

MINUTES OF 84th MEETING OF EXPERT APPRAISAL COMMITTEE (INFRASTRUCTURE-2) HELD DURING 16-17th MARCH, 2022.

VENUE: Through Video Conferencing

DATE: 16-17th March, 2022

PROCEEDINGS

84.1 Opening Remarks of the Chairman: The Chairman and Members extended warm welcome with each other and other participants of the meeting. Thereafter, the meeting was opened to start proceeding as per the agenda adopted for this meeting.

84.2 Confirmation of Minutes of 83rd Meeting of Expert Appraisal Committee (Infrastructure-2) held during 28th February and 2nd March, 2022.

The Expert Appraisal Committee (Infrastructure-2), hereinafter called the EAC, was informed that no representation has been received regarding projects considered in 83rd meeting. Minutes of 83rd meeting of EAC were confirmed. The typo errors, if any noticed during processing of these cases may be corrected in the light of facts and figures provided by the respective Project Proponent.

84.3 Consideration of Proposals (Day I): The EAC considered proposals as per the agenda adopted for Day-I of 84th meeting. The details of deliberations held and decisions taken in the meeting are as under:

AGENDA ITEM NO. 84.3.1

Proposed Common Effluent Treatment Plant of 0.5 MLD capacity at Rectangle No. 24, Khasra No-25/1, HSIIDC Industrial Estate Hansi Road, Near Vita Plant, Jind, Haryana by M/s Haryana State Industrial and Infrastructure Development Corporation Limited (HSIIDC) - Environmental Clearance

(IA/HR/MIS/249878/2021; F. No. 21-38/2022-IA-III)

1. The Project Proponent [M/s. Haryana State Industrial and Infrastructure Development Corporation Limited (HSIIDC)] along with his consultant 'M/s. Gaurang Environmental Solutions Pvt. Ltd.', made a presentation on the key parameters and salient features of the project to the EAC (Infra-2). The EAC took note of following key parameters and salient features of the project, as presented during the meeting; provided in the brief and application for this project:

- i. The project is located at Rectangle No. 24, Khasra No-25/1, HSIIDC Industrial Estate Hansi Road, Near Vita Plant, Jind, Haryana.

- ii. The project is new.
- iii. The project was granted Standard ToR by MoEF&CC vide F. No. 21-76/2021-IA-III dated 07.07.2021.
- iv. Baseline study has been carried out during the period of March, April and May, 2021 covering pre-monsoon season.
- v. The proposed Common Effluent Treatment Plant (CETP) unit is coming up in 2,711.39 sqm. (0.67 Acre) area. The proposed project is for CETP to treat the effluent being generated from the member industries located in the industrial estate, Jind. Wastewater thus generated by the associated industries will be lifted through dedicated closed conduit pipeline system after meeting the primary treatment discharge standards prescribed by HSIIDC. The wastewater after treatment shall meet the discharge standards laid down by Haryana State Pollution Control Board (HSPCB) and CPCB. The treated water will be recirculated for industrial uses by member industries and green belt development. Treated water will meet the criteria for irrigation water quality. The land use breakup of the project is as under:

S. No.	Particulars	Area (sqm.)	Percentage (%)
1	Plant area	1220.13	45
2	Road/Paved area	189.80	7
3	Green belt	894.76	33
4	Open area	406.70	15
Total		2711.39	100

- vi. Land for construction of CETP has already been acquired and in possession of HSIIDC. Possession of land was taken over by HSIIDC Chandigarh on dated 18.05.1977 and mutation of this land was done in favour of HSIIDC dated 28.10.1987. There is no existing building at the site.
- vii. Exemption from public hearing has been considered as per Para 7(i) III. Stage (3) (i) (b) of EIA Notification, 2006, "Project or activity or units located within Industrial Estates/Parks, which area notified prior to 14.09.2006 are exempted from public consultation.", and MoEF&CC OM regarding exemption of public consultation for the project/activities located within the Industrial Estate/Parks vide letter no J-11011/321/2016-IA.II (I) dated 27.04.2018.
- viii. The salient features of the project are given as follows:

Items	Details
Project Capacity	0.5 MLD
Technology	Extended Aeration System followed by Tertiary Treatment
Total area of Industrial Estate, Jind	1,00,888.13sqm. (24.93 Acres)
Total area for CETP	2,711.39 sqm. (0.67 Acre)
Green Area	894.76 sqm. of CETP Area (33%)

Power Demand and Source	Power Demand: 80 kVA Source: Dakshin Haryana BijliVitrان Nigam (DHBVN)
Power Backup (D. G. set)	Capacity: 100 kVA Number: 1 no. Fuel Consumption: HSD – 24 l/hr
Water Demand & Source	Water Demand: 0.8 KLD Domestic uses: 0.6 KLD Chemical Dosing: 0.2 KLD Source: HSIIDC IE, Jind
Manpower (Nos.)	Construction Phase –30 Operation phase –15
Waste water generation	Domestic wastewater generation – 0.5 KLD wastewater will be pumped into CETP through septic tank. Waste water from member industry: 131 KLD will be treated in proposed 0.5 MLD CETP

- ix. There is already 0.1 MLD CETP (up to secondary treatment) situated within HSIIDC IE, Jind on another site. The same will be dismantled after the commissioning of proposed 0.5 MLD CETP at HSIIDC IE, Jind. An affidavit has been submitted in this regard.
- x. Total fresh water demand for proposed unit will be 0.8 KLD, Out of which 0.6 KLD water will be required for domestic and 0.2 KLD for chemical dosing purposes. Water demand will be met from HSIIDC Industrial Estate, Jind. Domestic wastewater to the tune of 0.5 KLD will be generated, which will be pumped into CETP through septic tank. The approximate quantity of effluent from member industries will be 131 KLD. It has been proposed by HSIIDC to reuse treated water for green belt/plantation and recirculate to member industries.
- xi. Domestic solid waste (2.5 kg/day) generated will be segregated in to biodegradable and non-biodegradable at site and will be sent to Municipal Council, Jind. ETP Sludge generated (about 100 kg/day) will be disposed off to the TSD site (GEPIL) via GPS enabled trucks.
- xii. 01 number underground water tank for RWH will be constructed within the project site.
- xiii. Out of total plot area (2,711.39 sqm.), about 33% (894.76 sqm.) will be under green belt, which is as per the CPCB norms. 250 trees are proposed for plantation.
- xiv. Submission of Application of Conservation plan for Schedule-I species has been submitted to Chief Conservator of Forest, Panchkula, Haryana on dated 17.12.2021.
- xv. The project is not located in Critically Polluted area.
- xvi. NBWL Clearance is not required.
- xvii. Forest Clearance is not required.
- xviii. No court case is pending against the project.
- xix. CRZ Clearance is not required.
- xx. Expected timeline for completion of the project - The project will be operational within a year after obtaining all the statutory clearances.

- xxi. Investment/Cost of the project is ₹5.81 Crores.
- xxii. Employment Potential – 30 persons during construction phase and 15 persons during operation phase.
- xxiii. Benefits of the project - The Project will generate indirect employment around the project area. The CER OM dated May 1st 2018 has been superseded by recent OM of September 30th 2020 which states that Social activities & budget to be included in EMP. An amount of ₹11.65 lac/- will be spent on EMP social budget.

2. The EAC noted that the project/activity is covered under category 'B' of item 7(h) 'Common Effluent Treatment Plants (CETPs)' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at State level. However, General Condition is applicable due to the presence of Bir Bara Ban Wildlife Sanctuary (Denotified and declared as a Conservation Reserve vide Haryana Govt. Notification No. S.O. 78/C.A.53/72/S.18 and 36-A/2007 dated 11.10.2007) at a distance of 1.16 km the project. Accordingly, the project comes under category 'A' and requires appraisal at Central level by Sectoral EAC.

3. *The EAC (Infra-2), 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 while considering for accord of environmental clearance:*

- i. As committed, no groundwater abstraction shall be done during construction as well as operation phase of the project.
- ii. Fresh water requirement from local authority shall not exceed 0.8 KLD during operational phase.
- iii. As committed, there shall be no discharge of treated wastewater from the CETP. The treated wastewater shall be recycled and reused for green belt/plantation/industrial uses by member industries through dedicated pipe networks.
- iv. MoU with member industries shall specify the influent characteristics required for the CETP. Copy of the MoUs shall be submitted to the IRO, MoEF&CC along with six-monthly compliance report.
- v. A continuous 24x7 online monitoring system for influent and effluent characteristics shall be installed at CETP and its value be displayed at entry gate for public.
- vi. CETP sludge shall be managed properly and as proposed it shall be disposed to authorized TSDF site as committed.
- vii. Area for greenery shall be provided as per the details provided in the project document i.e., area under plantation/greenery will be 894.76 sqm. at 33% of plot area. As proposed, atleast 250 trees shall be maintained during the operation phase of the project. As committed, green belt shall be developed with dense plantation at the project site using appropriate techniques in consultation with the forest department/horticulture department/experts/consultants etc., to

- counter air pollution.
- viii. 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, 1 underground water tanks shall be provided for rain water harvesting.
 - ix. The solid waste shall be duly segregated into biodegradable and non-biodegradable components and handled in separate area earmarked for segregation of solid waste. As committed, biodegradable and non-biodegradable wastes shall be segregated at site and sent to Municipal Council, Jind for disposal through authorized vendors.
 - x. Wildlife Conservation Plan shall be implemented as committed.
 - xi. The project proponent must ensure that only biodegradable wastewater will be accepted in CETP from member industries. Therefore, the project proponent must spell out modalities for wastewater characterization before it is discharged from member industries. In addition, the project proponent must make necessary arrangements for sampling and characterization of wastewater at various junctions of the pipelines before it reaches to CETP.
 - xii. The project proponent must establish the proper piping network with sump house, flowmeters, valves, and pumping stations to ensure the influent flow of wastewater to the CETP will always be under the control of project proponent / CETP authorities. None of the member industries can discharge wastewater as per their desire; instead, wastewater from the member industry can be discharged after permission from the project proponent / CETP authorities. Concisely, project proponent / CETP authorities must ensure that the influent flow, i.e, in terms of volumetric flow and characteristics of the wastewater, is never received beyond the design capacity of the CETP.
 - xiii. 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.

AGENDA ITEM NO. 84.3.2

Proposed expansion of Sardar Vallabhbhai Patel International Airport (SVPIA) to enhance the Passenger Handling Capacity up to 40.33 MPPA & Cargo Handling Capacity up to 1.0 MTPA by M/s Ahmedabad International Airport Limited (AIAL) – Terms of Reference

(IA/GJ/MIS/257785/2022; F. No. 21-36/2022-IA-III)

1. The Project Proponent [M/s. Ahmedabad International Airport Limited (AIAL)] along with his consultant 'M/s. Vimta Labs Ltd.', made a presentation on the key parameters and salient features of the project to the EAC (Infra-2). The EAC took note of following key parameters and salient

features of the project, as presented during the meeting; provided in the brief and application for this project:

- i. The project (Sardar Vallabhbhai Patel International Airport (SVPIA), Ahmedabad), is located at 11 km northeast of city centre of Ahmedabad and about 18 km southeast of Gandhinagar, in Hansol, Asarva, Naroda, Kotarpur, Sejpurbodha and Sardarnagar Villages.
- ii. The proposal is for 'Expansion'.
- iii. Earlier, Environmental Clearance for "Construction of New International Terminal Building & New Domestic Arrival Block" at Ahmedabad, Gujarat was obtained vide File No. 10-6/2006-IA-III dated 31.07.2006.
- iv. A concession agreement for operation, maintenance, management & development of SVPIA was signed between Airports Authority of India (AAI) and Ahmedabad International Airport Limited (AIAL) (earlier known as Adani Ahmedabad International Airport Limited) on 14.02.2020. As per the Concession Agreement, AIAL has been entrusted with the responsibility to operate and manage the existing airport assets and will be responsible for designing, engineering, financing, construction, upgradation, and development of future airside, terminal, city side and landside infrastructure for the airport in phases, and its subsequent operation and management for a 50-Year concession period from the Commercial Date of Operation (COD) 07.11.2020.
- v. Transfer of EC from "Airports Authority of India" (AAI) to "Adani Ahmedabad International Airport Ltd" (AAIAL) has been obtained vide letter File No. 10-6/2006-IA-III dated 17.06.2021, amended vide letter of even no. dated 26.11. 2021. Further EC name change order has been obtained in the name of "Ahmedabad International Airport Ltd." vide letter of even no. dated 16.02.2022 based on Certificate of incorporation upon change of name from Adani Ahmedabad International Airport Ltd to Ahmedabad International Airport Ltd issued by Ministry of Corporate Affairs vide document dated 09.11.2021.
- vi. The proposal for expansion includes works required for relocation, improvement, modification/upgradation/augmentation and modernization of existing Airside/Landside facilities and infrastructure, and to meet operational safety requirements to facilitate the required infrastructure to serve the projected passenger and cargo traffic in ultimate phase. A new integrated terminal building (NITB) is proposed to be developed phase wise to cater the passenger handling up to 40.33 Million Passenger Per Annum (MPPA). The cargo Handling capacity is projected to be developed for 1 Million Tonnes Per Annum (MTPA). The proposed expansion shall comprise of the following:
 - a. New Integrated Passenger Terminal Building (NITB): NITB is proposed to cater 40.33 MPPA with a built-up area of approx. 4,00,000 sqm. It is planned to be a multi-level terminal with departure level at 13.0 m, arrival mezzanine at 5.5 m and

arrival level at 0.0 m, well connected on the landside with elevated departure roadway and at grade road network at arrival level.

- b. A multi-modal transport hub (MMTH): is envisioned abutting the NITB which includes metro connectivity, multi-level car park (MLCP), city side check-in and self-bag drop (SBD) facility, Airport plaza area for passengers/visitors arriving early at the airport from surrounding – all connected seamlessly to the main levels of the NITB.
 - c. Cargo Complex: Cargo Complex will be developed in a total area of 5.7 Ha, to handle cargo up to 1 MTPA.
 - d. Arpon & Taxiway: Apron and taxiways will be developed within an area of 107.30 Ha. Full length parallel taxiway will be developed along with associated RETs and entry/exit way.
 - e. Multilevel Car parking: Multilevel Car Parking is proposed to be developed to accommodate 2000 Nos. of vehicles.
 - f. Green Area: The total area under this zone shall be approximately 12.33 ha in landside zone. The proposed green spaces shall be developed as per their contextual and functional requirements and overall environmental and landscape planning approach. The proposed Green Space & Landscape development is planned considering key airport related constraints, i.e. bird menace, height restriction, restriction in open area etc.
 - g. Support Facilities & amenities: Hangars in an area of 4.78 Ha, VIP/CIP/General Aviation in an area of ~0.82 ha along with the other Support facilities such as of ARFF, Fuel Storage, GSE maintenance facility, Flight Kitchen Facility, Police station, Airport maintenance building, Airport Health Organization, CISF Housing Barrack etc. also proposed to be upgraded or relocated as per the suitability of the SVPIA Master Plan Development.
- vii. The Master Plan has been considered into two major zones: Airside Zone and Landside Zone, as follows:

S. No.	Zone	Area in ha	Area in Acres
1	Airside	806.25	326.28
2	Landside	157.57	63.76
Total Site Area		~963.82	~390.05

- viii. As a part of concession agreement between AAI & AIAL, 399.48 ha has been allotted to AIAL for development of SVPIA. Out of which, 11.19 ha of land will be considered for City Side development, which will be developed phase wise after obtaining required approvals. The proposed expansion is within an area of 390.05 Ha, which includes land area of 29.95 ha as a Carved Out Area, retained by Airport Authority of India (AAI) and additional land area of 1.76 ha (State Govt.) for safety requirements and de-bottlenecking. The additional

land required will be acquired by AAI and encumbrance free land will be handed over to AIAL.

- ix. For achieving the better operating practices for safety, additional area of 8.54 ha is identified and same will be acquired and utilized subject to its availability from AAI. However, this will not have any direct implications on the proposed expansion, as same will be used only for enhancing safety.
- x. Total water requirement is estimated to be 9.5 MLD, out of which 4.5 MLD will be potable water requirement, which is proposed to be sourced through State Government water supply/borewells and remaining 5.0 MLD will be recycled water from STP. The total estimated wastewater generation is expected around 5.20 MLD which will be treated through total STP capacity of 5.5 MLD to be developed on modular basis. Treated wastewater will be used for landscaping or other purposes. Liquid waste from aircraft needs to be treated at Triturator as a primary treatment & further will be pumped to STP for secondary treatment.
- xi. The total estimated power demand for SVPIA Operations is 42 MVA, which will be sourced from Electrical Substation. DG sets for emergency requirements will be installed on modular basis.
- xii. The total estimated Solid waste generation is 32 Tonnes/day, which will be managed in line with the provisions of the Solid Waste Rules, 2016, amended till date. Hazardous waste 1 Tonne/Day, including Used Oil, Contaminated filters, Oily cotton waste, discarded drums etc. will be and will be handled in accordance with HWM rules 2016, amended till date.
- xiii. Rainwater Harvesting ponds will be developed with a capacity of 45 MLD, in an area of 22,852 sqm and will be used for non-potable purposes.
- xiv. AIAL has planned to install Solar Panels on roof tops of existing & proposed structures including the new integrated passenger terminal building. The proposed area available on roof top is approx. 5.67 ha and the solar power generation will be ~3 MW.
- xv. The proposed connectivity for the project includes the following:
 - a. External Connectivity: Expansion/Widening of the main Airport Road section from Airport Circle near Hotel Ummed to SVP Statue circle is extremely essential to cater the Airport Final Phase. Existing single main airport access road to be widened to required width of 41m by expanding current road to minimum 5+5 lanes (inclusive of new 3+3 lane flyover/elevated road to new integrated passenger terminal), with additional corridor for metro rail connectivity to airport, and underground corridor for airport utilities like power cables and ATF fuel supply pipeline. Existing internal main airport road from SVP statue to IMD facility will be widened to 4+4 lanes from its current 2+2 lane configuration.
 - b. Internal Connectivity: Govt. of Gujarat (GoG) and Gujarat Metro Rail Corporation Limited (GMRCL) are aligned to the metro requirement of SVPIA. Metrorail connectivity for SVPIA is

included as part of the ambitious MEGA (Metro-Link Express for Gandhinagar and Ahmedabad) Project which is a rapid metro rail transit system connecting the city of Ahmedabad, Gandhinagar & GIFT city, and the airport.

- xvi. It is proposed to be one of the Carbon Neutral airports in the country.
- xvii. Baseline Monitoring within 10 km radius Study Area has been carried out during October 2021 to December 2021.
- xviii. Public Hearing exemption is sought for the expansion of SVPIA within an area of 390.05 Ha, considering below facts:
 - a. The proposed 390.05 ha of area is within the Airport premises for which SVPIA has already been granted EC by MoEF&CC vide dated 31.07.2006 for which the Public Hearing was conducted on 07.02.2006.
 - b. All the issues raised by the people during the earlier Public Hearing, have been addressed and satisfactorily implemented at SVPIA.
 - c. There is no pending litigation against AIAL project.
 - d. No R&R is involved as part of the SVPIA Master Plan proposal.
- xix. NBWL Clearance is not required.
- xx. Forest Clearance is not required.
- xxi. CRZ Clearance is not required.
- xxii. No court case is pending against the project.
- xxiii. The project will be scheduled in phases in line with the Master Plan.
- xxiv. Investment/Cost of the project is ₹ 18,000 Crores.
- xxv. Employment Potential – About 2000 persons during construction phase and 26,000 persons during operation phase.
- xxvi. Benefits of the project –Improvements in the physical infrastructure by way of addition of project infrastructure, ancillary industries that may come up on account of the project. Improvements in the social infrastructure like roads, railways, townships, housing, water supply, electrical power, drainage, educational institutions, hospitals, effluent treatment plants, improved waste disposal systems, improved environmental conditions, etc. Employment potential skilled; semi-skilled and unskilled labour both during construction and operational phases of the project with specific attention to employment potential of local population as well as necessity for imparting any specialized skills to them to be eligible for such employment in the project on a long-term basis i.e., during operational and maintenance stages of the project and other tangible benefits like improved standards of living, health, education etc.

2. The EAC noted that 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.

3. The EAC exempted the proposed project from requirement of Public Hearing as per para 7(ii) of EIA Notification, 2006 and its subsequent amendments for preparation of EIA/EMP report after taking into account

that there is no R&R issue involved as part of the SVPIA Master Plan proposal and that proposed 390.05 ha of area is within the Airport premises for which SVPIA has already been granted EC by MoEF&CC vide dated 31.07.2006.

4. *The EAC (Infra-2), based on the information and clarifications provided by the Project Proponent and detailed discussions held on all the issues, recommended for grant of 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. Importance and benefits of the project.
- ii. Layout maps of proposed project indicating runway, terminal building, parking, greenbelt area, utilities etc.
- iii. The impacts of demolition and the activities related thereto shall be examined and a management plan shall be prepared to conform to the C&D Waste Management Rules.
- iv. The details of excavations, its impacts and the impact of transport of excavated material. A detailed management plan shall be suggested.
- v. An assessment of the cumulative impact of all development and increased inhabitation being carried out or proposed to be carried out by the project or other agencies in the core area, shall be made for traffic densities and parking capabilities in a 05 kms radius from the site. A detailed traffic management and a traffic decongestion plan drawn up through an organization of repute and specializing in Transport Planning shall be submitted with the EIA. The Plan to be implemented to the satisfaction of the State Urban Development and Transport Departments shall also include the consent of all the concerned implementing agencies.
- vi. A note on appropriate process and materials to be used to encourage reduction in carbon footprint. 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. Details shall be provided regarding the solar generation proposed and the extent of substitution, along with compliance to the ECBC rules.
- viii. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract).
- ix. Details of emissions, effluents, solid waste (including de-plane waste) and hazardous waste generation and their management. Air quality modelling and noise modelling shall be carried out for the emissions from the various types of aircrafts.
- x. An onsite disaster management plan shall be prepared to account for risks and accidents. This onsite plan shall be dovetailed with the disaster management plan for the district.

- xi. Cost of project and time of completion.
- xii. A tabular chart with index for point wise compliance of above TORs.
- xiii. Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof shall also be included.

AGENDA ITEM No. 84.3.3

Proposed expansion of Mangaluru International Airport (MIA) to enhance the Passenger Handling Capacity up to 22.5 MPPA & Cargo Handling Capacity up to 0.12 MTPA by M/s Mangaluru International Airport Limited (MIAL) – Terms of Reference

(IA/KA/MIS/258263/2022; F. No. 21-34/2022-IA-III)

1. The Project Proponent [M/s. Mangaluru International Airport Limited (MIAL)] along with his consultant 'M/s.Vimta Labs Ltd.', made a presentation on the key parameters and salient features of the project to the EAC (Infra-2). The EAC took note of following key parameters and salient features of the project, as presented during the meeting; provided in the brief and application for this project:

- i. The project, Mangaluru International Airport (MIA), is situated about 15 km northeast of Mangaluru city on top of 100m high hill of Kenjar area at 12°57'15.79"N Latitude & 74°53'7.53"E Longitude, and at altitude of range 95 -100 m above MSL. MIA falls under the following Town/villages of Mangaluru Taluk, Dakshin Kannada District: Malavoor, Kenjar, Kolambe, Adyapady and Kandavara.
- ii. The proposal is for 'Expansion'.
- iii. Earlier, Environmental Clearance for "Construction of New Integrated Passenger Terminal Building, Apron, taxiway and associated facilities at MIA by AAI" was obtained vide F.No. 10-79/2007-IA-III dated 01.11.2007.
- iv. A Concession Agreement for Operation, Maintenance, Management & Development of MIA was signed between Airports Authority of India (AAI) and Mangaluru International Airport Limited (MIAL) (earlier known as Adani Mangaluru International Airport Limited) on 14.02.2020.
- v. As per the Concession Agreement, MIAL has been entrusted with the responsibility to operate and manage the existing airport assets and will be responsible for designing, engineering, financing, construction, upgradation, and development of future airside, terminal, city side and landside infrastructure for the airport in phases, and its subsequent operation and management for a 50-year concession period from the commercial date of operation (COD) 31.10.2020.
- vi. Transfer of EC from "Airports Authority of India" (AAI) to "Adani Mangaluru International Airport Ltd" (AMIAL) has been obtained vide F. No. 10-79/2007-IA.III dated 3rd August 2021. Further, EC name

change order has been obtained in the name of “Mangaluru International Airport Ltd.” vide letter of even no. dated. 16.02.2022 based on Certificate of incorporation upon change of name from Adani Mangaluru International Airport Ltd to Mangaluru International Airport Ltd. issued by Ministry of Corporate Affairs vide document dated 09.11.2021.

- vii. The proposal for expansion includes works required for relocation, improvement, modification/up-gradation/augmentation and modernization of existing Airside/Landside facilities and infrastructure, and to meet operational safety requirements to facilitate the required infrastructure to serve the projected passenger and cargo traffic in ultimate phase. The proposed master plan is inclusive of two integrated terminal buildings, i.e. existing developed Terminal with future eastern expansion and New Terminal Building with associated infrastructure, support facilities & utilities, to accommodate up to 22.5 MPPA. The Cargo Handling capacity is projected to be developed for 0.12 MTPA. The proposed expansion shall comprise of the following:
- a. Terminal Development: The proposed master plan is inclusive of two integrated terminal buildings, i.e. existing developed Terminal with future eastern expansion and New Terminal Building to accommodate up to 22.5 MPPA with a built-up area of approx. 1,83,221 sqm.
 - b. Cargo Complex: Cargo complex will be developed in total floor area of 48,600 sqm. and is expected to handle Cargo up to 0.12 MTPA.
 - c. Apron & Taxiway – Apron is proposed to be developed with 35 stands, while Parallel Taxiway will be modified with respect to Rapid Exit Taxiways (RETs) and entry/exit way as per suitability of Master Plan. Both Apron & Taxiway will be developed in an area of 34.75 Ha.
 - d. Multilevel Car parking: Two MLCP as part of the MIA Master Plan has been proposed to accommodate 1125 no parking space.
 - e. Green Area: The total area under this zone shall be approximately 15.11 ha in landside. The proposed green spaces shall be developed as per their contextual and functional requirements and overall environmental and landscape planning approach. The proposed Green Space & Landscape development is planned considering key airport related constraints, i.e. bird menace, height restriction, restriction in open area etc.
 - f. Support Facilities & amenities: VIP/CIP/General Aviation terminal in the footprint of 4330.13 sqm. along with the other Support facilities such as of Aircraft Rescue & Fire Fighting (ARFF), Fuel Storage, GSE maintenance facility, Flight Kitchen Facility, Police station, Airport maintenance building, Airport Health Organization, Central Industrial Security Force (CISF), Housing Barrack etc. also proposed to be upgraded or relocated as per the suitability of the MIA Master Plan Development.
- viii. As a part of concession agreement between AAI & MIAL, 236.24 ha has been allotted to MIAL for development of Mangaluru International

Airport (MIA). Out of which, 4.04 ha of land will be considered for City Side development, which will be developed phase wise after obtaining required approvals. Two isolated plots with an area of 4.89 ha & 1.66 ha are excluded from this Master plan. MIAL now proposes expansion of MIA within an area of 225.64 ha, which includes land area of 7.03 ha as a Carved out area, retained by AAI.

- ix. For achieving the better operating practices for safety, additional area of 13.35 ha is identified and same will be acquired and utilized subject to its availability from AAI. However, this will not have, any direct implications on the proposed expansion, as same will be used only for enhancing safety.
- x. The Master Plan has been considered into two major zones: Airside Zone and Landside Zone, as follows:

S. No.	Zone	Area in ha	Area in Acres
1	Airside	169.94	419.92
2	Landside	55.70	137.65
Total Site Area		225.64	557.57

- xi. The proposed connectivity to the new terminal building, Airport Authority of India has requested KUIDFC (Karnataka Urban Infrastructure Development and Finance Corporation) to construct a new approach road connecting the Proposed new terminal building to the existing state highway SH-66A (Mangalore– Bajpe road). The proposed project road comprises the following components:
 - a. Stretch-I - Strengthening of existing SH 66A for a length of 1.125 Km.
 - b. Stretch-II -Construction of a new 4-lane road from Airport approach road at Devi College of Pharmacy to the Western side Terminal. The total length of this stretch is 0.888 Km.
 - c. Western side - Existing exit road shall be augmented as 3+3 lanes divided arterial road and used as primary entry/exit road for western terminal. Existing West Terminal access road is planned to be widened to 2+2 lanes, which shall cater western cargo traffic and departure exit traffic.
 - d. Eastern Side - This terminal is planned to have two access, one through existing road connecting eastern landside area with the city and second from proposed West – East connecting elevated landside road.
 - e. Direct road connectivity to eastern part of airport from western side needs is also explored for long term sustainability.
- xii. Total water requirement is estimated to be 5.3 MLD, out of which 2.8 MLD will be potable water requirement, which is proposed to be sourced through State Government water supply/borewells and remaining 2.5 MLD will be recycled water from STP. The total estimated wastewater generation is expected around 2.8 MLD which will be treated through total STP capacity of 3 MLD (including existing 0.5 MLD) to be developed on modular basis. Treated wastewater will

be used for Landscaping or other purposes. Liquid waste from aircraft needs to be treated at Triturator as a primary treatment & further will be pumped to STP for secondary treatment.

- xiii. The total estimated power demand for operations is 18 MVA, which will be sourced from Electrical Substation. DG sets for emergency requirements will be installed on modular basis.
- xiv. The total estimated Solid waste generation is 18 Tonnes/day, which will be managed in line with the provisions of the Solid Waste Rules, 2016, amended till date. Hazardous waste 1 Tonne/Day, including Used Oil, Contaminated filters, Oily cotton waste, discarded drums etc. will be and will be handled in accordance with HWM rules 2016, amended till date
- xv. Rainwater Harvesting ponds will be developed with a capacity of 46 MLD, in an area of 23,000 sqm. and will be used for non-potable purposes.
- xvi. Solar farm on land side area is proposed to be developed, to utilise natural sunlight to possible extent for airport operations. Roof top will also be explored.
- xvii. It is proposed to be one of the Carbon Neutral airports in the country.
- xviii. Baseline Monitoring within 10 km radius Study Area has been carried out during November 2021 to January 2022.
- xix. Public Hearing exemption is sought for the expansion of MIA within an area of 225.64 ha, considering below facts:
 - a. The proposed 225.64 ha of area is within the Airport premises for which MIA has already been granted an EC by MoEF&CC vide letter no. 10-79/2007-IA-III dated. 01.11.2007.
 - b. The proposed Master plan falls within the approved land use falling within the Airport Zone as per Master plan/Zoning Plan by the State Government.
 - c. No pending litigation against MIAL project.
 - d. No R&R is involved as part of the MIA Master Plan proposal.
- xx. NBWL Clearance is not required.
- xxi. Forest Clearance is not required.
- xxii. CRZ Clearance is not required.
- xxiii. No court case is pending against the project.
- xxiv. The project will be scheduled in phases in line with the Master Plan.
- xxv. Investment/Cost of the project is ₹5,200 Crores.
- xxvi. Employment Potential – About 2,000 persons during construction phase and 14,500 persons during operation phase.
- xxvii. Benefits of the project - Improvements in the physical infrastructure by addition of project infrastructure, ancillary industries that may come up on account of the project. Improvements in the social infrastructure like roads, railways, townships, housing, water supply, electrical power, drainage, educational institutions, hospitals, effluent treatment plants, improved waste disposal systems, improved environmental conditions, etc. Employment potential skilled; semi-skilled and unskilled labour both during construction and operational phases of the project with specific attention to employment potential of local population as well as necessity for imparting any specialized

skills to them to be eligible for such employment in the project on a long-term basis i.e., during operational and maintenance stages of the project and other tangible benefits like improved standards of living, health, education etc.

2. The EAC noted that 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.

3. The EAC exempted the proposed project from requirement of Public Hearing as per para 7(ii) of EIA Notification, 2006 and its subsequent amendments for preparation of EIA/EMP report after taking into account that there is no R&R issue involved as part of the MIA Master Plan proposal and that proposed 225.64 ha of area is within the Airport premises for which MIA has already been granted an EC by MoEF&CC vide letter no. 10-79/2007-IA-III dated. 01.11.2007.

4. *The EAC (Infra-2), based on the information and clarifications provided by the Project Proponent and detailed discussions held on all the issues, recommended for grant of 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. Importance and benefits of the project.
- ii. Layout maps of proposed project indicating runway, terminal building, parking, greenbelt area, utilities etc.
- iii. The impacts of demolition and the activities related thereto shall be examined and a management plan shall be prepared to conform to the C&D Waste Management Rules.
- iv. The details of excavations, its impacts and the impact of transport of excavated material. A detailed management plan shall be suggested.
- v. Details of the proposed road connectivity to the airport specifying the present status of the proposal along with requisite approvals.
- vi. An assessment of the cumulative impact of all development and increased inhabitation being carried out or proposed to be carried out by the project or other agencies in the core area, shall be made for traffic densities and parking capabilities in a 05 kms radius from the site. A detailed traffic management and a traffic decongestion plan drawn up through an organization of repute and specializing in Transport Planning shall be submitted with the EIA. The Plan to be implemented to the satisfaction of the State Urban Development and Transport Departments shall also include the consent of all the concerned implementing agencies. The assessment/plan shall also take into consideration the proposed road connectivity to the airport.
- vii. Details shall be provided regarding the solar generation proposed and the extent of substitution, along with compliance to the ECBC rules.

- viii. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract).
- ix. Details of emissions, effluents, solid waste (including de-plane waste) and hazardous waste generation and their management. Air quality modelling and noise modelling shall be carried out for the emissions from the various types of aircrafts.
- x. A note on appropriate process and materials to be used to encourage reduction in carbon footprint. 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.
- xi. An onsite disaster management plan shall be prepared to account for risks and accidents. This onsite plan shall be dovetailed with the disaster management plan for the district.
- xii. Cost of project and time of completion.
- xiii. A tabular chart with index for point wise compliance of above TORs.
- xiv. Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof shall also be included.

AGENDA ITEM NO. 84.3.4

Proposed Residential Plotted Colony under DDJAY Scheme with built-up area of 3,45,623 sqm. on land measuring 30.24375 acres situated in the Revenue Estate of Village Ghata, Sector-58, Gurugram, Haryana by M/s Bequeath Infrastructure Private Limited - Reconsideration for Environmental Clearance

(IA/HR/MIS/254566/2021; F. No. 21-21/2022-IA-III)

1. The EAC noted that the proposal was deferred in its 82nd meeting held during 15-16th February, 2022 and the project proponent was asked to provide the following additional information:

- i. Provide the source and quantity requirement of STP treated water during construction phase.
- ii. Explore alternate arrangements for reuse and recycling of excess treated water of about 362 KLD in nearby areas and submit MoU in this regard.
- iii. Clarify the number of rain water harvesting pits.
- iv. Submit an action plan for increasing green cover in NCR region as discussed in the meeting and indicated in MoM of 82nd Meeting.

2. The Project Proponent (M/s Bequeath Infrastructure Private Limited) along with his consultant 'M/s. Ind Tech House Consult', made a presentation and provided the following information:

- i. During construction phase, fresh water for labourers (8 KLD) will be sourced from Gurugram Metropolitan Development Authority (GMDA). Assurance regarding the same has been obtained and submitted. Approx. 5 KLD STP treated water will be required during construction phase and shall be sourced from GMDA common STP through contractor.
- ii. MoUs have been done with M/s Prompt Engineering Pvt. Ltd & M/s Gentle Realtors Pvt. Ltd. for supply of 212 KLD & 150 KLD respectively for supply of excess STP treated water generated in the project (362 KLD) and a copy of same has been submitted.
- iii. 31 Nos. of RWH pits are proposed in the project.
- iv. 21% Green area with plantation of 10,199 Nos. plants (including trees and shrubs) has been proposed. Revised layout plan has been submitted.

3. The EAC noted that the project/activity is covered under category 'B' of item 8(b) 'Townships 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 non-existence of SEIAA in Haryana, it required appraisal at Central level by sectoral EAC.

4. Keeping in view the location of the project is in the National Capital Region (NCR) which is severely affected by poor air quality, the committee and the Chairman EAC (Infra-2) particularly advised to the PP to consider the development of dense plantation at the project site using appropriate techniques in consultation with the forest department/horticulture department/experts/consultants etc., to counter the air pollution in the area and also consider the use of Gas Gensets in place of regular DG sets. The action plan for increasing the green cover needs to be submitted immediately with the copy marked separately to the Chairman EAC (Infra-2).

5. *The EAC found that the response to the queries are satisfactory. The EAC (Infra-2), 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 while considering for accord of environmental clearance:*

- i. Fresh water requirement from municipal supply shall not exceed 716.83 KLD during operational phase. As committed, no groundwater abstraction shall be done during construction as well as operation phase of the project.
- ii. As proposed, wastewater shall be treated in the onsite STP having total 975 KLD capacity. At least 370.61 KLD of treated water from the STP shall be recycled and re-used for flushing (244 KLD), for DG

- cooling (6 KLD) and for gardening (120 KLD). Excess treated water of about 362 KLD shall be utilised for reuse and recycling as committed. PP shall submit MoU for the disposal of excess treated water (outside the site) to the Regional Office of MoEF&CC along with six-monthly compliance report.
- iii. 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.
 - iv. Area for greenery shall be provided as per the details provided in the project document i.e., area under plantation/greenery will be 21% of the plot area. The project being located in the National Capital Region (NCR) which is severely affected by poor air quality, the project proponent shall develop dense plantation at the project site using appropriate techniques in consultation with the forest department/horticulture department/experts/consultants etc., comprising of at least 10,199 Nos. plants (including trees and shrubs) during the operation phase of the project as committed.
 - v. No tree can be felled/transplanted 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).
 - vi. 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.
 - 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, 31 Nos. of RWH pits shall be provided by PP for rain water harvesting after filtration.
 - viii. The solid waste shall be duly segregated into biodegradable and non-biodegradable components and handled in separate area earmarked for segregation of solid waste, as per SWM Rules, 2016. As committed, biodegradable waste shall be utilized through the Bio-Gas generation plant/bio-bin unit to be installed within the site. Inert waste shall be disposed off as per norms at authorized site. The recyclable waste shall be sold to authorized vendors/recyclers. Construction & Demolition (C&D) waste shall be segregated and managed as per C&D Waste Management Rules, 2016.

- 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 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.
- x. The PP shall provide electric charging points in parking areas for e-vehicles as committed.
- xi. As committed, solar energy installation shall be implemented as per HAREDA (Department of Renewable Energy, Govt. of Haryana) and PP shall explore the options to meet atleast 10% of the total energy requirement through renewable energy.
- xii. 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.

AGENDA ITEM NO. 84.3.5

Residential Plotted Colony Project under DDJAY with built-up area of 48,896.03 sqm. located at Village- Kadarapur, Sector 63A, Gurugram, Haryana by M/s Signature Global India Pvt. Ltd. - Reconsideration for Environmental Clearance

(IA/HR/MIS/254015/2022; F. No. 21-18/2022-IA-III)

1. The EAC noted that the proposal was deferred in its 82nd meeting held during 15-16th February, 2022 and the project proponent was asked to provide the following additional information:
 - i. Provide the details of solar energy installation proposed.
 - ii. Provide the source and quantity requirement of STP treated water during construction phase.
 - iii. Provide details of provision for electrical vehicles charging.
 - iv. Submit an action plan for increasing green cover in NCR region as discussed in the meeting and indicated in MoM of 82nd Meeting.
 - v. Explore alternate arrangements for reuse and recycling of excess treated water generated in the project and resubmit the water balance diagram accordingly.
 - vi. Percentage increment in air pollution to be quantified and tabulated.

- vii. Revise the calculation for OWC by considering 30 day cycle.
- viii. Submit revised EMP budget considering the proposed changes.

2. The Project Proponent (M/s. Signature Global India Pvt. Ltd.) along with his consultant 'M/s. Grass Roots Research & Creation (P) Ltd.', made a presentation and provided the following information:

- i. It is proposed to meet 10% of electrical load (i.e. 116 KW) through solar energy. Budget of ₹46.40 Lakhs is proposed @₹ 40,000/KW for solar panels installation. Sensor-based lighting system shall also be provided in common areas for energy conservation. Undertaking stating the same has been submitted.
- ii. 98 KLD tertiary treated STP water will be required for construction phase and same will be provided by Gurugram Metropolitan Development Authority (GMDA) from STP of Behrampur, Gurugram. Copy of assurance is submitted.
- iii. Provision for 10 nos electrical vehicles charging facility has been made and Undertaking stating the same has been submitted.
- iv. As per Deen Dayal Jan Awas Yojna - Affordable Plotted Housing Policy 2016, for Low & Medium Potential Towns. of Govt. of Haryana, the requirement of green area is 7.5% of net planned area. However, green area of 1899.640 sqm. i.e. 9.36% of the plot area has been proposed. It was earlier proposed to plant 254 no. of trees as per MoEF&CC norms considering @1tree/80sqm, which has been increased to @3 plants/sqm. which will be planted in 969.64 sqm. As a result, no. of plants will increase to 2,909 (969.64 x3 = 2,908.92). Rest of the green area i.e. 930.0 sqm. (1899.640 – 969.64) will be developed as lawn/organised green space. Undertaking w.r.t. revised landscape plan along with plot area and green area breakup has been submitted.
- v. Revised water balance has been submitted. During operational phase, total water requirement of the project is expected to be 129 KLD and the same will be met by 89 KLD fresh water from Gurugram Metropolitan Development Authority (GMDA) and 40 KLD recycled water. Wastewater generated (105 KLD) will be treated in STP of total 130 KLD capacity. 94 KLD of treated wastewater will be generated of which 40 KLD will be recycled and reused for flushing (34 KLD) and for gardening (6 KLD). Reuse of STP treated water within the project site will be maximised and surplus (about 59 KLD during monsoon season and about 54 KLD during non-monsoon season) will be utilized for watering the external roadside plantation, provided to STP treated water supplying agency, etc.
- vi. Percentage increment in air pollution from the project has been quantified and submitted.
- vii. OWC Calculation has been revised considering 30-day cycle for composting. Area proposed for Solid waste management facility including OWC is 200 sqm.
- viii. Revised EMP budget provides for ₹238 lakhs Capital Cost and ₹21.67 lakhs/year recurring cost.
- ix. It is also submitted that the project does not attract the Aravalli Notification, 1992.

3. The EAC noted that 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 non-existence of SEIAA in Haryana, it required appraisal at Central level by sectoral EAC.

4. Keeping in view the location of the project is in the National Capital Region (NCR) which is severely affected by poor air quality, the committee and the Chairman EAC (Infra-2) particularly advised to the PP to consider the development of dense plantation at the project site using appropriate techniques in consultation with the forest department/horticulture department/experts/consultants etc., to counter the air pollution in the area and also consider the use of Gas Gensets in place of regular DG sets. The action plan for increasing the green cover needs to be submitted immediately with the copy marked separately to the Chairman EAC (Infra-2).

5. *The EAC found that the response to the queries are satisfactory. The EAC (Infra-2), 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 while considering for accord of environmental clearance:*

- i. Fresh water requirement from local authority shall not exceed 89 KLD during operational phase. As committed, no groundwater abstraction shall be done during construction as well as operation phase of the project.
- ii. As proposed, wastewater shall be treated in the onsite STP having total 130 KLD capacity. At least 40 KLD (non-monsoon season) of treated water from the STP shall be recycled and re-used for flushing (34 KLD), and gardening (6 KLD). Excess treated water (about 59 KLD during monsoon season and about 54 KLD during non-monsoon season) shall be used for watering the external roadside plantation, provided to STP treated water supplying agency, etc. PP shall submit MoU for the disposal of excess treated water (outside the site) to the Regional Office of MoEF&CC along with six-monthly compliance report.
- iii. 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.
- iv. Area for greenery shall be provided as per the details provided in the project document i.e., area under plantation/greenery will be 1899.640 sqm. The project being located in the National Capital

Region (NCR) which is severely affected by poor air quality, the project proponent shall develop dense plantation at the project site using appropriate techniques in consultation with the forest department/horticulture department/experts/consultants etc., comprising of at least 2,909 plants (including trees and shrubs) during the operation phase of the project as committed.

- 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, 5 no. RWH pit shall be provided for rain water harvesting after filtration.
- vi. The solid waste shall be duly segregated into biodegradable and non-biodegradable components and handled in separate area earmarked for segregation of solid waste, as per SWM Rules, 2016. As committed, biodegradable waste shall be utilized through the Bio-Gas generation plant/bio-bin unit to be installed within the site. Inert waste shall be disposed off as per norms at authorized site. The recyclable waste shall be sold to authorized vendors/recyclers. Construction & Demolition (C&D) waste shall be segregated and managed as per C&D Waste Management Rules, 2016. Bio-medical wastes shall be disposed as per Bio-Medical Waste (Management & Handling) Rules, 2016.
- vii. The PP shall provide electric charging points in parking areas for e-vehicles as committed.
- viii. As committed, atleast 10% of the electrical load shall be met through solar energy.
- ix. 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.

AGENDA ITEM NO. 84.3.6

Affordable Group Housing Colony Project with built-up area of 52,602.131 sqm. at Village Hayatpur, Sector 90, Gurugram, Haryana by M/s MRG Castle Reality LLP. – Reconsideration for Environmental Clearance

(IA/HR/MIS/253986/2022; F. No. 21-13/2022-IA-III)

1. The EAC noted that the proposal was deferred in its 82nd meeting held during 15-16th February, 2022 and the project proponent was asked to provide the following additional information:

- i. Explore alternate arrangements for reuse and recycling of excess treated water generated in the project and resubmit the water balance diagram accordingly.

- ii. Revise the calculation for OWC by considering 30 day cycle.
- iii. Provide the details of solar energy installation proposed.
- iv. Provide the source and quantity requirement of STP treated water during construction phase.
- v. Provide details of provision for electrical vehicles charging.
- vi. Percentage increment in air pollution to be quantified and tabulated.
- vii. Submit revised EMP budget considering the proposed changes.
- viii. Submit an action plan for increasing green cover in NCR region as discussed in the meeting and indicated in MoM of 82nd meeting.

2. The Project Proponent (M/s. MRG Castle Reality LLP) along with his consultant 'M/s. Grass Roots Research & Creation (P) Ltd.', made a presentation and provided the following information:

- i. Revised water balance has been submitted. During operational phase, total water requirement of the project is expected to be 315 KLD and the same will be met by Gurugram Metropolitan Development Authority (GMDA). 224 KLD fresh water and 91 KLD recycled water. Wastewater generated is 259 KLD will be treated in STP of total 325 KLD capacity. 233 KLD of treated wastewater will be generated of which 91 KLD will be recycled and reused for flushing (80 KLD) and for gardening (11 KLD). Reuse of STP treated water within the project site will be maximised and surplus (about 151 KLD during monsoon season and about 142 KLD during non-monsoon season) will be utilized for watering the external roadside plantation, provided to STP treated water supplying agency, etc.
- ii. OWC Calculation has been revised considering 30-day cycle for composting. 200 sqm. area is proposed for Solid waste management facility including OWC.
- iii. It is proposed to meet 10% of electrical load (i.e. 288 KW) through solar energy. Budget of ₹ 1,15,20,000/- is proposed @₹ 40,000/KW for solar panels installation. Sensor-based lighting system shall be provided in common areas for energy conservation. Undertaking stating the same has been submitted.
- iv. 60 KLD tertiary treated STP water will be required for construction phase and same will be provided by Gurugram Metropolitan Development Authority (GMDA) from STP of Dhanwapur, Gurugram. Copy of assurance is submitted.
- v. Provision for 10 nos. electrical vehicles charging facility has been made and Undertaking stating the same has been submitted.
- vi. Percentage increment in air pollution from the project has been quantified and submitted.
- vii. Revised EMP budget provides for ₹183 lakhs Capital Cost and ₹20.625 lakhs/year recurring cost.
- viii. As per Affordable Housing Policy, 2013 of Govt. of Haryana, the requirement of green area is 15% of net planned area. However, green area of 3,641.36 sqm. i.e. 20% of the plot area has been proposed. It was earlier proposed to plant 250 no. of trees as per MoEF&CC norms considering @1tree/80sqm, which has been increased to @3

plants/sqm. which will be planted in 1690.33 sqm. As a result, no. of plants will increase to 5,071 (1690.33 x 3 = 5070.99). Rest of the green area i.e. 1951.03 sqm. (3641.36 – 1690.33) will be developed as lawn/organised green space. Undertaking w.r.t. revised landscape plan along with plot area and green area breakup has been submitted.

- ix. It is also submitted that the project does not attract the Aravalli Notification, 1992.

3. The EAC noted that 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 non-existence of SEIAA in Haryana, it required appraisal at Central level by sectoral EAC.

4. Keeping in view the location of the project is in the National Capital Region (NCR) which is severely affected by poor air quality, the committee and the Chairman EAC (Infra-2) particularly advised to the PP to consider the development of dense plantation at the project site using appropriate techniques in consultation with the forest department/horticulture department/experts/consultants etc., to counter the air pollution in the area and also consider the use of Gas Gensets in place of regular DG sets. The action plan for increasing the green cover needs to be submitted immediately with the copy marked separately to the Chairman EAC (Infra-2).

5. *The EAC found that the response to the queries are satisfactory. The EAC (Infra-2), 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 while considering for accord of environmental clearance:*

- i. Fresh water requirement from local authority shall not exceed 224 KLD during operational phase. As committed, no groundwater abstraction shall be done during construction as well as operation phase of the project.
- ii. As proposed, wastewater shall be treated in the onsite STP having total 325 KLD capacity. Atleast 91 KLD (non-monsoon season) of treated water from the STP shall be recycled and re-used for flushing (80 KLD), and gardening (11 KLD). Excess treated water (about 151 KLD during monsoon season and about 142 KLD during non-monsoon season) shall be used for watering the external roadside plantation, provided to STP treated water supplying agency, etc. PP shall submit MoU for the disposal of excess treated water (outside the site) to the Regional Office of MoEF&CC along with six-monthly compliance report.
- iii. 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.
- iv. Area for greenery shall be provided as per the details provided in the project document i.e., area under plantation/greenery will be 3,641.355 sqm. The project being located in the National Capital Region (NCR) which is severely affected by poor air quality, the project proponent shall develop dense plantation at the project site using appropriate techniques in consultation with the forest department/horticulture department/experts/consultants etc., comprising of at least 5,071 plants (including trees and shrubs) during the operation phase of the project as committed.
 - 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, 5 no. RWH pit shall be provided for rain water harvesting after filtration.
 - vi. The solid waste shall be duly segregated into biodegradable and non-biodegradable components and handled in separate area earmarked for segregation of solid waste, as per SWM Rules, 2016. As committed, biodegradable waste shall be utilized through the Bio-Gas generation plant/bio-bin unit to be installed within the site. Inert waste shall be disposed off as per norms at authorized site. The recyclable waste shall be sold to authorized vendors/recyclers. Construction & Demolition (C&D) waste shall be segregated and managed as per C&D Waste Management Rules, 2016. Bio-medical wastes shall be disposed as per Bio-Medical Waste (Management & Handling) Rules, 2016.
 - vii. The PP shall provide electric charging points in parking areas for e-vehicles as committed.
 - viii. As committed, atleast 10% of the electrical load shall be met through solar energy.
 - ix. 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.

AGENDA ITEM NO. 84.3.7

Warehouse Project with built-up area of 78,679.317 sqm. at Village - Dhateer and Tehraki, Tehsil & District Palwal, Haryana by M/s Yael Real Estates Pvt. Ltd. - Reconsideration for Environmental Clearance

(IA/HR/MIS/254073/2022; F. No. 21-17/2022-IA-III)

1. The EAC noted that the proposal was deferred in its 82nd meeting held during 15-16th February, 2022 and the project proponent was asked to provide the following additional information:

- i. Revise the calculation for OWC by considering 30 day cycle.
- ii. Clarify the details of solar energy installation proposed.
- iii. Provide the source and quantity requirement of STP treated water during construction phase.
- iv. Provide the detailed breakup of vehicle parking area specifying the number of heavy vehicles parking proposed. Also, provide the details of provision for electrical vehicles charging.
- v. Submit revised traffic circulation plan specifying sufficient turning radius for movement of large trucks.
- vi. Provide details of maintenance area for trucks.
- vii. Percentage increment in air pollution to be quantified and tabulated.
- viii. Submit revised EMP budget considering the proposed changes.
- ix. Submit an action plan for increasing green cover in NCR region as discussed in the meeting and indicated in MoM of 82nd Meeting..

2. The Project Proponent (M/s. Yael Real Estates Pvt. Ltd.) along with his consultant 'M/s. Grass Roots Research & Creation (P) Ltd.', made a presentation and provided the following information:

- i. OWC Calculation has been revised considering 30-day cycle for composting. 150 sqm area is proposed for Solid waste management facility including OWC.
- ii. It is proposed to meet 10% of electrical load (i.e. 360 KW) through solar energy. Budget of ₹1,44,00,000 is proposed @ ₹ 40,000/KW for solar panels installation. Sensor-based lighting system shall be provided in common areas for energy conservation. Undertaking stating the same is submitted.
- iii. The quantity of water during construction phase is 40 KLD and shall be procured through private water tanker. Undertaking stating the same is submitted.
- iv. Total area proposed for parking is 23,713.853 sqm. Total 1,031 ECS is proposed for parking including 206 ECS for staff and 825 ECS for trucks (275 trucks @ 3 ECS/truck). Provision for 7 nos. electrical vehicles charging facility shall be made. Undertaking stating the same is submitted.
- v. Traffic circulation has been designed as per NBC and bye-laws. Turning radius is 9 m and the internal roads width vary from 6 m to 18 m. Traffic circulation plan is submitted.
- vi. Maintenance area for trucks has been provided and same has been earmarked on site plan.
- vii. Percentage increment in air pollution from the project has been quantified and submitted.
- viii. Revised EMP budget provides for ₹221 lakhs Capital Cost and ₹ 37.75 lakhs/year recurring cost.
- ix. As per Industries & Commerce Department Notification dated 09.03.2019, the requirement for green cover is 15%. However, green area of 22,046.48 sqm. i.e. 15% of the plot area has been proposed. It was earlier proposed to plant 1,850 no. of trees as per MoEF&CC norms considering @1 tree/80 sqm, which has been increased to @3

plants/sqm. which will be planted in 5,826.64 sqm. As a result, no. of plants will increase to 17,480 ($5,826.64 \times 3 = 17,479.92$). Rest of the green area i.e. 16,219.84 sqm. ($22,046.48 - 5,826.64$) will be developed as lawn/organised green space. Undertaking w.r.t. revised landscape plan along with plot area and green area breakup has been submitted.

3. The EAC noted that 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 non-existence of SEIAA in Haryana, it required appraisal at Central level by sectoral EAC.

4. Keeping in view the location of the project is in the National Capital Region (NCR) which is severely affected by poor air quality, the committee and the Chairman EAC (Infra-2) particularly advised to the PP to consider the development of dense plantation at the project site using appropriate techniques in consultation with the forest department/horticulture department/experts/consultants etc., to counter the air pollution in the area and also consider the use of Gas Gensets in place of regular DG sets. The action plan for increasing the green cover needs to be submitted immediately with the copy marked separately to the Chairman EAC (Infra-2).

5. *The EAC found that the response to the queries are satisfactory. The EAC (Infra-2), 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 while considering for accord of environmental clearance:*

- i. Abstraction of ground water shall be subject to the permission of Central Ground Water Authority (CGWA). Fresh water requirement shall not exceed 159 KLD during operational phase.
- ii. As proposed, wastewater shall be treated in the onsite STP having total 260 KLD capacity. At least 147 KLD of treated water from the STP shall be recycled and re-used for flushing (81 KLD) and for gardening (66 KLD). Excess treated water (about 95 KLD during rainy season and about 40 KLD during dry season) will be supplied to the nearby farmers for irrigation purpose. PP shall submit MoU for the disposal of excess treated water (outside the site) to the Regional Office of MoEF&CC along with six-monthly compliance report.
- iii. 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.

- iv. Area for greenery shall be provided as per the details provided in the project document i.e., area under plantation/greenery will be 22,046.48 sqm. The project being located in the National Capital Region (NCR) which is severely affected by poor air quality, the project proponent shall develop dense plantation at the project site using appropriate techniques in consultation with the forest department/horticulture department/experts/consultants etc., comprising of atleast 17,480 plants (including trees and shrubs) during the operation phase of the project as committed.
- 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, 37 RWH pits shall be provided by PP for rain water harvesting after filtration.
- vi. The solid waste shall be duly segregated into biodegradable and non-biodegradable components and handled in separate area earmarked for segregation of solid waste, as per SWM Rules, 2016. As committed, biodegradable waste shall be utilized through the Bio-Gas generation plant/bio-bin unit to be installed within the site. Inert waste shall be disposed off as per norms at authorized site. The recyclable waste shall be sold to authorized vendors/recyclers. Construction & Demolition (C&D) waste shall be segregated and managed as per C&D Waste Management Rules, 2016.
- vii. 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.
- viii. The PP shall provide electric charging points in parking areas for e-vehicles as committed.
- ix. As committed, atleast 10% of the electrical load shall be met through solar energy.
- x. 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.

AGENDA ITEM NO. 84.3.8**Modification & Expansion of Group Housing Colony Project at Village Dhanwapur, Sector-104, Gurugram, Haryana by M/s Juventus Estate Ltd. – Reconsideration for Amendment in Environmental Clearance****(IA/HR/MIS/255252/2022; F. No. 21-23/2022-IA-III)**

1. The EAC noted that the proposal was deferred in its 82nd meeting held during 15-16th February, 2022 and the project proponent was asked to provide the following additional information:

- i. Submit a detailed comparative chart of the proposed amendment specifying the floor wise changes in area and number of dwelling units.
- ii. Submit an action plan for increasing green cover in NCR region as discussed in the meeting and indicated in MoM of 82nd Meeting.

2. The Project Proponent (M/s. Juventus Estate Ltd.) along with his consultant 'M/s. Grass Roots Research & Creation (P) Ltd.', made a presentation and provided the following information:

- i. The floor and Dwelling unit wise comparison seeking amendment is submitted:

S. No.	Particulars	Earlier EC (sqm.)	Under Amendment	After Amendment (sqm.)
1.	Proposed FAR	2,26,027.126	-8,135.051	2,17,892.075
		(@163.885%)		
	Total FAR under Phase 1	97,832.36	-12,642.214	85,190.146
	Total FAR under in Phase 2	1,27,492.479	4,507.163	1,31,999.642
	Proposed FAR of Convenient	702.287	-	702.287
	Shopping			
2.	Non FAR area	30,479.93	-30,479.93	-
3.	Basement area	1,05,668	-16,871.092	88,796.908
	Basement 1	44,403.00	-263.324	44,139.676
	Basement 2	44,504.00	153.232	44,657.232
	Basement 3	16,762.00	-16,762	-
4.	Built-up Area (1+2+3)	3,61,332.00	-54,643.017	3,06,688.983

- ii. Proposed amendment in area, dwelling units and floors is given as follows:

Particulars	Earlier EC		Difference b/w Earlier EC and Amendment in EC		Amendment in EC	
	Area	Dwelling Units/ Floors	Area	Dwelling Units/ Floors	Area	Dwelling Units/ Floors
Phase-1						
Tower A	6089.013	45(G+18)	1521.725	-9 (-4 floors)	4567.288	36(G+14)
Tower B	10722.64	96(G+27)	2000.869	-13 (-4 floors)	8721.771	83(G+23)
Tower C	14527.264	132(G+36)	2159.505	-15 (-4 floors)	12367.759	117(G+31)
Tower D	18399.507	155(G+39)	1994.955	-16 (-4 floors)	16404.552	139(G+35)
Tower E	22526.419	227(G+39)	4211.433	-26 (-4 floors)	18314.986	201(G+35)
Tower F	12036.228	108(G+30)	1942.03	-13 (-4 floors)	10094.198	95(G+26)
Tower G	6352.557	47(G+19)	1519.896	-8 (-3 floors)	4832.661	39(G+16)
EWS		181(G+12)		140		321(G+12)
Attendants Quarters		87		-15		72
Phase-2						
Tower 1	16155.857	144(G+37)	-187.801	-	16343.658	144(G+37)
Tower 2	14663.675	159(G+27)	-156.387	-	14507.288	159(G+27)
Tower 3	14663.675	159(G+27)	-156.387	-	14507.288	159(G+27)
Tower 4	15715.062	140(G+36)	183.781	-	15898.843	140(G+36)
Tower 5	15715.062	140(G+36)	182.846	-	15897.908	140(G+36)
Tower 6	14439.768	157(G+27)	-143.003	-	14296.765	157(G+27)
Tower 7	15715.062	140(G+36)	183.781	-	15898.843	140(G+36)
Tower 8	14018.106	68(G+35)	4027.172	37	18045.278	105(G+35)
EWS		220(G+13)		-18 (-8 floors)		202(G+5)
Attendants Quarters		110		35		145

iii. Proposed amendment in dwelling units and floors is given as follows:

Tower	Earlier EC		Amendment in EC	
	Floors	No of Units	Floors	No of Units
Towers (A to G)				
Tower A	G+18	45	G + 14	36
Tower B	G+27	96	G + 23	83
Tower C	G+36	132	G+31	117
Tower D	G+39	155	G+35	139
Tower E	G+39	227	G+35	201

Tower F	G+30	108	G+26	95
Tower G	G+19	47	G+16	39
		810		710
Towers (1 to 8)				
Tower 1	G+37	144	G+37	144
Tower 2	G+27	159	G+27	159
Tower 3	G+27	159	G+27	159
Tower 4	G+36	140	G+36	140
Tower 5	G+36	140	G+36	140
Tower 6	G+27	157	G+27	157
Tower 7	G+36	140	G+36	140
Tower 8	G+35	68	G+35	105
		1107		1144

- iv. As per Haryana Building Code, 2017, the requirement of green area is 15% of the site area. However, green area of 41,850.30 sqm. at 30.4% of total site area has been proposed. It was earlier proposed to plant 1,721 no. of trees as per MoEF&CC norms considering @1 tree/80 sqm., which has been increased to @3 plants/sqm. which will be planted in 4,583.00 sqm. As a result, no. of plants will increase to 13,749 (4,583.00 x 3 = 13,749). Rest of the green area i.e. 37,267.30 sqm. (41,850.30 - 4,583.00) will be developed as lawn/organised green space. Revised landscape plan along with plot area and green area breakup has been submitted.
- v. It is also submitted that the project does not attract the Aravalli Notification, 1992.

3. The EAC noted that 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 non-existence of SEIAA in Haryana, it required appraisal at Central level by sectoral EAC.

4. Keeping in view the location of the project is in the National Capital Region (NCR) which is severely affected by poor air quality, the committee and the Chairman EAC (Infra-2) particularly advised to the PP to consider the development of dense plantation at the project site using appropriate techniques in consultation with the forest department/horticulture department/experts/consultants etc., to counter the air pollution in the area and also consider the use of Gas Gensets in place of regular DG sets. The action plan for increasing the green cover needs to be submitted immediately with the copy marked separately to the Chairman EAC (Infra-2).

5. The EAC (Infra-2), based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, recommended amending the environmental clearance granted vide file no. 21-104/2018-IA.III dated 17.05.2019 and amendment in EC issued vide file no. 21-104/2018-IA.III dated 21.06.2019, to the extent of project parameters as submitted, subject to the following additional specific

condition. All other conditions, as specified in the aforesaid EC letters shall remain unchanged.

- i. Area for greenery shall be provided as per the details provided in the project document i.e., area under plantation/greenery will be 41,850.30 sqm. The project being located in the National Capital Region (NCR) which is severely affected by poor air quality, the project proponent shall develop dense plantation at the project site using appropriate techniques in consultation with the forest department/horticulture department/experts/consultants etc., comprising of atleast 13,749 plants (including trees and shrubs) during the operation phase of the project as committed.

AGENDA ITEM NO. 84.3.9

Proposed Commercial Complex (J Category as per KPBR) cum Service Apartments Project with built-up area of 46,435 sqm. at Raroth Village, Kattipara Panchayat, Thamarassery Taluk, Kozhikode District, Kerala by M/s VIRSOURCE VENTURES PVT. LTD.- Reconsideration for Environmental Clearance

(IA/KL/MIS/254371/2022; F. No. 21-12/2022-IA-III)

1. The EAC noted that the proposal was deferred in its 82nd meeting held during 15-16th February, 2022 and the project proponent was asked to provide the following additional information:

- i. Clarify the discrepancy in total built-up area as submitted in Form-1 and Form 1A.
- ii. Clarify the discrepancies in total water requirement and water balance diagram as submitted in Form - 1 and Form 1A.
- iii. Clarify the discrepancy in solar power installation capacity as submitted in Form-1 and Form 1A.
- iv. Form 1 refers to old structures existing at site which will be demolished. Provide details of demolition and C&D waste management.
- v. Clarify the space allotted for storage of non -biodegradable wastes at site.
- vi. Provide details of excavated earth in Form 1/Form 1A.
- vii. Resubmit Form-1 and Form 1A with correct details.

2. The Project Proponent (M/s. VIRSOURCE VENTURES PVT. LTD.) along with his consultant 'M/s. Environmental Engineers & Consultants Pvt. Ltd.', made a presentation and provided the following information:

- i. The total built-up area of the project is 45,435 sqm. Revised Form 1 and Form 1A has been submitted.

- ii. The total daily water requirement for the project will be 163 KLD (fresh 63 KLD + 100 KLD recycled). The revised water balance chart is submitted. During operational phase, total water demand of the project is expected to be 163 KLD and the same will be met by 63 KLD fresh water from stored rain water tanks/KWA/well water and 100 KLD recycled water. Wastewater generated (111 KLD) will be treated in STP of total 140 KLD capacity. 100 KLD of treated wastewater will be generated which will be completely recycled and re-used (76 KLD for flushing, 5 KLD for gardening, 19 KLD for cooling requirement etc.).
- iii. The project has provision for installation and generation of 350 kWp (10.15% of connected load) capacity of On-Grid Solar Power generation.
- iv. There are old buildings and sheds (150 sqm. of total built-up area) within the site and which will be demolished for the development of the proposed site. The salvageable materials from the demolition debris would be recovered. The remaining demolition debris and the construction debris would be used for site preparatory works.
- v. An area equivalent of about 200 sqm. for the storage of non-biodegradable waste (equivalent to 15 days storage) (335 kg/day) would be provided.
- vi. Excavation of ordinary earthwork (OE) for the foundation of structures and for parking floor purposes. The total excavation of the OE is 16,400 cu.m. The excavated OE of 3,500 cu.m. will be preserved for landscaping purposes, 10,209 cu.m. will be used for backfilling purposes, 2,691 cu.m. will be used for internal road construction. All the excavated/cutting of OE will be utilized within the site and there will be no excess OE earth to be disposed outside the site.
- vii. Revised Form-1 and Form-1A with correct details have been submitted through Parivesh Portal.

3. The EAC noted that 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 non-existence of SEIAA in Kerala, it required appraisal at Central level by sectoral EAC.

4. The EAC also noted that, as per the clarification submitted by the PP, the value of built-up area may be suitably replaced in the project title as 45,435 sqm.

5. *The EAC found that the response to the queries are satisfactory. The EAC (Infra-2), 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 while considering for accord of environmental clearance:*

- i. Prior Clearance from standing committee of NBWL should be obtained before commencing the project.

- ii. Abstraction of ground water shall be subject to the permission of Central Ground Water Authority (CGWA). Fresh water requirement shall not exceed 63 KLD during operational phase.
- iii. As proposed, wastewater shall be treated in an onsite STP of total 140 KLD capacity. At least 100 KLD of treated water from the STP shall be recycled and re-used for flushing (76 KLD) for gardening (5 KLD) and for cooling towers attached with the HVAC system (19 KLD). There shall be no discharge of treated water from the project as proposed.
- 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. Area for greenery shall be provided as per the details provided in the project document i.e., area under plantation/greenery will be 6,039 sqm. As proposed, at least 1,950 trees shall be maintained during the operation phase of the project. The landscape planning should include plantation of native species. A minimum of 01 tree for every 80 sqm. of land should be planted and maintained. The existing trees will be counted for this purpose. Plantations to be ensured species (cut) to species (planted). 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.
- vi. No tree can be felled/transplanted 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).
- vii. 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.
- viii. 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, RWH tank of 240 KL capacity shall be provided by PP for rain water harvesting after filtration.
- ix. The solid waste shall be duly segregated into biodegradable and non-biodegradable components and handled in separate area earmarked for segregation of solid waste, as per SWM Rules, 2016. As committed, biodegradable waste shall be utilized through the Bio-Gas generation plant/bio-bin unit to be installed within the site. Inert waste shall be disposed off as per norms at authorized site. The recyclable waste

shall be sold to authorized vendors/recyclers. Construction & Demolition (C&D) waste shall be segregated and managed as per C&D Waste Management Rules, 2016.

- x. The PP shall provide electric charging points in parking areas for e-vehicles as committed.
- xi. As committed, solar energy installation of 350 kWp capacity to meet atleast 10.15% of the connected load shall be implemented.
- xii. 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.

Consideration of Proposals on Day-II (17th March, 2022): The EAC considered proposals as per the agenda adopted for Day-II of 84th meeting. The details of deliberations held and decisions taken in the meeting are as under:

AGENDA ITEM NO. 84.4.1

Construction of Aerial Passenger Ropeway System between Purkul Gaon (Dehradun) and Library (Mussoorie), covering area of 63,500 sqm. and length of 5.402 km at district Dehradun, Uttarakhand by M/s Mussoorie Sky Car Company Private Limited - Environmental Clearance

(IA/UK/MIS/176857/2020; F. No. 21-39/2022-IA-III)

1. The Project Proponent (M/s. Mussoorie Sky Car Company Private Limited) along with his consultant 'M/s. Perfact Enviro Solutions Pvt. Ltd.', made a presentation on the key parameters and salient features of the project to the EAC (Infra-2). The EAC took note of following key parameters and salient features of the project, as presented during the meeting; provided in the brief and application for this project:

- i. The project is located at Purkul gaon Dehradun to Mussoorie library at LTP: Purkul, village Purkul & UTP: Library Chowk Mussoorie, Mussoorie, Mussoorie Nagar Palika District- Dehradun, State- Uttarakhand with coordinates from 30°24'46.97" N, 78° 04'01.80" E (LTP) to 30°27'36.76" N, 78° 03'58.19" E (UTP).
- ii. The project is new.
- iii. The proposed project will be a continuous ropeway line from LTP at elevation 958.2 AMSL to UTP at elevation at 1996 AMSL based on Monocable Detachable Gondola System technology. It is a 5302m long ropeway, covering total area of 63500 sqm. The proposed ropeway will be developed from LTP at Purkul Village (Dehradun) to UTP at Mussoorie Library with Carrying capacity of 2000 PPH. The salient features of the project are given as follows:

Particulars	Unit	Details
Ropeway Details		
Total Capacity of Ropeway	PPH (Person per hour)	2000
Average Working Hours	Hours	10
Average working days per year	No.	350
TECHNICAL DETAILS		
System	-	Monocable Detachable Gandola Ropeway System
Speed	metre/second	6
Horizontal Length	m	5302
Inclined Length	m	5402.61
Level Difference (Between Terminals)	m	1037.8
Hauling Rope	mm	110 m of diameter 60 mm
No. Of Cabin	No.	54
Trip Time	minutes	15-18
Cabin Capacity	No.	10 persons per cabin
Motor	-	Siemens 7 series
Number Of Towers	No.	25

- iv. Area measuring 42000 sqm. at LTP and 17000 sqm. at UTP will be utilised for the construction of ropeway terminals. The land use breakup is given as follows:

Particulars	Area (sqm.)	Percentage (%)
Lower Terminal Station (Purkulgaon, Dehradun)	42000	66
Upper Terminal Station (Library Mussoorie)	17000	27
Ropeway Corridor & tower area	4500	7
Total	63500	100

- v. The activities proposed at LTP and UTP are given as follows:

At LTP (Purkul Gaon, Dehradun)	At UTP (Mussoorie Library, Mussoorie)

<ul style="list-style-type: none"> • Boarding and deboarding facility. • Car/vehicle Parking for 1500 units. • Passenger holding/waiting area • Ticket Counter • Office block • Staff Accommodation & Service Area. • Toilets & STP, DG Sets • Open Spaces. • Food Court 	<ul style="list-style-type: none"> • Boarding and deboarding facility. • Limited Car/vehicle Parking provided. • Passenger holding / waiting area • Ticket Counter • Office block • Staff Accommodation & Service Area. • Connectivity to Mussoorie Mall road with planned public movement. • Toilets, STP, DG Sets • Open Spaces. • Food Court
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vi. Out of the total area of 63500 sqm. (6.35 ha), 9700 sqm. (0.97 ha) of land is forest land which will be used for the construction of station and line towers (non-forest uses) involved in ropeway installation. The area summary is given as follows:

Type of land	Area in sqm.
Total Area of Reserve Forest Land- X	800
Total Area of Notified Forest Land-Y	8900
Forest Land (X+Y)=A	9700
Non-Forest Land= B	53800
Total Land Area (A+B)	63500

vii. The service details of the project are given as follows:

Particulars	Unit	At Lower Terminal	At Upper Terminal	Total
SERVICE DETAILS				
Source of Water	-	Tank of Jal Sansthan		
Water requirement	KLD	37.4 (peak days) 25.0 (normal days)	17.2 (peak days) 9.9 (normal days)	54.6 (peak days) 34.9 (normal days)
Waste water generation	KLD	32.2 (peak days) 20.4 (normal days)	15.1 (peak days) 9.3 (normal days)	47.3 (peak days) 29.7 (normal days)
STP capacity	KLD	40	20	60
Solid waste	kg/day	267 (peak days) 161 (normal days)	114 (peak days) 70 (normal days)	381 (peak days) 231 (normal days)
Power Load	KW	1400	1000	2400

D.G. sets capacity	KVA	1x1500 kVA & 1x225 KVA, 1x250 kVA (Auxiliary)	1x350 KVA, 1x85 kVA & 1x700 kVA	1 x 1500 kVA, 1x 350 kVA, 1 x 225 kVA, 1 x 85 kVA, 1 x700 kVA (Auxiliary- 1x250)
Parking	ECS	1500	860	2360

- viii. The water source will be tank of Jal Sansthan at LTP and UTP. At LTP, water requirement during normal days will be 25.0 KLD and peak days will be 37.4 KLD. At UTP, water requirement during normal days will be 9.9 KLD and peak days will be 15.1 KLD. At LTP, waste water generation during normal days will be 20.4 KLD and peak days will be 32.2 KLD which will be treated in STP of capacity 40 KLD based on MBBR technology. At UTP, wastewater generation during normal days will be 9.3 KLD and peak days will be 15.1 KLD which will be treated in STP of capacity 20 KLD based on MBBR technology. ZLD is proposed at LTP and UTP.
- ix. Total Waste generation during normal days will be 231 kg/day and peak days will be 381 kg/day. At LTP, waste generation during normal days will be 162 kg/day out of which 113 kg/day will be biodegradable waste and 49 kg/day will be non-biodegradable waste and during peak days will be 267 kg/day out of which 187 kg/day will be biodegradable waste and 80 kg/day will be non-biodegradable waste. At UTP, waste generation during normal days will be 69 kg/day out of which 48 kg/day will be biodegradable waste and 21 kg/day will be non-biodegradable waste and during peak days will be 114 kg/day out of which 80 kg/day will be biodegradable waste and 34 kg/day will be non-biodegradable waste. Biodegradable waste generated will be treated in 2 no. Organic Waste Converter proposed at each Terminal LTP & UTP and non-biodegradable waste will be Collected and given to the approved recyclers. Approx. 29 lit./month of used oil generated from the DG sets will be given to authorized recycler. 2-3 kg /month of E- waste generated will be given to approved vendors.
- x. The total power requirement of the project will be 2400 KW out of which 1400 KW will be required at LTP and 1000 KW will be required at UTP which will be met by Utrakhand Power Corporation Limited. As power backup, DG sets will be installed at LTP with capacity 1x1500 kVA & 1x225 KVA, 1x250 kVA (Auxiliary) and at UTP with capacity 1x350 KVA, 1x85 kVA & 1x700 kVA. About 2% of total power load will be shared by solar energy.
- xi. Maximum collection of rainwater will be done and reused wherever possible. Garland drains are proposed around the pillars/towers to ensure the proper drainage of the storm water and to prevent disturbance to the drainage pattern of the area.
- xii. The total parking provision will be 2360 ECS out of which 1500 ECS will be provided at LTP and 860 ECS will be provided at UTP.

- xiii. The project was initially granted Standard Terms of Reference vide letter no. F. No. 10-60/2020-IA-III dated 05.10.2020 for the development of a ropeway. Thereafter, additional ToR was granted vide F. No. 10-60/2020-IA-III dated 18.01.2021.
- xiv. Baseline study has been carried out in post-monsoon period from October to December, 2020.
- xv. Tree cutting will be involved for which joint inspection by forest and revenue Officials has been done and the forest application has been filed. 71 no. of trees will be cut and 20 no. of trees will be pruned for the installation. As the forest land is less than 1 Hectare, the compensatory afforestation will be done for 100 Trees per Hectare. Accordingly, 100 trees are proposed to be planted in the Rikhauli village.
- xvi. Public hearing was conducted by Uttarakhand Pollution Control Board on 16.08.2021 at project premises (Village-Purkul, Mussoorie). The major issues raised during public hearing includes employment opportunities for local population, water source, impacts on tourism and road traffic. The project proponent submitted that locals will be preferred and trained before employment. Training centres will be opened for long term employment checks. As far as possible locals will be preferred so that there will be social and economic development of the area. Water for the project will be sourced from the Jal Sansthan. The construction of the ropeway will increase tourism & will increase footfall and also will help in revenue generation and that after the operation phase, widening roads is proposed.
- xvii. Mussoorie wildlife sanctuary exists at a distance of 977 m from the UTP station. Clearance from the National Board for Wildlife (NBWL) has been received vide letter no. 742/12-1 dated 01.09.2021.
- xviii. NOC for the project falling under Doon Valley Notification has been obtained from Uttarakhand Tourism Development Board vide letter no. 3594/2-6-966/2021 dated 02.02.2021.
- xix. Stage I Forest Clearance is yet to be received. Application was submitted vide file no. FP/UK/Others/49804/2020 dated 18.09.2020. Receiving has been obtained from Nodal Officer, Dehradun, Uttarakhand.
- xx. The project is not located in Critically Polluted area.
- xxi. No court case is pending against the project.
- xxii. CRZ Clearance is not required.
- xxiii. Expected timeline for completion of the project- 3 Years
- xxiv. Investment/Cost of the project: Total cost of the project is expected to be ₹285.2 crores.
- xxv. Employment potential- Approx. 200 labourers will be hired during the construction phase and during the operation phase about 175 employment opportunities will be generated.
- xxvi. Benefits of the project-The proposed ropeway project will facilitate faster and convenient travel of tourist at present travelling time from Dehradun to Mussoorie is around 1 hour and after introduction of the ropeway it will be reduced to 15-18 minutes. It will also enable tourist to see the aerial view of mountains & Dehradun/Mussoorie City and

will be a scenic place to capture good moments. The proposed ropeway will result in diversion of passenger traffic from the existing road to the upcoming ropeway which will help in reducing traffic congestion (upto 20% reduction) along Dehradun-Mussoorie Road and thereby decrease the CO₂ emission (approx. 21%) of the vehicles. It will promote tourism and strengthen the socio-economic status of the areas. During the construction phase, employment provision to 200 local labourers & during the operation phase, 175 no. of staff shall be employed for the proposed ropeway. During monsoon season, when landslides are frequent & thereby results in traffic jam, proposed ropeway will provides a stable and consistent alternative to road& combination transport. Proposed ropeway will lead to reduction in pollution. The project has been planned to be “PLASTIC-FREE ZONE” for conservation of forest area. Noise and air pollution will be reduced due to reduction in traffic, sewage treatment facility will be provided. In absence of ropeway, littering of the waste is common in the current scenario.

2. The EAC noted that the project/activity is covered under item 7(g) ‘Aerial Ropeways’ of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and comes in category ‘A’ as the UTP is at an elevation of 1996m above MSL, and requires appraisal at Central level by sectoral EAC.

3. *The EAC (Infra-2), based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, noted that the project is yet to obtain Stage – I Forest Clearance which was specified in ToR issued dated 18.01.2021. Accordingly, the EAC decided to defer the proposal and asked the project proponent to provide the following additional information:*

- i. Submit Stage – I Forest Clearance.
- ii. Revise and resubmit water balance at UTP (during peak days).

AGENDA ITEM NO. 84.4.2

Solid Waste Management and Disposal Facility at Kotdwar, District Pauri Garhwal, Uttarakhand by Nagar Palika Parishad, Kotdwara – Terms of Reference

(IA/UK/MIS/260357/2022; F. No. 21-35/2022-IA-III)

1. The Project Proponent (Nagar Palika Parishad, Kotdwara) along with his consultant ‘M/s. Ind Tech House Consult’, made a presentation on the key parameters and salient features of the project to the EAC (Infra-2). The EAC took note of following key parameters and salient features of the project, as presented during the meeting; provided in the brief and application for this project:

- i. The project is located at Kanchan Puri, Haldukhatta, Malankham, Kotdwar, Uttarakhand.
- ii. The project is new.
- iii. In line with Swachh Bharat Mission Urban, Nagar Nigam Kotdwar under guidance of Urban Development Directorate, Uttarakhand has planned to improve the existing solid waste collection system and develop common solid waste management and disposal facility at Kotdwar. Kotdwar is a city, a municipal corporation and a tehsil in the Pauri Garhwal district of Uttarakhand, India. It is just 101 km from Pauri town, the district headquarters and is the eighth largest city in Uttarakhand.
- iv. A Detailed Project Report has been prepared and as per DPR, Nagar Nigam Kotdwar will manage approx. 80 TPD wastes including recyclable wastes [for a design period of 20 years]. It is also planned to set up decentralized segregation facilities. The proposed facility will have the following components:
 - a. Compost plant of capacity 43 TPD for processing bio-degradable waste [design period 20 years].
 - b. Sanitary landfill facility [11,800 MT capacity – as of now due to unavailability of land planned for a period of 5 years] for inert materials and rejects.
 - c. Liquid effluent i.e. leachate shall be treated in onsite leachate treatment unit.
- v. Two alternative sites examined. The selected proposed site has been transferred from Forest Dept. and duly approved by the Govt. of Uttarakhand and MoEF&CC, Dehradun RO. At present, both the site is vacant under ownership of Nagar Nigam Kotdwar. Approval for diversion of forest land for the waste processing site has been obtained. The site is allocated for waste processing and landfill facility. At present, the land is devoid of any building/structure and covered with natural vegetation, bushes and shrubs. Existing vegetation needs to be cleared. Existing trees will be retained to the possible extent. The site selection criteria is given as follows:

Location Criteria	Site at Kanchanpuri, Haldukhatta Malankham, Kotdwar 29°45'23.79"N / 78°26'14.14"E
Land Availability and accessibility	At present land area of 0.998 ha is transferred by Forest Department. Site is flat and easily accessible from Haridwar Road through existing kuchha road [approx. 20 feet wide].

<p>Lake or Pond: No landfill should be constructed within 200 m of any lake or pond. Because of concerns regarding runoff of waste water contact, a surface water monitoring program should be established if a landfill is sited less than 200 m from a lake or pond.</p>	<p>No lake or pond within 200 m radius of the site</p>
<p>River: No landfill should be constructed within 100 m of a navigable river or stream. The distance may be reduced in some instances for non-meandering rivers but a minimum of 30 m should be maintained in all cases</p>	<p>No river within 100 m radius. Malin river flows at a distance of 480m on East.</p>
<p>Flood Plain: No landfill should be constructed within a 100 year flood plain. A landfill may be built within the flood plains of secondary streams if an embankment is built along the stream side to avoid flooding of the area. However, landfills must not be built within the flood plains of major rivers unless properly designed protection embankments are constructed around the landfills</p>	<p>The project site is not located in any flood plain.</p>
<p>Highway: No landfill should be constructed within 200 m of the right of way of any state or national highway. This restriction is mainly for aesthetic reasons. A landfill may be built within the restricted distance, but no closure than 50 m, if trees and berms are used to screen the landfill site</p>	<p>No national or state highway within 200 m of the site. NH-119 passes at a distance 8.1 km on SE.</p>
<p>Habitation: A landfill site should be at least 500 m from a notified habitation area. A zone of 500 m around a landfill boundary should be declared a No-Development Buffer Zone after the landfill location is finalized.</p>	<p>Nearby habitation is located at a distance of 150 m on north east of proposed site.</p>
<p>Public Parks: No landfill should be constructed within 300 m of a public park. A landfill may be constructed within the restricted distance if some kind of screening</p>	<p>No public park within 300 m.</p>

<p>is used with a fence around the landfill and a secured gate.</p>	
<p>Critical Habitat Area: No landfill should be constructed within critical habitat areas. A critical habitat area is defined as the area in which one or more endangered species live. It is sometimes difficult to define a critical habitat area. If there is any doubt then the regulatory agency should be contacted</p>	<p>Not a critical habitat area.</p>
<p>Wetland: No landfill should be constructed within wetlands. It is often difficult to define a wetland area. Maps may be available for some wetlands, but in many cases such maps are absent or are incorrect. If there is any doubt, then the regulatory agency should be contacted</p>	<p>Not a wetland.</p>
<p>Ground Water Table: A landfill should not be constructed in areas where water table is less than 2 m below ground surface. Special design measures be adopted, if this cannot be adhered to.</p>	<p>Ground water table is approx. 5-10 m below ground level in post-monsoon period.</p>
<p>Airports: No landfill should be constructed within the limits prescribed by regulatory agencies (MoEF/CPCB/Aviation Authorities) from time to time</p>	<p>Jolly Grant International Airport, Dehradun is located at around 53 Km on NW.</p>
<p>Water Supply Well: No landfill should be constructed within 500 m of any water supply well. It is strongly suggested that this locational restriction be abided by at least for down gradient wells. Permission from regulatory agency may be needed if a landfill is to be sited within the restricted area</p>	<p>No centralized water supply well exists around the project site.</p>
<p>Coastal Regulation Zone: A landfill should not be sited in a coastal regulation zone.</p>	<p>Site not located in a coastal regulation zone</p>

<p>Unstable Zone: A landfill should not be located in potentially unstable zones such as landslide prone areas, fault zone etc.</p>	<p>The area is not a potentially unstable zone.</p>
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- vi. The site can be approached from Haridwar Road through existing kuchha road [approx. 20 feet wide]. The kuchha road of approx. length 250 m will be strengthened by the Nagar Nigam.
- vii. Total Water requirement is 11 KLD fresh water through onsite groundwater abstraction (not for drinking purpose). Leachate collected will also be reused in maintain the moisture content of windrow composting. Necessary permission from the CGWA will be obtained if applicable.
- viii. Power demand for the project will be sourced from local electricity distribution authority. D.G. Set of 150 KVA will be provided at site as back up during power failure.
- ix. No court case is pending against the project.
- x. CRZ Clearance is not required.
- xi. Forest Clearance is required.
- xii. NBWL Clearance is not required.
- xiii. Investment/Cost of the project is ₹ 15.216 Crores.
- xiv. Employment potential: 25 persons.
- xv. Benefits of the project: Social Benefit – Proper management of waste as compared to current crude dumping – improved environment and aesthetics. Mandatory provision in MSW Rules 2000, necessitates proper treatment and disposal facilities for MSW. Supports recycle & reuse of waste. The waste will be collected at one place, improving aesthetic of the area. Odours due to scattered decomposed waste, will be minimized. Substantial reduction in the overall waste quantities requiring final disposal. Scientific disposal of rejects/Inerts in the proposed SLF to reduce Greenhouse gases emission. Financial Benefits - As suggested by the DPR consultant, the ULB can arrange the O&M cost by levying user charges on households and commercial establishments as the system improves. Also, revenue will be generated from sale of compost, recyclable materials etc.

2. The EAC noted that the project/activity is covered under category ‘B’ of item 7(i) ‘Common Municipal Solid Waste Management Facility (CMSWMF)’ of the Schedule to the EIA Notification, 2006 and its subsequent amendments. However, General Condition is applicable due to the presence of Uttar Pradesh – Uttarakhand state border at a distance of 7m approx. from proposed site and therefore requires appraisal at Central level by sectoral EAC.

3. *The EAC expressed concern on the conversion of forest land for use as a waste management/landfill site. The committee observed that the land area identified for landfill would be inadequate to meet the long term requirements (only 5 years design period has been considered). It was also noted that the PP has incorrectly submitted that ‘no forest land is involved’ in online Form 1*

on Parivesh Portal. Therefore, based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, the EAC (Infra 2) decided to defer the proposal and was of the opinion to conduct a site visit before further consideration.

AGENDA ITEM NO. 84.4.3

Integrated Solid Waste Management (ISWM) Project for Dineshpur Cluster, District Udham Singh Nagar, Uttarakhand by Nagar Panchayat Dineshpur – Terms of Reference

(IA/UK/MIS/258362/2022; F. No. 21-37/2022-IA-III)

The Project Proponent (Nagar Panchayat Dineshpur) along with his consultant 'M/s. Ind Tech House Consult', made a presentation and submitted that the proposed project is an Integrated Solid Waste Management Facility without landfill and asked for clarification on exemption as per the Ministry's D.O. letter dated 03.07.2017. The EAC noted that it was not the appropriate agency to provide clarification on the matter. Accordingly, the EAC decided to return the instant proposal and advised the project proponent to first obtain clarification from the Ministry regarding exemption and thereafter apply for EC, if necessary.

AGENDA ITEM NO. 84.4.4

Warehouse & Industrial (Non-Agro Produce) Project with built-up area of 51,581.27 sqm. at Village – Nimot & Rahaka, Tehsil-Sohna, District-Gurugram, Haryana by M/s LSA Warehousing Solutions Pvt. Ltd. - Reconsideration for Environmental Clearance

(IA/HR/MIS/254251/2022; F. No. 21-14/2022-IA-III)

1. The EAC noted that the proposal was deferred in its 82nd meeting held during 15-16th February, 2022 and the project proponent was asked to provide the following additional information:

- i. Submit NOC from BPCL for the project since there is a BPCL line passing through the proposed land.
- ii. Submit site specific risk assessment plan considering the hazards related to BPCL line and HT line passing through the project site.
- iii. Revise the calculation for OWC by considering 30-day cycle.
- iv. Clarify the details of solar energy installation proposed.
- v. Provide the source and quantity requirement of STP treated water during construction phase.

- vi. Submit an action plan for increasing green cover in NCR region as discussed in the meeting and indicated in MoM of 82nd Meeting.
- vii. Provide the detailed breakup of vehicle parking area specifying the number of heavy vehicles parking proposed. Also, provide the details of provision for electrical vehicles charging.
- viii. Submit revised traffic circulation plan specifying sufficient turning radius for movement of large trucks.
- ix. Provide details of maintenance area for trucks.
- x. Percentage increment in air pollution to be quantified and tabulated.
- xi. Submit revised EMP budget considering the proposed changes.

2. The Project Proponent (M/s. LSA Warehousing Solutions Pvt. Ltd.) along with his consultant 'M/s. Grass Roots Research & Creation (P) Ltd.', made a presentation and provided the following information:

- i. NOC has been issued by BPCL to M/s Mayar Infrastructure Development Pvt. Ltd. vide letter no. BPCL/PYL ROU/MAYAR/19-20/01 dated 27.09.2019 wherein certain restrictions have been placed on activities inside 18m pipeline ROU.
- ii. It is submitted that the guidelines of P&MP Act (Petroleum & Mineral Pipeline Act, 1962) shall be followed and that no activity shall be carried out in the demarcated area for pipeline. Activities shall be planned outside 18 m of pipeline ROU.
- iii. OWC Calculation has been revised considering 30-day cycle for composting. 150sqm. area is proposed for Solid waste management facility including OWC.
- iv. It is proposed to meet 10% of electrical load (i.e. 75 kVA/60 KW) through solar energy. Budget of ₹23,90,400 is proposed @₹ 40,000/KW for solar panels installation. Sensor-based lighting system is proposed in common areas for energy conservation. Undertaking stating the same is submitted.
- v. The quantity of water during construction phase is 35 KLD which shall be procured through private water tanker. Undertaking stating the same is submitted.
- vi. As per Industries & Commerce Department Notification dated 09.03.2019, the requirement for green cover is 15%. However, green area of 11,883.21 sqm. i.e., 16.85% of the plot area has been proposed. It was earlier proposed to plant 881 no. of trees as per MoEF&CC norms considering @1 tree/80 sqm., which has been increased to @3 plants/sqm. which will be planted in 7,148.22 sqm. As a result, no. of plants will increase to 21,445 (7,148.22 x 3 = 21,444.6). Rest of the green area i.e. 4,735 sqm. (11,883.21 – 7,148.22) will be developed as lawn/organised green space. Undertaking w.r.t. revised landscape plan along with plot area and green area breakup has been submitted.
- vii. Total area proposed for parking is 10,603.08 sqm. Total 461 ECS is proposed for parking including 92 ECS for staff and 369 ECS for trucks (123 trucks @ 3 ECS/truck). Provision shall be made for 8 nos

electrical vehicles charging facility. Undertaking stating the same is submitted.

- viii. Traffic circulation has been designed as per NBC and bye-laws. Turning radius is 9 m and the internal roads width vary from 6-18 m. Traffic circulation plan is submitted. Internal concrete road shall be provided.
- ix. Maintenance area for trucks has been provided and same has been earmarked on site plan.
- x. Percentage increment in air pollution from the project has been quantified and submitted.
- xi. Revised EMP budget provides for ₹152 lakhs Capital Cost and ₹26 lakhs/year recurring cost.

3. The EAC noted that 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 non-existence of SEIAA in Haryana, it required appraisal at Central level by sectoral EAC.

4. Keeping in view the location of the project is in the National Capital Region (NCR) which is severely affected by poor air quality, the committee and the Chairman EAC (Infra-2) particularly advised to the PP to consider the development of dense plantation at the project site using appropriate techniques in consultation with the forest department/horticulture department/experts/consultants etc., to counter the air pollution in the area and also consider the use of Gas Gensets in place of regular DG sets. The action plan for increasing the green cover needs to be submitted immediately with the copy marked separately to the Chairman EAC (Infra-2).

5. *The EAC found that the response to the queries are satisfactory. The EAC (Infra-2), 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 while considering for accord of environmental clearance:*

- i. Abstraction of ground water shall be subject to the permission of Central Ground Water Authority (CGWA). Fresh water requirement shall not exceed 33 KLD during operational phase.
- ii. As proposed, wastewater shall be treated in the onsite STP having total 55 KLD capacity. At least 39 KLD of treated water from the STP shall be recycled and re-used for flushing (17 KLD) and for gardening (22 KLD). Excess treated water (about 16 KLD during monsoon season) shall be supplied to the nearby farmers for irrigation purpose. PP shall submit MoU for the disposal of excess treated water (outside the site) to the Regional Office of MoEF&CC along with six-monthly compliance report.
- iii. 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.
- iv. Area for greenery shall be provided as per the details provided in the project document i.e., area under plantation/greenery will be 11,883.21 sqm. The project being located in the National Capital Region (NCR) which is severely affected by poor air quality, the project proponent shall develop dense plantation at the project site using appropriate techniques in consultation with the forest department/horticulture department/experts/consultants etc., comprising of atleast 21,445 plants (including trees and shrubs) as committed.
 - 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, 18 RWH pits and 2 Rain Gardens/Ponds shall be provided by PP for rain water harvesting after filtration.
 - vi. The solid waste shall be duly segregated into biodegradable and non-biodegradable components and handled in separate area earmarked for segregation of solid waste, as per SWM Rules, 2016. As committed, biodegradable waste shall be utilized through the Bio-Gas generation plant/bio-bin unit to be installed within the site. Inert waste shall be disposed off as per norms at authorized site. The recyclable waste shall be sold to authorized vendors/recyclers. Construction & Demolition (C&D) waste shall be segregated and managed as per C&D Waste Management Rules, 2016.
 - vii. 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.
 - viii. The PP shall provide electric charging points in parking areas for e-vehicles as committed.
 - ix. As committed, atleast 10% of the electrical load shall be met through solar energy.
 - x. Hazard Identification and Risk Assessment for the project shall be carried out which shall include the hazards related to gas pipeline and

HT line passing through the project site and adequate mitigation measures shall be adopted to ensure that all safety issues are addressed. The documentation shall be reviewed periodically and shall be submitted to the regional office along with six-monthly compliance report.

- xi. 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.

AGENDA ITEM NO. 84.4.5

Proposed Expansion of Sarvodaya Hospital & Research Centre (A Unit of Anshu Hospitals Ltd) At Site No. 1, Sector-08 at Faridabad – Reconsideration for Amendment in Environmental Clearance

(IA/HR/MIS/255454/2022; F. No. 21-24/2022-IA-III)

1. The EAC noted that the proposal was deferred in its 82nd meeting held during 15-16th February, 2022 and the project proponent was asked to provide the following additional information:

- i. Submit revised calculation of biomedical waste generated due to the proposed amendment.
- ii. Submit a copy of the Minutes of Meetings of SEIAA Haryana in which the proposal was considered for amendment along with a copy of the provisional EC granted by SEIAA, Haryana dated 22.07.2021 and their letter dated 16.12.2021 revoking the same.
- iii. Submit an action plan for increasing green cover in NCR region as discussed in the meeting and indicated in MoM of 82nd Meeting.

2. The Project Proponent [M/s Sarvodaya Hospital & Research Centre (A Unit of Anshu Hospitals Ltd.)] along with his consultant 'M/s. Ind Tech House Consult.', made a presentation and provided the following information:

- i. Bio medical waste has been calculated @1.5 kg/bed, so maximum 675 kg/day BMW shall be generated for 450 bedded (300 existing + 150 proposed) hospital. The authorization for 300 beds for BMW has already been received from Haryana State Pollution Control Board (HSPCB).
- ii. Detailed chronology along with MOM of SEAC/SEIAA, Haryana, provisional EC letter and revocation letter has been submitted.
- iii. 3,851 sqm. (Approx. 23% of the plot area) green area has already been developed to enhance the beauty of the site and help to combat air and noise pollution. Required no. of No. of Trees @ 1 tree/80 sqm. plot area is 212 nos. 547 Nos. of trees have already been planted at the

project site and 312 nos of trees have been planted outside the periphery.

3. The EAC noted that 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 non-existence of SEIAA in Haryana, it required appraisal at Central level by sectoral EAC.

4. Keeping in view the location of the project is in the National Capital Region (NCR) which is severely affected by poor air quality, the committee and the Chairman EAC (Infra-2) particularly advised to the PP to consider the development of dense plantation at the project site using appropriate techniques in consultation with the forest department/horticulture department/experts/consultants etc., to counter the air pollution in the area and also consider the use of Gas Gensets in place of regular DG sets. The action plan for increasing the green cover needs to be submitted immediately with the copy marked separately to the Chairman EAC (Infra-2).

5. *The EAC found that the response to the queries are satisfactory. The EAC (Infra-2), based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, recommended amending the environmental clearance granted by SEIAA Haryana vide letter No. SEIAA/HR/2017/798 dated 30.11.2017, to the extent of project parameters as submitted. All other conditions, as specified in the aforesaid EC letter shall remain unchanged.*

AGENDA ITEM NO. 84.4.6

Construction of Separated Family Accommodation (440 Nos) (Phase -1 C/O 336 Nos. Type-II Qtrs., 96 Nos. Type- III Qtrs., 08 Nos. Type-IV Qtrs., Multipurpose Hall & Multipurpose Parking) for SSB with built-up area of 49,042.3.36 sqm. at Faridabad, Haryana by Commandant 25th BN SSB, Faridabad (Ministry of Home Affairs)- Reconsideration for Environmental Clearance

(IA/HR/MIS/254128/2022; F. No. 21-10/2022-IA-III)

1. The EAC noted that the proposal was deferred in its 82nd meeting held during 15-16th February, 2022 and the project proponent was asked to provide the following additional information:

- i. Explore alternate arrangements for reuse and recycling of excess treated water generated in the project and resubmit the water balance diagram accordingly.
- ii. Provide the details of solar energy installation proposed.
- iii. Provide the source and quantity requirement of STP treated water during construction phase.

- iv. Provide details of provision for electrical vehicles charging.
- v. Provide details of C&D Waste Management.
- vi. Submit an action plan for increasing green cover in NCR region as discussed in the meeting and indicated in MoM of 82nd Meeting.

2. The Project Proponent [Commandant 25th BN SSB, Faridabad (Ministry of Home Affairs)] along with his consultant 'M/s. Ind Tech House Consult.', made a presentation and provided the following information:

- i. 58 KLD excess treated water shall be used for roadside landscaping (from project site roundabout to Neelam chowk approx. 1.67 Km), Aravalli Golf Course, Cricket Stadium New Industrial Town Faridabad (2.4 km from project site).
- ii. It is proposed to provide 110 kWp solar power generation (requiring 1,100 sqm. which is available space on roof) to meet 5% of total connected load. Undertaking in this regard has been submitted.
- iii. Approx. 10 KLD treated water will be required during construction phase which will be sourced from Municipal Corporation Faridabad Common STP. Drinking water for labour and staff shall be met through existing municipal water supply line.
- iv. Charging points for electrical vehicles will be provided as per requirement. Undertaking in this regard has been submitted.
- v. C&D waste generated during entire construction period will be used for site levelling, flooring, road making on site. Collection, segregation of concrete, soil and others and storage of construction and demolition waste generated shall be done separately within the project site. Waste will be segregated into four streams such as concrete, soil, steel, wood and plastics, bricks and mortar and disposed to authorized C&D waste management facility.
- vi. Green area development of 9,051.44 sqm. (approx. 30 % of plot area) is proposed. There are 465 nos. of trees on the project site. Approx. 203 nos. of trees will be cut/transplanted with prior permission from forest department and compensatory plantation will be done in consultation with forest department. Maximum compensatory plantation will be done at project site. It is proposed to plant 380 trees against the requirement of 1 tree @ 80 sqm of plot area. Thus, total no. of trees at project site will be 642 (262 existing + 380 proposed) + compensatory plantation as per space available.

3. The EAC noted that 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 non-existence of SEIAA in Haryana, it required appraisal at Central level by sectoral EAC.

4. Keeping in view the location of the project is in the National Capital Region (NCR) which is severely affected by poor air quality, the committee and the Chairman EAC (Infra-2) particularly advised to the PP to consider the development of dense plantation at the project site using appropriate techniques in consultation with the forest department/horticulture

department/experts/consultants etc., to counter the air pollution in the area and also consider the use of Gas Gensets in place of regular DG sets. The action plan for increasing the green cover needs to be submitted immediately with the copy marked separately to the Chairman EAC (Infra-2).

5. *The EAC found that the response to the queries are satisfactory. The EAC (Infra-2), 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 while considering for accord of environmental clearance:*

- i. Fresh water requirement from local authority shall not exceed 151.17 KLD during operational phase. As committed, no ground water abstraction shall be done during construction phase of the project.
- ii. As proposed, waste water shall be treated in the onsite STP having total 200 KLD capacity. At least 95.07 KLD of treated water from the STP shall be recycled and re-used for flushing (49.01 KLD), DG cooling (0.8 KLD) and for gardening (45.26 KLD). Excess treated water (about 58 KLD) shall be utilised for reuse and recycling as proposed. PP shall submit MoU for the disposal of excess treated water (outside the site) to the Regional Office of MoEF&CC along with six-monthly compliance report.
- iii. 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.
- iv. Area for greenery shall be provided as per the details provided in the project document i.e., area under plantation/greenery will be 9,051.44 sqm. As proposed, at least 642 trees shall be maintained during the operation phase of the project. The landscape planning should include plantation of native species. A minimum of 01 tree for every 80 sqm. of land should be planted and maintained. The existing trees will be counted for this purpose. Plantations to be ensured species (cut) to species (planted). 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.
- v. Area for greenery shall be provided as per the details provided in the project document i.e., area under plantation/greenery will be 9,051.44 sqm. The project being located in the National Capital Region (NCR) which is severely affected by poor air quality, the project proponent shall develop dense plantation at the project site using appropriate techniques in consultation with the forest department/horticulture department/experts/consultants etc., comprising of at least 642 trees as committed.

- vi. No tree can be felled/transplanted 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).
- vii. 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.
- viii. 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, 7 no. RWH pit shall be provided for rain water harvesting after filtration.
- ix. The solid waste shall be duly segregated into biodegradable and non-biodegradable components and handled in separate area earmarked for segregation of solid waste, as per SWM Rules, 2016. As committed, biodegradable waste shall be utilized through the Bio-Gas generation plant/bio-bin unit to be installed within the site. Inert waste shall be disposed off as per norms at authorized site. The recyclable waste shall be sold to authorized vendors/recyclers. Construction & Demolition (C&D) waste shall be segregated and managed as per C&D Waste Management Rules, 2016.
- x. 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.
- xi. The PP shall provide electric charging points in parking areas for e-vehicles as committed.
- xii. As committed, 110 kWp solar power generation to meet atleast 5% of the electrical load shall be implemented.
- xiii. 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.

AGENDA ITEM NO. 84.4.7

Expansion of Civil Enclave at Gwalior Airport at Maharajpur, Gwalior, Madhya Pradesh by M/s Airports Authority of India (AAI) – Environmental Clearance

(A/MP/MIS/260915/2022; F. No. 21-40/2022-IA-III)

1. The Project Proponent [M/s. Airports Authority of India (AAI)] along with his consultant 'M/s. EQMS India Pvt. Ltd.', made a presentation on the key parameters and salient features of the project to the EAC (Infra-2). The EAC took note of following key parameters and salient features of the project, as presented during the meeting; provided in the brief and application for this project:

- i. The project is located at Maharajpur, Gwalior, Madhya Pradesh with coordinates 26°16'52.35"N Latitude and 78°12'57.98"E Longitude.
- ii. The proposal is for 'Expansion under para 7(ii)'.
- iii. Gwalior Airport (Rajmata Vijayaraje Scindhia Terminal) is a Civil Enclave Airport at Maharajpur Air Force Station which was established before 1994. Now, under UDAN 4.1(Ude Desh ka Aam Nagarik) scheme under Regional Air Connectivity Scheme of National Civil Aviation Policy 2016, increasing tourist footfall and complaisance of PM Modi's Flagship Smart Cities Mission, Airports Authority of India (AAI) has proposed for expansion of civil enclave at Gwalior airport.
- iv. The proposed expansion is planned with minimum impact on the environmental components in a negative way. As well it will prove beneficial to overall socio-economy of the area as there is no international airport located in the vicinity of the area. The terminal building and related developments have been planned in such a way so as to reduce energy consumption, water consumption etc. The project will also comply all conditions to achieve GRIHA-4-star rating.
- v. Keeping in consideration of above-mentioned facts, the Hon'ble EAC (Infra-II) Committee is requested for consideration of the proposal under para 7(ii) and exempt it from scoping stage, Public Hearing stage and EIA Stage and appraise directly for the grant of Environmental Clearance.
- vi. The baseline study and primary data collection has been carried out during 1st December, 2021 to 28th February, 2022. Field monitoring for meteorological conditions, ambient air quality, water quality, noise quality, soil quality etc. has been carried out.
- vii. Certified Compliance Report has been obtained from MoEF&CC Integrated Regional Office, Bhopal vide File No. 8(o)-1/2022(Env)/079 dated 15.03.2022.
- viii. The proposed project will involve the following infrastructural facilities:
 - a. The terminal building will be state of the art centrally air-conditioned, one and half level terminal building with

- mezzanine, with all modern facilities and amenities catering to 1400 PHP (Departure-700; Arrival-700).
- b. Development of 9 no. of additional aprons to capture Airbus 320 aircrafts.
 - c. Additional Taxiway (Dimension: 650m x 23m) will be developed from proposed terminal building to existing runway.
 - d. Security Hold Area with 4 no. of aerobridges and bus lounge area with adequate seating arrangements, isolated smoking area, child-care rooms, and washrooms etc., will be developed.
 - e. Parking Area will be developed for 700 no. of cars.
 - f. Water Treatment and Solid Waste treatment facilities will be developed in the utility section of terminal building.
 - g. Approach Road (1800m x 20m) will be widened with Airport Road for better connectivity and accessibility.
- ix. The existing terminal building will be non-operational after development of proposed terminal building. Major infrastructural facilities and utilities of Indian Air Force (IAF) such as Runway, ATC Tower, Navigation system, Fire Fighting Services, etc., will be utilised for operation of the airport.
- x. The salient features of the project are given as follows:

S. No.	Particulars	Unit	Total after Proposed Terminal Building & Ancillary Activities
1	Handling Capacity		
	Person Handling Capacity	MPPA	1.11
2	Project Area Details		
	Plot Area	acres	172.60
	Area to be demolished	sqm.	1218.98
	Proposed Built-up Area	sqm.	25000
	Maximum Height of Building	m	30
3	Components Of Airport		
	ATC Tower	No.	With IAF
	Number of Buildings	No.	1
	Number of Aprons	No.	13 (Existing -4 no.; Proposed -9 no.)
	Aerobridges	No.	4
4	Service Details		
	Total Water Requirement	KLD	845
	Freshwater Requirement	KLD	357
	Wastewater Generation	KLD	514
	STP Capacity	KLD	600
	Treated Water Reuse	KLD	488
	Biodegradable Waste	kg/day	1774 (including 16 kg/day of STP)

			Sludge)
	Recyclable Waste	kg/day	1758
	Total Waste	kg/day	3532
	Power Requirement	kVA	4439
	Power Backup (DG Sets)	kVA	5x1250
	Parking	ECS	700

- xi. The total handling capacity of the airport after expansion will be 1.11 million passengers per year (MPPA). The total plot area of airport will be 172.60 acres (excluding IAF Base & Runway). The existing plot area of airport is 29.405 acres. Under proposed expansion, additional 143.20 acres of land has been transferred from Indian Council of Agricultural Research (ICAR) to Airports Authority of India (AAI) for construction of the proposed terminal building and auxiliary facilities. The land use of additional area has already been demarcated for “Transportation Use” as per Gwalior Master Plan, 2021. Hence, there will be no change in land use for proposed land area.
- xii. There will be demolition of AAI residential quarters & hostel present in the site.
- xiii. The total water requirement of airport will be 845 KLD. Out of which, freshwater requirement of 357 KLD will be sourced from groundwater through borewells. Total wastewater generation will be 514 KLD that will be treated in proposed Sewage Treatment Plant of capacity 600 KLD. Approx. 488 KLD treated water will be generated from STP treatment that will be reused in the airport for flushing, HVAC cooling, gardening purposes. It will be a “Zero-liquid Discharge Project”.
- xiv. Total solid waste generation from the airport will be 3,532 kg/day. Out of total, 1,758 kg/day of biodegradable waste will be treated in Organic Waste Convertor (OWC) for reuse as manure. 16 kg/day of STP Sludge will be used directly for manure in green area. 1,758 kg/day of recyclable waste will be given to authorized recyclers. Solid Waste Management Rules, 2016 will be followed.
- xv. Total power requirement of the airport will be 4439 kVA. For backup purposes, 5 no. of DG sets of capacity 1250 kVA (each) will be installed.
- xvi. Approx. 20,245 sqm. of green area will be developed under proposed airport development. There are approximately 616 no. of trees located within the proposed site that will be cleared, for which NOC has been obtained.
- xvii. The project is not located in Critically Polluted area.
- xviii. The project is not located within 10 km of Eco Sensitive Zone. NBWL Clearance is not required.
- xix. Forest Clearance is not required.
- xx. No court case is pending against the project.
- xxi. Investment/Cost of the project is ₹446.12 Crores.
- xxii. Employment Potential –About 250 persons during construction phase and about 200 persons (staff) during operation phase.

xxiii. Benefits of the project – The proposed project will help in development and revenue generation. It expects boost of industrialization, multi-model-connectivity, and infrastructure development in the hinterland. The commercial development such as retail outlets, food-courts, multiplexes, and market zone shall lift the socio-economic status of the area. It will help in generation of employment opportunities that will grow steadily resulting in more demand of skilled, educated and un-skilled people thereby increasing the standard of education and living in the city. The proposed project will broaden the scope of opportunities, tourism as well as economic development in Gwalior to give a boost in development of the city.

2. The EAC noted that 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.

3. *The EAC (Infra-2), noted that the project was earlier granted Terms of Reference by MoEF&CC vide F. NO. 21-114/2021-IA-III dated 04.01.2022. Based on the information and clarifications provided by the Project Proponent and detailed discussions held on all the issues, the EAC agreed for granting exemption to the proposed project from requirement of Public Hearing as per para 7(ii) of EIA Notification, 2006 and its subsequent amendments, after taking into account that there is no R&R issue involved as per Gwalior Master Plan, 2021. However, the Committee was of the opinion that the EIA Report is necessary for further consideration. Accordingly, the EAC (Infra-2) decided to defer the proposal and asked the project proponent to submit the EIA Report for the project.*

LIST OF PARTICIPANTS OF EAC (INFRASTRUCTURE-2) IN 84th MEETING OF EAC (INFRA-2) HELD DURING 16th -17th MARCH, 2022 THROUGH VIDEO CONFERENCING

S. No.	Name	Designation	Attendance		Sign
			16.03.2022	17.03.2022	Through VC
1.	Dr. N. P. Shukla	Chairman	P	P	-
2.	Dr. H. C. Sharatchandra	Member	P	P	-
3.	Shri V. Suresh	Member	P	P	-
4.	Dr. V. S. Naidu	Member	P	P	-
5.	Shri B. C. Nigam	Member	P	P	-
6.	Dr. ManoranjanHota	Member	P	P	-
7.	Dr. DipankarSaha	Member	P	P	-
8.	Dr. JayeshRuparelia	Member	P	P	-
9.	Dr. (Mrs.) Mayuri H. Pandya	Member	P	P	-
10.	Dr. M. V. Ramana Murthy	Member	P	A	-
11.	Prof. Dr. P.S.N. Rao	Member	A	A	-
12.	Dr. Dharmendra Kumar Gupta	Scientist "F"& Member Secretary	P	P	-

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., PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NO_x in reference to SO₂ and NO_x 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 equipment's.
- 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. 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.
- 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 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 shareholder's / 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.
- vi. 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.
- vii. 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.
- viii. Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
- ix. 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.

- x. The criteria pollutant levels namely; PM₁₀, PM_{2.5}, SO₂, NO_x (ambient levels) shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
- xi. 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.
- xii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- xiii. 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.
- xiv. 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).
- xv. 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.
- xvi. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xvii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xviii. 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.
- xix. 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.
- xx. 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.

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 (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 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., PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NO_x in reference to SO₂ and NO_x 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); bag filter/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 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. 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. 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.
- 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 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 shareholder's/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.
- vi. 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.
- vii. 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.
- viii. Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

- ix. 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.
- x. The criteria pollutant levels namely; PM_{2.5}, PM₁₀, SO₂, NO_x (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.
- xi. 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.
- xii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- xiii. 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.
- xiv. 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).
- xv. 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.
- xvi. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xvii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xviii. 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.
- xix. 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.
- xx. 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.

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 (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. 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/Nm³.
- 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 devices (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. 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 MoEF&CC/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 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 shareholder's/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.
- vi. 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.
- vii. 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.
- viii. Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

- ix. 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.
- x. The criteria pollutant levels namely; PM_{2.5}, PM₁₀, SO₂, NO_x (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.
- xi. 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.
- xii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- xiii. 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.
- xiv. 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).
- xv. 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.
- xvi. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xvii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xviii. 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.
- xix. 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.
- xx. 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.

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., PM₁₀ 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.

VII. 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.

VIII 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 MoEF&CC/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 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 shareholder's/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.
- vi. 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.
- vii. 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.

- viii. Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
- ix. 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.
- x. 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.
- xi. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- xii. 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.
- xiii. 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).
- xiv. 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.
- xv. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xvi. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xvii. 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.
- xviii. 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.
- xix. 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.

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 systems 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 equipment's.
- 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. 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 MoEF&CC/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 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 shareholder's/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.

- vi. 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.
- vii. 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.
- viii. Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
- ix. 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.
- x. 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.
- xi. 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.

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); bag filter/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, SO₂, NO_x 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., PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NO_x in reference to SO₂ and NO_x 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.

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 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 shareholder's/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.
- vi. 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.

- vii. 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.
- viii. Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
- ix. 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.
- x. 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.
- xi. The criteria pollutant levels namely; PM_{2.5}, PM₁₀, SO₂, NO_x (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).
- xii. 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.
- xiii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- xiv. 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.
- xv. 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).
- xvi. 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.
- xvii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xviii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xix. 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.

- xx. 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.
- xxi. 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.

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 firefighting 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. PM₁₀ 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, murrum and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
 - vi. Sand, murrum, 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. 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 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.
- vi. 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.
- vii. 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
- viii. 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.
- ix. 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.
- x. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- xi. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report and also that during their presentation to the Expert Appraisal Committee.
- xii. 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).
- xiii. 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.
- xiv. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xv. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xvi. 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.

- xvii. 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.
- xviii. 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.
