MINUTES OF 54th MEETING OF EXPERT APPRAISAL COMMITTEE (INFRASTRUCTURE-2) HELD DURING 27-28TH AUGUST, 2020.

VENUE: IPB, Jor Bagh, **Through Video Conferencing**

DATE: 27-28th August, 2020

DAY 1- Thursday, 27th August, 2020

54.1 Opening Remarks of the Chairman: The Chairman extended welcome to members and other participants and requested to start the proceeding as provided in agenda adopted for this meeting.

54.2 Confirmation of the Minutes of 53rd Meeting of the EAC (Infra-2) held on 23-24 July, 2020at New Delhi.

There were no comments and the minutes of 53rd Meeting of the EAC (Infra-2) held on 23-24 July, 2020 were confirmed.

54.3 Consideration of Proposals: The EAC considered proposals as per agenda adopted for the meeting. EAC also decided to renumber the Agenda item for day 1 as 54.3.1 to 54.3.8. The details of deliberations held and decisions taken in the meeting are as under.

Agenda item No. 54.3.1.

Expansion of Vijayawada Airport in respect of construction of new integrated terminal building & allied facilities at Kesarapally Village, Gannavaram, Krishna District, Andhra Pradesh by M/s Airports Authority of India, Vijayawada –reg.Environmental Clearance

(IA/AP/MIS/63249/2016; F.No. 10-59/2016-1A-III)

54.3.1.1. The Project Proponent (PP) along with his accredited consultant M/s GreenC India Consulting Private Limited (NABET/EIA/1922/RA0159) made a presentation and explained following main features of the project to the Committee:

(i) The proposal is for Environment Clearance seeking Expansion of Vijayawada Airport in respect of Construction of New Integrated Terminal Building & Allied Facilities at Kesarapally Village, Gannavaram Tehsil, Krishna District, Andhra Pradesh by M/s Airports Authority of India.

(ii) The project/activity is covered under category 'A' of item 7(a) 'Airports' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at Central Level by sectoral EAC.

(iii) Earlier Environment Clearance vide letter no. 10-59/2016-IA.III dated 10th August, 2017was granted to existing project regarding extension of Runway-26 from 2286 m to 3360 m to cater for B747-400, B777-300 type aircraft. Certified Compliance report of existing EC is provided by APPCB vide letter no. APPCB/UH: IV/CFO/MoEF&CC/Comp Rpt/2020 dated 1st August, 2020.

(iv) Terms of Reference (ToR) for the proposed project was granted by MoEFCC vide letter F.No. 10-59/2016-1A-III dated 7th September, 2018.The public hearing for the project was conducted on 25th June, 2019 at the airport premises under the supervision of Joint Collector & Additional District Magistrate, Krishna District.

(v) The existing airport is spread over an area of 1229.65 acres/497.62 ha of land, which is under possession of Airport Authority. Out of total area, 13.32 acres/5.391 ha of the land will be utilized for the proposed development. Total Built-up area proposed is 39,900 sqm. The project area is currently operational as Vijayawada Airport. Existing

infrastructure consists of a terminal building, one runway, taxiway, one isolation bay, car parking and other ancillary facilities. The current proposal involves construction of new integrated terminal building, expansion of car parking, road and utility block. The details are as follows:

Facilities	Existing	Proposed	Total
Terminal Building	Plot Area – 3.3036 ha (33,036 sqm)	Plot Area – 3.036 ha (30,360 sqm)	6.3396 ha (63,396 sqm)
	BUA – 12,642 sqm (1.2642 ha)	BUA – 39,900 sqm (3.99 ha)	52,542 sqm (5.2542 ha)
Runway	1,51,200 sqm (15.12 ha)	-	1,51,200 sqm (15.12 ha)
Apron I	8,056 sqm (0.8056 ha)	-	8,056 sqm (0.8056 ha)
Apron II	29,280 sqm (2.928 ha)	-	29,280 sqm (2.928 ha)
Car parking	5,600 sqm (0.56 ha)	11,400 sqm (1.14 ha)	1,700 sqm (1.70 ha)
Road	8 m wide access road (two lane)	Approach road of 4 lane x 3.5 m wide each and Service Road of 2 lane x 3.5 m wide each	8 m wide access road (two lane) Approach road of 4 lane x 3.5 m wide each and Service Road of 2 lane x 3.5 m wide each
Taxiway	6,016.8 sqm (0.602 ha) with 7.5 m wide shoulder	-	6,016.8 sqm (0.602 ha) with 7.5 m wide shoulder
Green cover	85,000 sqm(8.5 ha)	Area of green cover remains same	85,000 sqm (8.5 ha)

(vi) At present, Vijayawada Airport requires 50 KLD of fresh water, which is sourced from the bore well. Total water requirement after expansion will be 710 KLD, of which fresh water requirement would be 290 KLD and treated waste water reuse would be 420 KLD. Fresh water requirement will be increased from 50 KLD to 290 KLD. During construction phase, 30 KLD of water shall be utilised. The water shall be sourced from bore well. The wastewater of 450 KLD so generated will be treated in a proposed Sewage Treatment Plant of 550 KLD capacity and the treated water will be used for HVAC and flushing purpose.

(vii) Total 833.4 kg per day of solid waste will be generated after expansion. The waste shall be collected in three separate bins namely biodegradable, non-biodegradable and domestic hazardous wastes. The respective solid wastes shall be handed over to authorized waste collectors for disposal. Biodegradable MSW will be treated at site by Organic Waste Converters and manure generated will be used for plantation. Recyclable waste will be disposed-off by selling. Inert waste will be sent to MSW Disposal sites for land fill. Hazardous waste shall be treated in accordance with Hazardous and Other Wastes (Management and Trans-boundary Movement) Rules, 2016.

(viii) Total electrical load shall increase from of existing airport is 1250 kVA which is supplied by Andhra Pradesh State Electricity Board and the additional requirement for the proposed developed is 1344 KW. Installation and commissioning of 1MW peak grid connected ground mounted solar power plant is proposed with existing AAI Vijayawada airport premises.

(ix) Rainwater harvesting for ground water recharge has been considered and total volume of water available for Rain Water Harvesting is 27.7 m^3/hr for the proposed expansion area. Considering 2 m as length and 1 m as effective depth of pit, it has been estimated that additional 2 rainwater harvesting pits shall have to be constructed.

(x) Current car parking exists over an area of 5600 m^2 having parking for 200 vehicles. The same will be extended by another 11400 m2 ha with parking facility for 150 Taxi, 10 no. Bus, VIP parking for 10 cars with separate car/scooter parking for AAI and Airline staff at appropriate location.

(xi) Eluru Canal is passing through the project site where no development is proposed at the current stage. Apart from this, there are no drainage channels that are going to be affected by the proposed project.

(xii) No tree cutting will be required. Existing landscaped land exists over an area of 85000 m^2 which remains same in the proposed development. The existing greenbelt shall be further developed and preserved.

(xiii) The estimated cost of the project is Rs. 500 crores. The expected completion schedule of the proposed project is 24 months.

(xiv) Employment potential: During the project operation stage for the purposes of day-to-day professional and maintenance works, about 170 additional staff would be required. The total required manpower during operation phase is 400.

(xv) Benefits of the project: There will be increased connectivity to the surrounding areas and will aid the economic development of the region. During the construction phase& operation phase, employment opportunities will be provided. The proposed Airport expansion will enhance the safety, security and environmental standards and passenger comfort at Airport.

54.3.1.2. The EAC took note of above mentioned information about the project. The EAC deliberated on the certified compliance report provided by the Andhra Pradesh Pollution Control Board, Vijaywada vide letter No. APPCB/UH: IV/CFO/MoEF&CC/Comp/Rpt/2020- dated 01.08.2020. As per Compliance report, it was observed that the project authority had completed extension project of existing run way with Semi Dense Ashphalt Concrete (SDAC) and the completed works of storm water drains, compound wall and perimeter road. The EAC noted that three conditions of existing EC dated 10th August 2017 are not complied. For non-complied conditions, the project proponent has submitted an affidavit by affirming the followings:

(i) Specific EC condition no.22 refers to installation of a monitoring station for ambient air and noise levels in the nearest village to the airport. PP submitted that the process has been initiated and the task shall be completed by 31st October, 2020.

(ii) Specific EC condition no.26 is for carrying out a study on traffic density and parking capability within 5 km radius of the airport site and subsequently prepare a traffic decongestion plan. PP submitted that we are on the verge of finalizing a reputed Agency for the job and will be able to submit the required documents by 30thNovember, 2020.

(iii) Specific EC condition no. 27 is for installation of LED/CFLs/TFLs in areas outside the building and proper disposal of the used CFLs. With regards to this, PP informed that they have already taken action by replacing the existing CFLs by LED luminaries and the work is almost complete.

The Committee also deliberated, inter-alia, upon the issues raised during the Public Hearing/Public Consultation meeting. It was noted that the concerns were expressed primarily on shifting of garbage dump yard, coming under the flying zone of Airport, mining activity being

carried out near their village in the name of Airport Authorities, open burning of garbage in the dump yard, encroachment by constructing a compound wall, employment opportunities to the locals, effective utilization of CSR funds for the development of surrounding villages, providing housing under R&R package. The Committee observed that the response of PP to the issues raised during Public hearing is satisfactory addressed and has been incorporated in the final EIA-EMP report.However, EAC noted that non-compliance points of existing EC are not addressed adequately.

Later on scrutiny of EIA-EMP report, it is noted that base line data in EIA-EMP report was collected during September- November, 2016. As per the OM dated 31.10.2017, base line data should not be older than 3 years, at the time of submission of proposal, for grant of Environmental Clearance. This confirms to be serious lapse on the part of the Consultant. Therefore, EAC recommends deferring the proposal and suggested followings;

(i) to recollect the fresh baseline data including ambient noise with necessary environmental impact mitigation measures to be supplemented with EIA-EMP report; and

(ii) also to submit the action taken report on above referred 3 non-compliance conditions of existing EC i.e. 22, 26 & 27 related to installation of ambient monitoring stations, traffic decongestion plan and management of CFLs by LED luminaries.

Agenda item No. 54.3.2.

Setting up of Common Hazardous Waste and Bio-medical Waste Treatment Facility at Harohalli Industrial Area - 2nd Phase, Plot nos. 312-A2 and 312-A2 (Part), Harohalli Village, Ramanagara District, Karnataka by M/s Maridi Eco Industries Private Limited – reg. Reconsideration for Environmental Clearance

(IA/KA/MIS/71634/2017; F.No. 10-2/2018-IA-III)

54.3.2.1. The EAC noted the following:-

(i) The proposal was earlier considered by Expert Appraisal Committee (Infra-2) in its 39th meeting held during 26-28 March, 2019. After deliberation upon the proposal, the Committee asked the project proponent to submit Closure plan for the existing site, revised water balance for the proposed project and CER plan for the proposed project. Project Proponent has submitted the additional information on Ministry's website on 25.04.2019.

(ii) The proposal was again considered by Expert Appraisal Committee (Infra-2) in its 41st meeting held during 27-29 May, 2019. Due to ambiguity on site use, the Committee asked the project proponent to submit the status of the land on which the project is proposed. Project Proponent has submitted the additional information on Ministry's website on 22.07.2020.

54.3.2.2. The project proponent informed the EAC that KIADB, has transferred lease hold rights of the 9,835 sqm of land in plot nos. 312-A2 and 312-A2 (Part) of Harohalli 2nd Phase Industrial Area for establishment of Common Hazardous Waste & Biomedical Waste Treatment Unit. The Lease cum Sale Agreement was made with the KIADB on 23.06.2020 for the proposed land for Establishment of Common Hazardous Waste & Biomedical Waste Treatment Unit.

Additionally, Ambient air quality monitoring baseline studies were conducted during summer season (March 2018 - May 2018) at 10 different locations. The minimum and

maximum levels of $PM_{2.5}$ are recorded in the range of 18.1 to 28.5 µg/m^3, whereas the $PM_{10}$are in the range of 46.2 to 58.1 µg/m^3. The SO_2concentrations within the study area are in the range of 12.8 to 18.4 µg/m^3 and the oxides of nitrogen observed are in the range of 18.6 to 24.8 µg/m^3. Ozone concentrations were also monitored in the study area and are found to be in the range of 15.4 to 22.3 µg/m^3, Carbon Monoxides observed are in the range of 362 to 660 µg/m^3, Benzene observed are in the range of 0.53 to 0.68 µg/m^3, Ammonia observed are in the range of 14.9 to 21.0 µg/m^3. The observed pollutant levels were compared with CPCB National Ambient Air Quality Standards and found to be well within the limits.

The EAC, based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, **recommended the** project for grant of environmental clearance and stipulated the following specific conditions along with other Standard EC Conditions as specified by the Ministry vide OM dated 04.01.2019 for the said project/activity (specified at **Annexure-2**&**3** of the minutes):

(i) As proposed incinerators shall be equipped with flue gas treatment system consisting of quencher, scrubber, bag filters, activated carbon system etc. along with a minimum stack height of 30 m shall be provided to comply with the emission standards. DG sets shall be operated only during power failures.

(ii) Waste such as incineration ash generated in the process of incineration and sludge from wastewater treatment plant shall be stored in a separate area under shed so as to avoid entry of rain water during the monsoon.

(iii) All possible measures shall be adopted for odour contour shall be controlled by providing proper ventilation in the site, spraying ecosorb (organic and biodegradable chemical) around odour generation areas at regular intervals and by developing greenbelt with odour control species.

(iv) Fresh water of 80 KLD will be met from KIADB indusial water supply. No ground water abstraction shall be done at site.

(v) Wastewater generated from container washing, floor washing, incinerators etc. shall be treated in in-house effluent treatment plant. Rain water runoff from other hazardous waste management area shall be collected and treated in the effluent treatment plant. No wastewater/ treated water shall be discharged from the facility.

(vi) The Environmental Clearance to the project is primarily under provisions of EIA Notification, 2006. The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/ Regulations or Statutes as applicable to the project.

(vii) The Project proponent should ensure that the facility fulfils all the provisions of Hazardous and other Wastes (Management and Transboundary Movement) Rules, 2016&the Protocol for 'Performance Evaluation and Monitoring for the same as published by the CPCB and Bio-Medical Waste Management Rules, 2016and the revised guidelines issued by CPCB for Common Bio-Medical Waste Treatment and Disposal Facility.

(viii) The TSDF should handle the waste generated from the member units as well as health establishment for bio-medical waste processing. Tracking system for movement of Hazardous and Bio-Medical Waste from generator to the facility site shall be put in place.

(ix) Sufficient number of Piezometer wells shall be installed in and around the project site to monitor the ground water quality in consultation with the State Pollution Control Board / CPCB. Periodical ground water/soil monitoring to check the contamination in and around the site shall be carried out.

(x) Trend analysis of ground water quality shall be carried out each season and information shall be submitted to the SPCB and the Regional Office of MoEF&CC.

(xi) Ambient air quality monitoring shall be carried out in and around the landfill site at up wind and downwind locations. On-line real time continuous monitoring facilities shall be provided as per the CPCB or State Board Directions

(xii) As proposed Greenbelt shall be developed in a minimum of 33% area of the proposed facility with native species (as per CPCB guidelines). It shall be ensured that all the trees and other plantation within facility do not in any way encourage the incorporation of toxic materials in the food chain

(xiii) As proposed, onsite and off-site disaster management plan shall be operationalised in consultation with district level authority in order to minimize the hazards to human health or environment from fires, explosion or any unplanned sudden or continuous release of hazardous waste or hazardous waste constituents to air, soil or surface water.

(xiv) As per the Ministry's Office Memorandum F.No. 22-65/2017-IA.III dated 01.05.2018, and as proposed, a fund of Rs. 0.30 Crores (@ 2% of project Cost) shall be earmarked under Corporate Environment Responsibility (CER) for the activities such as Health check-up for communities in the nearby villages and distribution of medicines to the needy, Bore wells, Hand pump in the nearby villages, modernization of class rooms, donation of computers, note books, other need based education materials, provision of potable drinking water and improving sanitation in local schools, in PHCs and PHSCs for improving medical infrastructure, Plantation drives would be conducted on World Environment Day in the nearby villages, For employee children and others studying in the nearby schools and Monitoring, Impact Assessment and Independent study etc. The activities proposed under CER shall be restricted to the affected area around the project. The entire activities proposed under the CER shall be treated as project and monitored strictly. The monitoring report shall be submitted to the regional office as a part of half yearly compliance report, and to the District Collector. It should be posted on the website of the project proponent.

Agenda item No. 54.3.3.

Integrated Common Hazardous Waste Treatment, Storage, Disposal & Recycling Facility at Industrial Growth Center (IGC), Maneri Village, Mandla District, Madhya Pradesh by M/s Ramky Enviro Engineers Limited - Reconsideration for Environmental Clearance

(IA/MP/MIS/117811/2019; F.No. 10-40/2019-IA-III)

54.3.3.1. The EAC noted that this proposal was earlier considered in its 48th meeting held during 28-29 January, 2020 wherein the EAC observed a number of deficiencies in the EIA Report. As desired by EAC, PP has submitted revised EIA Report on Ministry's website on 22.07.2020. The EAC deliberated on the revised EIA Report and took note of the following response to issues raised by EAC:

S. No.	Deficiency identified by the EAC	Improvements made in the Revised EIA Report.
(i)	The EIA does not give details of industries, their nature and type of hazardous waste generated that will go into proposed TSDF.	Annual hazardous waste inventory in the state of Madhya Pradesh, published by MPPCB for the past few years has been taken into consideration for estimating the future waste quantity (details provided in Chapter 1, Section 1.3.1.). Different types of industries in the state of Madhya Pradesh in different regions are listed out in Table 1.4 in Chapter 1. Different kinds of hazardous wastes expected to be treated at the

		proposed facility from different kinds of industries are presented in Table 1.5.
(ii)	There is mix up of units in the EIA report. Both British system (acres) and metric system (square meters) are used in the report. Single system need to be used.	The EIA report has been revised with all the units presented in metric system only.
(iii)	Fresh water requirement for various activities like gardening, incineration, biomedical waste treatment etc, need to be justified. Explore the possibility of use of treated wastewater for such activity.	As advised, the possibility of using treated water to the maximum extent has been looked at, by providing additional tertiary treatment systems to make use of treated water reuse for all the processes within TSDF. Also, it is now proposed to utilize only the treated water for gardening/greenbelt development purposes. Similarly, for stabilization operations, it is proposed to use only the treated water. For incineration, it is proposed to meet 2/3rd of the water requirement through treated water only. The revised water requirement details are presented in Table 2.5. in Chapter 2
(iv)	There is no data of quantity of different type of waste that would go into incinerator. There is no mention of the capacity of incinerator in the project description.	Information on different types of waste that would go into incinerator (such as pesticide wastes, phenolic wastes etc.) has been provided in Section 2.5.5 in Chapter 2. Capacity of incinerator (2,500 kg/hr) and the capacities of all other proposed facilities are now mentioned in the project description(s) given in Chapter 2.
(v)	The project description indicates generation of 2 MW of power each from renewable and Waste to Energy. Lay out plan does not reflect the location of the facility. There is no clarity on how the industry is going to achieve this. The EIA report is silent on Waste to Energy system to be adopted and power generation from Renewable sources.	It is proposed to generate 2 MW of power from renewable energy (solar power project) and another 2 MW of power from high calorific value hazardous waste streams/alternate fuel produced from the Alternate Fuel and Raw Material Facility (AFRF). The proposed location of the waste to energy plant is shown in the layout of the project (presented in Figure 2.3 in Chapter 2). Section 2.9 and Section 2.10 in Chapter 2 provide detailed description of the Solar Power Plant and the Waste to Energy Plant respectively.
(vi)	In baseline data collection, report mentions that data is generated during October to December but is silent on all other aspects like frequency of collection. There is no clarity-if data (including micro-meteorology) is collected twice a week or for the entire duration of the period of study.	To understand the local micrometeorology, an automatic weather station (solar powered) was installed at the proposed site for collecting the data - Temperature, Relative Humidity, Wind Speed and Wind Direction. The weather station was programmed to record and automatically save the readings on an hourly basis. The primary data thus collected during the entire study period (October to December 2019) has been summarized and presented in Table 3.1 in Chapter 3. Ambient air quality monitoring stations were selected on the basis of surface influence, demographic influence and meteorological influence. During the study period, monitoring was carried out twice per week for 12 weeks at each sampling station for all the twelve parameters listed in the National Ambient Air Quality (NAAQ) Standards. Sulphur dioxide (SO2), Oxides of Nitrogen (NOx),

		Particulate Matter (PM) presented in Tables 3.5 to 3.9 in Chapter 3. The water sampling, noise and soil samplings were carried out once in the specified season of October to December 2019. Table 3.12 and Table 3.13 in Chapter 3 present the summary of analysis results for ground water and surface water samples respectively. Table 3.15 presents the noise monitoring data and Table 3.18 presents the soil analysis results.
(vii)	No quality assurance of Ecological data. For example-Dalbergialatifolia is said to be present in the buffer zone but common name is indicated as Sitasal (spelling error) *D. sisoo* is different from *D. latifolia*. Among fauna, Green Parakeet (*Psittacaraholochlorus*) is mentioned. The species of parakeet mentioned is native of Central America and not found in India.	The ecology and biodiversity data and the list of fauna is revisited and necessary corrections were carried out and presented in Section 3.8 of Chapter 3.
(viii)	Impacts and mitigation does not mention incremental increase (for each parameter like air, water, noise, vibration etc,) due to project and project related activities. Quantification is the need in an EIA and mitigation recommended should correspond to the impacts. Treatment descriptions are schematic flow sheets and do not mention the capacities or mass balance. While mentioning odour control it only mentions, as care shall be taken to avoid smell nuisance. What kind of care is to be mentioned.	The quantification and expected incremental rise due to air emissions from TSDF processes were estimated for PM, SO2, and NOx parameters. The isopleths depicting the impact zones around the project site were given in Section 4.6.3 in Chapter 4. Similarly, Section 4.7 in Chapter 4 presents the details of water requirement, wastewater generation and water balance. Section 4.14 in Chapter 4 presents the proposed Odour Management.
(ix)	Additional studies (chapter 7) cover Risk and disaster. It is a stand-alone chapter and findings of this chapter are not integrated on chapter 4-impact and mitigation.	As suggested, Chapter 7 has been revised. Findings from chapters 4 and 7 have now been integrated.

After deliberation EAC observed that above replies given by PP are satisfactory. Additionally, it is noted that the baseline study carried out from October - December 2019 at 8 locations indicates that the maximum and minimum values of PM_{10} are in the range of 56.1 to 53.2 µg/m^3, whereas the $PM_{2.5}$ are in the range of 34.5 to 28.7 µg/m^3. The SO_2concentrations within the study area are in the range of 14.8 to 10.5 µg/m^3 and the NOx are in the range of 25.1 to 20.5 µg/m^3. Ozone concentrations were also monitored in the study area and are found to be in the range of 26.7 to 20.4 µg/m^3, CO are in the range of 640 to 492 µg/m^3, Benzene observed are in the range of 0.75 to 0.55 µg/m^3, Ammonia observed are in the range of 21.4 to 15.6 µg/m^3. The observed pollutant levels were compared with CPCB National Ambient Air Quality Standards and found to be well within the limits.

The EAC, based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, recommended the project for grant of environmental clearance and stipulated the following specific conditions along with other Standard EC Conditions as specified by the Ministry vide OM dated 04.01.2019 for the said project/activity (specified at Annexure-2 and Annexure-3 of the minutes):

(i) The Environmental Clearance to the project is primarily under provisions of EIA Notification, 2006. The Project Proponent is under obligation to obtain approvals

/clearances under any other Acts/ Regulations or Statutes as applicable to the project.

(ii) As proposed, Incinerator shall be provided with all necessary air pollution control devices (such as quencher/spray drier, venturi-scrubber, bag filter etc.) along with a stack height of minimum 30 m to ensure that the emissions be within the prescribed limits as per MoEF&CC Gazette vide GSR 481(E) dated June 26, 2008.

(iii) Boilers shall be provided with air pollution control devices along with a stack of minimum 30 m height and DG sets will be provided with adequate stack height for proper dispersion of sulfur dioxide and oxides of nitrogen.

(iv) As proposed, in the Used Oil Recycling plant, all the process vents are connected to scrubber with activated charcoal to control of emission form vents. In the Aluminium Dross Reprocessing Facility, Scrubbers shall be utilized to treat the flue gases.

(v) As proposed, in the Spent Pot Liner (Carbon Portion) Reprocessing facility, APCDs such as Cyclone, Pulse Jet Bag Filter, and ID Fan etc. shall be installed to treat the emissions from rotary kiln, crushing and screening. There shall be a common stack after the treatment. In the Spent Pot Liner (Refractory Portion) Reprocessing and Disposal Facility, Bag Filter to be attached to Pulverizer.

(vi) The Project proponent should ensure that the facility fulfils all the provisions of Hazardous and other Wastes (Management and Transboundary Movement) Rules, 2016 & the Protocol for 'Performance Evaluation and Monitoring for the same as published by the CPCB and Bio-Medical Waste Management Rules, 2016and the revised guidelines issued by CPCB for Common Bio-Medical Waste Treatment and Disposal Facility. Tracking system for movement of Hazardous and Bio-Medical Waste from generator to the facility site shall be put in place.

(vii) Bio-medical waste as received for common facility shall follow the revised guidelines issued by CPCB for Common Bio-Medical Waste Treatment and Disposal Facility.

(viii) The Waste to Energy Plant shall be provided with all necessary air pollution control devices (such as quencher/spray drier, venturi-scrubber, bag filter etc.) along with a stack height of minimum 30 m to ensure that the emissions be within the prescribed limits as per MoEF&CC Gazette vide GSR 481(E) dated June 26, 2008.

(ix) The leachate generated from landfill will be collected into leachate collection pond and treated in ETP. The effluent from floor washings, workshop etc., will be collected, treated in O&G trap, settling tank and recycle back for dust suppression, etc.The domestic wastewater will be collected and treated in STP

(x) The waste water from bio-medical sections shall be collected, disinfected and after necessary treatment reused for dust suppression on landfill area.

(xi) Waste such as incineration ash generated in the process of incineration and sludge from wastewater treatment plant shall be stored in a separate area under shed so as to avoid entry of rain water during the monsoon.

(xii) All possible measures shall be adopted for odour control. Odour shall be controlled by providing proper ventilation in the site, spraying ecosorb (organic and biodegradable chemical) around odour generation areas at regular intervals and developing greenbelt with odour control species.

(xiii) Total water requirement will be 120 KLD, of which, 60 KLD of fresh water will be met from MP Industrial Development Corporation Limited and 60 KLD of treated water shall be reused. No ground water abstraction shall be done.

(xiv) Wastewater generated from container washing, floor washing, incinerators etc. including leachate collection shall be treated in in-house treatment plant. Rain water runoff from other hazardous waste management area shall be collected and treated in the effluent treatment plant. No wastewater/ treated water shall be discharged from the

facility.

(xv) As TSDF handles the waste generated from the member units as well as health establishment for bio-medical waste processing, the employees shall be provided with PPE like safety glasses, boots, gloves, ear plugs etc. as necessary. Employees shall also be given immunization, from time to time.

(xvi) The project proponents shall adhere to all conditions as prescribed in the Protocol for 'Performance Evaluation and Monitoring of the Common Hazardous Waste Treatment, Storage and Disposal Facilities' published by the CPCB.

(xvii) As proposed 04 number of Piezometer wells shall be installed in and around the project site to monitor the ground water quality in consultation with the State Pollution Control Board / CPCB. Periodical ground water/soil monitoring also to check the contamination in and around the site shall be carried out.

(xviii) Trend analysis of ground water quality shall be carried out each season and information shall be submitted to the SPCB and the Regional Office of MoEF&CC.

(xix) Ambient air quality monitoring including gaseous emission shall be carried out in and around the landfill site at up wind and downwind locations at least three locations at 120 degree location around TSDF. Location of air quality monitoring station may be decided in consultation with CPCB/SPCB. On line real time continuous monitoring facilities shall be done as per the CPCB or State Board Directions

(xx) As proposed Greenbelt shall be developed in a minimum of 33% area of the proposed facility with native species (as per CPCB guidelines). It shall be ensured that all the trees and other plantation within facility do not in any way encourage the incorporation of toxic materials in the food chain

(xxi) As proposed, on site and off-site disaster management plan shall be operationalised in consultation with district level authority in order to minimize the hazards to human health or environment from fires, explosion or any unplanned sudden or non sudden release of hazardous waste or hazardous waste constituents to air, soil or surface water.

(xxii) As per the Ministry's Office Memorandum F.No. 22-65/2017-IA.III dated 01.05.2018, and as proposed, a fund of Rs. 0.80 Crores (@ 2% of project Cost) shall be earmarked under Corporate Environment Responsibility (CER) for the activities such as Health check-up for communities in the nearby villages and distribution of medicines to the needy, Bore wells, Hand pump in the nearby villages, modernization of class rooms, donation of computers, note books, other need based education materials, provision of potable drinking water and improving sanitation in local schools, in PHCs and PHSCs for improving medical infrastructure, Plantation drives would be conducted on World Environment Day in the nearby villages, For nearby villagers - Women empowerment initiative for SHGs, etc. The activities proposed under CER shall be restricted to the affected area around the project. The entire activities proposed under the CER shall be treated as project and shall be monitored. The monitoring report shall be submitted to the regional office as a part of half yearly compliance report, and to the District Collector. It should be posted on the website of the project proponent.

Agenda item No. 54.3.4.

Proposed expansion of secured landfill (Phase IV) of Integrated Common Hazardous Waste Treatment, Storage and Disposal Facility (TSDF) at plot number 9701-9716, GIDC Ankleshwar, proposed by M/s Bharuch Enviro Infrastructure Limited - Reconsideration for Environmental Clearance

(IA/GJ/MIS/22321/2014; F.No. 10-25/2019-IA-III)

54.3.4.1. The EAC noted that proposal was earlier considered by Expert Appraisal Committee (Infra-2) in its 51st meeting held during 21-22 May, 2020. The EAC asked the project proponent to submit additional information. Project Proponent has submitted the additional information on Ministry's website on 29.07.2020.

54.3.4.2. During the meeting the project proponent has submitted point wise reply to the observations raised by EAC. The details are as follows:

<table>
<tr><th>S.No.</th><th>Deficiency identified by the EAC</th><th>Submission by project proponent</th></tr>
<tr><td>(i)</td><td>Action taken report on the partially complied conditions to be submitted to Regional Office of MoEFCC at Bhopal and get their recommendations on the compliances.</td><td>The Action Taken report on partially complied conditions was submitted to Regional Office of MoEF& CC at Bhopal vide letter no. BEIL/ANK/2020-21/13 dated 29thJune, 2020. The Regional Office of MoEFCC has issued closure of non-compliances vide letter no 5-28/2008/(ENV)/597 dated 26.08.2020.</td></tr>
<tr><td>(ii)</td><td>Total wastewater generated as per EIA report is 396.5 KL. However, there is no clarity in mode of waste water treatment. Therefore, provide details of quantities to be treated in MEE and the quantity to be sent to CETP. Also, the details of sources of waste water to be routed to MEE and CETP.</td><td>The break-up of 396.5 KLD waste water generated from various sources and the treatment provided are given below;
<table>
<tr><th>Sources of waste water</th><th>Quantity in KLD</th><th>Treatment system adopted</th></tr>
<tr><td>Leachate from land fill</td><td>260.5</td><td>MEE**/CETP*</td></tr>
<tr><td>Process – Bleed from scrubber for cleaning of flue gases arising from Incinerator.</td><td>60</td><td>Recycle in Incineration (Quenching)</td></tr>
<tr><td>Drum washing</td><td>11</td><td>MEE**/CETP*</td></tr>
<tr><td>Cooling water blow down.</td><td>2</td><td>MEE**/CETP*</td></tr>
<tr><td>Boiler blow down and Reject from DM Plant</td><td>8</td><td>MEE**/CETP*</td></tr>
<tr><td>Washings/Lab-</td><td>55</td><td>MEE**/CETP*</td></tr>
<tr><td>Total</td><td colspan="2">396.5</td></tr>
</table>
*Whenever Multiple Effect Evaporator (MEE) plant is under maintenance/or cleaning of callendria, the effluent is sent to CETP
**Condensate generated from MEE will be sent to CETP
BEIL is having a MEE plant with installed capacity of 15 KL/hr.
During 2019-20, 25612 KL effluent was evaporated in MEE. Whereas, 14020 KL was sent to CETP.</td></tr>
<tr><td>(iii)</td><td>Give average daily energy consumption for operation of MEE for the previous phases (Randomly for a few days in a month for previous 5 years) in a manner that facilitate verification at a later stage by Competent Authority.</td><td>Daily energy consumption in KWH (randomly) for past five years has been submitted. Energy and fuel consumption in the month of March 2020 are reported to be – 195038 Kwh; Furnace Oil in Boiler- 21441KL; Furnace oil in Spray Dryer- 169294 KL; Steam Utilisation from WHRB- 716597 Tons; Steam Utilisation from Boiler- 174568 tons.</td></tr>
</table>

(iv)	Is this the final proposal for expansion? If not, what will be the ultimate capacity?	This is the final proposal for expansion of Secured Landfill at the existing site at Plot No.9701-9716, GIDC Industrial Estate, Ankleshwar District- Bharuch, Gujarat. After the expansion, the ultimate capacity of the landfill will be 50 Lac MT.
(v)	The date since when the TSDF is in operation.	Since 4th April, 1998
(vi)	Proposed expansion of the existing facility does not meet the sitting parameter in respect of ground water. Submit the ground water table that prevailed during the first baseline study (prior to establishment) and current ground water table in and around project site obtained from the Concerned Ground Water Authority. Also submit details of measures taken to prevent ground water contamination?	• EIA Report was prepared in October 1997 by National Productivity Council (NPC). As per report the site was found suitable for landfill. Accordingly, Government of Gujarat notified the site vide notification dated 06.01.1998. • The ground water level at time of selection of site was 29 meter bgl. The bottom line was at the depth of 8.8 meter below ground level (bgl). • The present ground water level is at 32.5 meters bgl as per Gujarat Water Resources Development Corporation (GWRDC). • Therefore, siting criteria as prescribed by CPCB, i.e. bottom liner system should be 2 meter above ground water table has been complied with. Steps taken to prevent contamination ground includes, inter-alia, (i) Liner system, as per the "Criteria for Hazardous Waste Landfills" published by CPCB is followed. A combination of Clay liner & geo-synthetic liner is provided to make the bottom impervious. The clay liner is tested after preparation to check the permeability. Pressure testing & vacuum testing is carried out in presence of experts at the HDPE sheet joints; (ii) proper leachate collection and transfer system, etc.
(vii)	In EIA, there are several factors in which ground water quality exceeds the stipulated parameters. e.g. TDS in ground water Sample 1 & 9, total hardness in ground water sample 1, 2 & 9, Nitrate in ground water 2 & 9, Phenol compounds in all samples (except ground water 1) exceed the limits, Lead in ground water sample 6,7 & 8. Please explain with a table the (1) increase compared to First baseline data prior to establishment of the facility, (2) reasons for increase and action taken to prevent the same, (3) how does PP rules out contamination from the TSDF facility?	Ankleshwar Industrial Estate was set up by Gujarat Industrial Development Corporation in 1975. This industrial estate spreads over an area of 1574.34 hectares and houses more than 1200 industries, which consist of industries manufacturing chemicals, pesticides, pharmaceuticals, bulk drugs, petroleum products, engineering, textiles, plastics, rubber, packaging etc. TSDF site is located within the Notified Industrial Estate of Ankleshwar at the south east corner. The ground water monitoring locations selected for EIA study are in the range of 1.4 to 4.8 km distance from the TSDF site in all directions. In the present EIA Study, 10 locations were selected within 10 km of buffer zone from the project site for monitoring of ground water quality. Earlier, prior to setting up of TSDF, an EIA study was conducted by National Productivity Council (NPC) New Delhi in May 1997 as per Rule 8 of Hazardous Waste (Management & Handling) Rule 1989, followed by EIA study carried out for expansion of the project i.e. Phase II in Sept 2006. Further EIA for phase III expansion was carried out in Oct 2014. In addition an independent study was carried out by the NEERI, Nagpur in Nov 2008. Considering the first observation on Phenolic compounds and variations in other parameters, monitoring was carried out in the first week of June 2020 from the same borewells. The monitoring has been done through 3rd party (Pollucon Labs, NABL/MoEF&CC approved). The level of phenol and lead are reported to below detection limit.

		Sporadic higher levels of nitrate were reported at two locations i.e. 57.5 mg/l at Jitali Madresa and 57mg/l at Sarangpur respectively, which is marginally higher value in comparison to prescribed standard 45mg/l for drinking water. Sources of nitrogen and nitrates include runoff or seepage from fertilized agricultural lands, municipal waste, animal feedlots, etc.
(viii)	Method for preservation and transportation of samples for analysis of Dioxins and Furans.	The collection of samples and analysis of Dioxins and Furans is outsourced to M/s Vimta lab; Hyderabad or M/s CVR Labs, Chennai. The method followed is **USEPA Method 23 A.** Brief Is given below. Sample containing module absorbent XAD-2 tightly cap at both ends, label it, cover with aluminium foil, and store it on ice for transport to laboratory. All samples must be extracted within 30 days of collection and analysed within 45 days.
(ix)	Details of Existing and proposed Employment.	Existing-100 and proposed-15

The Committee found the replies given above by PP is satisfactory. However, EAC expressed displeasure on the data documentation and procedures being followed by Consultant for EIA-EMP report. Finally, the EAC, based on the information submitted, clarifications provided by the Project Proponent and detailed discussions held on all the issues, recommended the project for grant of environmental clearance and stipulated the following specific conditions along with other Standard EC Conditions as specified by the Ministry vide OM dated 04.01.2019 for the said project/activity (specified at Annexure-2 of the minutes) while considering for accord of environmental clearance:

(i) The Environmental Clearance to the project is primarily under provisions of EIA Notification, 2006. The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/ Regulations or Statutes as applicable to the project

(ii) All possible measures shall be adopted for odor control. Odor shall be controlled by providing proper ventilation in the site, spraying ecosorb (organic and biodegradable chemical) around odor generation areas at regular intervals and by developing greenbelt with odour control species.

(iii) Existing water consumption is 657 KL/day. No additional water will be required for proposed expansion. Water is being supplied by GIDC Ankleshwar. No ground water shall be extracted for proposed facility.

(iv) Total 396.5 KLD of wastewater will be generated from existing as well as from proposed facility form Leachate of landfill and effluent from various sources like scrubber, washings from lab, drum washing, and cooling water blow down. It shall be treated in existing Multiple Effect Evaporator (MEE) plant. CETP facility shall only be used whenever entire MEE plant is put in maintenance as per SOP.

(v) As proposed total greenbelt at 36.14 %(14.68% existing +21.46% capped SLF area) of total plot area shall be maintained.

(vi) The landfill operating area should be kept covered during monsoon period. During monsoon period, waste shall be collected and temporally stored in the covered storage provided at site.

(vii) Periodic inspection and routine maintenance at closed landfill site shall be carried out for a period, as proposed i.e. 30 years of closure. A maintenance schedule is to be drawn up in consultation with concerned SPCB. Such schedule should cover, inter-alia, cover system, detection of rupture/ faults, surface water drainage system etc.

(viii) The Project proponent should ensure that the facility fulfils all the provisions of Hazardous and other Wastes (Management and Transboundary Movement) Rules, 2016 & the Protocol for 'Performance Evaluation and Monitoring for the same as

published by the CPCB and Bio-Medical Waste Management Rules, 2016and the revised guidelines issued by CPCB for Common Bio-Medical Waste Treatment and Disposal Facility. Tracking system for movement of Hazardous Waste from generator to the facility site shall be put in place.

(ix) The project proponents shall adhere to all conditions as prescribed in the Protocol for 'Performance Evaluation and Monitoring of the Common Hazardous Waste Treatment, Storage and Disposal Facilities' published by the CPCB.

(x) Sufficient number of Piezometer wells shall be installed in and around the project site to monitor the ground water quality in consultation with the State Pollution Control Board / CPCB. Periodical ground water/soil monitoring to check the contamination in and around the site shall be carried out.

(xi) Trend analysis of ground water quality shall be carried out each season and information shall be submitted to the SPCB and the Regional Office of MoEF&CC.

(xii) Ambient air quality monitoring shall be carried out in and around the landfill site at up wind and downwind locations. On-line real time continuous monitoring facilities shall be provided as per the CPCB or State Board Directions

(xiii) As proposed, onsite and off-site disaster management plan shall be operationalised in consultation with district level authority in order to minimize the hazards to human health or environment from fires, explosion or any unplanned sudden or non sudden release of hazardous waste or hazardous waste constituents to air, soil or surface water.

(xiv) As per the Ministry's Office Memorandum F.No. 22-65/2017-IA.III dated 01.05.2018, and as proposed, a fund of Rs. 0.8257 Crores shall be earmarked under Corporate Environment Responsibility (CER) for the activities such as Solar lights in adjacent villages, Construction of Toilets under Swachh Bharat Abhiyan, Construction of Water harvesting structures etc. The activities proposed under CER shall be restricted to the affected area around the project. The entire activities proposed under the CER shall be treated as project and shall be monitored. The monitoring report shall be submitted to the regional office as a part of half yearly compliance report, and to the District Collector. It should be posted on the website of the project proponent.

Agenda item No. 54.3.5.

Construction (Including Structural Design) of 640 dwelling unit in 20 Nos. of G+3 Blocks (32 DU's in each Blocks) at Plot No. 2302, Khata No. 148, Thana No. 25, Village Kalapathar, Tehsil Chas, District Bokaro, Jharkhand by M/s. Jharkhand Urban Infrastructure Development Company Limited - Environmental Clearance

(IA/JH/NCP/161991/2020; F.No. 21-45/2020-IA-III)

54.3.5.1. The Project Proponent (PP) along with his accredited consultant M/s P and M Solution made a presentation and presented following parameters and salient features of the project to the Committee:

(i) The project site is located at Plot No. 2302, Khata No.148, Thana No. 25, village Kalapathar, Tehsil, Chas, District Bokaro, Jharkhand. The geographical co-ordinates of the project site are 23°40'45.72"N - 86°12'14.83"E.

(ii) The Project is new. The total plot area is 16,174.47 sqm, FSI area is 23,614.7262sqm and total construction (Built-up) area of 23,632.68 sqm. The project will comprise of residential Buildings. Total 640 flats shall be developed. Maximum height of the building is 12 m.

(iii) During construction phase, source of water is private water tanker. Water requirement during construction phase will be approx. 50 KLD which will be met by Jharkhand Municipal Corporation. During the construction phase, soak pits and septic tanks will be provided for disposal of waste water. Temporary sanitary toilets will be provided during peak labor force.

(iv) During operation phase, the source of water supply would be Jharkhand State Municipal Corporation. The total water requirement is estimated to be 294.5 KLD, out of which domestic water requirement is 287 KLD. The fresh water requirement would be 201 KLD. Approx. 247 KLD of wastewater will be generated during the Operation phase. This wastewater generated will be treated in STP of 300 KLD capacity and treated effluent will be reused for flushing and Horticulture. Excess treated water shall be discharged to Municipal Sewer.

(v) During the operation phase, waste will comprise domestic as well as horticultural waste. The solid waste generated shall be approx. 1745.5 kg per day (@ 0.5 kg per capita per day for residents, @ 0.15 kg per capita per day for the visitor, 0.3 kg per capita per day for the staff members and landscape wastes @ 0.2 kg/acre/day). Following arrangement will be made at the site in accordance to Municipal Solid Waste (Management and Handling) Rules, 2016.

(vi) The power will be supplied by Jharkhand state electricity board. The electrical load requirement for the project is approx. 565 KW. Proposed energy saving measures would save about 20 % of power.

(vii) Rooftop rainwater of buildings will be collected in 10 RWH tanks of total 89.495 m^3/hr capacity for harvesting after filtration.

(viii) Parking facility for 236 four wheelers and 512 two wheelers is proposed to be provided against the requirement of 128 and 512 respectively (according to local norms).

(ix) The project is not located in Critically Polluted area. It is not located within 10 km of Eco Sensitive Zone.

(x) No Court case is pending against the project.

(xi) Total green area will be 2525.78 sqm (including green belt, avenue plantation and lawn). Evergreen tall and ornamental trees like Alstoniascholaris, Anhtocephaluscadamba, Bauhinia varieagata, Caryotamillitis, Cassia fistula etc will be planted inside the premises.

(xii) The total estimated cost of the project including land and development is approx. Rs. 35.92 Crore. Expected timeline for completion of the project will be for two Year

(xiii) Employment potential: It will generate direct and indirect employment opportunities for both skilled and unskilled labor during construction & operation phase.

(xiv) Benefits of the project: Socio-economic standard of people will improve due to increased employment opportunities provided by this project. This will lead to better quality of life and will also set a standard for future developments in the area.

54.3.5.2. The EAC noted the following: -

(i) The proposal is for grant of environmental clearance to the project Construction (Including Structural Design) of 640 dwelling unit in 20 Nos. of G+3 Blocks (32 DU's in each Blocks) at Plot No. 2302, Khata No. 148, Thana No. 25, Village Kalapathar, Tehsil Chas, District Bokaro, Jharkhand by M/s. Jharkhand Urban Infrastructure Development Company Limited in a total plot area of 16,174.47 sqm and total construction (built-up) area of 23,632.68 sqm.

(ii) The project/activity is covered under item 8(a) 'Building and Construction Projects' of the Schedule to the EIA Notification, 2006 and its amendments, and requires appraisal at State level. However, due to non-existence of SEIAA/SEAC in Jharkhand, the proposal is appraised at Central level by sectoral EAC.

54.3.5.3. The project proponent informed the EAC that the project is for Development of affordable housing facility having 640 dwelling unit in 20 Nos. of G+3 Blocks (32 DU's in each Blocks) under Pradhan Mantri Awasyojna (Urban) package-K at Plot No. 2302, Khata No. 148, Thana No. 25, village Kalapathar, Tehsil, Chas, District Bokaro, Jharkhand. The land has been allotted for the project. The main Environmental considerations for the project will be Green belt and green area development, rain water harvesting, solar street lights, provision of STP, dual plumbing, storm water collection and harvesting and provision of roads & parking area.

The EAC, based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, recommended granting environmental clearance to the project subject to the following specific conditions and other Standard Conditions as specified by the Ministry vide OM dated 4th January, 2019 for the said project/activity (specified at Annexure-7 of the minutes):

(i) The Environmental Clearance to the project is primarily under provisions of EIA Notification, 2006. The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/ Regulations or Statutes as applicable to the project.

(ii) As proposed, fresh water requirement from Jharkhand State Municipal Corporation shall not exceed 201 KLD during operational phase. During construction phase, 50 KLD of water shall be sourced from private tanker. No ground water shall be extracted.

(iii) Sewage shall be treated in onsite STP and treated effluent from STP shall be recycled/re-used for flushing and horticulture. As proposed, no treated/untreated wastewater shall be disposed to Municipal sewer line or open nallah.

(iv) Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing and other for supply of recycled water for flushing, landscape& irrigation shall be done.

(v) As proposed, 15% of solar energy will be used through roof-top solar panel.

(vi) The project proponents would commission a third party study on the implementation of conditions related to quality and quantity of recycle and reuse of treated water, efficiency of treatment systems, quality of treated water being supplied for flushing (specially the bacterial counts), comparative bacteriological studies from toilet seats using recycled treated waters and fresh waters for flushing, and quality of water being supplied through spray faucets attached to toilet seats.

(vii) The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. As proposed, 10 no. of rain water harvesting recharge tanks shall be provided for rain water harvesting after filtration as per CGWB guidelines.

(viii) Segregated bio-degradable waste shall be composted in Organic Waste Converter. Adequate area shall be provided for solid waste management within the premises which will include area for segregation, composting. The inert waste from project will be sent to designated/authorized landfill site.

(ix) No tree cutting/transplantation has been proposed in the instant project. A minimum of one tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover

are desirable. Water intensive and/or invasive species should not be used for landscaping. As proposed, total area of 2525.78 sqm (15.61% of plot area) shall be developed as green area.

(x) As per the Ministry's Office Memorandum F.No. 22-65/2017-IA.III dated 1st May, 2018, project proponent has proposed that an amount of Rs. 0.72 Crores (@ 2.0% of the project Cost) shall be earmarked under Corporate Environment Responsibility (CER) for the activities such as Education facilities for nearby communities, Solar Power, Rainwater Harvesting, Plantation in community areas and Health Initiatives. The activities proposed under CER shall be restricted to the affected area around the project. The entire activities proposed under the CER shall be treated as project and shall be monitored. The monitoring report shall be submitted to the Regional Office of the MoEFCC as a part of half yearly compliance report, and to the District Collector. It should be posted on the website of the project proponent.

Agenda item No. 54.3.6.

Construction of Passenger Ropeway for 3.7 km long connecting Adivaram in Kozhikode District to Lakkidi in Wayanad District, Kerala by M/s Western Ghats Development Ltd-reg.-Reconsideration of Terms of Reference

(IA/KL/MIS/146249/2020; F.No. 10-26/2020-IA-III)

54.3.6.1. The EAC noted the following: -

(i) The proposal is for Terms of Reference to the project Construction of Passenger Ropeway for 3.7 km long connecting Adivaram in Kozhikode District to Lakkidi in Wayanad District, Kerala by M/s Western Ghats Development Ltd.

(ii) The proposal was examined by the EAC (Infra-2) in its 50th Meeting held in April, 2020 wherein Committee deliberated upon information provided by the project proponent and noted that proposed project lies within 5 km area of Malabar Wildlife Sanctuary and also lies within the eco-sensitive area of Western Ghats. A decision was taken by EAC that a sub-committee consisting of Dr. H. C. Sharatchandra, Shri B C Nigam and Dr. Manoranjan Hota, Member of the EAC (Infra-2) may visit the project site and submit the report. On receipt of above-mentioned site inspection report from the sub-committee, EAC (Infra-2) would further deliberate on the proposal. It was also decided that the Sub-committee would furnish its report as early as possible and preferably within three months provided that situation turns out to be normal from the lockdown due to COVID -19 pandemic.

(iii) The proposal was received in the Parivesh Portal on 29th February, 2020. It has been pending at the portal on the part of the MoEFCC for a considerable time for the site visit. The restriction for inter-state movement due to spread of COD-19 are still in place and may continue in future also. Hence, this note for consideration of the EAC (Infra-2) w.r.t. suggest the way forward.

(iv) The Committee deliberated on the issue and suggested that the Ministry may consider exploring the possibility of visit by the regional office of the Ministry; if possible, in the current situation. Otherwise, PP may be called for the next meeting along with kml file, site photographs, videos, etc. as appropriate to depict the ecological sensitivity, habitation, terrain, etc. for the proposed project site and other relevant details of the proposal.

(v) Accordingly, the project proponent was asked to make presentation before the EAC (Infra-2).

54.3.6.2. The project proponent made a detailed presentation before the EAC including site photograph and visuals of the project site. Details like Terminal Location Plan showing

Google Map showing Location of Ropeway, Site Photographs, Survey Plan LTP & UTP (Adivaram) & (Lakkadi), status of approvals and project details were discussed during the presentation. It was informed by the project proponent that about 500 no. of rubber trees to be cut for the development of lower terminal, intermediate terminal and upper terminal. Compensatory tree plantation will be done in and around the proposed site in the ratio 1:3 (In consultation with forest department). As per the "Kerala Promotion of Tree Growth in Non-Forest Areas (Amendment) Act, 2007", no permission is required for cutting of the rubber tree. The Forest clearance application has already been applied on Parivesh Portal dated 24.02.2020 vide proposal no is FPKL/Others/44754/2020. The project lies within 5 km area of ESZ of Malabar Wildlife Sanctuary (Vide Draft Notification letter no. S.O. 2634 dated 05.08.2020).

After detailed deliberations on the proposal, the Committee prescribed Terms of Reference as specified by the Ministry as Standard ToR in April, 2015 for the said project/activity and the following TOR in addition to Standard ToR for preparation of EIA-EMP report:

(i) Submit copy of Stage-1 Forest Clearance.

(ii) Status of clearance from National Board for Wild Life (NBWL).

(iii) Detailed plan for management air emission, domestic effluents, solid waste and hazardous waste.

(iv) A detailed traffic management and a traffic decongestion plan drawn up through an organization of repute and specializing in Transport Planning.

(v) Details about the distance from the ESZ site to various ropeway stations.

(vi) An onsite disaster management plan shall be drawn up to account for risks and accidents. This onsite plan shall be dovetailed with the onsite management plan for the two districts in consultation with district authority.

(vii) Public hearing to be conducted with two Districts and issues raised and commitments made by the project proponent on the same should be included in EIA/EMP Report in the form of tabular chart with financial budget for complying with the commitments made.

(viii) Plan for Corporate Environment Responsibility (CER) **for villages falling** under the area as specified under Ministry's Office Memorandum vide F.No. 22-65/2017-IA.III dated 1st May 2018 shall be prepared and submitted along with EIA Report.

*The EAC **recommended for the grant of ToR with Public Hearing** for preparation of EIA / EMP report in addition to all relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006 and as amended from time to time. The draft EIA/EMP report be submitted to the State Pollution Control Board for public hearing.*

Agenda item No. 54.3.7.

Expansion of existing Integrated Terminal Building and Construction of New ATC Tower cum Technical Block & Miscellaneous Works at Madurai Airport, Tamil Nadu - Terms of Reference

(IA/TN/MIS/165677/2020; F.No. 10-47/2020-IA-III)

54.3.7.1. The Project Proponent (PP) along with his accredited consultant M/s ABC Techno Labs made a presentation and presented following parameters and salient features of the project to the Committee:

(i) Madurai Airport is a customs airport serving Madurai and southern districts, in the state of Tamil Nadu. The airport is located about 12 km from the Madurai Railway Junction and connecting Madurai with Tuticorin. Madurai Airport is located at Perungudi and Ayanpappakudi villages of Madurai South Taluk and Madurai District. Geographically, airport is located at Latitude $09^0$49'47.48" to $09^0$50'26.50" N, Longitude $78^0$04'32.33" to $78^0$06'14.80" E and altitude of 136 m above MSL. The geological coordinates of Airport Reference Point (ARP) is 09^o50'06.0064" N and 78^o05'18.7289" E.

(ii) The proposed project involves the expansion of existing Integrated Terminal Building, Construction of new ATC Tower cum Technical Block & Miscellaneous works within existing facility.

(iii) The existing Integrated Terminal Building is proposed to be expanded by an area of 7,680 sqm. to have a total area of 25,240 sqm. Total peak hour of the building after expansion will increase from 700 pax to 2600 pax (Domectic - 1800 Pax. & International- 800 Pax.) corresponding to annual capacity of 4.15 MPPA by the year 2024-25 after incorporation of additionat facilities such as X-ray Machines with Security lanes (in both domestic and International), additional Conveyor belt & 1 no. of Aerobridge.

(iv) The proposed ATC Tower cum Technical Block is a four storied structure with tower cabin at 33.4 m above ground level. The ATC Tower cum Technical Block of ATC Category – 2 and IMD Category – 2, has been designed as per the space requirement recommendation of the committee set up to work out Revised Standard Requirements for ATC Tower cum Technical Block at various Airports. Other allied Works including Electrical Work, CNS Works, IT & Airports Systems Works, etc.

(v) Land available for the operation of existing airport s about 502 acres (203.16 ha). The proposed expansion activities will not require any additional land as it will be carried out within the existing land. The site for the proposed development activities and allied works is free from vegetation and buildings.

(vi) Total water requirement for domestic use, HVAC and landscaping will be about 1388 KLD. Out of it about 608 KLD will be fresh water which will be met through TWAD Board water supply and Bore wells. Treated wastewater from STP of about 780 KLD will be utilized for toilet flushing (380 KLD) and landscaping (400 KLD).

(vii) No water body will be affected by the proposed development activities and allied works within Madurai Airport. No forest land is involved in the proposed expansion project. There is no eco-sensitive area, biosphere and critically polluted area, state and national boundary within 10 km distance from the site.

(viii) Solid waste generated at the Madurai Airport will be about 1500 kg/day which will be disposed as per Solid Waste Management Rule 2016.

(ix) Expected Power Requirement will be 1350 KVA to 1900 KVA & met through TANGEDCO. Solar power generation units having capacity of 100 KW and 60 KW will be provided in building roof tops as per ECBC, 2017. It is also proposed a ground mounted solar power plant of 3.9 MW in future.

(x) Investment/Cost of the project is Rs. 145 Crores.

(xi) Employment potential- During construction Phase 400 Persons directly & 500 persons indirectly and operation Phase 200 Persons Direct and 1000 Person Indirect Employment.

(xii) Benefits of the project: Better infrastructure facilities for air passengers, Promotion of tourism, trade, commerce, etc, Increase in regional economy as it will boost tourism and commercial activities in the region, Generation of more revenue to the state, hence

more development of the region, More employment opportunity to people, More business and industrial opportunities.

54.3.7.2. The EAC took note of above and also noted the following: -

(i) The project/activity is covered under category 'A' of item 7 (e) i.e. 'Ports, harbours, break waters, dredging' of the schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at Central level by sectoral EAC.

(ii) Madurai Airport has obtained Environmental Clearance from MoEFCC vide No. 10-67/2007-IA-III dated 04.07.2008 for its existing operations and also have valid Consent issued by TNPCB. Standard Terms of Reference for proposed expansion has already been granted by MoEFCC vide letter F.No. 10-47/2020-IA-III dated 1st August, 2020.

After detailed deliberations on the proposal, the Committee prescribed of following specific Terms of Reference in addition to Standard ToR granted by MoEFCC vide letter F.No. 10-47/2020-IA-III dated 1st August, 2020for preparation of EIA-EMP report:

(i) Certified Compliance Report on existing EC issued by the MoEF&CC vide letter No. 10-67/2007-IA-III dated 04.07.2008 from Regional Office or concerned Regional Office of Central Pollution Control Board or the Member Secretary of the respective State Pollution Control Board for the conditions stipulated in environmental clearance issued for the project along with an action taken report on issues which have been stated to be partially complied or non/not complied.

(ii) Submit valid Consent to Operate (CTO) for the existing Airport and compliance to the conditions of the CTO and authorization for the existing Airport.

(iii) Submit Fire NOC for existing project from concerned Department.

(iv) No ground water shall be extracted.

(v) The E.I.A. should specifically address to vehicular traffic management as well as estimation of vehicular parking area inside the Airport premises.

(vi) A note on appropriate process and materials to be used to encourage reduction in carbon foot print. Optimize use of energy systems in buildings that should maintain a specified indoor environment conducive to the functional requirements of the building by following mandatory compliance measures (for all applicable buildings) as recommended in the Energy Conservation Building Code (ECBC) 2017 of the Bureau of Energy Efficiency, Government of India. The energy system includes air conditioning systems, indoor lighting systems, water heaters, air heaters and air circulation devices.

(vii) The impact of aircraft noise and emissions in different scenarios of idling, taxiing, take off and touchdown shall be examined and a management plan.

(viii) Noise monitoring and impact assessment shall be done for each representative area (as per the Noise Rules of MoEF&CC). A noise management plan shall be submitted to conform to the guidelines of the MoEF&CC and the DGCA.

(ix) Details of fuel tank farm and its risk assessment.

(x) Public hearing to be conducted and issues raised and commitments made by the project proponent on the same should be included in EIA/EMP Report in the form of tabular chart with financial budget for complying with the commitments made.

(xi) Plan for Corporate Environment Responsibility (CER) as specified under Ministry's Office Memorandum vide F.No. 22-65/2017-IA.III dated 1st May 2018 shall be prepared and submitted along with EIA Report.

(xii) A tabular chart with index for point-wise compliance of above ToR.

The EAC recommended for the grant of ToR with Public Hearing for preparation of EIA / EMP report in addition to all relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006 and as amended from time to time. The draft EIA/EMP report be submitted to the State Pollution Control Board for public hearing.

Agenda item No. 54.3.8.

Development of Water Aerodrome at Sabarmati Riverfront, Paldi, Ahmedabad, Gujarat by M/s Civil Aviation Department, Government of Gujarat - Terms of Reference

(IA/GJ/MIS/164873/2020; F.No. 10-46/2020-IA-III)

54.3.8.1. The Project Proponent (PP) along with his accredited consultant M/s Enviro Resources made a presentation and presented following parameters and salient features of the project to the Committee:

(i) Title of the Proposal is Development of Water Aerodrome at Sabarmati Riverfront, Paldi, Ahmedabad, Gujarat by M/s Civil Aviation Department, Government of Gujarat.

(ii) Water Aerodrome is primarily on water, intended to be used either wholly or in part for the arrival, departure and movement of seaplanes, and any building and equipment on ground or water. Sea plane operation from coastal/ river/ canal as well as terrestrial water bodies will extend the connectivity to those areas where there is no land based airport. Investment/Cost of the project will be Rs. 22 Crores. Employment potential: Approx 50.

(iii) The OLS Survey and Bathymetry Study have been carried out along the Sabarmati Riverfront area and the proposed project site is best suited due to minimum requirement of the draft available at the banks itself. The Area Break-Up Details of the proposed project are as follows:

SN	Description	Area (sqm)	% Utilization of Plot Area
1	Green Belt	1,500	33.0
2	PTB Plinth	600	13.2
3	Road	2,009	44.1
4	Parking	162	3.6
5	Utility	140	3.1
6	Hard Paving	139	3.0
Total Plot Area		**4,550**	**100.0**

(iv) The project is New. The following activities are being proposed:

Approach Road:	The site is presently connected through 10m wide tar road.
Terminal Building and Ancillary Facilities on City Side:	• Terminal building will have a plinth area of 600 sqm. • Pre Engineered Building structure has been proposed. Total glass façade has been proposed to use the natural light. • City side car parking for 8 cars, approach road and utility buildings for electromechanical services. • Horticulture-landscaping, drainage system, water supply on the city side area. • Providing peripheral compound wall with gates etc., as per site requirements. • Retro reflective road signage's in the car park and approach road. Green building norms to be followed for minimum 3-star rating of GRIHA. • There will be a 3 m walkway connecting from behind the terminal building on the city side to air side towards the floating jetty.
Air Side:	• From the proposed terminal building, passengers will use 3m walkway, 2m x 10m Aluminium Gangway & 3m x 6m Floating walkway to reach docking pad of sea plane.
Fuelling:	• The fuelling shall be done at Ahmedabad Airport as well as the Operation and Maintenance of the Sea Planes as needed.

	• Fire fighting with sprinkler system and automatic fire alarm system has been proposed for Terminal Building. • Fire Detection & Alarm System and Fire Fighting Systems are being designed based on the NBC and relevant IS codes as applicable. Layout of fire alarm panel, detectors, control module, etc. are being prepared. • For City Side, Fire Fighting & Detection System will be designed as per prevailing NBC code for designing of building norms and also incompliance with fire department of Aviation sector for PTB/PARKING/APRON/JETTY structures. • For Air Side, a fire tender with capacity of min 5000 litre (foam based) in H3 category as per DGCA norms/guidelines (Aviation standard) will be provided for the Fire Fighting in emergency situation. • For Jetty, min 02 nos. fire extinguisher of capacity 50 kg (foam based) will be provided during operations in the water body. • A rescue boat fire fighter will also be provided in Final Approach Take Off (FATO) Area during operations in the water body.

(v) The relative terrain is flat and the Project Site is ~45m above MSL. No Requirement of filling is envisaged.

(vi) Total fresh water requirement of the project will be 16.4 KLD. It will be sourced from Ahmedabad Municipal Corporation. Total Wastewater generated will be 8.5 KLD and it will be treated in proposed STP of 10 KLD Capacity.

(vii) Total Solid Waste generated will be ~ 86 kg/day (Wet Waste ~ 34.4 kg/day and Dry Waste ~51.6 kg/day) and it will be disposed off as per local MSW Rules.

(viii) Proposed Connected Load will be 143 kW, DG Set of capacity 2 x 50 kVA

(ix) Energy Conservation - PP will install around 150 numbers of Solar modules which each has capacity of 400 watt will have total installed capacity of 60 KW DC.

(x) The 10 km around the proposed project site is mainly urban settled land in the north and east side whereas some agricultural/cultivated land along the south and west side. No wildlife sanctuaries fall within 10 km radius of project site. The project does not involves diversion of forest land and not located in Critically Polluted area

(xi) The baseline monitoring data has been carried out for the period of December 2019 to February 2020. The baseline monitoring has been carried out as per the guidelines of the Standard ToR as well as per CPCB guidelines.

(xii) Benefits of the project: The high capital investment for airside infrastructure development required in land based airport can be avoided with development of Water Aerodrome facility mainly for the purpose of boosting the tourism sector.

54.3.8.2. During deliberations, the EAC noted that The Water Aerodrome is not a listed project/activity in the Schedule to the EIA Notification, 2006 and its amendments. However, a view has been taken by this EAC that the activities proposed under Water Aerodrome project may have similar type of impacts as that of the Airport. Considering the Water Aerodrome are emerging in the country as new mode of transport involving sea/river fronts and its likely impacts on water, air and aquatic biodiversity including flora and fauna, the EAC has also taken a view to follow the EC process as per category A of item 7(a) 'Air Ports' of the Schedule to the EIA Notification, 2006.

After detailed deliberations on the proposal, the Committee prescribed the following Additional Terms of Reference (TOR)in addition to Standard ToR as specified by MoEF&CC in April, 2015 for the said project/activity for preparation of EIA-EMP report:

(i) Impact of aerodrome on flow and water characteristics including flora and fauna during monsoon and non-monsoon season.

(ii) Mechanism for ensuring minimum flow to downstream of Sabarmati barrage for river once minimum depth is established for proposed aerodrome.

(iii) Arrangement & management of desilting of accumulated river bed sludge.

(iv) Details of emission, effluents, solid waste and hazardous waste generation and their management. Air quality modelling and noise modelling shall be carried out for the emissions from various types of aircraft.

(v) Additional Noise monitoring and impact assessment shall be done for each representative area (as per the Noise Rules of MoEF&CC). A noise management plan shall be submitted to conform to the guidelines of the MoEF&CC and the DGCA.

(vi) Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract).

(vii) The report should give a detailed impact analysis and management plan for handling of the following wastes for the existing and proposed scenarios.

a. Trash collected in flight and disposed at the Aerodrome including the segregation mechanism.
b. Toilet wastes and sewage collected from aircrafts and disposed at the Aerodrome.
c. Maintenance and workshop wastes.
d. Wastes arising out of eateries and shops situated within the Aerodrome.

(viii) Plan for Corporate Environment Responsibility (CER), as specified in this Ministry's Office Memorandum No. 22-65/2017-IA.III dated 1st May, 2018, shall be prepared and submitted along with EIA Report.

(ix) EIA report should consist of the detailed plan for the monsoonal floods in the river segment.

(x) Public hearing is to be conducted. Issues raised during public hearing and commitments made by the project proponent on such issues should be included in final EIA/EMP Report in the form of tabular chart with financial budget for complying with such commitments.

(xi) Details of fuel tank farm and its risk assessment.

(xii) A tabular chart with index for point-wise compliance of above ToRs.

The EAC recommended for the grant of ToR with Public Hearing for preparation of EIA / EMP report in addition to all relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006 and as amended from time to time. The draft EIA/EMP report be submitted to the State Pollution Control Board for public hearing.

Day 2- Friday, 28th August, 2020

Agenda item No. 54.4.1.

Expansion of "DLF Cyber City" (upto Built up area of 902796.80 sqm) at Survey no. 129/P, 130/P, 131/P, 132/P, TSHB Colony, Gachibowli, Serilingipalli, Rangareddy District, Telangana by M/s DLF Commercial Developers Limited – Reconsideration for Environmental Clearance

(IA/TG/MIS/90243/2007; F.No. 21-41/2018-IA-III)

54.4.1.1. The EAC noted the following:-

(i) The proposal is for Environmental Clearance to the project Expansion of "DLF Cyber City" (upto Built up area of 902796.80 sqm) at Survey no. 129/P, 130/P, 131/P, 132/P, TSHB Colony, Gachibowli, Serilingipalli, Rangareddy District, Telangana by M/s DLF Commercial Developers Limited for plot area 106,128.11 sqm and total built-up area of 9,02,796.80 sqm.

(ii) The project/activity is covered under category 'B' of item 8(b) 'Township and Area Development projects' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at State level. However, due to absence of SEIAA/SEAC in Telangana, the proposal has been appraised at Central level by sectoral EAC.

(iii) Standard ToR was granted by MoEFCC vide letter F.No. 21-41/2018-IA-III dated 9th July, 2018 followed by Amendment in ToR vide letter F.No. 21-41/2018-IA-III dated 22nd April, 2019.

(iv) The proposal was earlier considered by Expert Appraisal Committee (Infra-2) in its 42nd meeting held during 10-12 July, 2019. After detailed deliberation the Committee asked the project proponent to submit Certified Compliance Report of earlier EC issued by MoEF&CC vide letter no. 21-538/2007-IA.III dated 18.06.2008. Further, Regional Office, MoEF&CC, Chennai submitted the report vide their letter dated 22.05.2020. The Project Proponent (PP) vide its reply dated 22.06.2020 to ADS on Parivesh has uploaded the Certified Compliance Report issued from the RO, MoEF&CC, Chennai. PP was to provide the action taken report on issues which have been stated to be partially complied or non/not complied with revised details of Fauna. Project Proponent has submitted the additional information on Ministry's website on 31.10.2019.

(v) Now, the PP has submitted the action taken note on the observations made by RO, MoEF&CC Chennai. As per the Certified Compliance Report dated 22.05.2020; the observed non compliances and reply of PP inter-alia include the following:

S.No.	Observations of RO, MOEFCC in its Compliance Report	Submission by PP, as contained in his ATN addressed to RO, MOEFCC.
i.	Except IT complex other facilities envisaged in the Environment Clearance (EC) have not been implemented SC for even after the lapse of 11 years from the date of grant of EC.	At present three IT/Commercial blocks have been constructed with a built-up area of 3,74,642.05 sqm and has been operation for serving IT/ITES companies and commercial offices. CTO Obtained has mentioned that the line of activity as three blocks of IT/ Commercial & Retail Shopping building with a total built-up area 3743,74,642.05 sqm. This line has been mentioned in the EC granted in 2008. However, we have only constructed three IT/ Commercial Block. The retail shopping building has not been constructed. Due to economic recession and economic conditions Retail Shopping & Other Complex were not constructed. Now, due to change in Governmental policy promoting IT/ITES development in the area by way of relaxing planning provisions, the economic conditions encourage construction of more working spaces for which we have applied for grant of EC for the proposed Expansion with the total built-up area 9,02,796.80 sqm.
ii.	Copy of validity extension for the EC beyond 17/6/2013 has not been made available.	Environment Clearance vide letter No. 21-538/2007-IA.III, Dt: 18.06.2008 was extended up to 12.1.2016. As per MOEF&CC Notification S.O.No. 1141(E) dated 29.04.2015 and S.O. No.2571(E) dated 31.08.2015, the

		validity of Environment Clearance for the project is valid till 18.06.2020 as Annexure-2B.
iii.	The facilities for which CTO obtained is inconsistent with actual implementation.	The Copy of CTO Consent Order No.190821962103 dated 23.07.2019 valid up to 30.06.2024 is attached as Annexure-3. The CTO has mentioned the line of activity as 3 Blocks of IT/Commercial & Retail shopping building, with a total built-up area 3,74,642.05 sqm, therefore covering the total built and operational 03 nos. IT/Commercial Blocks as on date.
iv.	Details are not made available regarding soil and ground water samples analyzed to ascertain that there is no threat to ground water quality - specific condition No. (vii) of construction phase.	Soil Investigation report as being submitted vide six monthly compliance report to MOEF-RO is attached as Annexure-4 A. No Groundwater extraction is being done as the entire freshwater is being supplied by Rangareddy District Water Supply System. Raw water, treated water for drinking purpose and other uses, wastewater and treated wastewater all tested and periodically submitted to MOEFRO. A copy is attached herewith as Annexure 4-B. We will carry out testing of the quality of groundwater from the nearest borewell/source in the nearby areas and shall report the same from the next Six Monthly Report onwards
v.	Details are not made available in connection with the certification made by an independent expert for the installation of the Sewage Treatment Plant (STP) and its report submission to the Ministry before the project is commissioned for operation-specific condition No. (i) of operation phase.	As per the EC guidelines, STP Adequacy has been verified and report issued by Anna University, Chennai after due inspection at site, copy of the report is attached.
vi.	Details are not made available regarding the report submitted to the MoEF&CC o the energy conservation measures adopted - specific condition No. (x) of operation phase.	We submit the following points related to Energy conservation measures adopted in the complex: • Several energy efficient building materials have been used as construction material during construction. These include use of fly ash in concrete (RMC), thermal insulation of roof in terms of brickbat coba and under decking treatment with EPS. • Waste heat is recovered from Gas Engine & Gas Turbine for making chilled water for air conditioning. • Solar power generation at site connecting to the grid is made available in the terrace of the buildings. This power will be use of LED, TFL, LMR & LDB lighting fixtures in common areas and True-light fluorescent lamps in basements. We will report the status / outcome of Energy conservation measures in our submissions of six-monthly compliance reports from the next report onwards.
vii.	PA shall submit six monthly reports with monitored dada duly singed by the competent	Six Monthly Compliance report is attached as Annexure-6. Since the entire facility is managed by Third party agencies, we have authorized M/s. Cushman &

	authority instead of third-party agency M/s Cushman & Wakefield Property Management Services (I) Pvt. Ltd. - general condition No. (iii).	Wakefield Property Management Services (I) Pvt Ltd. to submit the six-monthly compliance reports. Hereinafter, the report will be directly submitted by us.

The EAC took note of the above submissions and observed that as per EC letter issued in 2008, the PP was required to construct IT Complex, Commercial Complex and Retail shopping and 645 service apartments and two basements for IT/Commercial and three basements for retail units and service apartments with total built-up area 6,04,651 sqm. The PP has constructed three IT/Commercial blocks with a built-up area of 3,74,642.05 sqm. The PP has given an affidavit cum undertaking to the effect that the aforesaid construction of three IT/ Commercial blocks is as per earlier EC. With regard to validity of exiting EC as pointed out by RO, the EAC opined that Ministry may take a final view on this observation of EC extension beyond 17.06.2013 and also RO pointed out on the facility for which CTO obtained inconsistent with actual implementation. It may be clarified that the claim of PP referred to s.no. ii of the above table w.r.t. validity of EC upto 2020 does not sustain.

*The EAC, based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, recommended granting environmental clearance to the project subject to the following specific conditions and other Standard Conditions as specified by the Ministry vide OM dated 4th January, 2019 for the said project/activity (specified at **Annexure-7** of the minutes):*

(i) The Environmental Clearance to the project is primarily under provisions of EIA Notification, 2006. The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/ Regulations or Statutes as applicable to the project.

(ii) As proposed, fresh water requirement from Municipal Supply shall not exceed 2345 KLD. Sewage shall be treated in onsite STP with advance technology with tertiary treatment system and treated effluent shall be recycled/re-used for Flushing, gardening, Cooling and Miscellaneous purposes. As proposed, no treated water shall be discharged outside or any Municipal drain/nallah.

(iii) Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing and other for supply of recycled water for flushing, landscape& irrigation shall be done.

(iv) The project proponents would commission a third party study on the implementation of conditions related to quality and quantity of recycle and reuse of treated water, efficiency of treatment systems, quality of treated water being supplied for flushing (specially the bacterial counts), comparative bacteriological studies from toilet seats using recycled treated waters and fresh waters for flushing, and quality of water being supplied through spray faucets attached to toilet seats.

(v) The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. As proposed, 10 no. of rain water harvesting recharge tanks (04 existing and 10 proposed) shall be provided for rain water harvesting after filtration as per CGWB guidelines.

(vi) Segregated bio-degradable waste shall be composted in Organic Waste Converter. Adequate area shall be provided for solid waste management within the premises which will include area for segregation, composting. The inert waste from project will be sent to designated/authorized landfill site.

(vii) No tree cutting/transplantation has been proposed in the instant project. A minimum of one tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of

native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping. As proposed, total area of 26,710.25 sqm (25% of plot area) shall be developed as green area.

(viii) The company shall draw up and implement Corporate Social Responsibility Plan as per the Company's Act of 2013.

(ix) As per the Ministry's Office Memorandum F.No. 22-65/2017-IA.III dated 1st May, 2018, project proponent has proposed that an amount of Rs. 2.02 Crores (@ 0.75% of the project Cost) shall be earmarked under Corporate Environment Responsibility (CER) for the activities such as Clean and safe drinking water and sanitation, Skill Development, Education and infrastructure, Solar lightening, Healthcare support and waste management. The activities proposed under CER shall be restricted to the affected area around the project. The entire activities proposed under the CER shall be treated as project and shall be monitored. The monitoring report shall be submitted to the Regional Office of the MoEFCC as a part of half yearly compliance report, and to the District Collector. It should be posted on the website of the project proponent.

Agenda item No. 54.4.2.

Proposed New Medicine, Maternity and Advanced Paediatric Centre for Lok Nayak Hospital by M/s Government of NCT Delhi - Reconsideration for Environmental Clearance

(IA/DL/NCP/75988/2018; F.No.21-101/2018-IA-III)

54.4.2.1. The EAC noted that the proposal was earlier considered by Expert Appraisal Committee (Infra-2) in its 35th meeting held during 29-31 October, 2018. The committee asked the project proponent to submit additional documents. Now, PP has submitted the additional information on Ministry's website on 07.08.2020.

The project proponent made a presentation on the points raised by EAC in its earlier meeting. The details are as follows:

S.No.	Points raised by the EAC	Submission by project proponent
(i)	Submit copy of valid Consent to Operate issued by the State Pollution Control Committee for existing hospital project.	Consent to operate has been obtained from DPCC vide letter no. DPCC/BMW/21569, Order No. DPCC/BMW/2020/64 dated 29.06.2020 for existing hospital.
(ii)	Submit an authorization under the Bio-Medical Waste Management Rules, 2016 or its earlier versions.	Authorization under Biomedical Waste Management Rules, 2016 has been obtained vide Authorization no. DPCC/BMW/AUTH/NEW no/2020/05100 dated 06.07.2020.
(iii)	The Air Quality Index shall be calculated for base level air quality.	AQI has been specified in the document and submitted.
(iv)	A detailed report on compliance to ECBC-2017 norms.	All the norms of ECBC 2017 are being followed and report is submitted.
(v)	A detailed traffic management and traffic decongestion plan to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and	Traffic study has been conducted for a 5 Km area around the proposed site and the detailed report is submitted to MoEFCC. A copy of the report along with the recommendations has been submitted to the PWD and UTTTIPEC.

	increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D. and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.	
(vi)	A certificate from the competent authority for discharging treated effluent/ untreated effluents into the Public sewer/ disposal/drainage systems along with the final disposal point.	All the waste water generated from the proposed project will be treated in the STP and ETP of 650 KLD and 275 KLD respectively. The treated water will be used within the campus and in case excess treated water is generated, it will be discharged in the existing sewer line in the campus. Final disposal point has been marked.
(vii)	A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project.	Municipal solid waste is being handled by the North MCD as per their mandate and the additional waste that will be generated through the upcoming project will be dealt by North MCD itself. Letter in this regard has been submitted.
(viii)	Submit plan for Effluent Treatment Plant for treatment of effluent generated from the hospital/laboratory.	An ETP of 275 KLD has been proposed for the New Medicine, Maternity and Advanced Paediatric Centre for Lok Nayak Hospital to treat the effluent. The feasibility report is submitted.
(ix)	A management plan for handling and disposal of biomedical wastes to the satisfaction of the State Pollution Control Board shall be drawn up in conformance to the Biomedical Waste Management Rules, 2016.	Management plan for the Biomedical Waste generated that will be generated from the New Medicine, Maternity and Advanced Pediatric Center for Lok Nayak Hospital is submitted.
(x)	Plan for Corporate Environment Responsibility (CER) as specified under Ministry's Office Memorandum vide F.No. 22-65/2017-IA.III dated 1st May 2018 shall be submitted.	CER plan considering the Ministry's Office Memorandum vide F.No. 22- 65/2017-IA.III dated 1st May 2018 has been presented.

After deliberation, the Committee found the above responses given by PP are satisfactory. EAC also noted the proposed revisions w.r.t. the status of cutting of existing trees i.e. total number of trees present at site are 59Nos, due to change in Entry and Exit for construction and operation phase, 36 numbers of trees will be transplanted inside the campus. NOC for the same has been obtained from Tree Officer and Dy. Conservator of Forest (South), Tuglakabad, Government of NCT Delhi vide letter no. R-No. 200/TO(S)/TC-Transplantation/2019-20/2074 dated 05.08.2020. Total of 360 Trees as per Compensatory Afforestation (1:10) shall also be planted. In this regard, PP has submitted the revised application form and associated documents.

The EAC, based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, recommended granting environmental clearance to the project subject to the following specific conditions and other Standard EC Conditions as specified by the Ministry vide OM dated 4th January, 2019 for the

said project/activity (specified at Annexure-7of the minutes), while considering for accord of environmental clearance:

(i) The Environmental Clearance to the project is primarily under provisions of EIA Notification, 2006. The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/ Regulations or Statutes as applicable to the project.

(ii) The Project proponent should ensure that the facility fulfils all the provisions of Hazardous and other Wastes (Management and Transboundary Movement) Rules, 2016 &the Protocol for 'Performance Evaluation and Monitoring for the same as published by the CPCB and Bio-Medical Waste Management Rules, 2016 and the revised guidelines issued by CPCB for Common Bio-Medical Waste Treatment and Disposal Facility.

(iii) As proposed, fresh water requirement from DJB shall not exceed 608 KLD for operation of facility and necessary permission shall be obtained.

(iv) The wastewater will be treated in the inhouse STP of Capacity 650KLD and ETP of 275KLD capacity for Bio-Medical Liquid Waste. All the treated water will be used within the proposed campus for flushing, gardening, HVAC. No treated/untreated effluent shall be discharged outside the premises.

(v) In order to mitigate the emission load from traffic and to promote cleaner fuel options, Electric Car Charging Points shall be provided at the Parking and provision of vehicles based on green fuel like CNG shall be facilitated.

(vi) As committed, minimum 10% energy saving shall be achieved through using Double Insulated glass, wall & Roof insulations and using Energy efficient Electro-Mechanical Equipment including providing the Solar Panel.

(vii) The development of proposed centres may take in to account guidelines of concerned State Health Department, particularly in context of highly contagious diseases like novel Covid-19.

(viii) The project proponents would commission a third party study on the implementation of conditions related to quality and quantity of recycle and reuse of treated water, efficiency of treatment systems, quality of treated water being supplied for flushing (specially the bacterial counts), comparative bacteriological studies from toilet seats using recycled treated waters and fresh waters for flushing, and quality of water being supplied through spray faucets attached to toilet seats.

(ix) As proposed, 03 Nos. of rain water harvesting recharge pits shall be provided for rain water harvesting after filtration as per CGWB guidelines.

(x) Segregated bio-degradable waste shall be compost in Organic Waste Converter. Adequate area shall be provided for solid waste management within the premises which will include area for segregation, composting. The inert waste from project will be sent to designated/authorized landfill site.

(xi) As proposed total of 360 Trees as per Compensatory Afforestation (1:10) shall also be planted. A minimum of one tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping. As proposed 5,899 sqm (33.90% of total area) area shall be provided for green area development.

(xii) As per the Ministry's Office Memorandum F.No. 22-65/2017-IA.III dated 1st May, 2018, the project proponent has proposed that an amount of Rs. 5.339 Crore (@ 1.0% of project Cost) shall be earmarked under Corporate Environment Responsibility (CER)

for the activities such as infrastructure creation for drinking water supply, Health, Education, Electrification including solar power, Solid waste management facilities, Scientific support and awareness to local farmers to increase yield of crop and fodder, Soil moisture conservation works, Avenue plantation and plantation in community areas. The entire activities proposed under the CER shall be treated as project and shall be monitored. The monitoring report shall be submitted to the Regional Office of the MoEFCC as a part of half yearly compliance report, and to the District Collector. It should be posted on the website of the project proponent.

Agenda item No. 54.4.3.

Expansion of Shanti Mukand Hospital located at 2, Institutional Area, Vikas Marg Extension, Karkardooma, Delhi by Shri Mukandilal Memorial Foundation for Heart & Medical Care - Reconsideration for Environmental Clearance

(IA/DL/NCP/154800/2020; F.No. 21-43/2020-IA-III)

54.4.3.1. The EAC noted that the proposal was earlier considered by Expert Appraisal Committee (Infra-2) in its 53rd meeting held during 23-24 July, 2020. After detailed deliberations, the EAC asked project proponent to submit additional documents. Project Proponent has submitted the additional information on Ministry's website on 13.08.2020. *The project proponent made a presentation on the points raised by EAC in its earlier meeting. The details are as follows:*

S.No.	Points raised by the EAC	Submission by project proponent
(i)	Revise Application (Form-2) as it did not provide details for trees to be cut. Further Provide details of tree cutting/transplantation proposed due to proposed expansion. Further, there are inconsistencies in submissions made to EAC and submissions in Conceptual Plan w.r.t. reuse of treated water from the ETP. EAC cautioned PP that data provided in the Application and other associated documents shall be consistent with the data present before EAC and asked to clarify their stand on this aspect.	Revised Application (Form-2) is submitted. Details of tree cutting/ transplantation proposed due to proposed expansion is also submitted. The relevant changes with respect to the reuse of treated water from the ETP have been made in the Form 2. As suggested by the esteemed committee members, application and other associated documents have been updated thereby removing inadvertent inconsistencies in the data, for further processing of the application. Updated application is submitted.
(ii)	Elaborate the permissibility/structural safety of the proposed alteration through an institute of repute.	The permissibility and structural stability of the proposed alteration has been reviewed and the existing structure & foundations are found to be safe for the proposed vertical expansion of the Block-B. The Alteration Permissibility and Structure Stability Certificate is submitted.
(iii)	Submit the plan for solid waste management and bio medical waste management. Also highlight location and space allocated for management of biomedical and solid waste management.	The plan for solid waste management and bio-medical waste management is submitted. Solid waste management (Area = 5.04 sqm) & Biomedical waste room (Area = 10.8 sqm) Site plan with location of space allocated for Biomedical and Solid waste management is submitted.
(iv)	Submit revised Plan for Corporate Environment Responsibility (CER) as specified under Ministry's Office	Revised plan for CER is submitted.

	Memorandum vide F.No. 22-65/2017-IA.III dated 1st May, 2018.	

After deliberation, the Committee observed that the above responses given by PP are satisfactory. The EAC, based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, recommended granting environmental clearance to the project subject to the following specific conditions and other Standard EC Conditions as specified by the Ministry vide OM dated 4th January, 2019 for the said project/activity (specified at **Annexure-7**of the minutes), while considering for accord of environmental clearance:

(i) The Environmental Clearance to the project is primarily under provisions of EIA Notification, 2006. The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/ Regulations or Statutes as applicable to the project.

(ii) As proposed, fresh water requirement from DJB shall not exceed 206 KLD for operation of facility and necessary permission shall be obtained

(iii) Sewage shall be treated in onsite STP having capacity 205 KLD and treated effluent from STP shall be recycled/re-used for Flushing, Horticulture, HVAC Cooling. Bio-Medical Liquid Waste shall be treated in ETP of 80 KLD capacity.

(iv) The project proponents would commission a third party study on the implementation of conditions related to quality and quantity of recycle and reuse of treated water, efficiency of treatment systems, quality of treated water being supplied for flushing (specially the bacterial counts), comparative bacteriological studies from toilet seats using recycled treated waters and fresh waters for flushing, and quality of water being supplied through spray faucets attached to toilet seats.

(v) Biomedical wastes shall be managed in accordance to the BMW Rules, 2016 and radio-active waste shall be disposed-off as per the atomic Energy Commission regulations, as applicable.

(vi) As proposed, 02 Nos. of rain water harvesting recharge pits shall be provided for rain water harvesting after filtration as per CGWB guidelines.

(vii) Proper in-house waste segregation practice shall be followed as per Municipal Waste (Management& Handling), Rules 2016. Bio-degradable municipal waste shall be compost in Organic Waste Converter. Adequate area shall be provided for solid waste management within the premises which will include area for segregation, composting. The inert waste from project will be sent to designated/authorized landfill site.

(viii) A total of 14 trees will be felled/cut for which the permission from Tree Authority constituted as per the Delhi Preservation of Trees Act, 1994 (Delhi Act No. 11 of 1994) shall be obtained. However, tree cutting/transplantation should be taken where absolutely necessary. Old trees should be retained based on girth and age regulations as may be prescribed by the Forest Department. Plantations to be ensured species (cut) to species (planted). In case of cut/non-survival of any transplanted tree, compensatory plantation in the ratio of 1:10 (i.e. planting of 10 trees for every 1 tree) shall be done and maintained.

(ix) The development of proposed centres may take in to account guidelines of concerned State Health Department, particularly in context of highly contagious diseases like novel Covid-19.

(x) As proposed 1,584.59 sqm (23.12% of total area) area shall be provided for green area development. A minimum of one tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad

leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.

(xi) As per the Ministry's Office Memorandum F.No. 22-65/2017-IA.III dated 1st May, 2018, the project proponent has proposed that an amount of Rs. 1.02 Crore (@ 1.0% of project Cost) shall be earmarked under Corporate Environment Responsibility (CER) for the activities such as Medical/Health services to Indoor patients, Medical/Health services to Outdoor patients, Health Check-up & Awareness Camps, Health Education and Medical/ Health services to Neighbouring Schools. The monitoring report shall be submitted to the Regional Office of the MoEFCC as a part of half yearly compliance report, and to the District Collector. It should be posted on the website of the project proponent.

Agenda item No. 54.4.4.

Expansion of Commercial Complex Project from 17,216.63 sqm to 23,195.93 sqm at Plot No. 14, Jasola, New Delhi by M/s Omaxe Ltd. - Environmental Clearance

(IA/DL/MIS/167926/2020; F.No. 21-46/2020-IA-III)

54.4.4.1. The Project Proponent (PP) along with his accredited consultant M/s Grass Roots Research & Creation India (P) Ltd. made a presentation and presented following parameters and salient features of the project to the Committee:

(i) The project is located at 28°32'22.58"N Latitude and 77°17'10.87"E Longitude.

(ii) The project is Expansion of existing facility. Earlier PP had applied for EC, according to the EIA Notification 2006 construction projects with a total built up area less than 20,000 sqm do not require prior environmental clearance. Since earlier proposal involves a built-up area of less than 20,000 sqm, the project does not require prior Environmental Clearance. A letter for exemption from requirement of EC vide letter no. 21-692/2006-IA.III dated 13thMay, 2008 was issued by MoEFCC for plot area 6,896 sqm & total built up area 18,783.83sqm. However, PP had constructed only 17,216.63 sqm of built up area at the project site.

(iii) The total plot area is 6,896 sqm, FSI area is 11,336.36 sqm and total construction (Built-up) area of 23,195.93 sqm. Maximum height of the building is 33.3 m. The details of building are as follows:

S. No.	Particulars	Existing (sqm)	Alteration/Expansion (sqm)	Total (sqm)
1.	Plot Area	6,896	-	6,896
2.	Permissible Ground Coverage (@33% of the plot area)	2,286	-	2,286
3.	Proposed Ground Coverage (@22.78 % of the plot area)	1570.95	-	1,570.95
4.	Permissible FAR (@ 1.65 of the plot area)	11,434	-	11,434
5.	Proposed FAR (@1.64 of the plot area)	8,591.56	2,744.80	11,336.36
6.	Non FAR Area	8,625.07	3,234.5	11,859.57
6.	**Built-Up Area**	17,216.63	5,979.3	23,195.93
7.	Landscape Area (@ 15.02 % of the plot area for planning)	691.646	344.80	1,036.44
8.	Maximum height of the building (m)	-	-	33.3

(iv) During construction phase, total water requirement is expected tobe12 ML which will be met by Delhi Jal Board. During the construction phase, soak pits and septic tanks

will be provided for disposal of waste water. Temporary sanitary toilets will be provided during peak labor force.

(v) During operational phase, total water requirement of the project is expected to be 62 KLD and the same will be met by 27 KLD fresh water from Delhi Jal Board and 47 KLD recycled water. Wastewater generated (52 KLD) will be treated in STP of total 70 KLD capacity. 47 KLD of treated wastewater will be recycled and re-used (31 KLD for flushing, 3 KLD for gardening etc.). Excess treated water (13 KLD) shall be provided to the nearby construction site.

(vi) About 431 kg per day solid wastes will be generated in the project. The biodegradable waste (129.3 kg/day) will be processed in OWC and the non- biodegradable waste generated (258.6 kg/day) will be handed over to authorized local vendor.

(vii) The total power requirement during construction phase is 2,692.4 KVA and will be met from TATA Power Ltd.

(viii) Rooftop rain water of buildings will be collected in1 RWHP it of total 67.38 m3 capacity for harvesting after filtration.

(ix) Parking facility of 313 ECS is proposed to be provided against the requirement of 306 ECS (according to local norms). Proposed energy saving measures would save about 20.52% of power.

(x) The project is not in Critically Polluted area. It is located at 2.0 km from Okhla Bird Sanctuary. However, it is outside the Notified Boundary of Eco Sensitive Zone.

(xi) No Court case is pending against the project.

(xii) Total green area measures 1,036.44 sqm i.e. 15.02% of the plot area shall be provided.

(xiii) Expected timeline for completion of the project is 20.04.2022. Total cost of the Project is Rs. 92.81 Crores. (Rs. 78.57 Crores for existing & Rs. 14.24 Crores for expansion) including Land & Development cost.

(xiv) Employment potential: 796 persons. Benefits of the project covers employment generation.

54.4.4.2. The EAC noted the following: -

(i) The proposal is to grant Environmental Clearance to the project i.e. Expansion of Commercial Complex Project from 17,216.63 sqm to 23,195.93 sqm at Plot No. 14, Jasola, New Delhi by M/s Omaxe Ltd. for net plot area 6,896 sqm and total built-up area of 23,195.93 sqm.

(ii) The project/activity is covered under category 'B' of item 8(a) 'Building and Construction projects' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at State level. However, due to absence of SEIAA/SEAC in Delhi, the proposal has been appraised at Central level by sectoral EAC.

(iii) There will be vertical expansion which includes addition of two floors i.e. 6th Floor & 7th Floor for office use. Consent to Operate (CTO) for the existing project has been obtained from Delhi Pollution Control Committee vide No. O-033459 dated 27.09.2018.

The EAC, based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, recommended granting environmental clearance to the project subject to the following specific conditions and other Standard Conditions as specified by the Ministry vide OM dated 4th January, 2019 for the said project/activity (specified at **Annexure-7** of the minutes):

(i) The Environmental Clearance to the project is primarily under provisions of EIA Notification, 2006. The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/ Regulations or Statutes as applicable to the project.

(ii) As proposed, fresh water requirement from DJB shall not exceed 27 KLD during operational phase and necessary permission shall be obtained. Only treated wastewater shall be used for constriction works at site from the nearest STP. No groundwater shall be extracted.

(iii) Sewage shall be treated in onsite STP of 70 KLD and treated effluent from STP shall be recycled/re-used for flushing and horticulture.

(iv) The project proponents would commission a third party study on the implementation of conditions related to quality and quantity of recycle and reuse of treated water, efficiency of treatment systems, quality of treated water being supplied for flushing (specially the bacterial counts), comparative bacteriological studies from toilet seats using recycled treated waters and fresh waters for flushing, and quality of water being supplied through spray faucets attached to toilet seats.

(v) The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. As proposed, 01 no. of rain water harvesting recharge tanks (already existing) shall be provided for rain water harvesting after filtration as per CGWB guidelines.

(vi) Bio-degradable shall be composted in Organic Waste Converter. As proposed, 150 sqm area shall be provided for solid waste management within the premises which will include area for segregation, composting. The inert waste from project will be sent to designated/authorized landfill site.

(vii) As proposed, total area of 1,036.44 sqm (15.02% of plot area) shall be developed as green area. No tree cutting/transplantation has been proposed in the instant project. A minimum of one tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.

(viii) As proposed, 01 rain water harvesting recharge pit shall be provided for rain water harvesting after filtration as per CGWB guidelines

(ix) As per the Ministry's Office Memorandum F.No. 22-65/2017-IA.III dated 1st May, 2018, project proponent has proposed that an amount of Rs. 0.1424 Crores (@ 1.0% of the project Cost) shall be earmarked under Corporate Environment Responsibility (CER) for the activities such as Providing Computer labs, Benches, Fans, Water Coolers etc. in nearby govt. schools, Setting up a Vocational Training Centre in the nearby areas & villages, Maintenance/construction of roads in consultation with local authorities in nearby areas & villages and medical equipment to the nearby Govt hospitals and Govt Dispensary. The activities proposed under CER shall be restricted to the affected area around the project. The entire activities proposed under the CER shall be treated as project and shall be monitored. The monitoring report shall be submitted to the Regional Office of the MoEFCC as a part of half yearly compliance report, and to the District Collector. It should be posted on the website of the project proponent.

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54.5 Any other item with the permission of Chair- Nil

The meeting ended with vote of thanks to the Chair.

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LIST OF PARTICIPANTS OF EAC (INFRASTRUCTURE-2) IN 54th MEETING OF EAC (INFRASTRUCTURE-2) HELD DURING 27-28 AUGUST, 2020 THROUGH VIDEO CONFERENCING

S. No.	Name	Designation	Attendance		Sign
			27.08.2020	28.08.2020	
1.	Prof. T. Haque	Chairman	P	P	
2.	Dr. N. P. Shukla	Member	P	P	
3.	Dr. H. C. Sharatchandra	Member	P	P	
4.	Shri V. Suresh	Member	P	P	
5.	Dr. V. S. Naidu	Member	P	P	
6.	Shri B. C. Nigam	Member	P	P	
7.	Dr.ManoranjanHota	Member	P	P	
8.	Dr. Dipankar Saha	Member	P	P	
9.	Dr. Jayesh Ruparelia	Member	P	P	
10.	Dr. (Mrs.) Mayuri H. Pandya	Member	P	P	
11.	Dr. M. V. Ramana Murthy	Member	A	A	
12.	Prof. Dr. P.S.N. Rao	Member	A	A	
13.	Shri Lalit Bokolia	Scientist F & Member Secretary	P	P	
14.	Shri Shard	Scientist E	P	P	

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ANNEXURE-1

Standard EC Conditions for Project/Activity 7(a): Airport

I. Statutory compliance:

(i) The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1980, in case of the diversion of forest land for non-forest purpose involved in the project.
(ii) The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
(iii) The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan/Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report (in case of the presence of schedule-I species in the study area).
(iv) The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.
(v) The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
(vi) Clearance from Directorate General of Civil Aviation (DGCA) and Airports Authority of India (AAI) for safety and project facilities shall be obtained.
(vii) A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
(viii) All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable by project proponents from the respective competent authorities.

II. Air quality monitoring and preservation:

(i) The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM_{10} and $PM_{2.5}$ in reference to PM emission, and SO_2 and NOx in reference to SO_2 and NOx emissions) within and outside the airport area at least at four locations (one within and three outside the plant area at an angle of 120°each), covering upwind and downwind directions.
(ii) Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.
(iii) A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.
(iv) Soil and other construction materials should be sprayed with water prior to any loading, unloading or transfer operation so as to maintain the dusty material wet
(v) The excavation working area should be sprayed with water after operation so as to maintain the entire surface wet.
(vi) Excavated materials shall be handled and transported in a manner that they do not cause any problems of air pollution.
(vii) The soil/construction materials carried by the vehicle should be covered by impervious sheeting to ensure that the dusty materials do not leak from the vehicle.

III. Water quality monitoring and preservation:

(i) Run off from chemicals and other contaminants from aircraft maintenance and other areas within the airport shall be suitably contained and treated before disposal. A spillage and contaminant containment plan shall be drawn up and implemented to the satisfaction of the State Pollution Control Board.
(ii) Proper drainage systems, emergency containment in the event of a major spill during monsoon season etc. shall be provided.
(iii) The runoff from paved structures like Runways, Taxiways, can be routed through drains to oil separation tanks and sedimentation basins before being discharged into rainwater harvesting structures.
(iv) Storm water drains are to be built for discharging storm water from the air-field to avoid flooding/water logging in project area. Domestic and industrial waste water shall not be allowed to be discharged into storm water drains.
(v) Rain water harvesting for roof run-off and surface run-off, as plan submitted should be implemented. Rain water harvesting structures shall conform to CGWA designs. Before recharging the surface run off, pre-treatment must be done to remove suspended matter, oil and grease.
(vi) Total fresh water use shall not exceed the proposed requirement as provided in the project details. Prior permission from competent authority shall be obtained for use of fresh water.
(vii) Sewage Treatment Plant shall be provided to treat the wastewater generated from airport. Treated water shall be reused for horticulture, flushing, backwash, HVAC purposes and dust suppression
(viii) A certificate from the competent authority for discharging treated effluent/ untreated effluents into the Public sewer/ disposal/drainage systems along with the final disposal point should be obtained.
(ix) A detailed drainage plan for rain water shall be drawn up and implemented.

IV. Noise monitoring and prevention:

(i) Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
(ii) Noise from vehicles, power machinery and equipment on-site should not exceed the prescribed limit. Equipment should be regularly serviced. Attention should also be given to muffler maintenance and enclosure of noisy equipments.
(iii) Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.

(iv) During airport operation period, noise should be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.

(v) Where construction activity is likely to cause noise nuisance to nearby residents, restrict operation hours between 7 am to 6 pm.

V. Energy Conservation measures:

(i) Energy conservation measures like installation of LED/CFLs/TFLs for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning.

VI. Waste management:

(i) Soil stockpile shall be managed in such a manner that dust emission and sediment runoff are minimized. Ensure that soil stockpiles are designed with no slope greater than 2:1 (horizontal/vertical).

(ii) The project activity shall conform to the Fly Ash notification issued under the E.P. Act of 1986.

(iii) Solid inert waste found on construction sites consists of building rubble, demolition material, concrete; bricks, timber, plastic, glass, metals, bitumen etc shall be reused/recycled or disposed off as per Solid Waste Management Rules, 2016 and Construction and Demolition Waste Management Rules, 2016.

(iv) Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016.

(v) The project proponents shall implement a management plan duly approved by the State Pollution Control Board and obtain its permissions for the safe handling and disposal of:

a. Trash collected in flight and disposed at the airport including segregation, collection and disposed.
b. Toilet wastes and sewage collected from aircrafts and disposed at the Airport.
c. Wastes arising out of maintenance and workshops
d. Wastes arising out of eateries and shops situated inside the airport complex.
e. Hazardous and other wastes

(vi) The solid wastes shall be segregated as per the norms of the Solid Waste Management Rules, 2016. Recycling of wastes such as paper, glass (produced from terminals and aircraft caterers), metal (at aircraft maintenance site), plastics (from aircrafts, terminals and offices), wood, waste oil and solvents (from maintenance and engineering operations), kitchen wastes and vegetable oils (from caterers) shall be carried out. Solid wastes shall be disposed in accordance to the Solid Waste Management Rules, 2016 as amended.

(vii) A certificate from the competent authority handling municipal solid wastes should be obtained, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project.

(viii) Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination.

VII. Green Belt:

(i) Green belt shall be developed in area as provided in project details, with native tree species in accordance with Forest Department. The greenbelt shall inter alia cover the entire periphery of the Air Port.

(ii) Top soil shall be separately stored and used in the development of green belt.

VIII. Public hearing and Human health issues:

(i) Construction site should be adequately barricaded before the construction begins.

(ii) Traffic congestion near the entry and exit points from the roads adjoining the airport shall be avoided. Parking should be fully internalized and no public space should be utilized.

(iii) Provision of Electro-mechanical doors for toilets meant for disabled passengers. Children nursing/feeding room to be located conveniently near arrival and departure gates.

(iv) Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.

(v) Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

(vi) Occupational health surveillance of the workers shall be done on a regular basis.

IX. Corporate Environment Responsibility:

(i) The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 01.05.2018, as applicable, regarding Corporate Environment Responsibility.

(ii) The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.

(iii) A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.

(iv) Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

(v) Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

X. Miscellaneous:

(i) The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular languagewithin seven days and in addition this shall also be displayed in the project proponent's website permanently.

(ii) The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.

(iii) The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.

(iv) The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.

(v) The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.

(vi) The criteria pollutant levels namely; PM_{10}, $PM_{2.5}$, SO_2, NOx (ambient levels) shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.

(vii) The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.

(viii) The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.

(ix) The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.

(x) No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).

(xi) Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.

(xii) The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

(xiii) The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

(xiv) The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data/ information/monitoring reports.

(xv) The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts/NGT and any other Court of Law relating to the subject matter.

(xvi) Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

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ANNEXURE-2

Standard EC Conditions for Project/Activity 7(d): Common hazardous waste treatment, storage and disposal facilities (TSDFs)

I. Statutory compliance:

i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1980, in case of the diversion of forest land for non-forest purpose involved in the project.
ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report (incase of the presence of schedule-I species in the study area)
iv. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.
v. The Project proponent should ensure that the TSDF fulfils all the provisions of Hazardous and other Wastes (Management and Transboundary Movement) Rules, 2016.
vi. The project proponents shall adhere to all conditions as prescribed in the Protocol for 'Performance Evaluation and Monitoring of the Common Hazardous waste treatment, storage and disposal facilities' published by the CPCB in May, 2010.
vii. Incinerator shall be designed as per CPCB guidelines. Energy shall be recovered from incinerator.
viii. The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
ix. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
x. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable by project proponents from the respective competent authorities

II. Air quality monitoring and preservation:

i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986.
iii. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM_{10} and $PM_{2.5}$ in reference to PM emission, and SO_2 and NOx in reference to SO_2 and NOx emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions.
iv. Sampling facility at process stacks and at quenching towers shall be provided as per CPCB guidelines for manual monitoring of emissions.
v. The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
vi. Appropriate Air Pollution Control (As proposed, air pollution control device viz. gas quencher; treatment with mixture of hydrated lime and activated powder for adsorption of partial acidity and VOCs (if any); bagfilter/ESP for removal of particulate matter; venturi scrubber followed by packed bed scrubber with caustic circulation to neutralize the acidic vapours in flue gas; and demister column for arresting water carry over will be provided to the incinerator) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
vii. The periodical monitoring of Dioxins and Furans in the Stack emissions shall be carried out. Analysis of Dioxins and Furans shall be done through CSIR-National Institute for Interdisciplinary Science and Technology (NIIST), Thiruvananthapuram or equivalent NABL Accredited laboratory
viii. Gas generated in the Land fill should be properly collected, monitored and flared
ix. A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 02 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 02 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.

III. Water quality monitoring and preservation:

i. The project proponent shall install continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
ii. Sufficient number of Piezometer wells shall be installed in and around the project site to monitor the ground water quality in consultation with the State Pollution Control Board / CPCB. Trend analysis of ground water quality shall be carried out each season and information shall be submitted to the SPCB and the Regional Office of MoEF&CC.
iii. The project proponent shall submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
iv. No discharge in nearby river(s)/pond(s).

v. The depth of the land fill site shall be decided based on the ground water table at the site.
vi. The Company shall ensure proper handling of all spillages by introducing spill control procedures for various chemicals.
vii. All leachates arising from premises should be collected and treated in the ETP followed by RO. RO rejects shall be evaporated in MEE. Toxicity Characteristic Leaching Procedure (TCLP) test to be performed on leachates.
viii. The Company shall review the unit operations provided for the treatment of effluents, specially the sequencing of MEE after tertiary treatment, the source of permeate when no R.O. is recommended and the treatment of MEE condensate. The scheme for treatment of effluents shall be as permitted by the Pollution Control Board/Committee under the provisions of consent to establish.
ix. Scrubber water, leachate water or wheel wash effluent shall be treated in the effluent treatment plant followed by RO to achieve zero liquid discharge.
x. Total fresh water use shall not exceed the proposed requirement as provided in the project details. Prior permission from competent authority shall be obtained for use of fresh water.
xi. Sewage Treatment Plant shall be provided to treat the wastewater generated from the project. Treated water shall be reused within the project.
xii. A certificate from the competent authority for discharging treated effluent/ untreated effluents into the Public sewer/ disposal/drainage systems along with the final disposal point should be obtained.
xiii. Rain water runoff from hazardous waste storage area shall be collected and treated in the effluent treatment plant.

IV. Noise monitoring and prevention:

i. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.
iii. Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.

V. Energy Conservation measures:

i. Energy conservation measures like installation ofLED/CFLs/TFLs for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning.

VI. Waste management:

i. The TSDF should only handle the waste generated from the member units.
ii. Periodical soil monitoring to check the contamination in and around the site shall be carried out.
iii. No non-hazardous wastes, as defined under the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, shall be handled in the premises.
iv. The Project proponent shall not store the Hazardous Wastes more than the quantity that has been permitted by the CPCB/SPCB.
v. The solid wastes shall be segregated, managed and disposed as per the norms of the Solid Waste Management Rules, 2016.
vi. A certificate from the competent authority handling municipal solid wastes should be obtained, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project.
vii. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Rules, 2016.

VII. Green Belt:

i. Green belt shall be developed in an area as provided in project details, with native tree species in accordance with Forest Department. The greenbelt shall inter alia cover the entire periphery of the project site.
ii. Top soil shall be separately stored and used in the development of green belt.

VIII. Public hearing and Human health issues:

i. Traffic congestion near the entry and exit points from the roads adjoining the project site shall be avoided. Parking should be fully internalized and no public space should be utilized.
ii. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
iii. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
iv. Occupational health surveillance of the workers shall be done on a regular basis.

IX. Corporate Environment Responsibility:

i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 01.05.2018, as applicable, regarding Corporate Environment Responsibility.
ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

X. Miscellaneous:

i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of

the District or State, of which one shall be in the vernacular languagewithin seven days and in addition this shall also be displayed in the project proponent's website permanently.

ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.

iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.

iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.

v. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.

vi. The criteria pollutant levels namely; $PM_{2.5}$, PM_{10}, SO_2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.

vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.

viii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.

ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.

x. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).

xi. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.

xii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

xiii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

xiv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.

xv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts/NGT and any other Court of Law relating to the subject matter.

xvi. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

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ANNEXURE-3

Standard EC Conditions for Project/Activity 7(da): Bio-Medical Waste Treatment Facilities

I. Statutory compliance:

i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1980, in case of the diversion of forest land for non-forest purpose involved in the project.
ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report (incase of the presence of schedule-I species in the study area)
iv. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.
v. Transportation and handling of Bio-medical Wastes shall be as per the Bio-Medical Waste Management Rules, 2016 including the section 129 to 137 of Central Motor Vehicle Rules 1989.
vi. Project shall fulfill all the provisions of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 including collection and transportation design etc and also guidelines for Common Hazardous Waste Incineration - 2005, issued by CPCB Guidelines of CPCB/MPPCB for Bio-medical Waste Common Hazardous Wastes incinerators shall be followed.
vii. The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
viii. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
ix. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable by project proponents from the respective competent authorities

II. Air quality monitoring and preservation:

i. The project proponent shall install emission monitoring system including Dioxin and furans to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
ii. Periodical air quality monitoring in and around the site including VOC, HC shall be carried out.
iii. Incineration plants shall be operated (combustion chambers) with such temperature, retention time and turbulence, so as to achieve Total Organic Carbon (TOC) content in the slag and bottom ashes less than 3%, or their loss on ignition is less than 5% of the dry weight of the material.
iv. Venturi scrubber (alkaline) should be provided with the incinerator with stack of adequate height (Minimum 30 meters) to control particulate emission within 50mg/Nm^3.
v. Appropriate Air Pollution Control (APC) system shall be provided for fugitive dust from all vulnerable sources, so as to comply prescribed standards. All necessary air pollution control devises (quenching, Venturi scrubber, mist eliminator) should be provided for compliance of emission standards.
vi. Masking agents should be used for odour control.

III. Water quality monitoring and preservation:

i. The project proponent shall install effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
ii. Waste water generated from the facility shall be treated in the ETP and treated waste water shall be reused in the APCD connected to the incinerator. The water quality of treated effluent shall meet the norms prescribed by State Pollution Control Board. Zero discharge should be maintained.
iii. Process effluent/any waste water should not be allowed to mix with storm water.
iv. Total fresh water use shall not exceed the proposed requirement as provided in the project details. Prior permission from competent authority shall be obtained for use of fresh water.
v. Sewage Treatment Plant shall be provided to treat the wastewater generated from the project. Treated water shall be reused within the project.
vi. A certificate from the competent authority for discharging treated effluent/ untreated effluents into the Public sewer/ disposal/drainage systems along with the final disposal point should be obtained.
vii. The leachate from the facility shall be collected and treated to meet the prescribed standards before disposal.
viii. Magnetic flow meters shall be provided at the inlet and outlet of the ETP & all ground water abstraction points and records for the same shall be maintained regularly.
ix. Rain water runoff from hazardous waste storage area shall be collected and treated in the effluent treatment plant.

IV. Noise monitoring and prevention:

i. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

V. Energy Conservation measures:

i. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;
ii. Provide LED lights in their offices and residential areas

VI. Waste management:

i. Incinerated ash shall be disposed at approved TSDF and MoU made in this regard shall be submitted to the Ministry prior to the commencement.
ii. The solid wastes shall be segregated as per the norms of the Solid Waste Management Rules, 2016.
iii. A certificate from the competent authority handling municipal solid wastes should be obtained, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project.

iv. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016
v. No landfill site is allowed within the CBWTF site
vi. The Project proponent shall not store the Hazardous Wastes more than the quantity that has been permitted by the CPCB/SPCB.

VII. Green Belt:

i. Green belt shall be developed in area as provided in project details, with native tree Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant.

VIII. Public hearing and Human health issues:

i. Feeding of materials/Bio-medical waste should be mechanized and automatic no manual feeding is permitted.
ii. Proper parking facility should be provided for employees & transport used for collection & disposal of waste materials.
iii. Necessary provision shall be made for fire-fighting facilities within the complex.
iv. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
v. Emergency plan shall be drawn in consultation with SPCB/CPCB and implemented in order to minimize the hazards to human health or environment from fires, explosion or any unplanned sudden or gradual release of hazardous waste or hazardous waste constituents to air, soil or surface water.
vi. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
vii. Occupational health surveillance of the workers shall be done on a regular basis.

IX. Corporate Environment Responsibility:

i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 01.05.2018, as applicable, regarding Corporate Environment Responsibility.
ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

X. Miscellaneous:

i. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular languagewithin seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed
ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
v. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
vi. The criteria pollutant levels namely; $PM_{2.5}$, PM_{10}, SO_2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
viii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
x. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
xi. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
xii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
xiii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

xiv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.

xv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts/NGT and any other Court of Law relating to the subject matter.

xvi. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

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ANNEXURE-4

Standard EC Conditions for Project/Activity 7(g): Aerial ropeways

I. Statutory compliance:

i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.

ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.

iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report (in case of the presence of schedule-I species in the study area)

iv. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.

v. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.

vi. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, the Forest Conservation Act, 1980 and the Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities.

II. Air quality monitoring and preservation:

i. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM_{10} and $PM_{2.5}$ in reference to PM emission) covering upwind and downwind directions.

ii. Appropriate Air Pollution Control (APC) system (both during the construction and operation) shall be provided for all the dust generating points *inter alia* including loading, unloading, transfer points, fugitive dust from all vulnerable sources, so as to comply prescribed standards.

iii. Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.

iv. Adequate parking shall be constructed at upper terminal and lower terminal. PP shall ensure smooth traffic management.

III. Water quality monitoring and preservation:

i. Storm water from the project area shall be passed through settling chamber.

ii. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.

iii. Total fresh water use shall not exceed the proposed requirement as provided in the project details.

iv. Prior permission from competent authority shall be obtained for use of fresh water.

v. No wastewater shall be discharged in open. Appropriate Water Pollution Control system shall be provided for treatment of waste water.

vi. A certificate from the competent authority, in case of discharging treated effluent/ untreated effluents into the Public sewer/ disposal/drainage systems along with the final disposal point should be obtained.

IV. Noise monitoring and prevention:

i. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.

ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time..

V. Energy Conservation measures:

i. Energy conservation measures like installation of LED/CFLs/TFLs for lighting should be integral part of the project design and should be in place before project commissioning.

ii. Solar energy shall be used in the project i.e. at upper terminal and lower terminal to reduce the carbon footprint.

VII. Waste management

i. The solid wastes shall be segregated, managed and disposed as per the norms of the Solid Waste Management Rules, 2016.

ii. The waste oil, grease and other hazardous waste shall be disposed of as per the Hazardous & Other Wastes (Management and Transboundary Movement) Rules, 2016.

iii. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016.

VIII. Public hearing and Human health/safety issues:

i. Comply with the safety procedures, norms and guidelines (as applicable) as outlined in IS 5228, IS 5229 and IS 5230, code of practice for construction of aerial ropeways, Bureau of Indian Standards.

ii. Maintaining hoists and lifts, lifting machines, chains, ropes, and other lifting tackles in good condition.

iii. Ensuring that walking surfaces or boards at height are of sound construction and are provided with safety rails or belts.

iv. The project should conform to the norms prescribed by the Director General Mine safety. Necessary clearances in this regard shall be obtained.

v. Adequate infrastructure, including power, shall be provided for emergency situations and disaster management.

vi. Adequate first aid facility shall be provided during construction and operation phase of the project.

vii. Regular safety inspection shall be carried out of the ropeway project and a copy of safety inspection report should be submitted to the Regional Office.

viii. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.

IX Corporate Environment Responsibility:

i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 01.05.2018, as applicable, regarding Corporate Environment Responsibility.

ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.

iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.

iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

X. Miscellaneous:

i. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed.

ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.

iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.

iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.

v. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.

vi. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.

vii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.

viii. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.

ix. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).

x. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.

xi. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

xii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

xiii. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.

xiv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

xv. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

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ANNEXURE-5

Standard EC Conditions for Project/Activity 7(h): Common Effluent Treatment plants (CETPs)

I. Statutory compliance:

i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1980, in case of the diversion of forest land for non-forest purpose involved in the project.
ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report (in case of the presence of schedule-I species in the study area)
iv. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.
v. The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
vi. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
vii. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, etc. shall be obtained, as applicable by project proponents from the respective competent authorities.

II. Air quality monitoring and preservation:

i. The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Diesel generating sets shall be installed, in the downwind directions.
ii. Appropriate Air Pollution Control (APC) system shall be provided for fugitive dust from all vulnerable sources, so as to comply prescribed standards.

III. Water quality monitoring and preservation:

i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
ii. Total fresh water use shall not exceed the proposed requirement as provided in the project details. Prior permission from competent authority shall be obtained for use of fresh water.
iii. There shall be flow meters at inlet and outlet of CETP to monitor the flow. Suitable meters shall be provided to measure the quantity of effluent received, quantity of effluent recycled/reused and discharged.
iv. The units and the CETP will maintain daily log book of the quantity and quality of discharge from the units, quantity of inflow into the CETP, details of the treatment at each stage of the CETP including the raw materials used, quantity of the treated water proposed to be recycled, reused within the Industrial park/units, quantity of the treated effluent discharged. All the above information shall be provided on- line of the web site exclusively prepared for the purpose by the CETP owner. The website shall be accessible by the public. The financial and energy details of the CETP will also be provided along with details of the workers of the CETP.
v. The CETP operator will maintain an annual register of member units which will contain the details of products with installed capacities and quality and quantity of effluents accepted for discharge. This will form a part of the initial and renewal applications for consent to operate to be made before the State Pollution Control Board.
vi. No changes in installed capacity, quality or quantity of effluents as agreed upon in the initial MOU between the operator and the member units, addition of any new member units shall be carried without prior approval of the ministry
vii. The Unit shall inform the State Pollution Control Board at least a week prior to undertaking maintenance activities in the recycle system and store/dispose treated effluents under their advice in the matter.
viii. The unit shall also immediately inform the Pollution Control Board of any breakdown in the recycling system, store the effluents in the interim period and dispose effluents only as advised by the Pollution Control Board.
ix. The MoU between CETP and member units shall indicate the maximum quantity of effluent to be sent to the CETP along with the quality.
x. The unit shall maintain a robust system of conveyance for primary treated effluents from the member units and constantly monitor the influent quality to the CETP. The Management of the CETP and the individual member shall be jointly and severally responsible for conveyance and pre-treatment of effluents. Only those units will be authorized to send their effluents to the CETP which have a valid consent of the Pollution Control Board and which meet the primary treated standards as prescribed. The CETP operator shall with the consent of the State Pollution Control Board retain the powers to delink the defaulter unit from entering the conveyance system.
xi. The effluent from member units shall be transported through pipeline. In case the effluent is transported thorough road, it shall be transported through CETP tankers only duly maintaining proper manifest system. The vehicles shall be fitted with proper GPS system.
xii. Before accepting any effluent from member units, the same shall be as permitted by the SPCB in the consent order. No effluent from any unit shall be accepted without consent from SPCB under the Water Act, 1974 as amended.
xiii. Treated water shall be disposed on land for irrigation. An irrigation management plan shall be drawn up in consultation with and to the satisfaction of the State Pollution Control Board.
xiv. The Project proponents will build operate and maintain the collection and conveyance system to transport effluents from the industrial units in consultation with and to the satisfaction of the State Pollution Control Board and ensure that the industrial units meet the primary effluent standards prescribed by the State Pollution Control Board.
xv. The State Pollution Control Board will also evaluate the treatment efficiency of the Effluent Treatment Plant (ETP) and its capability of meeting the prescribed standards. The final scheme of treatment would be such as is approved by the Pollution Control Board in the Consent to Establish.
xvi. The project proponents will create an institutional arrangement for the involvement of individual members in the management of the CETP.

IV. Noise monitoring and prevention:

i. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.

ii. Noise from vehicles, power machinery and equipment on-site should not exceed the prescribed limit. Equipment should be regularly serviced. Attention should also be given to muffler maintenance and enclosure of noisy equipments.

iii. Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.

V. Waste management:

i. ETP sludge generated from CETP facility shall be handled and disposed to nearby authorized TSDF site as per Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.

ii. Non Hazardous solid wastes and sludge arising out of the operation of the CETP shall be adequately disposed as per the Consent to be availed from the State Pollution Control Board. Non Hazardous solid wastes and sludge shall not be mixed with Hazardous wastes.

iii. The CETP shall have adequate power back up facility, to meet the energy requirement in case of power failure from the grid.

iv. The site for aerobic composting shall be selected and developed in consultation with and to the satisfaction of the State Pollution Control Board. Odour and insect nuisance shall be adequately controlled.

v. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016.

vi. The solid wastes shall be segregated, managed and disposed as per the norms of the Solid Waste Management Rules, 2016.

VI. Energy Conservation measures:

i. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;

ii. Provide LED lights in their offices and residential areas

VII. Green Belt:

i. Green belt shall be developed in area as provided in project details, with native tree Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant.

VIII. Public hearing and Human health issues:

i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.

ii. Adequate infrastructure, including power, shall be provided for emergency situations and disaster management.

iii. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

iv. Occupational health surveillance of the workers shall be done on a regular basis.

IX. Corporate Environment Responsibility:

i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 01.05.2018, as applicable, regarding Corporate Environment Responsibility.

ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.

iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.

iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

X. Miscellaneous:

i. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed.

ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.

iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.

iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.

v. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.

vi. The criteria pollutant levels or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.

vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of operation by the project.

viii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.

ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.

x. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).

xi. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.

xii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

xiii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

xiv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.

xv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

xvi. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

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ANNEXURE-6

Standard EC Conditions for Project/Activity 7(i): Common Municipal Solid Waste Management Facility (CMSWMF)

I. Statutory compliance:

i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1980, in case of the diversion of forest land for non-forest purpose involved in the project.
ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report (in case of the presence of schedule-I species in the study area)
iv. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.
v. The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
vi. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
vii. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable by project proponents from the respective competent authorities.

II. Air quality monitoring and preservation:

i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories. (for projects involving incineration).
ii. As proposed, air pollution control device viz. gas quencher; treatment with mixture of hydrated lime and activated powder for adsorption of partial acidity and VOCs (if any); bagfilter/ESP for removal of particulate matter; venturi scrubber followed by packed bed scrubber with caustic circulation to neutralize the acidic vapours in flue gas; and demister column for arresting water carry over will be provided to the incinerator. Online pollutant monitoring shall be provided as per CPCB guidelines for monitoring particulate matter, SO_2, NOx and CO from the incinerator stack. The periodical monitoring of Dioxins and Furans in the Stack emissions shall be carried out.
iii. Analysis of Dioxins and Furans shall be done through CSIR-National Institute for Interdisciplinary Science and Technology (NIIST), Thiruvananthapuram or equivalent NABL Accredited laboratory.
iv. Incinerator shall be designed as per CPCB guidelines. Energy shall be recovered from incinerator.
v. Gas generated in the Land fill should be properly collected, monitored and flared.
vi. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM_{10} and $PM_{2.5}$ in reference to PM emission, and SO_2 and NOx in reference to SO_2 and NOx emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions.

III. Water quality monitoring and preservation:

i. The project proponent shall install continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
ii. Sufficient number of Piezometer wells shall be installed in and around the project site to monitor the ground water quality in consultation with the State Pollution Control Board / CPCB. Trend analysis of ground water quality shall be carried out each season and information shall be submitted to the SPCB and the Regional Office of MoEF&CC.
iii. The depth of the land fill site shall be decided based on the ground water table at the site.
iv. Rain water runoff from the landfill area and other hazardous waste management area shall be collected and treated in the effluent treatment plant.
v. Total fresh water use shall not exceed the proposed requirement as provided in the project details. Prior permission from competent authority shall be obtained for use of fresh water.
vi. The Company shall ensure proper handling of all spillages by introducing spill control procedures for various chemicals.
vii. All leachates arising from premises should be collected and treated in the ETP followed by RO. RO rejects shall be evaporated in MEE. Toxicity Characteristic Leaching Procedure (TCLP) test to be performed on leachates.
viii. Scrubber water, leachate water or wheel wash effluent shall be treated in the effluent treatment plant followed by RO to achieve zero liquid discharge.
ix. Sewage Treatment Plant shall be provided to treat the wastewater generated from the project. Treated water shall be reused within the project.
x. A certificate from the competent authority for discharging treated effluent/ untreated effluents into the Public sewer/ disposal/drainage systems along with the final disposal point should be obtained.

IV. Waste management:

i. No non-hazardous wastes, as defined under the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, shall be handled in the premises.
ii. The solid wastes shall be segregated, managed and disposed as per the norms of the Solid Waste Management Rules, 2016.
iii. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016.
iv. A certificate from the competent authority handling municipal solid wastes should be obtained, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project.

V. Transportation:

i. Project should ensure that the site is properly cordoned off from general movement and no unauthorized person or goods permitted to enter the premises. Necessary security provision should be made as a condition in the Authorization under the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 to prevent unwanted access.
ii. Traffic congestion near the entry and exit points from the roads adjoining the project site shall be avoided. Parking should be fully internalized and no public space should be utilized.
iii. A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 02 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 02 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.

VI. Green belt:

i. Green belt shall be developed in an area as provided in project details, with native tree species in accordance with Forest Department. The greenbelt shall inter alia cover the entire periphery of the project site.
ii. Top soil shall be separately stored and used in the development of green belt.

VII. Public hearing and Human health/safety issues:

i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
ii. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
iii. Occupational health surveillance of the workers shall be done on a regular basis.

VIII. Corporate Environment Responsibility:

i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 01.05.2018, as applicable, regarding Corporate Environment Responsibility.
ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

IX. Miscellaneous:

i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently. (for projects involving incineration)
ii. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed (For projects involving only Landfill without incineration)
iii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
iv. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
vii. The criteria pollutant levels namely; $PM_{2.5}$, PM_{10}, SO_2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain (in case of incineration involved).
viii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
ix. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
x. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
xi. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
xii. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.

xiii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

xiv. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

xv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.

xvi. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

xvii. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

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ANNEXURE-7

Standard EC Conditions for Project/Activity 8(a/b): Building and Construction projects / Townships and Area Development projects

I. Statutory compliance:

i. The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.
ii. The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of fire fighting equipment etc as per National Building Code including protection measures from lightening etc.
iii. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1980, in case of the diversion of forest land for non-forest purpose involved in the project.
iv. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
v. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.
vi. The project proponent shall obtain the necessary permission for drawl of ground water / surface water required for the project from the competent authority.
vii. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
viii. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable, by project proponents from the respective competent authorities.
ix. The provisions of the Solid Waste Management Rules, 2016, e-Waste (Management) Rules, 2016, and the Plastics Waste Management Rules, 2016, shall be followed.
x. The project proponent shall follow the ECBC/ECBC-R prescribed by Bureau of Energy Efficiency, Ministry of Power strictly.

II. Air quality monitoring and preservation:

i. Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.
ii. A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.
iii. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM_{10} and $PM_{2.5}$) covering upwind and downwind directions during the construction period.
iv. Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.
v. Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
vi. Sand, murram, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.
vii. Wet jet shall be provided for grinding and stone cutting.
viii. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
ix. All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Management Rules 2016.
x. The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.
xi. The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.
xii. For indoor air quality the ventilation provisions as per National Building Code of India.

III. Water quality monitoring and preservation:

i. The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bio-swales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water.
ii. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.
iii. Total fresh water use shall not exceed the proposed requirement as provided in the project details.
iv. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.
v. 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.

vi. At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.
vii. Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.
viii. Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.
ix. Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.
x. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
xi. The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rain water harvesting recharge pits/storage tanks shall be provided for ground water recharging as per the CGWB norms.
xii. A rain water harvesting plan needs to be designed where the recharge bores of minimum one recharge bore per 5,000 square meters of built up area and storage capacity of minimum one day of total fresh water requirement shall be provided. In areas where ground water recharge is not feasible, the rain water should be harvested and stored for reuse. The ground water shall not be withdrawn without approval from the Competent Authority.
xiii. All recharge should be limited to shallow aquifer.
xiv. No ground water shall be used during construction phase of the project.
xv. Any ground water dewatering should be properly managed and shall conform to the approvals and the guidelines of the CGWA in the matter. Formal approval shall be taken from the CGWA for any ground water abstraction or dewatering.
xvi. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.
xvii. Sewage shall be treated in the STP with tertiary treatment. The treated effluent from STP shall be recycled/re-used for flushing, AC make up water and gardening. As proposed, no treated water shall be disposed in to municipal drain.
xviii. No sewage or untreated effluent water would be discharged through storm water drains.
xix. Onsite sewage treatment of capacity of treating 100% waste water to be installed. The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Treated waste water shall be reused on site for landscape, flushing, cooling tower, and other end-uses. Excess treated water shall be discharged as per statutory norms notified by Ministry of Environment, Forest and Climate Change. Natural treatment systems shall be promoted.
xx. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.
xxi. Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.

IV. Noise monitoring and prevention:

i. Ambient noise levels shall conform to residential area/commercial area/industrial area/silence zone both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental pollution loads on the ambient air and noise quality shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB.
ii. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
iii. Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.

V. Energy Conservation measures:

i. Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC.
ii. Outdoor and common area lighting shall be LED.
iii. Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.
iv. Energy conservation measures like installation of CFLs/ LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning.
v. Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 1% of the demand load or as per the state level/ local building bye-laws requirement, whichever is higher.
vi. Solar power shall be used for lighting in the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. Solar water heating shall be provided to meet 20% of the hot water demand of the commercial and institutional building or as per the requirement of the local building bye-laws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.

VI. Waste Management:

i. A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project shall be obtained.
ii. Disposal of muck during construction phase shall not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
iii. Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials.
iv. Organic waste compost/ Vermiculture pit/ Organic Waste Converter within the premises with a minimum capacity of 0.3 kg /person/day must be installed.

v. All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.
vi. Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.
vii. Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials.
viii. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.
ix. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016.
x. Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination.

VII. Green Cover:

i. No tree can be felled/transplant unless exigencies demand. Where absolutely necessary, tree felling shall be with prior permission from the concerned regulatory authority. Old trees should be retained based on girth and age regulations as may be prescribed by the Forest Department. Plantations to be ensured species (cut) to species (planted).
ii. A minimum of 1 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.
iii. Where the trees need to be cut with prior permission from the concerned local Authority, compensatory plantation in the ratio of 1:10 (i.e. planting of 10 trees for every 1 tree that is cut) shall be done and maintained. Plantations to be ensured species (cut) to species (planted). Area for green belt development shall be provided as per the details provided in the project document.
iv. Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.

VIII. Transport

i. A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria.
    a. Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
    b. Traffic calming measures.
    c. Proper design of entry and exit points.
    d. Parking norms as per local regulation.
ii. Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours.
iii. A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.

IX. Human health issues:

i. All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.
ii. For indoor air quality the ventilation provisions as per National Building Code of India.
iii. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
iv. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
v. Occupational health surveillance of the workers shall be done on a regular basis.
vi. A First Aid Room shall be provided in the project both during construction and operations of the project.

X. Corporate Environment Responsibility:

i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 01.05.2018, as applicable, regarding Corporate Environment Responsibility.
ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

XI. Miscellaneous:

i. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed.
ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
v. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
vi. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
vii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
viii. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
ix. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change (MoEF&CC).
x. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
xi. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
xii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
xiii. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
xiv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
xv. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

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