

**Minutes of the 29<sup>th</sup> meeting of the Project Appraisal & Approval Committee (PAAC-EPC)**

29<sup>th</sup> meeting of the Project Appraisal & Approval Committee (PAAC-EPC) for utilization of EPC funds, chaired by Chairman, CPCB, was held on July 15, 2024 via video conferencing. Members of Technical Group (TG), which evaluates proposals received for consideration under EPC funds, also participated in the meeting. List of participants is placed at Annexure - I.

02. AQM division briefed the committee about the status of EPC funds and proposals received for consideration under the said funds. Subsequently, AQM division apprised the committee about the agenda of the meeting, involving post-facto approval for extension of Annual Maintenance Service for CPCB Central Control Room (CCR) project, taking decisions on 04 proposals and approval of draft CPCB guidelines for gap funding support for NCR cities for implementation of Clean Air City Action Plan. Further, findings of one project to be presented for acceptance and project closure.

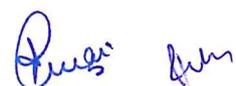
03. The observations and decisions of the committee are summarized below:

**A. Post facto approval for extension of Annual Maintenance Charge (AMC) for Central Control Room (CCR) beyond the initial scope and associated expenditure:**

PAAC was apprised that the project was sanctioned in the 5<sup>th</sup> meeting of the PAAC at a cost of Rs. 57 lakhs, which included 4 years AMC (17.1.2019-16.01.2023). CCR Portal is used for acquisition of CAAQMS Data, Generation of AQI, Public Complaint Redressal etc. AMC was initially extended for 09 months i.e. till 16.10.2023 and again till 30.04.2024. The total extended AMC cost is Rs. 18,54,000/-. Total Expenditure incurred is Rs. 74,81,525/- as against the sanctioned amount of Rs. 57,00,000/-.

Accordingly, Post-facto approval of PAAC is sought for AMC extension for 17.01.2023-30.04.2024 with an additional expenditure of Rs 17,81,525/-.

PAAC enquired about the alternate source of funds in case EPC funding is stopped. Head, IT division informed that a new CCR portal is proposed to be developed using EC funds. The estimated cost implication would be ₹4 crores and would include 5-year AMC. At present, the bid documents are being reviewed. He further expressed that AMC was extended because of delays due to re-tendering for development of the new CCR portal, and until the portal is developed, it is proposed to use funds available with the division for continuing AMC of the existing portal. PAAC expressed that this is an important activity, however, since the portal has been extended to the entire country while EPC funds is only for Delhi-NCR, further expenditure may be met from other funds. PAAC accorded post facto approval for the AMC extension till 30.04.2024 and the associated expenditure.



**B. Guidelines for gap funding support for NCR cities for implementation of Clean Air City Action Plan:**

The committee was briefed that in the 26<sup>th</sup> meeting, it had decided that other cities which are not being funded under NCAP/XV-FC could also be funded for preparation/implementation of micro-level action plans for undertaking mitigation/pollution control and abatement measures related to air pollution hotspots. Further, steering committee in its meeting held on 22.04.2022 has already expressed that EPC funds needs to be utilized for a mix of measures including on-ground mitigation measures for air pollution control.

Subsequently, CPCB has prepared draft guidelines to provide gap funding for implementation of city action plans (CAP) in 18 cities in NCR in line with the NCAP model, which are not being funded under NCAP/XV-FC. These cities have been asked to prepare City Action Plans (CAP), wherein actions addressing major sources of air pollution in these cities with timelines and concerned agencies are specified. The CAP is to be approved by State Air Quality Monitoring Committee.

CPCB made a detailed presentation on the draft guidelines indicating activities that are considered for support, method of fund allocation, criteria for fund release, etc.

Overall objective of guidelines is to provide gap funding support towards capital expenditure for implementation of City Action Plan for improvement of air quality. The financial support is proposed to be provided to ULBs through SPCBs/PCCs, preferably for taking up specific activities, as per the micro planning under city action plan.

Proposed Corpus for utilisation is Rs. 150 core for the first year (FY 2024-25) and 3/4th of the yearly accrued EPC amount (~ Rs. 40-45 crore) in subsequent years. 50% of the funds would be released on submission of plan for the year by the ULB, and balance 50% on completion of works, which would help in avoiding parking of funds.

PAAC was also apprised that only performance based supplemental funds are being provided through these guidelines as the ULBs are required to mobilize funds for implementation of CAPs through convergence of resources from various schemes of Central Government, State/UT Governments and its agencies.

It was informed that these guidelines are also being submitted to the Hon'ble NGT, as part of the comprehensive plan for utilisation of EPC funds which has been sought by Hon'ble NGT, and a major part of available EPC funds is proposed to be utilized through these guidelines.


PAAC approved the guidelines in-principle, subject to the acceptance by the Hon'ble NGT, and made the following suggestions:

- Regarding road construction/repair & paving projects, ULB may also be asked to provide a declaration that the said road stretches are heavy traffic roads and are a major contributor to air pollution in the area.
- A committee chaired by MS-CPCB, and having members from CAQM, AQM division- CPCB and F&A division-CPCB, may be constituted to take a decision on release of funds to the concerned ULB, based on the submitted plan for utilisation of funds and duly approved by city level implementation committee.
- The physical and financial progress for these cities may also be updated preferably on PRANA portal.

It was also decided that the guidelines may be circulated among the members for inputs and subsequently, guidelines may be finalized.

PAAC authorised MS-CPCB to review the suggestions received, if any, suitably incorporate it in the guidelines along with the suggestions made above, and place it before Chairman, CPCB for approval.

#### **C. Recommendations of Technical Group (TG) on 03 proposals:**

Three proposals were considered by the Technical Group (TG) in its 9<sup>th</sup> meeting held on 07.03.2024. TG had made specific observations on each proposal. Observation made by TG were discussed during the meeting and deliberation of PAAC are summarized below:

##### **i. Health problems and associated factors among brick kiln workers in Delhi/NCR submitted by MAMC:**

PAAC was briefed that the matter of operation of brick kilns in NCR was taken up in Hon'ble Supreme Court, and it was expressed that impact of brick kilns on human health may be studied. Subsequently, a proposal was submitted by MAMC and the same was presented and discussed in Technical Group (TG), and that TG in its 9<sup>th</sup> meeting had recommended the proposal for sanction and had made certain observations, which were agreed to by MAMC.

Sh. Krishnamurthi Kannan, NEERI, Co-PI presented the proposal before PAAC, covering the objectives, scope of work, deliverables, timelines and budget. The primary objective of the project is to study the factors affecting health of workers in brick manufacturing industry, by assessing



their respiratory condition and related biomarkers for exposure to various pollutants, besides carrying out ambient air quality sampling. MAMC will look after the health aspects while NEERI will look after the air quality monitoring and analysis aspect. The proposed project duration is 2 years and sample size will be 600 subjects from 28 brick kilns across NCR. The proposed total budget of the study is ₹2.33 crore including 1.61 crore and 0.72 crore for MAMC and NEERI, respectively.

Representative, SIAM enquired about previous such health studies conducted for brick kiln or similar industries in NCR region and the novelty of the presently proposed study. Co-PI informed that it has experience in similar health studies conducted in coal mines, thermal power plants, etc., and that MAMC has also done several health studies, however, no such health impact assessment study has been done for brick kilns in NCR region.

PAAC suggested that the results of the health assessment of the brick kiln workers may also be compared with non-exposed/control subjects to assess their correlation, which may add value to the study, and the same was agreed by Co-PI.

PAAC accepted the recommendations of TG and sanctioned the project to MAMC at a cost of ₹2.33 crores inclusive applicable taxes.

**ii. Optimization of Diesel-Ethanol blended fuel in existing Diesel genset engine to reduce environmental emissions in Delhi NCR submitted by ARAI, BPCL and TMTL:**

PAAC was briefed that a joint proposal was submitted by ARAI, BPCL and TMTL about Diesel-Ethanol blended fuel in existing Diesel genset engine to reduce environmental emissions in Delhi NCR. The proposal was recommended by Ministry of Heavy Industries, and was discussed and examined during 7<sup>th</sup> and 9<sup>th</sup> TG meetings.

TG had not recommended the proposal and had suggested PI to do a pilot study first with detailed emission analysis, addressing concerns such as that of reduction in CO emissions but increase in PM emissions, emissions of aldehyde, etc. Besides, TG had also raised the issue of patent ownership and high project cost.

Representative, SIAM expressed that the proposal may not be relevant at present and suggested that the proposal may be rejected. PAAC accepted the recommendation of TG and rejected the proposal.

**iii. Heavy Duty vehicle fuel consumption calculation and validation through vehicle simulation tool submitted by ARAI:**


PAAC was briefed that proposal aims to develop a simulation based fuel consumption (FC) calculation methodology for India, along with a simulation tool. The proposal was discussed during the 26<sup>th</sup> meeting and PAAC had recommended that the proposal utility for Delhi-NCR may be re-examined by TG. Subsequently, proposal was discussed during 9<sup>th</sup> meeting of TG wherein ARAI informed that the project involves development of Delhi NCR specific drive cycle for city bus which could be helpful in recommending emission standards for Delhi NCR region.

TG had expressed that since the proposal is of greater relevance for the automotive industry and the tool so developed will be utilized by certification agencies and further, applicability of specific norms for vehicles to operate in Delhi-NCR based on the study done for development of city specific driving cycles for Delhi-NCR may be difficult. Hence, the proposal may be considered by representative ministry such as Ministry of Road, Transport and Highways.

Representative, SIAM expressed that as on 1 April 2023, Heavy Duty Vehicles are required to be tested for Constant Speed Fuel Consumption standard, and comply with the Fuel consumption target, notified under the Energy Conservation Act, 2001 by the Ministry of Power. Based on the fuel consumption simulation tool used in the European Union (VECTO), work has already commenced on its modification in Indian context. He further expressed that this tool will help to usher in the next set of regulation for fuel efficiency of heavy duty vehicles, and stringent emission standards may then be prescribed for restricting entry of vehicles which are not fuel efficient in areas of high air pollution.

In view of inputs of SIAM, PAAC expressed that the proposal may be re-considered by TG and SIAM may also be invited in the meeting to present its viewpoint.

**D. Multiple antenna high density ion generator for pollution control in New Delhi & Monitoring & Evaluation of Ionization based Air Purifying Technology:**

PAAC was informed that a study was sanctioned to Science and Technology Park, Pune for demonstration of ion generator for ambient air quality improvement, and IIT Delhi was given the task for evaluation of performance of ion generator. The study was completed and was reviewed by DST expert panel, which had noted that clear evidence for significant reduction in PM could not be ascertained and hence its outdoor utility is not demonstrated.

The findings of IIT Delhi and DST expert panel were presented before PAAC in its 17<sup>th</sup> meeting and PAAC had suggested that DST may review ionization projects undertaken in Israel for air pollution mitigation in order to take a final decision on such technologies. Subsequently, a sub-committee was constituted by DST, chaired by Prof. Mukesh Khare to look into ionization projects undertaken in other



countries/ India for air pollution mitigation and provide recommendations on feasibility of use of such technologies. The sub-committee reviewed the utility of ionization technology for reduction in ambient air pollution and concluded that the same cannot be established, and that the technology seems to be unfeasible in ambient conditions, owing to its negligible impact, and it does not seem reasonable to support it for any further applications.

Considering the same, PAAC recommended closure of the project and release of due payments, if any.

**E. 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 submitted by Health Environment Foundation (HEF):**

It was informed that a proposal to assess indoor air quality in classrooms besides other parameters, was submitted, for coming out with recommendations for policy makers, to minimize/limit exposure to indoor air pollution. The proposal was approved in-principle by the PAAC in its 23<sup>rd</sup> meeting in view of recommendations of TG. The PI was subsequently asked to submit a revised proposal duly addressing observations of PAAC and TG. Besides, PAAC also expressed that project funds would be released to MAMC and not to HEF and MAMC (govt. institute) will be responsible for project execution and that acknowledgement in terms of project acceptance is to be provided by Director, MAMC.

PAAC was apprised that the PI has not agreed to the requirement of routing the project proposal through MAMC as well as for release of funds to MAMC. Further, no revised proposal has been received from MAMC despite various letters.

In view of the above, it was recommended that proposal may be rejected. PAAC accepted the recommendation and rejected the proposal.

Meeting ended with thanks to and from the chair.

\*\*\*



**List of PAAC Members:**

1. Sh. Tanmay Kumar, Special Secretary, MoEF&CC and Chairman, CPCB
2. Sh. Bharat Kumar Sharma, Member Secretary, CPCB
3. Dr. V.K. Soni, Scientist F and Head, EMRC, IMD
4. Sh. Mrityunjay Jha, Director (OR), MoPNG
5. Sh. Suresh Kumar, Director, IFD, MoEF&CC
6. Sh. R.K. Agarwal, Director (Technical), CAQM
7. Sh. Pankaj Kapil, Additional Director, DPCC
8. Sh. R.K. Jaiswal, Development Officer, MHI
9. Sh. Prasoon Tripathi, Under Secretary, MoEF&CC (CP Division)
10. Dr. Jayshree Kala, SSO, RSPCB
11. Sh. Nirmal Kashyap, SEE, HSPCB
12. Sh. Mahesh, Scientist B, MoRTH
13. Dr. Rashid Hasan, Senior Advisor, SIAM
14. Dr. Sandeep Garg, SIAM

**List of Technical Group members:**

1. Dr. Shankar Aggarwal, Chief Scientist (Professor, AcSIR), CSIR-NPL
2. Sh. Ankush Tewani, Scientist E, CPCB

**Invitees:**

1. Dr. M.M. Singh, Director Professor, MAMC
2. Sh. Krishnamurthi Kannan, Chief Scientist, CSIR-NEERI
3. Dr. Govind Marwari, Senior Scientist, MAMC

**CPCB Officials:**

1. Sh. Pankaj Agarwal, Scientist F & Head, AQM Division
2. Sh. B. Vinod Babu, Scientist F and Head, IT Division
3. Sh. G. Rambabu, Scientist E, IPC-IV Division
4. Sh. Ankush Tewani, Scientist E, AQM Division
5. Sh. Gautam Kumar Sharma, Scientist C, AQM Division
6. Sh. Akshay Kumar, Scientist B, AQM Division

7. Sh. Toshesh Bhargava, SRF, AQM Division
8. Sh. Amit, IT Division