

Transfer of EPR  
credits between  
Producers and  
Recyclers

EPR wallet of  
Producers &  
Recyclers



UPTO MARCH 2024

# 2,358

REGISTERED PRODUCERS  
& RECYCLERS

UPTO MARCH 2024

# 69,576 T

EPR CREDITS GENERATED BY  
RECYCLERS

# Extended Producer Responsibility for Electronic Waste Management

Extended Producer Responsibility (EPR) Portal for Electronic Waste Management  
has been developed by CPCB for Producers, Recyclers, Refurbishers and  
Manufacturers

Registration of Producers from April 2023

Registration of Recyclers from July 2023

Generation & Transfer of EPR Certificates since August, 2023

Registration of Manufacturers & Refurbishers from January 2024

## Special Features of the Portal

Simplified, transparent  
& faceless Registration  
process

EPR certificate  
Generation

Transfer of EPR  
certificates

Filing of  
Quarterly &  
Annual reports

UPTO MARCH 2024

# 5,201

REGISTERED PRODUCERS &  
RECYCLERS

UPTO MARCH 2024

# 1,86,334 T

EPR CERTIFICATES GENERATED

AS ON MARCH 2024

# 1,52,662 T

EPR CERTIFICATES  
TRANSFERRED



# Extended Producer Responsibility for Waste Tyre

Extended Producer Responsibility (EPR) Portal for Waste Tyre has been developed by CPCB for Producers and Recyclers

Registration of Producers from March 2023

Registration of Recyclers from August 2023

Generation & Transfer of EPR Certificates since August, 2023

## Special Features of the Portal

Simplified, transparent  
& faceless Registration  
process

EPR certificate  
Generation

Transfer of EPR  
certificates

Filing of  
Annual reports

UPTO MARCH 2024

# 331

**REGISTERED PRODUCERS &  
RECYCLERS**

UPTO MARCH 2024

# 6,25,502 T

**EPR CERTIFICATES  
GENERATED**



UPTO MARCH 2024

# 17,977 T

**EPR CERTIFICATES  
TRANSFERRED**

# Prevention, Control & Mitigation of Industrial Pollution

Self regulation through Online Continuous Emission & Effluent Monitoring System (OCEMS)



## More than 6000

High Pollution Potential Industries / Common Facilities are connected with CPCB server generating Online Real-Time Emission & Effluent Monitoring Data for following parameters\*

### Effluent

pH, TSS, BOD, COD, As, Cr, Ammoniacal N, F, Phenol, Cyanide, Adsorbable Organic Halide, Temperature, and Flow

### Emission

PM, SO<sub>2</sub>, NO<sub>x</sub>, CO, HF (as Total fluoride), HCl, Cl<sub>2</sub>, Total Hg (Gaseous) and Flow

Real Time SMS Alert generation as soon as Emission / Effluent exceeds discharge standards to,



### Industry Representatives

To take remedial measures as self regulation

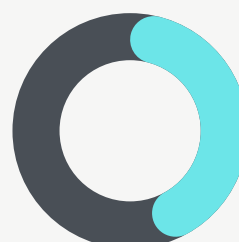
### CPCB, SPCBs and PCCs

To have more vigilance on such industry

### “Industry Specific Standards”

Notified 56 Emission related and 46 Effluent related standards for 79 Industrial Sectors so far

56 Emission related Standards



46 Effluent related Standards

\*as applicable



# Igniting Young Minds Ideation Hackathon

**From Trash to Treasure**  
**Hackathon on Innovative Solutions for Waste Management**  
**Undergraduate and above students**  
**May 14, 2023**

**Plastic Waste | Electronic Waste | Battery Waste | Crop Residue**

Boosted young intellectuals to apply their technical skills and problem-solving aptitude to solve real-world waste challenges



3226 young minds in 936 teams from colleges across the country

**453 Technical Ideas Submitted by 1300 Students**

- Evaluated by Dr. Abhay Jere, Vice Chairman AICTE and Chief Innovation Officer MHRD
- Other Experts from CSIR – NEERI, IIT Kanpur, DST, CIPET, MEITY, CII, PHD CCI
- Winners awarded by Shri Bhupender Yadav Hon'ble Minister of Environment, Forest & Climate Change and Shri Ashwini Kumar Choubey Hon'ble Minister of State for Environment, Forest & Climate Change







# Launch of Prakriti & Green Initiatives on Plastics

Launch of Prakriti & Green Initiatives on Plastics on April 05, 2022 by Shri Bhupender Yadav Hon'ble Minister EF&CC and Shri Ashwini Kumar Choubey Hon'ble Minister of State EF&CC in gracious presence of Smt. Leena Nandan, Secretary MoEF&CC



# Welfare of Employees

Well Equipped Fitness Center & Daycare Facility was Inaugurated by Shri Ashwini Kumar Choubey, Hon'ble Minister of State Ministry of Environment, Forest & Climate Change on April 05, 2022



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# Welfare of Employees



**International Women's Day, 2024**



**Fitness Center**

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# Welfare of Employees



International Day of Yoga



COVID 19 Vaccination and Testing Camp at CPCB

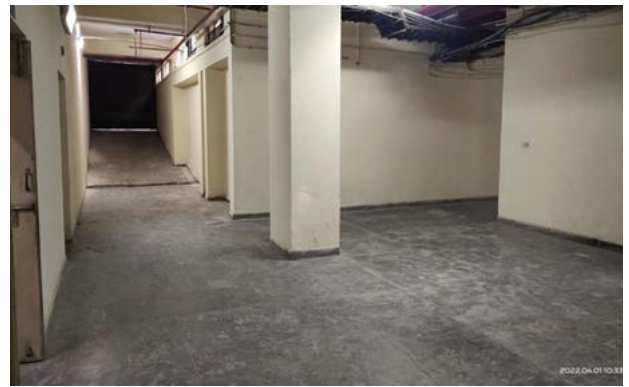
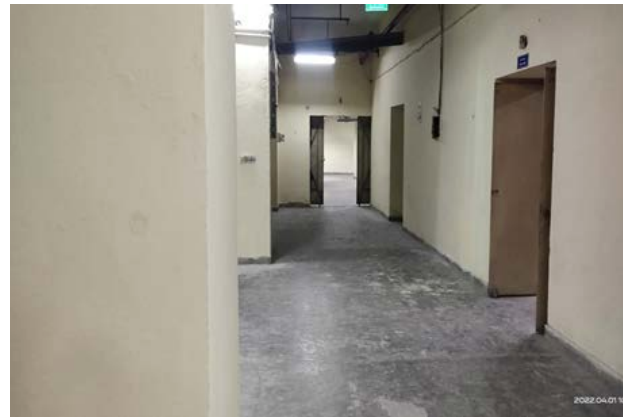
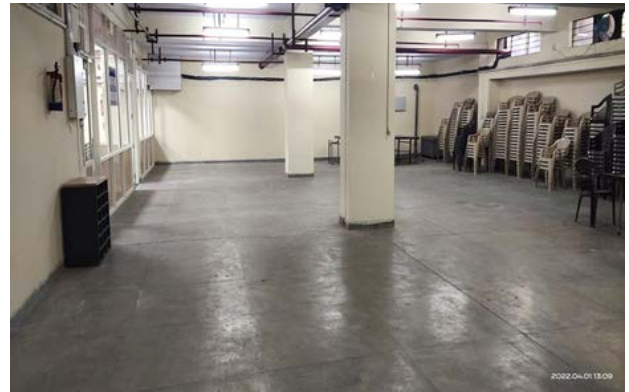


# Swachhhta Abhiyan

## Cleanliness Drive 1.0

**BEFORE**

**AFTER**





# Swachhhta Abhiyan

## Cleanliness Drive 1.0

BEFORE

AFTER





# Swachhhta Abhiyan

## Cleanliness Drive 2.0

**BEFORE**



**AFTER**





# Swachhata Abhiyan

## Cleanliness Drive 3.0

**BEFORE**

**AFTER**

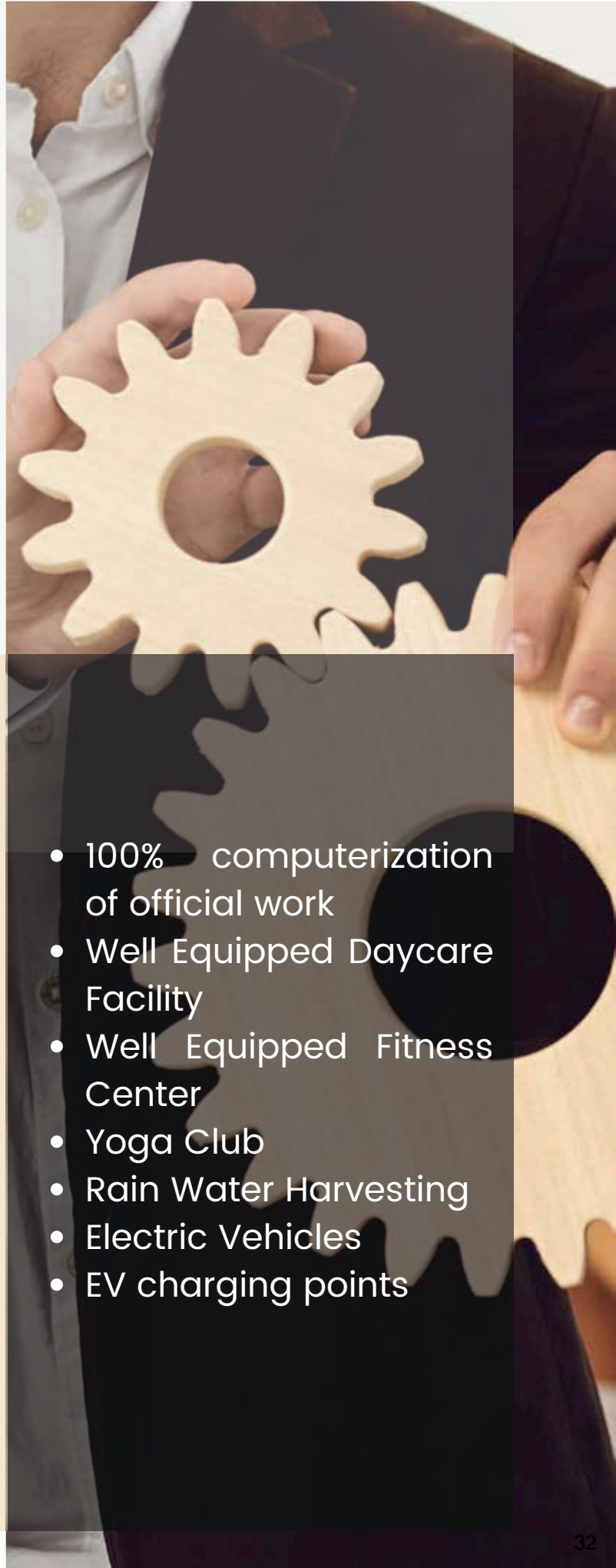




# Infrastructure & Administrative Improvements

- Three New Regional Directorates at Chandigarh, Chennai & Pune
- New Recruitment Rules to streamline process and attract skilled pool of candidates
- Recruitment through Graduate Aptitude Test in Engineering (GATE) Office, Indian Institute of Technology Delhi
- Recruitment of 137 technical & non-technical employees including 48 Scientists

- 100% computerization of official work
- Well Equipped Daycare Facility
- Well Equipped Fitness Center
- Yoga Club
- Rain Water Harvesting
- Electric Vehicles
- EV charging points



# Construction of Extension Building of CPCB at Parivesh Bhawan

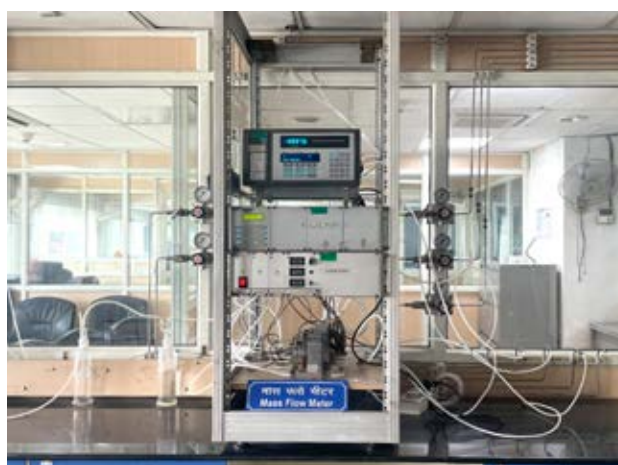
The extension building is being constructed with a ground coverage area of 736.74 sqm and will be GHAR - 4 Star rated. It will have a seating capacity for 276 officials, two laboratories for Hazardous & Other Waste testing & Artificial Intelligence, Conference Halls, On-site ETP for Treatment of Laboratory Effluent, Solar Panel and Rain Water Harvesting System.



# CPCB Laboratories

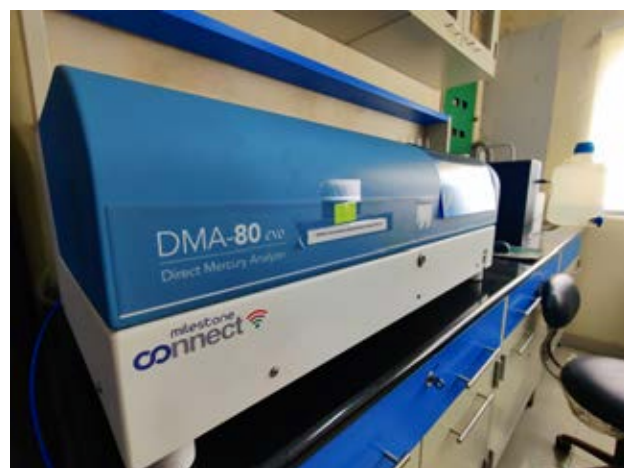
CPCB Central Laboratory is NABL Accredited as per ISO/IEC 17025:2017, BIS Certified for Occupational Health and Safety Management System (OH&SMS) under IS/ISO 45001:2018 and Recognized under Environmental Protection Act,1986

Name of Laboratory	Facility Available
Central Air Lab	Ambient Air Quality Monitoring, Industrial Emission Monitoring, Sonic Detection And Ranging (SODAR) & Meteorology System, Air Toxics
Central Water Lab	Physical, Inorganic, Non-metal, Soils, Hazardous Waste
Central Bio Science Lab	Bio-Monitoring, Bioassay, Microbiology
Central Trace Organic Lab	Pesticides (Organochlorine, Organophosphorus), Polyaromatic Hydrocarbons (PAHs), Herbicides, Phenols & Phenolic Compounds, Polychlorinated Biphenyls (PCBs), Pharmaceutical Compounds
Central Instrumentation Lab	Analysis of Elements, Trace metals, Organic Carbon and Organic Halides, etc



# Regional Directorates Laboratories

Name of RD Laboratory	Facilities Available	Certification/ Recognition
RD-Bengaluru	20 Physico-chemical/ 14 Trace Metals/ 03 Organics/ 01 Soil/sludge/sediment Parameters/ 08 Ambient Air/ 02 Source Emission	ISO/IEC 17025, IS/ISO 45001, EPA recognized
RD-Bhopal	29 Physico-chemical/ 15 Trace Metals/ 05 Organics/ 4 Microbiological/ 03 Biological/ 15 Ambient Air/ 13 Source Emission/ 03 Noise	IS/ISO 45001, ISO 9001, EPA recognized
RD-Kolkata	28 Physico-chemical/ 27 Trace Metals/ 08 Organics/ 03 Microbiological/ 02 Biological/ 10 Ambient Air/ 27 Source Emission/ 30 Soil/sludge/sediment Parameters	IS/ISO 45001, ISO 9001, EPA recognized
RD-Lucknow	21 Physico-chemical/ 06 Trace Metals/ 04 Organics/ 02 Microbiological/ 03 Ambient Air/ 02 Source Emission	ISO/IEC 17025, IS/ISO 45001, EPA recognized
RD-Shillong	17 Physico-chemical/ 05 Trace Metals/ 04 Organics/ 02 Microbiological/ 05 Ambient Air/ 03 Source Emission	--
RD- Vadodara	32 Physico-chemical/ 14 Trace Metals/ 14 Organics/ 04 Microbiological/ 08 Ambient Air/ 13 Source Emission/ 19 Soil/sludge/sediment Parameters	IS/ISO 45001, ISO 9001
RD-Chandigarh	Laboratories are under development - Sanctioned fund Rs. 4.06 Cr.	--
RD-Chennai		
RD-Pune		



# Outreach

## Sumangalam Panchmahabhoot VAYU: The Vital Life Force December 2 -4, 2022 Bhubaneswar, Odisha

The event was part of Azadi Ka Amrit Mahotsava celebrating 75th year of Independence. It was graced by Prof. Ganeshi Lal His Excellency the Governor of Odisha, Shri Bhupender Yadav Hon'ble Minister EF&CC and Shri Ashwini Kumar Choubey Hon'ble Minister of State EF&CC.



The event was attended by distinguished dignitaries, Exhibitors, Experts, Scholars, Students, Teachers, Officials from regulatory & implementing agencies.



**Shri Tanmay Kumar, Additional Secretary MoEF&CC and Chairman of CPCB, along with Shri Naresh Pal Gangwar, Additional Secretary MoEF&CC interacting with Exhibitors**



**A special performance was given by Shri Rickey Kej three-times Grammy Award Winner and Environmentalist**

# Outreach

Regional Interaction Meets on EPR Regime for E-Waste, Battery Waste, Tyre Waste and Used Oil at Kolkata, Mumbai, Bengaluru, Delhi, during October - November 2023

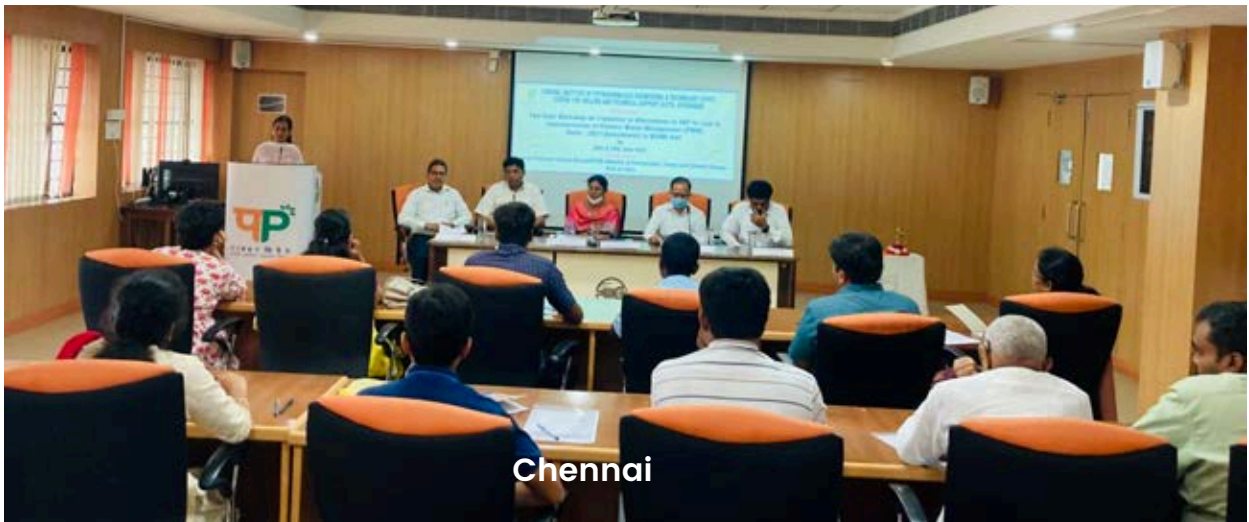


# Outreach

Workshops on Alternatives to Single Use Plastics, December 2022 – March 2023



Bhopal



Chennai



Lucknow



Vadodara



Chandigarh



# Capacity Building

Training Program for CPCB Officials during April 2022 in Delhi



# Capacity Building

CPCB's mandate is to plan and organize trainings for the persons engaged, or to be engaged in various programmes for prevention, control, or abatement of pollution

Total 87 training programs for PCBs & PCCs have been organized in five years with 1428 participants



Three Days Training Programme on 'Complete Manufacturing Process of Pulp & Paper Industries and best Available Technologies for its Effluent Treatment Management' at CPPRI, Saharanpur, March 05-07, 2024



Two Days Residential Training Programme on 'Environmental damage and restoration Cost / Compensation with related legislation' at CSIR NEERI Delhi Zonal Lab, February 22-23, 2024



Two days training program on 'Management of Electronic Waste through EPR Regime under E waste Management Rules, 2022' at Centre For Materials For Electronics Technology Hyderabad, February 13-14, 2024



Three days training program on 'Internal Auditor Course on Occupational Health and Safety Management System as per IS/ISO 45001:2018' at ICMR- National Institute of Occupational Health, Ahmadabad, February 28th-March 1st, 2024



Two days training program on 'Epidemiological Study with respect to Chemicals like Arsenic, Polyaromatic Hydrocarbons etc.' at Centre for Occupational & Environmental Health (COEH), Maulana Azad Medical College, New Delhi, held on 5th-6th February 2024



Two-days residential training programme on 'Management of Biomedical Waste as per Biomedical Management Rules, 2016' at ESIC, Hyderabad January 16-17, 2024

# Significant Works through Regional Directorates (RD)

Regional Co-ordination | Surveillance | Investigation | Supervising implementation of Central Schemes | Research & Development | Facilitation | Mass Awareness | Training

## RD Vadodara



Highest no. of trial run studies (65) to develop Standard Operating Procedures for Utilization of different Hazardous Waste streams

Development of Ready Reckoner for Personnel Engaged in Environmental Management in Small & Medium Scale Industries

### Important Activities

- ✿ Satisfactory results for 104 parameters during capability demonstration of laboratory in the National Level Proficiency Testing Exercise
- ✿ Surveillance of 75 NWMP & 53 NAMP stations; Interstate River Water Quality Monitoring at 30 locations
- ✿ 600 Surprise Inspections for SUP ban; 215 violations uncovered
- ✿ 313 inspections court matters & provided technical guidance in 100 Committees
- ✿ Inspections of Common Facilities & STPs (76) and OCEMS surveillance (67)
- ✿ Publications on Nanotechnology for wastewater treatment, COVID 19 waste detection in sewage, etc.



Capacity Building & awareness programs - Sensitization programs on implementation of PWM Rules, Training on Advance Instrumentation Techniques for Analysis of Environmental Matrix, Training to 172 personnel engaged in monitoring works at NAMP and NWMP stations, 56 awareness events under Mission LIFE

# RD Lucknow

Supervising implementation of Action Plan under NCAP in 17 cities of Uttar Pradesh and 03 cities of Uttarakhand

Interstate River Water Quality Monitoring at 19 locations at UP-Uttarakhand, UP-Bihar and UP-Madhya Pradesh border

## Activities under National Ganga River Basin Authority Project

Tapping of drain has been increased to 88 from 60 in 2021-22

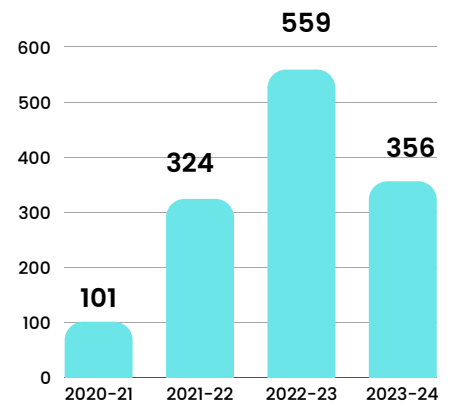
Monitoring of 271 drains in 15 districts & cities of Uttar Pradesh

Monitoring of River Ganga & tributaries at 24 locations

Performance evaluation of 42 STPs & 03 FSSTPs and monitoring of 05 CETPs in River Ganga & its tributaries

Monitoring of River Ganga during Magh Mela & tributaries in stretch between Farrukhabad to Prayagraj at 10 locations

No. of Inspections of Gross Polluting Industries (GPIs) from 2020-24



## Handling 311 Court cases : Important Activities

- Inspection of 660 units out of 724 Grossly Polluting Industries in Uttar Pradesh
- Inspection of 230 brick kiln in Delhi NCR to verify the Zig-Zag Technology adopted by different brick kilns
- Inspection and source emission monitoring of 82 brick kilns at Haryana and Uttar Pradesh
- Provided technical guidance in 79 Committees constituted by Hon'ble NGT

## Inspection and Monitoring of Common Facilities

	Activity/ Facility	2020-21	2021-22	2022-23	2023-24
01	TSDF	00	05	05	01
02	CBWTF	01	03	03	05
03	STP/FSTP	23	177	181	128
04	CETP + CCRU	08	29	26	21
05	MSW	01	06	09	13

## Details of SUP Inspection conducted by RD Lucknow

Total Shops/Units Inspected

1804

Total Violations Found

457

Total SUP Seized

13.5 T

Total Fine Imposed

Rs. 29 Lacs

# RD Bhopal



State of Art of New Laboratory at RD Bhopal



On-site Laboratory Effluent Treatment Plant



राजभाषा में श्रेष्ठ कार्य-निष्पादन के लिए क क्षेत्र स्थित केंद्रीय प्रदूषण नियंत्रण बोर्ड, क्षेत्रीय निदेशालय, भोपाल को गृह मंत्रालय के राजभाषा विभाग द्वारा वर्ष 2022-23 के लिए मध्य क्षेत्र का क्षेत्रीय राजभाषा पुरस्कार के अंतर्गत प्रथम पुरस्कार प्रदान किया गया ।



Development of Go-Kashth i.e. Cow Dung logs as substitute for wood for use in Holikadahan, Hawan, Cremation & Others

# RD Bhopal

- ❁ **Overseeing Implementation of Action Plans under National Clean Air Programme**
- ❁ **Monitoring at Interstate Boundaries**
- ❁ **Surveillance of NAMP & NWMP network**
- ❁ **137 Court cases handled**
- ❁ **Conducting inspections & regional studies**

## Capacity Building at Regional Level

National Workshop on Water Quality Monitoring Network Plan & identification of monitoring locations under NWMP

Workshop on Monitoring of Ambient Air Quality & Water Quality Station” under NAMP & NWMP

Workshop on alternatives of SUPs for Railways and Airports organized on 24.03.2023 for more than 500 participants

## Significant Studies in Compliance to Court Orders

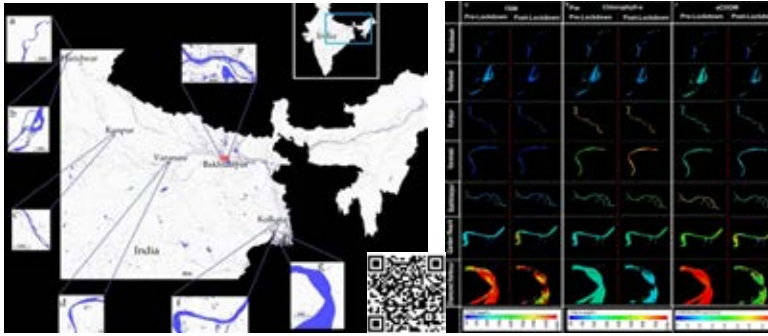
- Brick kiln Study in Sriganganagar
- Mechanism preparation for preventing illegal sand mining
- Preparation of restoration plan for the remediation for STP discharge at Kalwar in jaipur
- In depth study of Marble and Granite Processing units at Udaipur, Rajsamand, Kishangarh and Makrana in Rajasthan



संसदीय राजभाषा समिति द्वारा क्षेत्रीय निदेशालय भोपाल के निरीक्षण के दौरान श्री तन्मय कुमार अतरिक्त सचिव पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय को वर्ष 2023 में प्रमाण पत्र प्रदान किया।

## Global Recognition: Published Research Studies

Water quality assessment of the Ganges River during COVID-19 lockdown: A Satellite-based (Sentinel-2) Analysis

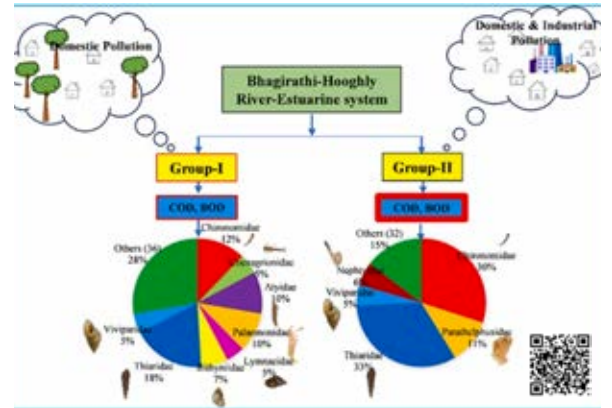


Supervising implementation of Action Plan under National Clean Air Programme, activities under National Ganga River Basin Authority Project, Monitoring at Interstate Boundaries, surveillance of NAMP & NWMP network, handling court cases, inspections

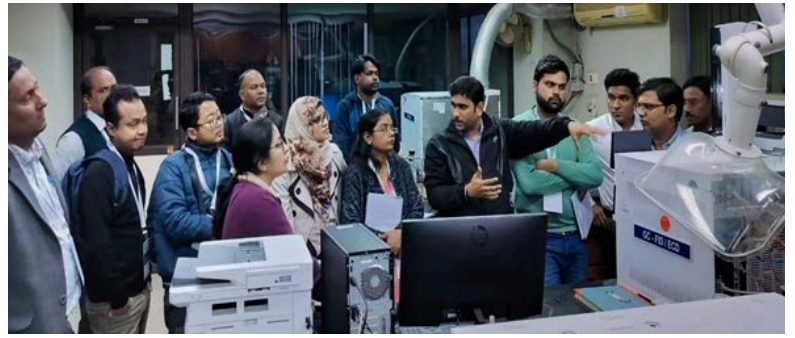
Manual Water Quality Monitoring of River Ganga and its drains during COVID 19 lockdown in West Bengal



Variability in Macro-invertebrate Community Structure and Ecological Health Status of River Ganga



Training program on Water Quality: Addressing Emerging Pollutants & Challenges during January 17 - 19, 2024 by RD Kolkata



One Day Eastern Regional Interaction Meet on Extended Producer Responsibility, 2023



Hindi Pakhwada 2023



# RD Bengaluru

## Important Studies Conducted & Research Published

Study for Identification of sources of pollution in Chandapura lake, Bengaluru, Karnataka

Assessment of leachate contamination from Municipal Solid Waste landfill site at various points of River Gurupura

Study of characteristics of sediments of Bellandur & Varthur lakes



Study regarding the safe distance for stone quarries from the habitation in Kerala

User Manual on Quality Assurance, Quality Control and Good Laboratory Practices in Water and Wastewater Laboratories

Paper on Integrated Solid Waste Management- Preparing to Face the Future

Modified Method of COD Analysis published in Indian Journal of Science and Technology

Paper on Waste to Wealth – Overview and Future of Plastic Waste Utilization in Road Construction in India

## Workshops, Training and Awareness programmes

Awareness programmes on the roles and responsibilities of Stakeholders for effective management of Biomedical Waste

Interaction Meet on implementation of EPR for E-Waste, Battery Waste, Waste Tyre and Used Oil, 2023



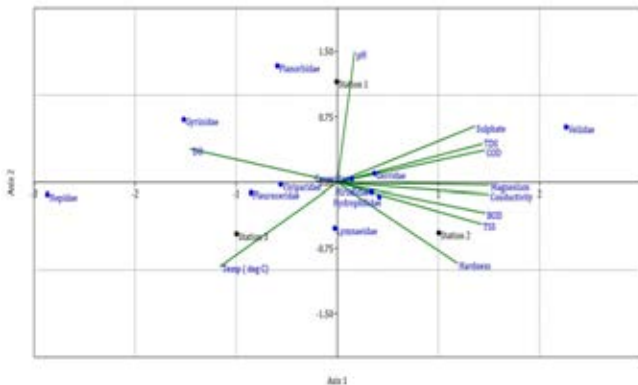


# RD Shillong

## R & D studies on Regional Issues



Water Quality Monitoring of Rivers in East Jaintia Hills District of Meghalaya with Specific study on change of colour of Lunar-Lubha-Lukha River at certain periods of the river, 2019 -2023



Study on the Macro-Invertebrate Community, a bioindicator of Water Quality in Deepor Beel (Ramsar Site), Assam, 2023 - 24

Study on Environmental Management of Industrial Hazardous Wastes in North-East India, 2022 - 23



Study of SO<sub>2</sub> Emission in Cement Industries using limestones with High Pyritic Sulfur Content, 2022 - 23

## Other Activities

### Air Quality Management

Implementation of action plan in 8 non-attainment cities in North-East Region

Declining trend of PM<sub>10</sub> in Byrnihat, Sibsagar, Dimapur & Kohima

### Monitoring Network

Surveillance of monitoring stations under NAMP & NWMP

Monitoring of inter-state water quality

### Waste Management

Compliance Verification of EPR authorization

SUP ban enforcement & promotion of alternatives to SUPs

The State of Sikkim is declared 100% organic and plastic free

# RD Chandigarh

## Pollution Control Monitoring & Enforcement Activities

Interstate water quality monitoring at 24 locations on Interstate Polluted river stretches

Performance evaluation of 68 STPs & 15 CETPs

164 inspections conducted for implementation of SUP ban

Random verification of 37 units for compliance to HWM Rules, surprise inspection of 17 industries

Inspection of 380 Brick Kilns in Delhi NCR region in pursuant to the orders of Hon'ble Supreme Court

Handling 93 court cases & representing in the Committee constituted

## Workshops, Training and Awareness programmes

Interaction Meet on implementation of EPR Framework, 2023



Workshop on Guidelines for grant of one-time financial support for promoting establishment of paddy straw based Pelletization & Torrefaction plants, 2023



Workshop on Alternatives to Single-Use Plastics, 2023



Awareness programs under Mission LiFE



# RD Chennai

## Pollution Control Monitoring & Enforcement Activities

Study on massive sand mining & dredging activities in River Krishna at Vijayawada. Based on the study “Free Sand Policy” adopted by the Government of Andhra Pradesh

Inspection of solid waste dumpsite at Kodungaiyur & Perungudi for compliance verification of SWM Rules, 2016 and for bio-mining/remediation of legacy waste

75% successful Remediation of two contaminated sites viz. Mercury contaminated site at Kodaikanal and Oil Contaminated site at Tondairpet



Inspection of 46 Textile Industries & CETPS at Namakkal, Karur, Erode & Tiruppur districts of Tamil Nadu

Monitoring of large/red category industries for obnoxious gases/odour from industries in North Chennai

## Research Studies

Study cum inspection of 8 Barium Chemical industries & 4 Barite pulverizing units in Kadapa to study the causes of air pollution & implementation of control measures



In-depth study on Water Less Chrome Tanning Technology and its impact on Chrome bearing waste generation



Root cause analysis for obnoxious odour from Chennai Petrochemicals Ltd.

Developed SOP for field testing method to identify compostable plastics



# Project Office Agra

- ☾ Air quality is being continuously monitored by CPCB at UNESCO World Heritage Site Taj Mahal (except on Friday & GH) for Particulate Matter (100, 10, 2.5), Sulphur Dioxide and Nitrogen Dioxide
- ☾ Monitoring is also being done at Itmad-ud-daulah, Rambagh & Nunhai to track air quality in and around Taj Mahal and guide the action planning by local agencies
- ☾ Inspections of Indian Oil Corporation Limited, Refinery, Mathura, (U.P.) for compliance verification
- ☾ Inspection of more than 250 Brick kilns located in Haryana



## Other Important Activities

Inspections for SUP Ban - 568 entities in Taj Trapezium Zone inspected, 31.32 Kg banned items were seized and fine of Rs.89,500 was imposed

Implementation of Rajbhasha Hindi Awarded Second Position among all Central Govt. offices in Agra by NARAKAS, Agra

Inspection of STPs in Agra and Mathura, Monitoring of 67 drains in Agra

Technical Guidance for Preparation of Air Action Plan for Agra and Firozabad under NCAP

Coordination with TTZ Authority and other relevant departments in Agra

Joint Inspections & Meetings in NGT matters, Mass awareness program, Swachhata Mission



## Important Activities in Legal Matters

# RD Pune

Preparation of Action Plan for restoration of environment which was polluted due to operation of CETP & industries in MIDC Tarapur

Study to assess environment & health damage caused in Malegaon, Maharashtra due to operation of plastic handling units, sizing units, and textile power looms

Hon'ble NGT appreciated the exhaustive report in incidence of fire at chemical unit and imposed EC of Rs.1.985 Cr along with other remedial measures.

## Other Important Activities

- ❁ Environmental Surveillance of 17 Categories of High Pollution Potential Industries & Common Environmental Infrastructure Facilities based on OCEMS data
- ❁ Co-ordination, Assessment & Verification of the implementation of City Action Plans of Million Plus Cities and Non-Attainment Cities (Total 19 Cities) under NCAP
- ❁ Assessment of Operation of NAMP Stations & NWMP Stations, including stations identified as Polluted River Stretches and Monitoring of Inter-State River Water Quality
- ❁ Trial Run for Utilization of Wastes as Supplementary Resources or for Energy Recovery and Inspection of Industries with respect to Import Permission for Hazardous & other waste
- ❁ Special Drive for Enforcement of Ban on Single Use Plastics (SUP), Activities under EPR Regulations on Wastes, Compliance verification of CETP, CHWTSDF, and BMWTF.

## Workshops & Awareness programmes

Workshop on Alternatives to Single Use Plastics on 28.03.2023



Western Regional Interaction Meet on EPR Regulations at Mumbai (October 2023)



Celebration of World Ozone Day 2023



Mission LiFE Pledge





**Central Pollution Control Board**  
Ministry of Environment, Forest & Climate Change  
Government of India



Parivesh Bhawan, East Arjun Nagar, Delhi-110032



Website  
<https://cpob.nic.in/index.php>

