STATE LEVEL EXPERT APPRAISAL COMMITTEE (SEAC)-DELHI
OFFICE OF DELHI POLLUTION CONTROL COMMITTEE
5th FLOOR, ISBT BUILDING, KASHMERE GATE, DELHI-110006

Minutes of the 98th meeting (2nd sitting day)of State Level Expert Appraisal Committee (SEAC) held on 02.02.2022 through video conferencing.

The 98th meeting (2nd sitting day) of State Level Expert Appraisal Committee (SEAC) was held on 02.02.2022 through video conferencing under the Chairmanship of Sh. Vijay Garg. The following members of SEAC were present in the meeting:

1. Sh. Vijay Garg - In Chair
2. Dr. Kailash Chand Tiwari - Member
3. Ms. Paromita Roy - Member
4. Sh. Surinder Kumar Juneja - Member
5. Sh. Chetan Agarwal - Member
6. Sh. Ashish Gupta -Member
7. Ms. Jyoti Mendiretta - Member
8. Sh. PranayLal -Member
9. Sh. Gopal Mohan -Member
10. Sh. Ankit Srivastava -Member
11. Dr. Sirajuddin Ahmed - Member
12. Sh. Pankaj Kapil -Member Secretary

Following SEAC Members could not attend the Meeting:

1. Dr. Sumit Kumar Gautam - Member

Following DPCC Officials assisted the Committee:

1. Sh. Amit Chaudhary (EE), DPCC
2. Sh. S.K.Goyal (EE), DPCC
3. Sh. Rohit Meena (JEE), DPCC.

Agenda No 1

Case No. C-373

Name of the Project	EC for Construction of Motel Building at Ghitorni, Vasant Vihar, South West Delhi, New Delhi
Project Proponent	Arun Misra, Director, M/s Penguin Farms Pvt. Ltd., 201, Surya Building, 19 K.G. Marg, Connaught Place, New Delhi- 110001,Central, Delhi-110001
Project EIA coordinator present during the meeting	Ms. Akta Chugh, M/s Perfact Enviro Solutions Pvt. Ltd.
Rep. Of the PP present during the meeting	Mr. Arun Mishra, Director, M/s Penguin Farms Pvt. Ltd.
Proposal No.	SIA/DL/MIS/236259/2021
File No.	DPCC/SEIAA-IV/C-373/DL/2021

A. Details of the proposed project are as under:

1. The Proposal is for grant of EC for Construction of Motel Building at Ghitorni, Vasant Vihar, South West Delhi, New Delhi by M/s Penguin Farms Pvt. Ltd after demolition of the existing building.
2. The project is located at **Latitude**:28°29'30.14"N, **Longitude**: 77°8'32.01"E
3. **Area Details:** The Gross Plot Area of the project is 10661.16sq.m. The Net Plot Area for proposed development is 8942.75sqm. Area to be demolished (Existing Built up Area) is 2700.895sqm.Proposed Total Built-up Area (FAR + Non FAR Area) is 46,949.00sq.m. Max. Permissible FAR Area is 18657.03 sq.m and Proposed FAR Area is 18454.596 sqm (including 3,570.73 sq.m. of FAR of proposed commercial at 5th, 6th, 7th Floors). The Total Non FAR Area (including Basement Area) is 28494.604 sq.m. The Total Basement Area is 16440.96 sq.m. The Max. Permissible Ground Coverage is 4264.46 sq.m. and Proposed Ground Coverage is3401.98sq.m.The Total No. of Basements will be 3. Total Nos. of tower is 1. The Maximum Number of

Floors are (3B+G+SF+8) nos. Maximum Height of the Building (upto Terrace Level) is39.7m.

4. **Water Details :**

- During Construction Phase, Total 16 KLD water will be required out of which 11 KLD of water will be required by labourers for domestic & flushing purposes which will be sourced from tanker suppliers and 5KLD for construction purpose will be sourced from nearby STP treated water. Waste water of 9 KLD will be discharged into septic tanks followed by soak pits.
- During Operational phase, Total Water requirement of the project will be 278 KLD and the same will be met by 138 KLD fresh water from Delhi Jal Board and 140 KLD Treated Water. Total Waste water generated will be 155 KLD (including Sewage: 148 KLD; ETP treated water: 7 KLD). The proposed capacity of in house STP is 200 KLD and of ETP is10 KLD. Treated Water of 140 KLD will be generated which will be recycled and reused in the premises for Flushing (38 KLD), Gardening (2 KLD), DG Cooling (98 KLD), Miscellaneous (2 KLD).No Excess treated water will be there, it will be a ZLD motel complex
- Total 3 nos. of Rain Water Harvesting pits will be provided in the proposed project.

5. **Solid Waste Details :**

- During Construction Phase, Total 37.5 kg/day of waste will be generated which will be disposed of at the Municipal Solid Waste Site
- During the Operation phase, Approx. 321 kg/ day (117 TPA) of solid waste will be generated from the motel during the operational phase. Out of which, 129 kg/day (47 TPA) of biodegradable waste will be treated in Organic Waste Converter to get converted to manure. 96 kg/day (35.25 TPA) of non-recyclable waste and 96 kg/day (35.25 TPA) of plastic waste will be sent to authorize recycler.
- Hazardous waste includes Oil from DG sets (36 Lts/month) which will be carefully stored in HDPE drums in isolated covered space and sold to recyclers authorized by CPCB/SPCB.

6. **Power Details :**

During Construction phase DG set of 2 x 125 kVA will be installed acoustically enclosed with adequate stack height.

During Operation phase, the total power requirement will be3219 kW (3576 kVA) and will be supplied by BSES Rajdhani Power Limited. For Power Back up, DG sets of Capacity 2 × 750 kVA and 2 x 1010 kVA will be installed.

Total of 10 % of energy saving has been proposed using energy conservation measures in the proposed motel complex. Out of which, 6% of energy will be conserved using solar measures.

7. **Parking facility:** Total Parking Requiredis554 ECS and Total Proposed is599 ECS.
8. **Eco-Sensitive Areas:** Distance from Asola Bird Sanctuary is 6.12 km ESE and Okhla Wildlife Sanctuary is beyond 10 km from the project site.
9. **Plantation:** The Green area will be 1794.72 sqm., out of which Green area on ground will be 1010.72 sqm. (11.30 % of net plot area) & Green area on terrace will be784 sqm. At present 30 no. of trees exist at the project site out of which 2 no. of trees will be cut and rest will be retained at the site. Total 115 no. of plants will be planted.
10. **Cost of the project**: Total Cost of the project is Rs. 100 Crores.

B. **After due deliberations, the SEAC in its 98th meeting held on 02.02.2022 recommended as follows:**

Based on the information furnished, documents shown & submitted, presentation made by the project proponent SEAC sought the following information:

1. Building Plan approval from Local Body, DUAC and Delhi Fire Service.
2. Water assurance from DJB for the proposed fresh water requirement.
3. Segregated figures for potable and non potable water requirement during construction and operation phase.
4. Proportion wise Step Diagram showing the amount of reduction in net Per Capita Water Demand achieved through (1) Each Demand reduction strategy (eg. Low flow fixtures, xeriscaping etc.), (2) Recycling and Reuse.
5. Outlet parameters of proposed STP during operation phase needs to be revisited in order to check the feasibility of its reuse in flushing, horticulture, HVAC etc.
6. Technical feasibility statement for the proposed STP units with quality of output each unit wise.

7. Rain water harvesting/ retention plan needs to be provided with numbers of RWH pits, taking into account the recent higher flash rain data along with actual percolation rate of the soil at site with layout and location plan.

8. Typical Floor Plans with dimensions to demonstrate how natural ventilation & day lighting is being achieved supported with screenshots of suitable software based out puts.

9. Proportion wise Step Diagram to be provided showing the amount of reduction in net per capita Energy Demand achieved as compared to base case scenario, through (i) Load Reduction Strategies, (ii) Passive Strategies, (iii) Renewables, and (iv) Energy Recovery strategies. Atleast 2 % of total energy demand to be sourced from Renewables. Percentage reduction through each of the aforesaid strategies to be provided in a consolidated diagram format for easy comprehension

10. Proposal for provisioning the energy audit during operation phase.

11. Revised landscape plan with demarcated green area with soft green area as per MPD. Landscape details to be provided with a measured impact on the micro-climate. Green area should be demarcated as per building bye laws and minimum consolidated area of 15 % of plot area should be kept as soft green area. Further, wherever tree plantation being done/ proposed, tree-pit size of 6' x 6' / tree to be adopted as permeable surface of the tree.

12. Layout showing the details (species and girth) of existing trees, trees to be retained, trees to be cut, trees to be transplanted/ planted along with details of the compensatory tree plantation to be done in project site.

13. Revised Traffic Management Plan including Traffic Impact Assessment considering the latest traffic scenario. Detailed calculation of roads, bicycle paths, pedestrian spaces including entry and exit to be provided. Further you are required to submit mitigation measures to handle critical entry and exit scenarios inside and outside the site minimizing the impact on the city roads. Distribution of mode of traffic as per MPD.

14. Revised EMP (Environment Management Plan) for dust mitigation measures during construction as per MoEF Notification No. GSR 94 (E) dated 25.01.2018/Hon'ble National Green Tribunal order in O.A. No.21 of 2014 and O.A. No. 95 of 2014 in the matter of Vardhaman Kaushik Vs. Union of India & others and Sanjay Kulshreshtha

Vs Union of India & others/ CAQM Directions issued time to time including registration on Dust Pollution Control Self Assessment Portal with provision of video fencing and low cost sensors for monitoring PM 2.5, PM 10.

15. Proposal and feasibility of installation of less polluting power backup eg. gas based generator sets etc.
16. Geotechnical Investigation Report along with details of pre and post monsoon water table in project area.
17. Provision for electric charging of the e-Vehicles as per Building Bye Laws.
18. Specify name and numbers of the post to be engaged by the proponent for implementation and monitoring of environmental parameters.

Agenda No 2

Case No. C-376

Name of the Project	EC for District Court Rohini at Sector 26, Rohini, New Delhi
Project Proponent	Rajendra Mittal, Executive Engineer, M/s Department of Law, Justice & Legislative Affairs, Govt. of NCT, Delhi, Sector 26, Rohini, Delhi,Alipur,North,Delhi-110087
Project EIA coordinator present during the meeting	Mr. Himanshu Goel, M/s OCEAO- ENVIRO Management Solutions (India) Private Limted.
Rep. Of the PP present during the meeting	Mr. Rajendra Mittal, Executive Engineer, M/s Department of Law, Justice & Legislative Affairs, Govt. of NCT, Delhi PP for
Proposal No.	SIA/DL/MIS/244263/2021
File No.	DPCC/SEIAA-IV/C-376/DL/2021

A. Details of the proposed project are as under:

1. The Proposal is for grant of EC for District Court Rohini at Sector 26, Rohini, New Delhi by M/s Department of Law, Justice & Legislative Affairs, Govt. of NCT, Delhi.
2. The project is located at **Latitude**:28°44'35.09"N, **Longitude**: 77°5'9.18"E
3. **Area Details:** The Total Plot Area of the project is 17415 sq.m. Proposed Total Built-up Area (FAR + Non FAR + Basement Area) is 112304.14 sq.m. Max. Permissible FAR Area (@ 3) is 52245 sq.m and Proposed FAR Area (@ 2.99) is 52250.582 sqm. The Total Non FAR Area is 46204.388 sqm. The Total Basement Area is 13849.181sq.m. Permissible Ground Coverage (@50% of TPA) and Proposed Ground Coverage (@49.568% of TPA) is 8109.886 sq.m. The Total No. of Basements will be 1. The total nos. of Building Blocks will be 2.The Maximum Height of the Building is 48 m.
4. **Water Details :**

   During Construction Phase, Approx. 2500 KL of water is required which will be met from Common Sewage Treatment Plant (CSTP) through private water tankers. Waste water generated will be disposed of through septic tanks with soak pits .

   During Operational phase, Total Water requirement of the project will be approx 600 KLD which will be met by 377 KLD of Fresh water from Delhi Jal Board and 223 KLD of Treated water. Out of 377 KLD Fresh Water, 140 KLD Fresh water will be used for Domestic Purposes while 236.6 KLD will be used for HVAC. Total Waste water generated will be approx 236 KLD which will be treated in house STP of capacity 280 KLD. Treated Water from STP will be 212.4 KLD which will be used for Flushing (124 KLD), Landscape (5 KLD), HVAC (83.4 KLD).Total water required for HVAC is 320 KLD (236.6 KLD Fresh Water and 83.4 KLD Treated water).

   Number of Rain Water Harvesting (RWH) Pits to be provided is 4 nos. The ground water level in the area is below 25 m below ground level (mbgl).
5. **Solid Waste Details :**

   During the Operation Phase, Total of 1605.1 kg/day of Solid Waste will be generated from the project. Out of which, Bio-Degradable Waste of 802.65 kg/day will be disposed through Municipal Corporation. 786.60 kg/day of Non-Biodegradable Waste (Recyclable and Non Recyclable) will be disposed through Govt. approved Agency. There will be no Biomedical Waste.

Hazardous waste includes Oil from DG sets (1000Lts/yr) which will be stored in HDPE drums at the earmarked locations and will be disposed through authorized recyclers.

E-Waste generated will be 16.05 kg/day which will be given to authorized vendors.

6. **Power Details :**

   During Operation phase, the total power requirement will be approx. 7244.7 KVA and will be supplied by BSES. For Power Back up, DG sets of Capacity 9000 KVA (6 × 1500 kVA) will be installed.

7. **Parking facility:** Total parking required as per Bye Laws is 1044 ECS and Total Proposed Parking is 1113 ECS.

8. **Eco-Sensitive Areas:** Distance from Okhla Wildlife Sanctuary is 26.55 Km away from the project site. Asola Wildlife Sanctuary is 31.29 km away from the project site.

9. **Plantation:** The total proposed green area of 4652.56sqm. (26.7 % of total plot area). Total no. of trees proposed at site (1 Tree/ 80 sqm) are 218 Trees.

10. **Cost of the project**: Total Cost of the project is Rs. 86 Crores which includes the cost of the land as well as the development cost.

B. **<u>After due deliberations, the SEAC in its 98th meeting held on 02.02.2022 recommended as follows:</u>**

Based on the information furnished, documents shown & submitted, presentation made by the project proponent SEAC sought the following information:

1. Building Plan approval from Local Body, DUAC and Delhi Fire Service.
2. Water assurance from DJB for the proposed fresh water requirement.
3. Assurance for supply of Treated Sewage during Construction Phase. PP is required to clarify the arrangement for reusing the aforesaid treated water along with the mechanism proposed for making this water fit for use in construction
4. Power supply assurance from TPDDL/ BSES.
5. Proposal to carry out watershed planning of the area and submit the same with proposal to redress the issue of water logging in and around the project site. Since the site appears to be part of a natural wetland/water body, it is not advisable to build on

it. However in the condition that construction needs to be taken up, no additional net run-off from the site should take place. Seasonal variation of the wetland needs to be addressed through basic hydrological modelling of the site (and it's watershed) and suitable mitigation measures need to be taken up (e.g. providing building on stilts, minimal landscaping, minimise built/paved footprint, etc.) in order to minimise site flooding and impact on the natural water systems.

6. Proposal to achieve the treatment of waste water in STP taking care of vast fluctuation of waste water generation and discharge in a court complex.
7. Detail of power sources in construction stage.
8. Rain water harvesting needs to be revised taking into account the recent flash rain data and actual percolation rate of the soil at site. Calculate runoff from (a) roof top, (b) other paved areas, and (c) green areas separately. Review peak rainfall runoff threshold used in the calculation – given the experience of last 5 years with extreme rainfall events and likely increase in frequency with climate change in the next 50 years and create adaptive strategy accordingly.
9. Prepare management strategy for each of these (a) roof top, (b) other paved areas, and (c) green areas
    a. Design natural storm water retention capacity in the green areas by marginal lowering, and gradient management, which can enhance natural percolation, and indicate the same in m3,
    b. Design separate storm water retention and recharge or reuse capacity for rooftop runoff and paved areas.
10. Typical Floor Plans with dimensions to demonstrate how natural ventilation & day lighting is being achieved supported with screenshots of suitable software based out puts.
11. Proportion wise Step Diagram to be provided showing the amount of reduction in net per capita Energy Demand achieved as compared to base case scenario, through (i) Load Reduction Strategies, (ii) Passive Strategies, (iii) Renewables, and (iv) Energy Recovery strategies. Atleast 2 % of total energy demand to be sourced from Renewables. Percentage reduction through each of the aforesaid strategies to be provided in a consolidated diagram format for easy comprehension

12. Proposal for provisioning the energy audit during operation phase.
13. Revised Traffic Management Plan including Traffic Impact Assessment considering the latest traffic scenario. Detailed calculation of roads, bicycle paths, pedestrian spaces including entry and exit to be provided. Further PP is required to submit mitigation measures to handle critical entry and exit scenarios inside and outside the site minimizing the impact on the city roads. Distribution of mode of traffic as per MPD.
14. Revised landscape plan with demarcated green area with soft green area as per MPD. Landscape details to be provided with a measured impact on the micro-climate. Green area should be demarcated as per building bye laws and minimum consolidated area of 15 % of plot area should be kept as soft green area. Further, wherever tree plantation being done/ proposed, tree-pit size of 6' x 6' / tree to be adopted as permeable surface of the tree.
15. Geotechnical Investigation Report along with details of pre and post monsoon water table in project area.
16. Specify name and numbers of the post to be engaged by the proponent for implementation and monitoring of environmental parameters.
17. Provision for electric charging of the e-Vehicles as per Building Bye Laws.

Agenda No 3

Case No. C-371

Name of the Project	EC for Commercial Complex Project at Plot No-G4, District Centre, Netaji Subhash Place, New Delhi
Project Proponent	Ajay Kumar Jha, General Manager, M/s County Projects Private Limited, F 28, Ground Floor, Preet Vihar, East Delhi, Preet Vihar, East Delhi-110092
Project EIA coordinator present during the meeting	Ms. Mudita Tomar Singh, Grass Roots Research & Creation India (P) Ltd.

Rep. Of the PP present during the meeting	Mr. Devesh Shakya , Mr. Pawan Rai, M/s County Projects Private Limited.
Proposal No.	SIA/DL/MIS/247809/2021
File No.	DPCC/SEIAA-IV/C-371/DL/2021

A. Details of the proposed project are as under:

1. The Proposal is for grant of EC for Commercial Complex Project at Plot No-G4, District Centre, Netaji Subhash Place, New Delhi by M/s County Projects Private Limited.
2. The project is located at **Latitude**: 28°41'31.03"N, **Longitude**: 77°09'0.03"E.
3. **Area detail:** The total plot area of the project is estimated 5,300 m^2 (1.3097 Acres) .The total built-up area will be (FAR + Non-FAR (including Basement Area)) 56,506.223 sqm. The maximum permissible FAR Area is 16569.60Sq.m and proposed FAR Area is 16,560.425Sqm. The Maximum Permissible ground coverage (@ 50% of plot area) is2,650 Sq.m and proposed ground coverage (49.489% of total plot area) is 2,622.928Sq.m. The total proposed basements are 3 & total basement area is 15,900 Sqm. Maximum no. of Floors are (3B+G+24+Terrace). Maximum Height of Building (upto terrace Floor level) is 113.5 m.
4. **Water Details:**

   During construction phase, negligible quantities of wastes will be generated which will be disposed through septic tanks with soak pits.

   During operational phase, total water requirement of the project is expected to be 202 KLD and the same will be met by 92 KLD fresh water from Delhi Jal Board and 110 KLD treated Water. Wastewater generated (132 KLD) will be treated in on site STP of total 160 KLD capacity. 119 KLD of treated wastewater generated will be of which recycled and re-used (72 KLD for Flushing, 3 KLD for Horticulture, 35 KLD for HVAC, 9 KLD for floor washing). The project will be a Zero Liquid Discharge (ZLD) project.

   Rooftop rainwater of buildings will be collected in RWH tank of 40 m^3.
5. **Solid Waste:** During the operation phase solid waste generated from the project will be approx. 980 kg/day. Biodegradable waste will be processed through Organic Waste

Converter while Non-Biodegradable waste comprising of Recyclable and Non-Recyclable waste will be disposed through government approved agency.

6. **Power:**The total power requirement during operation phase is 2465 kW and will be supplied by Tata Power Delhi Distribution Limited (TPDDL). For Power Back up, DG sets of Capacity 3010 kVA (1 x2000 kVA & 1 x 1010 kVA) will be installed.
   Solar Power generation system of the capacity Min. 40 KWp is proposed to be installed
7. **Parking Facility:** Total Parking required as per building bye laws are 298 ECS. Proposed Parking will be 300 ECS.
8. **Eco-Sensitive Areas:** The shortest aerial distance of the project from Asola Wildlife Sanctuary is 22.05 Km (S) & from Okhla Bird Sanctuary is 19.65 Km (SE) respectively.
9. **Plantation:** Green belt will be developed along the periphery of the project premises along with the internal parks and lawns. Total green area is 550 m2 i.e. 10.37% of the total plot area
10. **Cost of the project**: Total cost of the project is Rs. 330.04 Crores including land & development cost.

The PP attended the meeting through Video conferencing and he was advised to come with revised proposal/ information as per meeting held on 31.01.2022 in respect of its similar proposal. The representative of the project proponent requested to consider the proposal in view of few updated clarifications arranged by the project. The project proponent was allowed to give presentation on revised/additional information arranged by it. During the presentation the project proponent stressed that as per DJB the treated water of the STP is fit for construction purposes. On this issue the committee clarified to him that fitness of the treated STP water needs to be ensured at the end of project proponent also well in advance as the same may require some polishing unit for specific usage in different construction activities.

B. **<u>After due deliberations, the SEAC in its 98th meeting (2nd Sitting) held on 02.02.2022 recommended as follows:</u>**

***Based on the information furnished, documents shown & submitted, presentation made by the project proponent, SEAC sought the following informationas deliberated in the similar project of the project proponent considered on 31.01.2022*:**

1. Building Plan approval from DDA, DUAC and Delhi Fire Service.
2. PP is required to clarify as to how the storage/ stacking of construction material will be managed during construction phase.
3. Specific information on the issue of ensuring the safety of nearby structures in view of proposed construction of 03 level basements.
4. Water assurance from DDA specifying the quantity of water to be supplied to this project supported by the water supply scheme approved by DJB for NSP Complex of DDA including the total water availability with the DDA, the quantity of water already committed the quantity of water allotted to the project under consideration and the balance water available.
5. Proportion wise Step Diagram showing the amount of reduction in net Per Capita Water Demand achieved through (1) Each Demand reduction strategy (eg. Low flow fixtures, Xeriscaping etc.), (2) Recycling and Reuse.
6. Water requirement during construction phase is proposed to be met from the treated water of DJB STP. PP is required to clarify the arrangement for reusing the aforesaid treated water along with the mechanism proposed for making this water fit for use in construction.
7. Outlet parameters of proposed STP during operation phase needs to be revisited in order to check the feasibility of its reuse in flushing, horticulture, HVAC etc.
8. The projected cost of the proposed STP is not realistic in view of the technology being adopted. Justification to achieve the standards with the proposed technology is also required.
9. Proposal for a provision of toxic gas (Combustible gas, Carbon dioxide and Hydrogen sulphide) detectors for STP area.
10. The revised realistic cost of environmental monitoring.
11. Details of all the outlets from the proposed building including the outlet of STP required to be submitted with a proposal to install flow-meters at each of the outlets.
12. Rain water harvesting/ storage/ retention arrangement needs to be revised. Recent flash rain data of New Delhi in recent times should be accounted for in the revised design.

13. The PP is required to quantify the no. of labours and the detailed plan for the proposed labour camps for housing them.

14. Air pollution load and its negative impacts to be clarified along with mitigation options during the lifetime of the project.

15. To clarify the location of the cooling towers with its noise mitigation measures.

16. Revised Traffic Management Plan taking into consideration the latest traffic scenario. Detailed calculation of roads, bicycle paths, pedestrian spaces are to be provided.

17. Details of seasonal and yearly ground water table in project area.

18. Revised EMP (Environment Management Plan) for dust mitigation measures during construction as per MoEF Notification No. GSR 94 (E) dated 25.01.2018/Hon'ble National Green Tribunal order in O.A. No.21 of 2014 and O.A. No. 95 of 2014 in the matter of Vardhaman Kaushik Vs. Union of India & others and Sanjay Kulshreshtha Vs Union of India & others/ CAQM Directions issued time to time including registration on Dust Pollution Control Self Assessment Portal with provision of video fencing and low cost sensors for monitoring PM 2.5, PM 10.

19. Justification for proposed Solar power generation viz-a-viz provision of B B L.

20. Proportion wise Step Diagram to be provided showing the amount of reduction in net per capita energy demand achieved through (i) Load Reduction Strategies, (ii) Passive Strategies, (iii) Renewables, and (iv) Energy Recovery strategies. At least 2 % of the total energy demand to be sourced from renewables. Percentage reduction through each of the aforesaid strategies to be provided in a consolidated diagram format for easy comprehension.

21. Proposal for provisioning the energy audit during operation phase.

22. Provision for electric charging of the e-Vehicles as per Building Bye Laws.

23. Specify name and numbers of the post to be engaged by the proponent for implementation and monitoring of environmental parameters.

Agenda No 4

Case No. C-374

Name of the Project	EC for DLF Commercial Complex at 1 E Jhandewalan Extension, New Delhi
Project Proponent	Rajeev Singh, Executive Directory, M/s DLF Limited, DLF Centre, SansadMarg, New Delhi,,Karol Bagh,Central,Delhi-110001
Project EIA coordinator present during the meeting	Ms. Akta Chugh, M/s Perfact Enviro Solutions Pvt. Ltd.
Rep. Of the PP present during the meeting	Mr. Avinash Yadav, M/s DLF Limited
Proposal No.	SIA/DL/MIS/68705/2021
File No.	DPCC/SEIAA-IV/C-374/DL/2021

A. Details of the proposed project are as under:

1. The Proposal is for grant of EC for DLF Commercial Complex at 1 E Jhandewalan Extension, New DelhibyM/s DLF Limited after demolition of existing buildings.
2. The project is located at **Latitude**:28°38'48.72"N, **Longitude**: 77°12'7.15"E
3. **Area Details** :The Gross Plot Area of the project is 4062sq.m. Proposed Total Built-up Area (FAR + Non FAR + Basement Area) is32455sq.m. Existing Area which will be demolished is 21250sqm. Max. Permissible FAR Area is 10155sq.m and Proposed FAR Area is 10155sqm. The Total Non FAR Area is 10465sq.m. The Total Basement Area is 11835 sq.m. Proposed Ground Coverage is2031sq.m. The Total No. of Basements will be 3. The Total No. of Towers are 1. The Maximun Number of Floors are (3B+LG+G+8) nos. Maximum Height of the Building (upto Terrace Level) is39m.

4. **Water Details :**

During Construction Phase, Total water requirement will be 14 KLD out of which 5 KLD Water will be sourced through treated water from nearby STP for construction activities. For domestic use, 9 KLD water will be sourced through tankers. Mobile toilets will be provided at the site. Around 7 KLD of waste water will be generated which will be disposed of via a septic tank followed by soak pits .

During Operational phase, Total Water requirement of the project will be 346 KLD and the same will be met by 182 KLD fresh water from Delhi Jal Board and 164 KLD Treated Water. Total Waste water generated will be 179 KLD which will be treated in in-house STP of capacity 200 KLD. Treated Water from STP will be 164 KLD which will be used for Flushing (76 KLD), Cooling Towers (88 KLD). No Excess treated water will be there, it will be a ZLD motel complex

Number of Rain water collection tank will be 1 of capacity 54 cum. Rainwater will be collected and after primary treatment it will be used for sprinkling, floor mopping & misc. purposes.

5. **Solid Waste Details :**

During Construction Phase, Total 15 kg/day of solid waste will be generated. Out of which 9 kg/day of Biodegradable waste generated will be disposed of at the Municipal Solid Waste Site while 3 kg/day of non-recyclable waste and 3 kg/day of recyclable waste will be sent to authorized recycler. 4066.95 Tones of C & D waste will be generated at the site. The debris of construction material will be used in backfilling; roads etc. & rest will be disposed off as per C&D Waste Management Rules, 2016.

During the Operation Phase, Total of 695 kg/day of Solid Waste will be generated from the project. Out of which, Bio-Degradable Waste of 278 kg/day will be treated in organic waste converters and converted to manure. 209kg/day of Non-Biodegradable Waste and 208 kg/day of Plastic waste which will be given to authorized recyclers

Hazardous waste includes Oil from DG sets (30 Lts/month) which will be carefully stored in HDPE drums in isolated covered facilities and will be given to vendors authorized by CPCB/SPCB.

6. **Power Details :**

During Construction phase, DG sets of capacity 1 x 62.5 KVA will be used which will be bought acoustically enclosed with adequate stack height

During Operation phase, the total power requirement will be2000 kW and will be supplied by BSES Yamuna Power Limited. For Power Back up, DG sets of Capacity 1 × 500 kVA and 2 x 1010 kVA will be installed.

1% of the total power requirement will be met through solar power.

7. **Parking facility:** Total Parking Required is 305 ECS and Total Proposed Parking is419 ECS
8. **Eco-Sensitive Areas:** Distance from Okhla Wildlife Sanctuary is 12.66 Km SEfrom the project site. Asola Wildlife Sanctuary does not fall within the buffer zone of project.
9. **Plantation:** The green area of 406.2 sqm. (10 % of total plot area) will be provided all along the periphery of the project site. At present 29 no. of trees exist at the project site out of which 5 no. of trees will be transplanted/ trimmed and 24 will be retained at the site. Total no. of trees proposed at site are 50 (24 Existing + 26 New).
10. **Cost of the project**: Total Cost of the project is Rs. 98 Crores.

During the presentation the project proponent clarified that application for the environmental clearance is being made on the basis of the conceptual plan and thereafter sanction of building plan will be taken.

B. <u>After due deliberations, the SEAC in its 98th meeting (2nd Sitting) held on 02.02.2022 recommended as follows:</u>

Based on the information furnished, documents shown & submitted, presentation made by the project proponent, SEAC sought the following information:

1. To reconfirm whether project proponent wants to obtain environmental clearance on the basis of conceptual plan only as there is likelihood of changes in the layout and building plans while getting the same sanctioned from local bodies which may require re-appraisal of environmental clearance so granted. Ideally the preliminary 'In Principle Approval' from the local bodies duly rooted through development authorities in accordance with approved master plan is desirable to minimize aforesaid eventuality.
2. Approval from DUAC and Delhi Fire Service.
3. Water assurance from DJB for the proposed fresh water requirement.

4. Water requirement during construction phase is proposed to be met from the treated water from nearby STP. PP is required to clarify the arrangement for reusing the aforesaid treated water along with the mechanism proposed for making this water fit for use in construction phase.

5. Segregated figures for potable and non potable water requirement during construction and operation phase.

6. Proportion wise Step Diagram showing the amount of reduction in net Per Capita Water Demand achieved through (1) Each Demand reduction strategy (eg. Low flow fixtures, xeriscaping etc.), (2) Recycling and Reuse.

7. Revised landscape plan with demarcated green area with soft green area as per MPD. Landscape details to be provided with a measured impact on the micro-climate. Green area should be demarcated as per building bye laws and minimum consolidated area of 15 % of plot area should be kept as soft green area.

8. Rain water harvesting/ retention plan needs to be provided with numbers of RWH pits, taking into account the recent higher flash rain data along with actual percolation rate of the soil at site with layout and location plan.

9. Revised Traffic Management Plan including Traffic Impact Assessment considering the latest traffic scenario. Detailed calculation of roads, bicycle paths, pedestrian spaces including entry and exit to be provided. Further, PP is required to submit mitigation measures to handle critical entry and exit scenarios inside and outside the site minimizing the impact on the city roads. Distribution of mode of traffic as per MPD.

10. Undertaking to assure safety of others property along the boundary wall of the complex.

11. Outlet parameters of proposed STP during operation phase needs to be revisited in order to check the feasibility of its reuse in flushing, horticulture, HVAC etc.

12. Technical feasibility statement for the proposed STP units with quality of output each unit wise.

13. Explore the possibility for tapping the DJB sewer line of the area to treat the sewage and use in the complex as Jhandewalan is an water scarce area.

14. Revised EMP (Environment Management Plan) for dust mitigation measures during construction as per MoEF Notification No. GSR 94 (E) dated 25.01.2018/Hon'ble National Green Tribunal order in O.A. No.21 of 2014 and O.A. No. 95 of 2014 in the matter of Vardhaman Kaushik Vs. Union of India & others and Sanjay Kulshreshtha Vs Union of India & others/ CAQM Directions issued time to time including registration on Dust Pollution Control Self Assessment Portal with provision of video fencing and low cost sensors for monitoring PM 2.5, PM 10.
15. Geotechnical Investigation Report along with details of pre and post monsoon water table in project area.
16. Proportion wise Step Diagram to be provided showing the amount of reduction in net per capita Energy Demand achieved as compared to base case scenario, through (i) Load Reduction Strategies, (ii) Passive Strategies, (iii) Renewables, and (iv) Energy Recovery strategies. Atleast 2 % of total energy demand to be sourced from Renewables. Percentage reduction through each of the aforesaid strategies to be provided in a consolidated diagram format for easy comprehension
17. Proposal for provisioning the energy audit during operation phase.
18. Provision for electric charging of the e-Vehicles as per Building Bye Laws.
19. Specify name and numbers of the post to be engaged by the proponent for implementation and monitoring of environmental parameters.

Agenda No 5

Case No. C-370

Name of the Project	TOR for Construction of Mega Commercial Development at Plot no. LP 1B 02 Gateway District, Aerocity, Indira Gandhi International Airport, New Delhi
Project Proponent	Rajesh Kumar, Chief Projects, M/s Angelica Developers Limited, 3rd Floor, Worldmark-2, Asset-8, Aerocity, NH-8, New Delhi
Project EIA coordinator present during the meeting	Mr. Arvind Deviker, M/s Ind Tech House Consult.

Rep. Of the PP present during the meeting	Ms. Ruchi Ranjan, M/s Angelica Developers Limited
Proposal No.	SIA/DL/MIS/68937/2021
File No.	DPCC/SEIAA-IV/C-370/DL/2021

A. Details of the proposed project are as under:

1. The Proposal is for grant of TOR for Construction of Mega Commercial Development at Plot no. LP 1B 02 Gateway District, Aerocity, Indira Gandhi International Airport, New Delhiby M/s Angelica Developers Limited
2. The project is located at Latitude: 28°33'05.57" N, Longitude: 77°07'38.95" E.
3. Area Details: The Total Plot Area of the project is 92146.77 sqm. The Total Built-up Area will be (FAR + Non-FAR Area) 446597.00sqm. The Max. Permissible FAR is 196632Sq.m and Proposed FAR is 196632sqm .The Non FAR Area is 249965 sqm. The Maximum Permissible Ground Coverage (70%) is 64501.5Sq.m and Proposed Ground Coverage (62%) is 57243.6Sq.m. Maximum number of Floors are(3B + G + 7). Maximum Height of Building (upto terrace) is 35.95 m.
4. Water Details :
    - During Construction stage domestic liquid effluent generation will be limited to small quantity. Mobile toilets and potable water facilities will be provided at site during construction phase for labor and staff
    - During operational phase, total water requirement of the project is expected to be 1952 KLD and the same will be met by 422 KLD of fresh water from Delhi Jal Board and 1532 KLD Treated Water. Wastewater generated (853 KLD) will be treated in On-Site STP of total 1025 KLD capacity. There will be 767 KLD of treated waste water from on site STP and additional 763 KLD of treated water will be sourced from tanker supply. The treated wastewater will be recycled and re-used (515 KLD for flushing, 902 KLD for HVAC, 81 KLD for DG Cooling, 32 KLD for gardening). There will be no discharge from the project
    - Rooftop rainwater of buildings will be collected in 43 RWH Pits.

5. Solid Waste Details :
   - During Construction phase, about 17863.88 MT of construction waste and negligible quantity of domestic waste will be generated from labours employed at site. Most of the construction waste generated will be used on the site as filler material for onsite development, internal roads and pavements. Construction waste if any remaining will be sent to an approved dumping site/landfill site through authorized agency.
   - During Operation phase, about 8.33 TPD solid wastes will be generated in the project. The biodegradable waste (3.88 TPD) will be composted in on-site composting unit and the manure will be used for landscaping and the non-biodegradable waste generated (4.45 TPD) will be handed over to authorized vendors. Hazardous waste generation will be 8.17 LPD. About 60 kg/day of sewage sludge will be generated from the STP and will be used in horticulture as manure for plants and surplus manure will be sold to the farmers.
6. Power Details :

   The total power requirement during operation phase is 21065 KVA and will be met from BSES. For Power Back up, DG sets of Capacity 22500 kVA (10 × 2250 kVA) will be installed.

   Solar photovoltaic power panels of required capacity will be provided
7. Parking facility:The Proposed Total Parking is 4870 ECS and Total Parking Required as per BBL is 4129.27 ECS. Proposed Parking on Surface is 160 ECS and in Basement is 4710 ECS.
8. Eco-Sensitive Areas: Distance from Asola Bird Sanctuary is 11.63 km, SE and Okhla Wildlife Sanctuary is approx. 16.31 km from the project site.
9. Plantation: Total Green Area proposed is 9215sq.m (10 % of Plot Area)&No. of tree plantation required (1 tree per 80 m2 of plot area for development) is 1151 nos. and No. of tree plantation proposed is 1152 nos.
10. Cost of the project: Total cost of the project is Rs. 1150 Crores.

B. ***Based on information furnished, presentation made and discussions held, the SEAC in its 98th meeting held on committee decided to issue following ToR:***

1. *Examine details of land use as per Master plan and land use around 10km radius of the project site. Analysis should be made base on latest satellite imagery for land use with raw images. Share the elevation range of the site (minimum and maximum elevation above mean sea level) and the 10 year, 50 yr and 100 yr flood maps for the area and whether it is within the flood zone or directly on the flood plain of any river.*
2. *Submit details of environmentally sensitive places, land acquisition status, rehabilitation of communities/ villages and present status of such activities.*
3. *Examine baseline environmental quality along with projected incremental load due to the project.*
4. *Environmental data to be considered in relation to the project development would be (a) land, (b) groundwater,(c) surface water,(d) air,(e) bio-diversity,(f) noise and vibrations,(g) socio economic and health.*
5. *Submit a copy of the contour plan with slopes, drainage pattern and low-lying area of the site and surrounding area. If there is any obstruction of the drainage lines and low-lying area proposed by the project, then the rationale for the same may be stated along with any mitigation measures.*
6. *Submit the present land use and permission required for any conversion such as forest, agriculture etc. Submit the land type (kism) of each of the khasra numbers/plots of the site as per the revenue record/last jamabandi of the site. Is the site recorded as a low-lying area, waterbody, gairmumkinpahar, forest in the revenue record ?*
7. *Submit Roles and responsibility of the developer etc for compliance of Environmental regulations under the provisions of EP Act.*
8. *Ground water classification (whether over exploited, critical, semi-critical or safe) as per the Central Ground Water Authority*
9. *Examine the details of Source of Water, water requirement, use of treated waste water and prepare a water balance chart. Segregated figures for potable and non potable water requirement during construction and operation phase.*
10. *A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration and the*

balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.

11. *Rain Water Harvesting proposals should be made with due safeguards for ground water quality. Maximize recycling of water and utilization of rain water, Examine details.*

    a. *Calculate runoff from (a) roof top, (b) other paved areas, and (c) green areas separately.*

    b. *Recent/Enhanced peak rainfall runoff data be used in the runoff calculation for designing storm water retention capacity, to make the site future ready – given the experience of last 5 years with extreme rainfall events and likely increase in frequency of such extreme events due to climate change.*

    c. *Prepare management strategy for runoff for each of these (a) roof top, (b) other paved areas, and (c) green areas*

    d. *Design natural storm water retention capacity in the green areas by marginal lowering, and gradient management to enhance natural retention and percolation, and indicate the natural retention capacity created in cubic metres.*

    e. *Indicate rainfall retention capacity created via storage tanks/percolation pits*

12. *Examine soil characteristics and depth of ground water table for rain water harvesting along with with actual percolation rate of soil at site.*

13. *Examine details of solid waste generation treatment and its disposal*

14. *Examine and submit details of use of solar energy and alternative source of Energy to reduce the fossil energy consumption. Energy conservation and energy efficiency.*

15. *DG sets likely to be used during construction and operational phase of the Project. Emissions from DG sets must be taken into considered while estimation the impacts on air environment. Examine and submit details.*

16. *Examine road/rail connectivity to the project site and impact on the traffic due to the proposed project. Present and future traffic and transport facilities for the region should be analyzed with measures for preventing traffic congestion and providing faster trouble free system to reach different destinations in the city.*

17. *A detail traffic and transportation study should be made for existing and projected passenger and cargo traffic.Traffic Management Plan should take into consideration the latest traffic scenario. Detailed calculation of roads, bicycle paths, pedestrian spaces should be provided.*

18. *Examine the details of transport of materials for construction which should include source and availability.*

19. *Examine separately the details for construction and operation phases both for Environmental Management plan and Environment Monitoring Plan with cost and parameters*

20. *Submit details of a comprehensive Disaster Management Plan including emergency evacuation during natural and man-made disaster.*

21. *Details of litigation pending against the project, if any, with direction/order passed by any Court of Law against the Project should be given.*

22. *The Cost of the project (Capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.*

23. *The Project Proponent should include a specific chapter for control of Dust Pollution during construction phase in the Environmental Management Plan incorporating the steps as per MoEF Notification No. GSR 94 (E) dated 25.01.2018/Hon'ble National Green Tribunal order in O.A. No.21 of 2014 and O.A. No. 95 of 2014 in the matter of Vardhaman Kaushik Vs. Union of India & others and Sanjay Kulshreshtha Vs Union of India & others, CAQM/CPCB/DPCC extant statutory orders/guidelines/directions issued time to time including registration on Dust Pollution Control Self Assessment Portal with provision of video fencing and low cost sensors for monitoring PM 2.5, PM 10.*

24. *Detail of Parking (ECS) as per requirement of Building Bye Laws/ EIA Manual.*

25. *In case the project involves diversion of forests land, guidelines under OM dated 20.03.2013 may be followed and necessary action taken accordingly.*

26. *Submit details of the trees to be conserved and trees to be felled / removed ,if any, by ground coverage, and trees to be removed for other paved areas for the project including their species and whether it also involves any protected or endangered species*

Prepare and submit an existing tree inventory of the site listing each tree along with its species name and girth, and a tree layout plan showing the location of each tree on the site and within 10 m of the site. Measures taken to reduce the number of the trees to be removed should be explained in detail. Submit the details of compensatory plantation.

27. *Explore the possibilities of utilizing the debris/waste materials available in and around the project area.*
28. *Submit Environmental Management and Monitoring Plan for all phases of the project viz. construction and operation.*
29. *Submit NOC of Airport Authority of India for proposed height of the building.*
30. *Detail of water requirement during construction phase andits source. Project Proponent is required to clarify the arrangement for reusing the STP treated water/similar other source along with the mechanism proposed for making this water fit for use in construction phase.*
31. *Outlet parameters of proposed STP during operation phase needs to be checked for the feasibility of its reuse in flushing, horticulture, HVAC etc.*
32. *Justification to achieve the standards with the proposed technology of STP is required to be given.*
33. *Proposal should be included for a provision of toxic gas (Combustible gas, Carbon dioxide and Hydrogen sulphide) detectors for STP area.*
34. *The cost of environmental monitoring projected in the proposal should be commensurate with the environmental safe guard proposed.*
35. *Details of all the outlets from the proposed building including the outlet of STP required to be submitted with a proposal to install flow-meters at each of the outlets.*
36. *Project is required to quantify the no. of labours and the detailed plan for the proposed labour camps and amenities for housing them during construction phase.*
37. *Landscape details to be provided with a measured impact on the micro-climate. Green area should be demarcated as per building bye laws and 25% green area andconsolidated area of minimum 15 % of plot area should be kept as soft green area, so that there should be sufficient recharging of ground water.*

38. *Air quality pollution load and its negative impacts to be clarified along with mitigation options during the construction and lifetime of the project.*

39. *Give Typical Floor Plans with dimensions to demonstrate how natural ventilation & day lighting is being achieved supported with screenshots of suitable software based out puts.*

40. *Proportion wise step diagram to be provided showing the amount of Reduction in Net per capita Energy Demand achieved as compared to base case scenario, through (i) Load Reduction Strategies, (ii) Passive Strategies, (iii) Renewables, and (iv) Energy Recovery strategies. Atleast 2 % of total energy demand to be sourced from Renewables. Percentage reduction through each of the aforesaid strategies to be provided in a consolidated diagram format for easy comprehension.*

41. *Proposal for provisioning the energy audit during operation phase.*

42. *Proportion wise Step Diagram showing the amount of reduction in Net Per Capita Water Demand achieved through (1) Each Demand reduction strategy (eg. Low flow fixtures, Xeriscaping etc.), (2) Recycling and Reuse.*

43. *Elaborated effects of the building activity in altering the microclimates with self-assessment on the likely impacts of the proposed construction on creation of heat island & inversion effects.*

44. *Give plan for managing, conserving the top soil excavated during construction and for its reuse . Give the extent of total soil excavation (in m3) proposed and where the excavated soil will be gainfully used.*

45. *Proposal should include provision for electric charging of the e-Vehicles as per Building Bye Laws..*

46. *Typical Floor Plans with dimensions to demonstrate how natural ventilation & day lighting is being achieved supported with screenshots of suitable software based out puts. Energy Simulation Modeling for the entire complex using appropriate softwares to be submitted along with the proposal.*

47. *Ideally the environmental clearance application alongwith EIA study should be submitted after preliminary 'In Principle Approval' from the local bodies duly rooted through development authorities in accordance with approved master plan*

48. *Any Further clarification on carrying out the above studies including anticipated impacts due to the project and mitigative measure, project proponent can refer to the model TOR available on Ministry website http://moef.nic.in/Manual/Townships.*

B. *GENERAL GUIDELINES*

1. *The EIA document shall be printed on both sides, as for as possible.*
2. *All documents should be properly indexed, page numbered.*
3. *Period/date of data collection should be clearly indicated.*
4. *Authenticated English translation of al material provided in Regional languages.*
5. *The letter/application for EC should quote the MOEF & CC file no. and also attach a copy of the letter prescribing the TOR.*
6. *The copy of the letter received from the SEAC on the TOR prescribed for the project should be attached as an annexe to the final EIA-EMP Report.*
7. *The final EIA-EMP report submitted must incorporate the issues in TOR. The index of the final EIA-EMP report, must indicate the specific chapter and page no. of the EIA-EMP report where the specific issue raised have been incorporated.*
8. *Grant of TOR does not mean grant of EC.*
9. *The status of accreditation of the EIA consultants with NABET/QCI shall be specifically mentioned. The consultant shall certify that his accreditation is for the sector for which this EIA is prepared.*
10. *On the front page of EIA/EMP reports, the name of the consultant/ consultancy firm along with their complete details including their accreditation, if any shall be indicated. The consultant while submitting the EIA/EMP report shall give an undertaking to the effect that the prescribed TORs(TOR proposed by the project proponent and additional TOR given by the MOEF) have been complied with and the data submitted is factually correct(Refer MOEF office memorandum dated 4th august,2009).*
11. *While submitting the EIA/EMP reports, the name of the experts associated with/involved in the preparation of these reports and the laboratories through which the samples have been got analyzed should be stated in the report. It shall clearly be indicated whether these laboratories are approved under the Environment*

(Protection) Act, 1986 and the rules made there under (Please refer MOEF office memorandum dated 4th August, 2009). The project leader of the EIA study shall also be mentioned.

12. *As stipulated in amendment notification No. S.O. 751(E) dated 17th February, 2020, the above ToR would be valid for a period of four years from the date of issue. The project proponent shall submit detailed final EIA Report and EMP prepared as per above ToR within the stipulated period of four years.*

13. *The consultants involved in the preparation of EIA/EMP report after accreditation with Quality Council of India/National Accreditation Board of Education and Training (QCI/NABET) would need to include a certificate in this regard in the EIA/EMP reports prepared by them and data provided by other Organization(s)/Laboratories including their status of approvals etc. vide notification of the MOEF dated 19.07.2013.*

14. *The Prescribed ToR would be valid for a period of four years for submission of the EIA/EMP Reports.*

15. *The EIA-EMP report submitted must incorporate the construction and demolition waste management plan with identification of waste disposal/ recycling site.*

Agenda No 6

Case No. C-375 (TOR)

Name of the Project	Redevelopment of All India Institute of Medical Sciences Project (AIIMS), New Delhi
Project Proponent	All India Institute of Medical Sciences (AIIMS), New Delhi
Project EIA coordinator present during the meeting	Mr. Debbleena Mitra, M/s AECOM India Private Limited
Rep. Of the PP present during the meeting	Dr. Angel Ranjan Singh, All India Institute of Medical Sciences (AIIMS)

Proposal No.	SIA/DL/MIS/71147/2022
File No.	DPCC/SEIAA-IV/C-375(TOR)/DL/2022

A. Details of the proposed project are as under:

1. The Proposal is for Amendment in TOR for Redevelopment of AIIMS obtained for total plot area of 121.65 acres and the built-up area of 14,70,000 sqm, vide File No. 21-29/2021-IA-III(I) dated 05.05.2021.

   Reason for the Amendment in TORs: As per information submitted by the PP Masjid Moth area has been included within the Redevelopment project of AIIMS, which has led to increase in Plot area and change in Built-up area. There has also been change in plot area of East Ansari Nagar. Amendment in TOR has been applied to incorporate these changes and obtain amended TOR with revised configuration.

2. **Area Details:** The Total Plot Area of the project is 152.55 Acres i.e. 6,17,347.078sqm (East Ansari Nagar (107.6 Acres), Trauma Centre Campus Extension (14.95 Acre) and Masjid Moth Campus (30 Acres)). The Total Built-Up Area for the proposed Redevelopment project would be 14,65,695sqm (East Ansari Nagar: 1163497.69 sqm, Masjid Moth: 71638 sqm and Trauma Centre Extension: 230558 sqm). Total Existing Built up Area of the project is 548515 sqm and area to be demolished will be 138727.82sqm. After expansion the total BUA will be 18,75,481.69sqm). Level of Basement is upto three. Maximum Heights of Building is 45 m. The Total nos. of Beds will be 5412 Beds (3000 new and 2412 existing)

3. **Water Details :**

   Existing Phase: For the existing facility, the total water requirement and the gross fresh-water requirement is 1145 KLD for East Ansari Campus while the wastewater generation is in tune of approx. 9000 KLD

   During Construction stage, Total Water requirement will be 2045 KLD. Approx. 45 KLD of fresh water will be required for drinking and domestic purpose which will be supplied through bottled cans from the local freshwater supplier during the days of construction and the balance water will be sourced from DJB. Domestic sewage generated by construction labourers will be 36 KLD. For Construction activities about 2000 KLD of water will be required which will be met by the treated water from the nearby CSTP and will be brought by the private water tanker.

During Operational Phase after Redevelopment, total water requirement of the project is expected to be 16212 KLD and the same will be met by 7470 KLD of Fresh water from Delhi Jal Board and 8742 KLD of Treated wastewater. Wastewater generated (8851.3 KLD) will be treated in proposed on-Site STPs of 850 KLD, 9000 KLD, 300 KLD and existing STP of 2000 KLD capacity. Additionally 200 KLD ETP is proposed to be installed to treat laundry and laboratory wastewater. The treated wastewater will be recycled and re-used for Flushing (3880.5 KLD), for Landscaping (1030 KLD), for AC Cooling Tower make up (3614 KLD Treated wastewater + 876 Fresh water). Excess Treated wastewater of 217 KLD after exploring all possible options of recycling will be disposed in municipal drain.

Rain Water Harvesting Tank of capacity 10,000 m^3 is proposed and No. of Rainwater Harvesting Pits proposed are 117 nos.

4. **Solid Waste Details :**

During Construction phase, 110 kg/day of Municipal Solid Waste will be generated from the site. The Construction waste from new construction will be 73,285 Tons and from Redevelopment work will be 83,236 tons. C& D waste will be used for backfilling as much as possible while excess C&D waste will be disposed to C&D processing facility.

During the Operation phase, the total MSW generated from hostels, Type 3 DU/ 4 DU and by support staff and visitors, and from landscape will be in the tune of 6000 kg/day (approx. 3600 kg/day of biodegradable waste and approx. 2400 kg/day of non-biodegradable wastes).

The proposed development with approx. 3000 beds will generate approx. 9000 kg/day of MSW comprising approx. 5000 kg/day of biodegradable waste and approx. 4000 kg/day of non-bio-degradable wastes.

The cumulative MSW generation in future from the existing and proposed beds (with 5412 beds) will be in the tune of 17000 kg/day comprising of approx. 10000 kg/day of biodegradable waste and approx. 7000 kg/day of non-biodegradable waste

Biomedical Waste: The proposed redevelopment with approx. 3000 beds will generate approximately 4000 kg/day of biomedical wastes. The cumulative biomedical waste generation from the existing beds and the new beds (5412beds) will be in the tune of 8000 kg/day

The other categories of wastes are likely to be insignificant as compared to MSW and Bio-medical Wastes and will be determined during detail design stage

5. **Power Details :**

   During Construction phase, The total power requirement will be 3200 KW. For Power Back up, DG sets of Total Capacity 2000 kVA (2 × 500 kVA and 4 x 250 KVA) will be installed

   During Operation Phase, The total power requirement will be 58199 KW and the same will be met from NDMC. For Power Back up, DG sets of Total Capacity 51500 kVA (22 × 2000 kVA and 10 x 750 KVA) will be installed.

6. **Parking facility:**The Proposed Total Parking is 14,432 ECS (13,364 ECS in basement, stilts and MLCP and 1,345 ECS in Surface parking), presently, there is a provision of 440 ECS for the existing facilities.
7. **Eco-Sensitive Areas:** Distance from Asola Bird Sanctuary is 7.1 km South (ESZ of AsolaBhatti WLS is 6 Km South), and Okhla Bird Sanctuary is 7.6 km East from the project site.
8. **Plantation:** Total Green Area proposed is 143299 sqm&Tree felling will be carried out as per the norms and permission will be obtained from competent authority. No construction activity will be initiated before obtaining the requisite Tree felling permission Compensatory plantation will be done as per the rules. Green belt will be developed along the periphery of the project area
9. **Cost of the project**: Total cost of the project is Rs. 15,500Crores.

During deliberation on 02.02.2022, the Project Proponent gave presentation and following information provided:

The PP informed during deliberation that ToR dated 05.05.2021 was obtained indicating the Plot area of 121.65 acres for East Ansari Nagar and 14.95 Acre for Trauma Centre .

The proposal for amendment of ToR is with the corrected plot areas and addition of Masjid Moth complex i.e. 107.6 Acre for East Ansari Nagar (existing AIIMS Building, 14.95 Acre for Trauma Centre and 30 Acre for Masjid Moth Complex.)

Project Proponent informed during deliberation that Environmental Clearances for Masjid Moth Campus was obtained on 13.08.2012 from SEIAA Delhi for Total BUA of 339368.9 (Plot Area: 129499.52 sqm i.e. 32 Acre) and proposed Trauma Centre is a green field project on a land under Trauma Centre Extension.

As clarified by the PP, there is a proposal for carrying out expansion at 03 different locations under the administrative control of the AIIMS.

It was also deliberated that the site of Trauma Centre is located across the road/ others properties at a distance from existing AIIMS complex at East Ansari Nagar. Similarly, the land of Masjid Moth complex is also at different location adjacent to the existing AIIMS complex.

B. After due deliberations, the SEAC in its 98th meeting (2nd Sitting) held on 02.02.2022 recommended as follows:

(a). The proposal has 03 separate deliverables for the each complex at East Ansari Nagar, Masjid Moth and Trauma Centre Extension land located at Safdarjung Enclave and accordingly required to carry out Environment Impact Assessment studies w.r.t. these 03 buildings separately for a quantifiable control of Environmental safe guards in each complex and submitted distinctly for easy comprehension.

(b). Accordingly, the committee recommended that ToR for the proposed expansion of AIIMS at East Ansari Nagar for BUA 1163497.69 sqm (existing BUA 3,35,289 sqm out of which 133894 will be demolished), Masjid Moth (for BUA 71638 sqm i.e, existing:213226 out of which 4833 sqm will be demolished) and for construction of Trauma Centre Extension proposed at Safdarjung Enclave (BUA 230558 sqm) may be issued as follows :

1. *Examine details of land use as per Master plan and land use around 10 km radius of the project site. Analysis should be made base on latest satellite imagery for land use with raw images. Share the elevation range of the site (minimum and maximum elevation above mean sea level) and the 10 year, 50 yr and 100 yr flood maps for the area and whether it is within the flood zone or directly on the flood plain of any river.*
2. *Submit details of environmentally sensitive places, land acquisition status, rehabilitation of communities/ villages and present status of such activities.*

3. *Examine baseline environmental quality along with projected incremental load due to the project.*

4. *Environmental data to be considered in relation to the project development would be (a) land, (b) groundwater,(c) surface water,(d) air,(e) bio-diversity,(f) noise and vibrations,(g) socio economic and health.*

5. *Submit a copy of the contour plan with slopes, drainage pattern and low-lying area of the site and surrounding area. If there is any obstruction of the drainage lines and low-lying area proposed by the project, then the rationale for the same may be stated along with any mitigation measures.*

6. *Submit the present land use and permission required for any conversion such as forest, agriculture etc. Submit the land type (kism) of each of the khasra numbers/plots of the site as per the revenue record/last jamabandi of the site. Is the site recorded as a low-lying area, waterbody, gairmumkinpahar, forest in the revenue record ?*

7. *Submit Roles and responsibility of the developer etc for compliance of Environmental regulations under the provisions of EP Act.*

8. *Ground water classification (whether over exploited, critical, semi-critical or safe) as per the Central Ground Water Authority*

9. *Examine the details of Source of Water, water requirement, use of treated waste water and prepare a water balance chart. Segregated figures for potable and non potable water requirement during construction and operation phase.*

10. *A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.*

11. *Rain Water Harvesting proposals should be made with due safeguards for ground water quality. Maximize recycling of water and utilization of rain water, Examine details.*

    a. *Calculate runoff from (a) roof top, (b) other paved areas, and (c) green areas separately.*

b. *Recent/Enhanced peak rainfall runoff data be used in the runoff calculation for designing storm water retention capacity, to make the site future ready – given the experience of last 5 years with extreme rainfall events and likely increase in frequency of such extreme events due to climate change.*

c. *Prepare management strategy for runoff for each of these (a) roof top, (b) other paved areas, and (c) green areas*

d. *Design natural storm water retention capacity in the green areas by marginal lowering, and gradient management to enhance natural retention and percolation, and indicate the natural retention capacity created in cubic metres.*

e. *Indicate rainfall retention capacity created via storage tanks/percolation pits*

12. *Examine soil characteristics and depth of ground water table for rain water harvesting along with actual percolation rate of soil at site.*

13. *Examine details of solid waste generation treatment and its disposal*

14. *Examine and submit details of use of solar energy and alternative source of Energy to reduce the fossil energy consumption. Energy conservation and energy efficiency.*

15. *DG sets likely to be used during construction and operational phase of the Project. Emissions from DG sets must be taken into considered while estimation the impacts on air environment. Examine and submit details.*

16. *Examine road/rail connectivity to the project site and impact on the traffic due to the proposed project. Present and future traffic and transport facilities for the region should be analyzed with measures for preventing traffic congestion and providing faster trouble free system to reach different destinations in the city.*

17. *A detail traffic and transportation study should be made for existing and projected passenger and cargo traffic.Traffic Management Plan should take into consideration the latest traffic scenario. Detailed calculation of roads, bicycle paths, pedestrian spaces should be provided.*

18. *Examine the details of transport of materials for construction which should include source and availability.*

19. *Examine separately the details for construction and operation phases both for Environmental Management plan and Environment Monitoring Plan with cost and parameters*

20. *Submit details of a comprehensive Disaster Management Plan including emergency evacuation during natural and man-made disaster.*

21. *Details of litigation pending against the project, if any, with direction/order passed by any Court of Law against the Project should be given.*

22. *The Cost of the project (Capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.*

23. *The Project Proponent should include a specific chapter for control of Dust Pollution during construction phase in the Environmental Management Plan incorporating the steps as per MoEF Notification No. GSR 94 (E) dated 25.01.2018/Hon'ble National Green Tribunal order in O.A. No.21 of 2014 and O.A. No. 95 of 2014 in the matter of Vardhaman Kaushik Vs. Union of India & others and Sanjay Kulshreshtha Vs Union of India & others, CAQM/CPCB/DPCC extant statutory orders/guidelines/directions issued time to time including registration on Dust Pollution Control Self Assessment Portal with provision of video fencing and low cost sensors for monitoring PM 2.5, PM 10.*

24. *Detail of Parking (ECS) as per requirement of Building Bye Laws/ EIA Manual.*

25. *In case the project involves diversion of forests land, guidelines under OM dated 20.03.2013 may be followed and necessary action taken accordingly.*

26. *Submit details of the trees to be conserved and trees to be felled / removed ,if any, by ground coverage, and trees to be removed for other paved areas for the project including their species and whether it also involves any protected or endangered species*

    Prepare and submit an existing tree inventory of the site listing each tree along with its species name and girth, and a tree layout plan showing the location of each tree on the site and within 10 m of the site. Measures taken to reduce the number of the trees to be removed should be explained in detail. Submit the details of compensatory plantation.

27. *Explore the possibilities of utilising the debris/waste materials available in and around the project area.*

28. *Submit Environmental Management and Monitoring Plan for all phases of the project viz. construction and operation.*

29. *Submit NOC of Airport Authority of India for proposed height of the building.*

30. *Detail of water requirement during construction phase andits source. Project Proponent is required to clarify the arrangement for reusing the STP treated water/similar other source along with the mechanism proposed for making this water fit for use in construction phase.*

31. *Outlet parameters of proposed STP during operation phase needs to be checked for the feasibility of its reuse in flushing, horticulture, HVAC etc.*

32. *Justification to achieve the standards with the proposed technology of STP is required to be given.*

33. *Proposal should be included for a provision of toxic gas (Combustible gas, Carbon dioxide and Hydrogen sulphide) detectors for STP area.*

34. *The cost of environmental monitoring projected in the proposal should be commensurate with the environmental safe guard proposed.*

35. *Details of all the outlets from the proposed building including the outlet of STP required to be submitted with a proposal to install flow-meters at each of the outlets.*

36. *Project is required to quantify the no. of labours and the detailed plan for the proposed labour camps and amenities for housing them during construction phase.*

37. *Landscape details to be provided with a measured impact on the micro-climate. Green area should be demarcated as per building bye laws and 25% green area andconsolidated area of minimum 15 % of plot area should be kept as soft green area, so that there should be sufficient recharging of ground water.*

38. *Air quality pollution load and its negative impacts to be clarified along with mitigation options during the construction and lifetime of the project.*

39. *Give Typical Floor Plans with dimensions to demonstrate how natural ventilation & day lighting is being achieved supported with screenshots of suitable software based out puts.*

40. *Proportion wise step diagram to be provided showing the amount of Reduction in Net per capita Energy Demand achieved as compared to base case scenario, through (i) Load Reduction Strategies, (ii) Passive Strategies, (iii) Renewables, and (iv) Energy Recovery strategies. Atleast 2 % of total energy demand to be sourced from Renewables. Percentage reduction through each of the aforesaid strategies to be provided in a consolidated diagram format for easy comprehension.*

41. *Proposal for provisioning the energy audit during operation phase.*

42. *Proportion wise Step Diagram showing the amount of reduction in Net Per Capita Water Demand achieved through (1) Each Demand reduction strategy (eg. Low flow fixtures, Xeriscaping etc.), (2) Recycling and Reuse.*

43. *Elaborated effects of the building activity in altering the microclimates with self-assessment on the likely impacts of the proposed construction on creation of heat island & inversion effects.*

44. *Give plan for managing, conserving the top soil excavated during construction and for its reuse . Give the extent of total soil excavation (in m3) proposed and where the excavated soil will be gainfully used.*

45. *Proposal should include provision for electric charging of the e-Vehicles as per Building Bye Laws..*

46. *Typical Floor Plans with dimensions to demonstrate how natural ventilation & day lighting is being achieved supported with screenshots of suitable software based out puts. Energy Simulation Modeling for the entire complex using appropriate softwares to be submitted along with the proposal.*

47. *Ideally the environmental clearance application alongwith EIA study should be submitted after preliminary 'In Principle Approval' from the local bodies duly rooted through development authorities in accordance with approved master plan*

48. *Any Further clarification on carrying out the above studies including anticipated impacts due to the project and mitigative measure, project proponent can refer to the model TOR available on Ministry website http://moef.nic.in/Manual/Townships.*

B. ***GENERAL GUIDELINES***

1. *The EIA document shall be printed on both sides, as for as possible.*
2. *All documents should be properly indexed, page numbered.*
3. *Period/date of data collection should be clearly indicated.*

4. *Authenticated English translation of al material provided in Regional languages.*
5. *The letter/application for EC should quote the MOEF & CC file no. and also attach a copy of the letter prescribing the TOR.*
6. *The copy of the letter received from the SEAC on the TOR prescribed for the project should be attached as an annexure to the final EIA-EMP Report.*
7. *The final EIA-EMP report submitted must incorporate the issues in TOR. The index of the final EIA-EMP report, must indicate the specific chapter and page no. of the EIA-EMP report where the specific issue raised have been incorporated.*
8. *Grant of TOR does not mean grant of EC.*
9. *The status of accreditation of the EIA consultants with NABET/QCI shall be specifically mentioned. The consultant shall certify that his accreditation is for the sector for which this EIA is prepared.*
10. *On the front page of EIA/EMP reports, the name of the consultant/ consultancy firm along with their complete details including their accreditation, if any shall be indicated. The consultant while submitting the EIA/EMP report shall give an undertaking to the effect that the prescribed TORs(TOR proposed by the project proponent and additional TOR given by the MOEF) have been complied with and the data submitted is factually correct(Refer MOEF office memorandum dated 4th august,2009).*
11. *While submitting the EIA/EMP reports, the name of the experts associated with/involved in the preparation of these reports and the laboratories through which the samples have been got analyzed should be stated in the report. It shall clearly be indicated whether these laboratories are approved under the Environment (Protection) Act, 1986 and the rules made there under (Please refer MOEF office memorandum dated 4th August, 2009). The project leader of the EIA study shall also be mentioned.*
12. *As stipulated in amendment notification No. S.O. 751(E) dated 17th February, 2020, the above ToR would be valid for a period of four years from the date of issue. The project proponent shall submit detailed final EIA Report and EMP prepared as per above ToR within the stipulated period of four years.*

13. *The consultants involved in the preparation of EIA/EMP report after accreditation with Quality Council of India/National Accreditation Board of Education and Training (QCI/NABET) would need to include a certificate in this regard in the EIA/EMP reports prepared by them and data provided by other Organization(s)/Laboratories including their status of approvals etc. vide notification of the MOEF dated 19.07.2013.*

14. *The Prescribed ToR would be valid for a period of four years for submission of the EIA/EMP Reports.*

15. *The EIA-EMP report submitted must incorporate the construction and demolition waste management plan with identification of waste disposal/ recycling site.*

Meeting ended with the vote of thanks to the Chair

7/02/22

(Vijay Garg)
Chairman

(Pankaj Kapil)
Member secretary

(Chetan Agarwal)
Member

(Ashish Gupta)
Member

(Jyoti Mendiretta)
Member

(Pranay Lal)
Member

(Paromita Roy)
Member

(Dr. Kailash Chand Tiwari) Member

(Surinder Kumar Juneja) Member

(Gopal Mohan)
Member

(Ankit Srivastava)
Member

(Dr. Sirajuddin Ahmed) Member