

### **Minutes of the third meeting of PAAC-EPC held on September 11, 2017 at CPCB**

Third meeting of Project Appraisal & Approval Committee (PAAC-EPC) for utilization of EPC funds was held on September 11, 2017 at CPCB, Delhi. The meeting was chaired by Chairman, Central Board. List of member participants and project proponents is enclosed at Annexure- I.

Dr. Prashant Gargava, Head AQM division briefed the committee about the agenda. It was informed that five proposals presented in the second meeting have been revised and revised may be taken up for discussion

Total 05 proposals were presented by project proponents before the PAAC-EPC. The observations and decisions of committee are summarized below:

#### **1. Source Apportionment Study for stubble burning in Punjab & Haryana:**

The revised proposal was presented by Dr. Rakesh Kumar, Director NEERI on behalf of NEERI & IIT-Bombay, which focused mainly on assessment of the contribution of stubble burning in NCR States towards ambient air quality in Delhi, The scope will involve ambient air quality monitoring, characterization of PM10& PM2.5, development of source profile for stubble burning and urban biomass burning, air quality modeling and satellite data analysis. While IIT-Bombay will carry out work related to satellite data analysis, rest would be done by NEERI.

The cost of the project with revised scope has been reduced from Rs. 5.20 crore plus tax ( Rs.4.75 crore for NEERI and Rs 45.40 lakhs for IIT Bombay) to **Rs 2.10 crore plus taxes** ( as per the joint proposal)

The data from existing manual (NAMP) monitoring stations of CPCB will be used. However two additional monitoring stations will be set up by NEERI to capture plume path & movement during stubble burning period.

The use of thermal desorption aerosol gas chromatograph (TAG) system by IIT -Bombay for the analysis of ambient semi-volatile and low-volatility organic molecules was highlighted w.r.t assessment of formation of secondary organic particulate vis-a-vis stubble burning to enhance the confidence level of the chemical model proposed to be used in the study. The committee opined that in view of application of receptor, dispersion & chemical model, TAG analysis being cost intensive & time taking technique may be excluded.

The duration of the study is 9 months, however, interim results to be made available within 3 months from commencement of the study. The committee felt that interim results be submitted as soon as the data analysis from various techniques (measurements, satellite, etc) is available.

The committee approved for award of this study to NEERI & IIT –Bombay at the cost of **Rs 2.10 crore plus taxes**. NEERI would be the overall responsible agency for ensuring deliverables and will receive the funds. Subsequent payments to IIT-Bombay will be handled by NEERI

#### **2. Delineation of airshed for air quality management in Delhi- NCR:**

The revised proposal was presented by Dr. S.K. Goyal, Sr. Scientist, NEERI, Delhi ZL. Dr. Goyal apprised the committee that as per recommendation of PAAC-EPC during the previous meeting, the methodology for delineation of the airshed for Delhi-NCR will be based on the secondary data like Air quality, Surface & Upper air Met data for Delhi & NCR districts to be collected from various

organizations like IMD, PCBS/CPCB/ R&D Institutes etc. However, NEERI also submitted that in case relevant secondary data is not available for region, the same shall be discussed with CPCB and further appropriate action such as primary data generation etc, will be looked accordingly

PAAC-EPC observed that secondary data may be lacking for a few regions of proposed study area and hence it will not be appropriate to develop an airshed boundary without adequate data for the entire NCR region. Hence the committee advised proponents & CPCB to convene a meeting with the concerned stakeholders for obtaining secondary data. It was advised to prepare an inventory of available secondary data and identify data gaps those can eventually be filled through primary data generation. The committee agreed that the mitigation plans may presently be focussed on the air quality management of Delhi vis-a-vis demarcation of the airshed boundary for the entire NCR region. The development of the air quality management plan for the entire NCR may be taken up later in a phased manner.

### **3. Strengthening of Air Quality Monitoring network & infrastructure in Delhi-NCR:**

The proposal was presented by Dr. D. Saha, Head, Air Lab-CPCB for the establishment of four (04) continuous monitoring stations (CAAQMS) in NCR region along with the upgradation of air laboratory at CPCB. The cost estimation was **Rs. 7.4 crore** comprising establishment of four CAAQMS at cost of Rs 4.2 crore , O&M for these stations for one year at the cost of Rs. 59 lakh and up gradation of the air laboratory at the cost of Rs 2.61 crore.

The committee approved for establishment of four (04) CAAQMS in NCR along with its O&M cost for one year at a cost of Rs 4.79 crore( Rs 4.2 crore for establishment of 4 CAAQMs and Rs. 59 lakh as O&M cost for one year). The committee also approved up gradation of the air laboratory at the cost of Rs 2.61 crore. Total cost for instalment of four CAAQMS, O&M Cost for one year and cost of upgradation of laboratory at CPCB approved by the committee is **Rs. 7.4 crore**

### **4. Upgradation of existing Sodar at CPCB:**

As per the recommendations of PAAC-EPC during earlier meeting, **Dr. Kirti Soni**,CSIR-NPL submitted revised proposal for upgradation of SODAR at CPCB-Delhi. The cost for upgradation along with the O&M cost for three years estimated **Rs. 25 lakh** was approved by the committee..

### **5. Local air quality management planning in Delhi:**

The revised proposal was presented by Shri Sumit Sharma, TERI, intending to use RIO Model for Spatial Air Quality mapping of Delhi. The proposal as per the recommendation of PAAC-EPC consisted, (i) Identification of air pollution hotspots in Delhi, (ii) forecasting of the air quality and (iii) model validation along with optimization of the model as per Indian conditions. The CMB modeling & development of mitigation plans if required to be taken later.

The committee has also asked TERI to provide details regarding licensing of the Rio-software so that the same may be purchased if required in future for extended use by CPCB post completion of the project.

The committee approved the revised project at the cost of **Rs. 48.79 lakh** to TERI

**6. Development of emission factors & impact statement & mitigation strategies for air quality adversaries caused due to firework in Delhi-**

The revised proposal was presented by Prof. Tanu Jindal, Head, Environment Department Amity University. The proposal comprised three main segments i.e. Development of emission factors for various types of firecrackers, air quality monitoring during Deepavali period and socio-economic surveys for generation of activity data and development of mitigation measures. The study also intended for development of short-term air quality guidelines for additional parameters generated during burning of firecrackers.

The committee observed that the approach towards development of short –term air quality standards was inadequate. The committee recommended to presently take up the component related to development of Emission factors for authorized firecrackers and asked proponents to resubmit the proposal accordingly.

The meeting ended with 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. Ms. Shruti Rai Bhardwaj, Joint Director, Ministry of Environment, Forest & Climate Change.
4. Dr. B.B Awasthi, Regional Officer, Uttar Pradesh Pollution Control Board (Noida).
5. Mr.O.P. Gupta, Regional Officer, Rajasthan State Pollution Control Board Bhiwadi (Alwar).
6. Dr. Chandra Prakash, , Delhi Pollution Control Committee
7. Mr. Prashant K. Banerjee, Deputy Executive Director, Tech Society of Indian Automobile Manufacturers

**List of Proponents:**

1. Dr Rakesh kumar, Director, NEERI.
2. Dr S.K. Goyal, Senior Principal Scientist, NEERI.
3. Dr A.L Aggarwal, Emeritus Professor, Amity University.
4. Dr. Tanu Jindal,Head ENv. Dept Amity University.
5. Mr. Sumit Sharma, Associate Director, Centre for Environmental Studies,TEERI.
6. Dr Kirti Soni, Scientist, CSIR, NPL.

**CPCB Officials:**

1. Dr. Prashant Gargava, Head, AQM
2. Dr D. Shah, Head Air Lab.
3. Ms. Meeta Sharma, Head UPCD.
4. Shri Rajesh Debroy Scientist 'D', UPCD.
5. Mrs. Garima Sharma, Scientist 'C', AQM
6. Mrs. Meetu Puri, SSA, AQM