



**Central Pollution Control Board
Delhi – 110 032**

Brief Note on Central Sector Scheme: 'Control of Pollution'

The 'Control of Pollution' is an ongoing scheme under Central Sector Scheme which was initiated in the year 2018-19 with the approval of Expenditure Finance Committee (EFC). The full budget for the scheme was made available from the year 2019-20 for the following sub-components:

1. Environmental Monitoring Network Programme:
 - a. National Air Quality Monitoring Programme (NAMP)
 - b. Continuous Ambient Air Quality Monitoring Stations (CAAQMS)
 - c. National Ambient Noise Monitoring Network (NANMN)
 - d. National Water Quality Monitoring Programme (NWMP)
2. National Clean Air Programme (NCAP).
3. Assistance for Abatement of Pollution In lieu of Water Cess Fund.
4. Research and Development (R & D) under Control of Pollution.

The sub-components details are:

1. Environmental Monitoring Network Programme:

State Pollution Control Boards (SPCBs) and Pollution Control Committees (PCCs) are being funded under "Control of Pollution Scheme" for Environmental Monitoring Network Programme i.e. NAMP, NWMP, NANMN and CAAQMS. The activities are Pollution Assessment, Survey and Monitoring, Operation & Maintenance of Air and Water Quality Monitoring stations, establishment of New Monitoring Stations for Water, Air and Noise

National Ambient Air Quality Monitoring Programme (NAAQMP) and Continuous Ambient Air Quality Stations (CAAQMS):

Ambient air quality is monitored across the country through manual monitoring under National Ambient Air Quality Monitoring Programme (NAMP) and real-time monitoring under Continuous Ambient Air Quality Monitoring System (CAAQMS). There are 895 NAMP stations (Manual Monitoring) and 361 CAAQM stations (real-time) are functional across the country.

a. National Ambient Air Quality Monitoring Programme (NAMP):

Under Sub-section 2 (h) of Section 16 of the Air (Prevention and Control of Pollution) Act, 1981 National Ambient Air Quality Standard (NAAQS) has been notified on November 18, 2009 as a policy guideline that regulates the effect of human activity on the environment. CPCB along with State Pollution Control Boards (SPCB) and Pollution Control Committees (PCC) are monitoring ambient air quality at **895 manual stations** covering **382 cities/towns in 28 States and 7 Union Territories** across the country by monitoring under National Ambient Air Quality Monitoring Programme (NAMP).

Under NAMP, three criteria pollutants Particulate Matter (PM₁₀), Sulphur Dioxide (SO₂) and Nitrogen Dioxide (NO₂), along with Carbon Monoxide (CO), Ammonia (NH₃), Ozone (O₃), PM_{2.5}, Benzo(a)pyrene {B(a)P}, Lead (Pb) and Nickel (Ni) are being monitored at selected locations.

Major Objectives of National Ambient Air Quality Monitoring Programme:

- To determine the status and trends of ambient air quality;
- To ascertain whether the prescribed ambient air quality standards are violated;
- To identify non-attainment cities with respect to national standards and;
- To obtain the knowledge and understanding necessary for developing preventive and corrective measures.

b. Continuous Ambient Air Quality Monitoring Stations (CAAQMS):

Continuous Ambient Air Quality Monitoring System (CAAQMS) is a specialized system housed in temperature controlled container and is equipped with all necessary analyzers required for ambient air quality monitoring, calibration equipment, data acquisition (hardware and software) system with complete power backup facility. This system generates real time data and can be remotely managed. The network of Continuous Ambient Air Quality Monitoring Stations (CAAQMS) is expanding in the country and at present, 374 CAAQM stations covering 190 cities are existing across the country. CPCB is doing O&M of 15 Stations established in 4 cities namely Delhi, Lucknow, Bangalore and Chennai.

Under CAAQMS the Particulate Matter (PM₁₀& PM_{2.5}), Sulphur Dioxide (SO₂), Nitrogen Dioxide (NO₂), Ammonia (NH₃), Carbon Monoxide (CO), Ozone (O₃) and Benzene (C₆H₆) are being monitored at all locations. The CAAQMS are also equipped with sensors to measure meteorological parameters such as Wind Speed, Wind Direction, Ambient Temperature, Relative Humidity, Solar Radiation and Rainfall. The data of these CAAQMS are being used for generating the daily National Air Quality Index (NAQI) of the cities.

c. National Ambient Noise Monitoring Network (NANMN):

The Ambient Noise Quality for day & night for industrial, commercial, sensitive zones has been notified in Schedule III under Rule 3 of The Environment (Protection) Rules, 1986. MoEF&CC has notified the regulation for control of noise producing and generating source namely The Noise Pollution (Regulation and Control) Rules, 2000. As per section 4 (3) of The Noise Pollution (Regulation and Control) Rules, 2000, responsibility for monitoring and devising methodology for mitigation of noise pollution are vested with SPCBs /PCCs / CPCB. The CPCB in association with State Pollution Control Boards (SPCBs) has established National Ambient Noise Monitoring Network (NANMN) in 7 Metro-cities (Bengaluru, Chennai, Delhi, Hyderabad, Kolkata, Lucknow and Mumbai). A total of 70 Noise Monitoring Stations (NMS) are operational in these Metro-cities (10 Stations in each metro-city). Noise Monitoring System (NMS) is used for measuring real time noise level. NMSs are optimized for outdoor use with small, custom designed enclosure, and also designed for use in all climatic environments. Sound level is measured in Leq dB (A) units.

Data from all remote stations communicated through GPRS/3G/4G media, processes the Noise data and generates different reports. The central station software allows analysis of the noise data for remedial measures to control noise pollution and for research and development. Data generated from the Remote units can be displayed through Internet to the authorized addresses.

d. National Water Quality Monitoring Programme (NWMP):

Government of India enacted the Water (Prevention and Control of Pollution) Act 1974 to maintain wholesomeness of aquatic resources. The act prescribes various functions for the Central Pollution Control Board (CPCB) at the apex level and State Pollution Control Boards at the state level. One of the function of CPCB is to plan and cause to be executed a nation-wide programme for the prevention, control and abatement of water pollution. This nation-wide programme initiated under Global Environment Monitoring Systems (GEMS) during 1977 - 78 is now called as National Water Quality Monitoring Programme (NWMP). The detail objective of the project is:

- Rational planning of pollution control strategies and their prioritisation
- To assess nature and extent of pollution control needed in different water bodies or their part
- To evaluate effectiveness of pollution control measures already in existence
- To evaluate water quality trend over a period of time
- To assess assimilative capacity of a water body thereby reducing cost on pollution control
- To understand the environmental fate of different pollutants
- To assess the fitness of water for different uses

Nation-wide network of 4484 monitoring locations has been established in States/Union Territories covering 645 Rivers / Water Bodies and operated by CPCB through its Regional Directorate and SPCBs/PCCs and all are functional for improved water quality monitoring network. Number of identified polluted river stretches has been reduced from 351 (Assessment year 2018) to 311 (Assessment year 2021).

2. Assistance for Abatement of Pollution In lieu of Water Cess Fund

This sub-component of “**Assistance for Abatement of Pollution In lieu of Water Cess**” was introduced in the year 2018-19 to compensate the SPCBs/ PCCs and CPCB for the loss of resources/ revenue due to the subsuming of the Water Cess in to the Goods and Services Tax (GST) w.e.f 01.07.2017. After subsuming of the Water Cess in to the GST, the financial resources of all SPCBs/PCCs were limited to (1) own resources like consent fee collections, interest on investments, sample testing fees, consultancy receipts, receipts from sale of forms, fines and forfeitures and (2) external assistance in the form of grants-in-aid from Central and State Governments, project-based grants from CPCB and other grants. Earlier before subsuming of Water Cess with GST, the Water (Prevention and Control of Pollution) Cess Act, 1977 provided for levy and collection of cess on water consumed by persons carrying on certain industries and by local authorities with a view to augment the resources of the CPCB and SPCBs constituted under the Water Act, 1974.

The following specific areas are permitted under this scheme for financial assistance / allocated funds may be utilized for following activities:

- i. Programme and activities related to prevention and control of all facets of pollution including water and air;
- ii. Laboratory Development;
- iii. Pollution Assessment;
- iv. Training & Mass awareness etc.

The Terms and Conditions are:

- ✓ Expenditure on salary and establishment should not be more than 50% of financial support.
- ✓ Minimum of 5% of total fund shall be utilized for the purpose of e-governance and IT applications.

- ✓ To ensure that funds are utilized as per terms and conditions of MoEF&CC sanctioned letter.

3. National Clean Air Programme (NCAP)

The National Clean Air Programme (NCAP) was launched by the MoEF&CC in January 2019 as a long-term, time-bound, national level strategy Making determined efforts to deal with the air pollution problem across the country in a comprehensive manner. The process of implementation is ongoing. Impact on air quality improvement takes a long time as the whole system is dynamic. So it may be difficult to assess the effectiveness of the measures taken at such a short time. NCAP is a national level strategy to reduce air pollution levels across the country. Taking into account the available international experiences and national studies, the tentative national level target under NCAP is 20%–30% reduction of PM_{2.5} and PM₁₀ concentration by 2024.

Non-attainment cities have been identified based on ambient air quality levels exceeding National Ambient Air Quality Standards (NAAQS) for 05 consecutive years and list of non-attainment cities is updated annually. Further, list of Urban Agglomerations with million plus population have been recommended by the 15th Finance Commission for focused air quality improvement grants. Accordingly, City Specific Clean Air Action Plans have been prepared and rolled out for implementation in 132 non-attainments and million plus cities to control air pollution.

- The NCAP focuses on Multi-sectoral sources of pollution including power plants, industries, vehicles, open burning of waste, construction & demolition activities, etc.; Inter-Ministerial co-ordination for convergence of actions and interventions; and partnership with Institutes of National repute and International Agencies as Knowledge Partners.
- Activities in these cities include strengthening of ambient air quality network, source apportionment studies, dust mitigation equipment, composting units, infrastructure for non-motorised transport, shifting to clean energy in unorganised sectors, etc.
- Clean air action plans of 132 NACs are being implemented under overall supervision and coordination of Principal Secretary, environment of the concerned state/UT and further supervised by the concerned Chief Secretaries.
- Source Apportionment studies have been completed for 28 cities. Work is in progress in 60 cities and it is at proposal stage in 44 cities.
- In order to tackle air pollution emergencies, Emergency Response System (ERS) have been developed for 117 cities. It is in progress in 15 cities. Public Grievance Redressal System (PGRS) have been prepared in 131 cities. Work for app development is in progress in 01 city.
- Out of 132 identified cities, decrease in PM₁₀ concentrations has been observed in 96 cities whereas increase in PM₁₀ concentration has been observed in 36 cities during 2020-21 as compared to levels during 2019-20.

To monitor implementation of NCAP A portal named “Portal for Regulation of Air Pollution in Non-Attainment Cities” or “PRANA” has been launched for paperless monitoring of NCAP and for disseminating information about the programme to public, link is www.prana.cpcb.gov.in

4. Research and Development (R & D) under Control of Pollution:

MoEF&CC has identified the important thematic areas for funding of projects under R&D Scheme for conservation and development. The R&D schemes aims to promote Research & Development in various facets of ecology and environment for conservation and development of environment and natural resources of the country.

CPCB has identified projects Proposals under R&D scheme for Conservation and Development. Accordingly, there are 34 projects and 16 projects under R&D scheme for F.Y. 2021-22 & 2022-23 amounting to Rs. 195 lakhs & Rs.490 Lakhs sanctioned accordingly.