

Minutes of the 5th Meeting of PAAC-EPC held on January 24, 2018 at CPCB, Delhi

The 5th meeting of PAAC-EPC was held on January 24, 2018 at CPCB for appraising and approving projects submitted under EPC funds. The meeting was chaired by Chairman, Central Board. However, projects at S.No. VII to X were chaired by Dr. Neeraj Sharma , Sc "G", DST. List of participants is enclosed at **Annexure- I**.

Ten proposals were presented before the committee for consideration. The observations and decisions of committee are summarized below:

- i. **Strengthening of PAAC-EPC:** The PAAC-EPC was informed regarding inclusion of DST and Ministry of Earth Sciences (MoES) in the PAAC-EPC as per recommendations of the Steering Committee on utilization of EPC funds during its 1st meeting held on 28th June, 2017 at MoEF&CC.
- ii. **Constitution of a Sub –Committee under PAAC-EPC:** The Steering committee during its 1st meeting also recommended constitution of a sub-committee under PAAC-EPC for evaluation of proposals received under EPC funding. The Sub-Committee to be headed by Head AQM-Div, CPCB shall have representation from DST, MoES, and NEERI. The sub-committee besides evaluating proposals will also suggest specific studies for inviting proposal. The PAAC-EPC agreed for the constitution of the said subcommittee.
- iii. **Delineation of Air shed for air quality management in Delhi-NCR:** The revised proposal submitted by NEERI-Delhi ZL involved collaboration with India Metrological Department (IMD), Delhi and NPL-Delhi. The revised proposal included secondary metrological data support from IMD-Delhi and commissioning of 5 SODARs across NCR by NPL Delhi. The revised cost of the proposal is Rs 2,53,60,444/- + GST(@18%). Out of Rs.2,53,60,44/- proposed, Rs 1.93,80,444/- plus GST is the cost of commissioning of Five (05) SODARs which would be handed over to CPCB after completion of the projects. The project duration is 01 year, however NEERI accepted to submit an interim report with airshed identification and secondary data analysis. Representative of IMD informed that IMD will extent all necessary support and provide data required for the study.

The committee approved for award of this study to NEERI at the cost of Rs 2,53,60,444/- plus GST. NEERI would be the overall responsible agency for ensuring deliverables and will receive the funds. Subsequent payments to NPL-Delhi will be handled by NEERI.
- iv. **Development of Emission Factors^o for Fire Crackers:** The revised proposal with details on testing methodology and cost break-up of the proposal as suggested by PAAC in the last meeting was presented. While Committee agreed in principle on need for the study, it requested for firming up design of testing chamber which may be reviewed by DST.
- v. **Strengthening of legislative/regulatory role of CPCB:** A proposal on role & responsibilities of CPCB and to suggest improvement in regulatory framework to make it more effective was presented by VIDHI Centre for Legal Policy.. The committee opined that it may be more useful if study could focus on role model regulatory framework for air quality management in NCR, with Delhi as case study. VIDHI was requested to submit revised proposal for consideration.

vi. **Indoor Air Quality Monitoring for air quality management in Delhi-NCR:** A proposal on "Monitoring and analyzing how building breathes using IOT and AI approach" was presented by Central Scientific Instrumentation Organisation (CSIO), CSIR Chennai. The proposal aimed at development of Indoor Air Quality (IAQ) monitoring sensors (IAQ Nodes) and deploying the same at 5 different Indoor locations in Delhi for its validation in Indian conditions. The proposals also involved use of Artificial intelligence in identification of various sources towards indoor air pollution and then using IoT (Internet of Thinking) approach for advising mitigations. The committee opined to carry out pilot studies in two locations initially for validation purpose and performance check. Further the committee felt that the present exercise should translate into guidelines on designing building for minimizing indoor air pollution. Accordingly, CSIO-Chennai to revise the proposal in consultation with CPCB.

vii. **Strengthening of CAAQMS in NCR districts adjoining NCT:** Airlab, CPCB informed PAAC that in view of immediate proximity with Delhi, it is proposed to have five CAAQMS representing background, commercial, residential, Industrial & Traffic locations four NCR towns namely Ghaziabad, Noida, Faridabad & Gurugram. Proposals were received from UPPCB & HSPCB in this regard. In addition, three CAAQMS in Meerut as per the plan submitted to Hon'ble Supreme Court will also be taken up by UPPCB.

HSPCB submitted for commissioning three CAAQMS in Faridabad & two in Gurugram at cost of Rs 7.5 Cr (including O&M for five years). UPPCB submitted proposal for commissioning nine CAAQMS in three districts namely Ghaziabad, Meerut & Noida (3 station in each district) at the cost of Rs.18.94 Cr. including O&M for 5 years. It was also informed that UPPCB & HSPCB have completed recently tender process for other towns (following GFR) and the same will be used for installation of these proposed CAAQMS.

As such the total funds requirements for setting of 14 CAAQMS is Rs 26.44 Cr. (Rs 18.94 Cr. by UPPCB for setting 9 CAAQMS (3 each in Ghaziabad Noida & Meerut and Rs 7.5 Cr. by HPCB for setting 5 CAAQMS (3 in Faridabad and 2 in Gurugram). It was informed by Air Lab that Rs 4.79 were earlier sanctioned for 3 CAAQMS in Meerut & 1 in Faridabad. It was therefore proposed that in place of earlier sanction of Rs 4.79, a total grand of Rs 26.44 may be approved for setting up of 14 CAAQMS.

The Committee approved sanction of Rs 26.44 towards commissioning 14 monitoring station in U.P & Haryana. while Rs. 18.94 have been sanctioned to UPPCB for nine CAAQMS (3 each Ghaziabad, Meerut & Noida), while Rs 7.5 Cr sanctioned to HPCB for five CAAQMS (3 in Faridabad and 2 in Gurugram).

viii. **Extension of monitoring services to M/s Shriram Labs Ltd:** The PAAC-EPC has already sanctioned Rs 47 lakhs for outsourcing monitoring at 4 locations (3 in Meerut & one in Faridabad) to M/s Shriram Labs till November 30, 2018. Air Lab requested PAAC-EPC to accord further extension for monitoring. The Committee opined that in view of critical air quality period till 15 Feb, the extension may be accorded only till February 15, 2018.

The Committee sanctioned Rs 1,09,36,960/- in totality towards outsourcing of monitoring activity in Meerut & Fairdabad for the duration of October 01, 2017 to February 15, 2018 (inclusive of Rs 47 lakhs sanctioned earlier) to M/s Shriram Labs Ltd. .

ix. **Commissioning of a Central Control Room (CCR) at CPCB:** it was informed PAAC-EPC that the Hon'ble Supreme Court in the matter of M.C. Mehta vs. Union of India (W.P (Civil) 13029 of 1985) vide its order dated February 06, 2017 has sanctioned Rs 2.5 Cr. from EPC funds to CPCB for strengthening of monitoring units. The sanctioned cost included Rs 57 Lakhs towards commissioning of CCR at CPCB

and Rs 1.93 towards strengthening of monitoring units in Delhi. CPCB informed the committee that it will be using Rs 57.00 lakhs towards CCR and 1.93 for strengthening monitoring units in Delhi as per the directions of the Hon'ble Supreme Court.

- x. **Clean air Campaign in Delhi(February 10-25, 2018):** MoEF&CC along with CPCB and Delhi government have decided to initiate Clean Air for Delhi Campaign during February 10-23, 2018. The campaign will involve extensive mass awareness and enforcement drives by 70 teams across Delhi. The committee was requested to grant in principle approval to fund, if required, towards Clean Air Campaign in Delhi. The committee accorded in principal approval for utilization of funds for Clean Air for Delhi Campaign.

- xi. **Air pollution hot spots in western Indo –Gangetic Plains: Implications on agro ecosystem and Human health:** The proposal presented by JNU involved identification of air pollution hotspots in Indo Gangetic Plain and assessment of impact on agro ecosystems and human health on these hot spots. It also proposed development of an agro ecosystem service index and solutions thereof. In view of study on “Assessment of Crop residue burning in NCR states” already sanctioned by PAAC-EPC to NEERI., the Committee requested JNU to resubmit its proposal focussing on assessment of health & agro productivity implications along with development of agro ecosystems services Index for agricultural lands.

- xii. **Cleaner Technologies for Industrial Pollution Control in Delhi:** The proposal was presented by NITIE, Mumbai in collaboration with IIT-M & NEERI to assess role of industries in air quality of Delhi and suggest feasible clean technologies for industrial sectors in Delhi. The Committee was of the view that as a number of studies have already been carried out for the assessment of Industrial Pollution in Delhi, it would be useful if NITIE could review earlier work on particularly on cleaner technologies and submit revised proposal for identifying key industrial sectors in Delhi for possible interventions. The PAAC-EPC asked NITIE to revise its proposal in consultation with CPCB looking into outcomes of various recent studies on Industrial sector in Delhi for the optimal deliverables.

The meeting ended with vote of thanks to the Chair.

List of participants:

1. Shri S.P. Singh Parihar, Chairman, Central Pollution Control Board.
2. Shri A. Sudhakar, Member Secretary, Central Pollution Control Board.
3. Dr. V.K. Soni, Head, EMRC IMD, Ministry of Earth Science.
4. Dr. Neeraj Sharma, Scientist 'G' & Head, TDT, Dept. of Science & Technology.
5. Shri Ajay Kumar Gaur, Under Secretary, Dept. of Heavy Industry, Udyog Bhawan, New Delhi.
6. Dr. Priti Singh, Scientist 'C', MoEF&CC.
7. Ms. Suman Dixit, US IFD, MoEF&CC.
8. Shri I.P. Maurya, AEE, UPPCB, Noida.
9. Shri A.K. Tiwari, RO UPPCB, Ghaizabad.

List of Proponents:

1. Dr. S.K. Goyal, Scientist & Head, NEERI, Delhi.
2. Dr. Kirti Soni, Scientist, CSIR, NPL.
3. Dr. A.L. Aggarwal, Emeritus Professor, Amity University.
4. Dr. Tanu Jindal, Head Env. Dept Amity University, Noida.
5. Ms. Usha Meena, Associate Professor SES, JNU, New Delhi - 67
6. Shri Sudesh Yadav, Associate Professor, SES, JNU, New Delhi.
7. Shri Krishan Kumar, Professor, SES, JNU, New Delhi.
8. Shri Saurav Kumar, Scientist CSIR-CSIO, Chandigarh.
9. Shri Anand VP, Scientist CSIR-CSIO, Chandigarh.
10. Shri D. Bansal, Sr. Scientist CSIR-CSIO, Delhi Centre.
11. Dr. H.K. Sardana, Chief Scientist, CSIR-CSIO, Chandigarh.
12. Shri Satish Kumar, Sr, Principal Scientist, CSIR-CSIO, Chandigarh.
13. Dr. Amol P. Bhondekar, Principal Scientist, CSIR-CSIO, Chandigarh.
14. Ms. Geetanjali Sharma, Reseach Fellow, Vidhi Centre for legal policy

CPCB Officials:

1. Dr. Prashant Gargava, Head, AQM
2. Dr. D. Shah, Head Air Lab.
3. Shri V.K. Shukla, Scientist 'D', AQM
4. Mrs. Meetu Puri, SSA, AQM
5. Shri Aditya Sharma, IT In-charge.