

Minutes of the 12th PAAC-EPC held on November 30, 2018 at CPCB

The twelfth meeting of Project Appraisal & Approval Committee (PAAC-EPC) was held on November 30, 2018 at CPCB. The meeting was convened under the chairmanship of Chairman, CPCB. List of participants is placed at **Annexure-I**. Committee was briefed about the status of EPC funds.

Five proposals (02 revisions, 02 new external agencies proposal and 01 new CPCB proposal) were considered, and committee's decisions are as below:

- (i) **Satellite-based near real-time monitoring of ambient PM_{2.5} at national scale for air quality management Submitted by IIT Delhi:** The committee was apprised that the proposal was sent to 03 experts for examination. Comments received from two experts were discussed by the committee and clarifications were sought from the proponent.

Dr. Sagnik Dey, Centre for Atmospheric Sciences, IIT Delhi presented the methodology and significance of using AOD for monitoring PM_{2.5} in underrepresented areas (rural areas), for indication of locations for setting up of monitoring stations on the basis of particulate matter concentrations and for delineating air sheds based on 18+ years of PM_{2.5} through monitoring of city specific aerosol density. Committee expressed that it is a good proposal for air quality mapping. However, the proposal objectives may be revised in view of the points raised by experts.

The committee recommended to consider the project for funding from other sources as EPC funds are meant only for Delhi NCR.

- (ii) **Bi-weekly action plan for effective and efficient management of PM_{2.5} concentrations in the Delhi city Submitted by IIT Delhi:** Dr. Harsha Kota, IIT Delhi presented the proposal to committee. The objective of the project is to analyse and simulate PM_{2.5} concentrations using the USEPA's AERMOD for the months of November to February in Delhi to estimate the area specific potential decrease in concentrations using interventions as proposed in GRAP. Project requires an hourly inventory for Delhi and NCR and meteorological data from CPCB. Simulations for 6 months will be done then bi weekly report will be provided. The Committee expressed the need to such a correlative assessment of particulate matter and action plan interventions.

The PAAC-EPC asked the proponents to expand the domain of project to adjacent NCR towns covered during emission inventory preparation by IITM, Pune and approved the proposal at the cost of ₹ 3,78,000.

- (iii) **Purchase of Energy Dispersive X-Ray Fluorescence Spectrometer (EDXRF) for instrumentation Laboratory submitted by CPCB:** PAAC-EPC was briefed about the requirement of an Energy Dispersive X-Ray Fluorescence Spectrometer (EDXRF) in instrumentation laboratory for characterisation of elements in particulate matter. Committee expressed that there is extensive use of an Energy Dispersive X-Ray Fluorescence Spectrometer (EDXRF) in elemental analysis of particulate matter samples.

PAAC-EPC approved sanction of EPC funds for 2 EDXRF instruments.

- (iv) **Delhi air quality experiment: A paradigm shift in source apportionment submitted by IIT, Kanpur:** PAAC-EPC was briefed that the proposal was discussed during 10th meeting wherein it was approved in principle for two seasons and proposal will be forwarded to DPCC regarding Delhi Govt. study to avoid duplication. Based on the recommendations made during the meeting convened on 22.11.2018 under the



chairmanship of Chairman, CPCB, Dr. Tripathi submitted a revised proposal with reduction in cost from ₹ 628 lakhs to ₹ 417 lakhs.

Committee recommended that DST may examine objective, methodology and outcome of the IIT Kanpur proposal with respect to proposed real time source apportionment study awarded to Washington University by Delhi Govt. and provide DST's final views to avoid any duplication in the matter.

- (v) **Air Purifier Technology using Ionization of Atmosphere submitted by Centre for Rural Development and Technology, Indian Institute of Technology, Delhi:** Prof. Rajendra Prasad, presented the proposal for evaluating presently available ionization technologies with an interdisciplinary group of experts.

The committee was apprised that a meeting was convened on 22.11.2018 under the chairmanship of Chairman, CPCB to discuss various proposals received on ionization technology wherein it was recommended that IIT Delhi's group (which includes experts in radiation, health, ecology, etc.) may associate with Science and Technology Park (STP), Pune to monitor performance to validate the efficacy of the proposal, "Multiple antenna high density ion generator for pollution control in New Delhi" submitted by STP, after development of scientifically established protocol for validation.

The committee felt the budget and methodology of the proposal needs to be reworked such that long and acute effect on human health, plant species, ecology can be analysed along with the zone of influence (CFD), generation of electrically charged particles, etc.

The committee suggested the proponent to submit a revised proposal after consultation with DST. Further, DST was requested to constitute a committee to come up with a methodology and budget requirements for monitoring the proposed ionization technology. It was also decided that all proposals with CPCB on this technology may be referred to DST for advise and further action

Review of progress report of approved proposals:

The progress and performance of following projects was discussed:

- (i) Deployment and Evaluation of air purification units for traffic junction pollution abatement in Delhi (WAYU); NEERI.
- (ii) Pilot project to demonstrate the effectiveness of air pollution mitigation by pariyayantra filtration; MRIIRS
- (iii) Control of Dust Emission using dust suppressant; EPRI

The committee suggested submission of weekly status reports by the proponents.

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. Dr. Prashant Gargava, Member Secretary, Central Pollution Control Board
3. Shri Satyendra Kumar, Deputy Secretary, MoEF&CC
4. Sri A. K. Singh, Dir (CS - III), DoT/MoC
5. Shri R. K. Jaiswal, Development officer, DHI/MoHI&PE
6. Shri J. B. V. Reddy, Sc. 'D', DST/MoS&T
7. Shri M. P. George, Sc. 'D', DPCC
8. Shri K. C. Gupta, RO, RSPCB, Bhiwadi
9. Dr. Rashid Hasan, Advisor., SIAM
10. Ms. Sapna Srivastava, ASO, UPPCB, Ghaziabad
11. Shri A. K. Koshik, ASO, UPPCB, Noida

List of Proponents:

1. Dr. Sagnik Dey, Assoc. Professor CAS, IIT, Delhi
2. Shri Mukesh Khare, Professor, IIT, Delhi
3. Shri Rajendra Prashad, Emeritus Professor, IIT, Delhi
4. Shri Sai Harsha Kota, Asst. Professor, IIT, Delhi
5. Shri Shubham Sharma, PhD Research Scholar, IIT, Delhi
6. Shri Sunil Gulia, Scientist Fellow, CSIR-NEERI, Delhi
7. Shei Avick Sil, Regional Director, EPRI
8. Shri Nilkanth Dalvi, Asst. Manager, EPRI
9. Dr. B. S. Gill, Adviser, MRIIC, Faridabad

CPCB Officials:

1. Shri V. K. Shukla, Sc. 'D' and Head, Air Lab, CPCB
2. Shri Ankush Tewani, Sc. 'C', AQM, CPCB
3. Ms. Parinita Baruah, JRF, AQM
4. Ms. Nidhi Shukla, JRF, AQM
5. Shri Toshesh Bhargava, JRF, AQM
6. Shri H. R. Koshik, JRF, IT Division
7. Shri Kanak Gupta, JRF, IT Division