

Minutes of the 13<sup>th</sup> PAAC-EPC held on December 27, 2018 at CPCB

Thirteenth meeting of Project Appraisal & Approval Committee (PAAC-EPC) was held on December 27, 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.

Seven Proposals (03 revisions and 04 new external agencies proposal) were considered, and committee's decisions are as below:

- (i) **Delhi air quality experiment: A paradigm shift in source apportionment (IIT, Kanpur):** PAAC-EPC was briefed that the proposal of IIT Kanpur was referred to DST along with the proposal of Washington University to get these evaluated and provide feedback to CPCB with regard to duplication of work. DST has referred the proposals to National Institute of Advanced Studies and based on the feedback of the institute that IIT Kanpur proposal is far superior and will provide better understanding of source apportionment, DST has recommended the project.

PAAC was briefed that IIT Kanpur has made reduction in budget on consumables, contingency and international trips. PI has requested to fund instrument named as Xact 625i separately as it has to be returned to CPCB after the study. PAAC-EPC expressed that the honorarium cost (₹ 20,00,000/-) and international trips cost (₹ 6,00,000/-) shall also be removed from the project cost. PAAC-EPC approved the sanction of EPC funds for the study to IIT Kanpur at cost of ₹ 5.27 crores (approx.) including the cost of instrument (₹ 1.88 crores approx.) which will subsequently be returned to CPCB after the study. PAAC-EPC authorized MS, CPCB to specify expected study outcome/ project deliverables.

- (ii) **Air pollution hot spots in western IGP: Implication on agro-ecosystem (JNU):** PAAC-EPC was briefed that the proposal has been discussed in 5<sup>th</sup>, 7<sup>th</sup> and 9<sup>th</sup> meeting of EPC and during the 9<sup>th</sup> meeting it was decided to forward the proposal to Ministry of Agriculture and obtain their comments before further consideration of the proposal. The overall objective of the project is to develop Agro Eco System Service Index (ASI) which will be used as an advisory tool for farmers to guide on soil health and support system.

Comments from Indian council of Research have been received and it has recommended the proposal. PAAC-EPC was briefed that procurement cost of the instrument was the major component of project cost and ICAR has recommended that proponent may setup their own laboratory equipment instead of outsourcing the analytical component of project cost.

SIAM representative informed PAAC-EPC that CII is also working with Punjab Agriculture University on Agro Eco System Service Index. PAAC-EPC expressed that CPCB shall obtain project details from CII so as to avoid any duplication of work and further enquire about availability of instruments needed for the study with Agriculture University of Punjab or Haryana being stakeholders.

- (iii) (a) **Multiple antenna high density ion generator for pollution control in New Delhi (S&T Park, Pune) and (b) Monitoring & Evaluation of Ionization based Air Purifying Technology (IIT Delhi):** PAAC-EPC was briefed that both the proposals were referred to DST and both have been recommended for award under EPC funds. DST has recommended that the second project which is for validating the performance of ion generator technology, used in the first project, should be conducted in two phases. During the first phase, technology is to be validated along with the zone of influence and during second phase the impact of technology on ecology and human health will be studied by IIT Delhi. The project modalities were discussed in detail and PAAC-EPC observed that both technology validation and impact

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assessment should be done simultaneously under the supervision and guidance of expert committee of DST. The technology is to be tested at IIT campus at Sonapat, Haryana and necessary facility setup shall be facilitated to S&T park by IIT Delhi. The instrument to be purchased for technology validation by IIT Delhi under the project will be returned to CPCB on completion of the project for use as required.

PAAC-EPC approved sanction of EPC funds for the study to S&T Park, Pune at a cost of ₹ 18 lakhs for performance testing + additional cost (permanent shelter and establishing electricity supply).

PAAC-EPC expressed that the honorarium cost (₹ 11,14,000/-) shall be removed from the IIT Delhi project. Accordingly, PAAC-EPC approved sanction of EPC funds for study to IIT Delhi at a cost of ₹ 170 lakhs (Inclusive GST) + overheads.

(iv) **Development of an infrastructure for advanced air quality analytics for Delhi-NCR (IIT Bombay):** Project was deferred as proponent could not attend the meeting.

(v) **An exploratory study- Assessment of benzene concentration at retails outlets in Delhi post intervention (TERI):** PAAC-EPC expressed that observation and methodology of the project need to be revised in view of performance testing of VRS. The criteria for ambient location may also be firmed up. Further, feasibility of instrument proposed for benzene monitoring also needs to be re-examined. PAAC-EPC accordingly advised the project proponent to revise the proposal and suggested that project be evaluated by DST before further consideration by the committee.

(vi) **Assessment of air pollution exposure at different times during two seasons in the schools of Delhi along with basic lung functions in the senior school students (Health Environment Foundation):** The project objective and methodology were discussed in detail. PAAC-EPC observed that instead of providing benchmark on health status of students for each district of Delhi the project should focus on assessing conditions in a school which contribute to better air quality which can then be shared with other schools. Besides structural aspects, it could also focus on class strength, size and duration which may relate to air quality in a class room. Further, pollution monitoring through portable instruments is not reliable and these should be got properly calibrated through National Physical laboratory. PAAC-EPC accordingly advised the project proponent to consult experts on health, building structures and others to discuss all such aspects and submit a revised proposal with firm objectives and methodology.

(vii) **Burden of disease vis-a-vis' air pollution in Delhi-NCR – Epidemiology and Bio-monitoring based health risk assessment study (NEERI):** PAAC-EPC informed the project proponent that a health study is already being conducted by MoEF&CC through AIIMS. Accordingly, the proposal will be forwarded to MoEF&CC to confirm if there is likelihood of duplication of work, before further consideration by the Committee.

(viii) **Development of Stabilized Zirconia-based Highly Sensitive and Selective Exhaust Gas Sensors for Implementation in Urea-SCR DeNOx Vehicular-Emission Control System (Pondicherry University):** PAAC-EPC was briefed that the proposal has been discussed at the 6<sup>th</sup> meeting of EPC wherein it was decided to forward the proposal to SIAM and obtain their comments before further consideration of the proposal. SIAM responded that study cannot be recommended for consideration of CPCB as there is no requirement of such research. PAAC-EPC decided that the proposal may be forwarded to DST for examination before further consideration and taking final decision by the committee.

**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 Ajay Kumar Gaur, Under Secretary, DHI/MoHI&PE
4. Shri Satyendra Kumar, Deputy Secretary, MoEF&CC
5. Dr. V. K. Soni, Head, EMRC, IMD/MoES
6. Dr. J. B. V. Reddy, Sc. 'D', DST/MoST
7. Dr. Rashid Hasan, Advisor., SIAM
8. Shri A. K. Singh, ASO, UPPCB, Noida
9. Ms. Sapna Srivastava, ASO, UPPCB, Ghaziabad

**List of Proponents:**

1. Dr. Meena Sehgal, Senior Fellow, TERI
2. Dr. Naresh Gupta, Director & prof., MAMC
3. Dr. D. B. Jadhav, Sc. 'F', S&T park, Pune (via VC)
4. Dr. S. Saravanadevi, Senior Principle Scientist, CSIR-NEERI (via VC)

**CPCB Officials:**

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