

MINUTES OF 80th MEETING OF EXPERT APPRAISAL COMMITTEE (INFRASTRUCTURE-2) HELD DURING 20 –21st JANUARY, 2022.

VENUE: Through Video Conferencing

DATE: 20–21st January, 2022

PROCEEDINGS

80.1. Opening Remarks of the Chairman: The Chairman and Members extended warm welcome with each other and other participants of the meeting. The Chairman of the EAC (Infra-2), Dr. N.P. Shukla, initiated the meeting. However, due to some urgent official engagements Dr. Shukla designated Dr. H.C. Sharatchandra as the interim Chairman to conduct the 80th EAC meeting. Thereafter, the meeting was opened to start proceeding as per the agenda adopted for this meeting.

80.2. Confirmation of Minutes of 79th Meeting of Expert Appraisal Committee (Infrastructure-2) held on 31st December, 2021.

The Expert Appraisal Committee (Infrastructure-2), hereinafter called the EAC, was informed that no representation has been received regarding projects considered in 79th meeting. Minutes of 79th 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.

80.3. Consideration of Proposals (Day I): The EAC considered proposals as per the agenda adopted for Day-I of 80th meeting. The details of deliberations held and decisions taken in the meeting are as under:

AGENDA ITEM NO. 80.3.1.

“Expansion of Existing Airport at Hisar (Development of Phase II)” at village Bir, District Hisar by Department of Civil Aviation, Government of Haryana – Amendment in Environmental Clearance

(IA/HR/MIS/248020/2021; F. No.21-136/2021-IA-III)

1. The Project Proponent (Department of Civil Aviation, Government of Haryana) 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 in western periphery of State of Haryana in Hisar District. Site is located close to the Hisar City and well connected with NH-9.

- ii. The proposal is for Amendment in the Environmental Clearance granted by the Ministry vide letter no. F.No. 10-31/2019-IA.III dated 23.11.2020 for expansion of existing domestic airport Hisar Phase II having passenger handling capacity of 3.5 MPPA (Million passengers per annum) and cargo capacity of 20,000 MT with one runway of 3000m x 60m (with 7.5 m shoulders either side) for Code '4E' aircraft.
- iii. Construction as per EC is under process. Runway work is in process. Regular Six-monthly compliances are submitted.
- iv. Now, as per the expected upcoming development in the area, the land use of 7200-acre DoCA land has been zoned out for different activities like Airport use, Residential use, Commercial and Industrial use. The details of the amendment proposed are given as under:

S. No.	Para of EC issued by MoEF&CC	Details as per the EC dated 23.11.2020	To be revised/ read as	Justification/ reasons
1.	Para (ii) of 2	This is an Expansion project having total plot area of 7200 acres (2913.7 Ha). There are allocations of various types of land use of different regions within the proposed project site in accordance to Master Plan of Hisar, 2021. The existing land use of the site is Airport, Residential, Commercial and Special Economic Zone (SEZ) as per the Master Plan of the area. The entire land belongs to the Government of Haryana, which will be used for the airport. After development of airport, land use of 7200 acres land will change to airport. Also, as per the Draft Master Plan of 2041, the entire land has been considered as Airport.	This is an Expansion project having total plot area of 7200 acres (2913.7 Ha). There are allocations of various types of land use of different regions within the proposed project site in accordance to Master Plan of Hisar, 2021. The existing land use of the site is Airport, Residential, Commercial and Special Economic Zone (SEZ) as per the Master Plan of the area. The entire land belongs to the Government of Haryana, which will be used for the airport. After development of airport, land use of 7200 acres land will change to Airport, Residential, Commercial and Industrial.	As per the expected upcoming development in the area, the land use of 7200 acre land has been zoned out for different activities. There shall not be any change in the Airport planning submitted earlier.

- v. Due to zoning of land parcels for different activities as mentioned above, it is proposed to relocate the Solid Waste Management Facility and Solar Park area to another location within the 7200 acres land of Department of Civil Aviation (DoCA). Due to above mentioned changes, minor modifications in layout plan are made and the revised layout plan has been submitted. The proposed change in location is explained as follows:
- Solar Park Area** - Approx. 16.25 Ha of land was allocated for the solar park at the South Side of the boundary. Now, it is relocated near to the entry of the Airport and above the truck parking area of cargo facility. The total area allocated for solar park is 16.25 Ha.
 - Solid Waste Management Facility** - An area of 5.7 Ha was allocated for handling of solid waste of Hisar airport. The expected waste generation from phase II development of Airport is 5156 Kg/day. Maximum area required for 5156 Kg/day of waste shall be 100 Sqm. However, approx. 2.2 Ha areas allocated for the waste management.
- vi. The revised land use details as per the proposed amendment are given as follows:

Zone	Earlier	Revised
	Area (Ha)	Area (Ha)
Runway	18	18
Taxiway + Taxi Lane	18.3	18.3
Runway Protection Zone	112.8	112.8
RESA	5.76	5.76
Passenger Terminal	3	3
Apron (Passenger)	5.6	5.6
Cargo Terminal	0.5	0.5
Apron (Cargo)	0.4	0.4
Isolation Bay	1.6	1.6
ATC + Fire Station	2.07	2.07
AAI/BCAS/MET	2.16	2.16
Airline Offices	0.35	0.35
Hanger	3	3
Car Parking	1.2	1.2
Utilities	0.45	0.45
Maintenance Building	0.35	0.35
AGL Sub Station	0.1	0.1
STP	2	2
Solid waste Treatment	5.66	2.2
Electric Sub station	1	1
GSE	1	1
Green Area	4	4

Green Belt	4.5	4.5
Green Lawn on airside	98.92	98.92
Approach Lighting	8.4	8.4
Funnel Area	112.2	112.2
Approach Road	14.6	14.6
Perimeter Road	4.15	4.15
Solar Park	16.25	16.25
Residential Area	12.27	12.27
MRO	44	44
Fuel Farm	15.39	15.39
DVOR	28.3	28.3
Area for other Activities & Future Expansion	2365.42	2368.88
Total	2913.7	2913.7

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 noted that the Environmental Clearance vide letter no. F. No. 10-31/2019-IA.III dated 23.11.2020 was issued to the project considering that, after development of airport, land use of 7200 acres land will change to Airport. However, as per the proposed amendment, the land use of 7200 acres land will change to Airport, Residential, Commercial and Industrial. The project proponent also informed the EAC that separate environmental clearance will be obtained for development of Integrated Manufacturing Cluster (IMC) in the proposed industrial zone under 7(c) category of EIA Notification, 2006. The consultant mentioned that the residential area zone would be leased out to the general public for residential use. However, the project proponent later clarified that the residential area would be developed only for the airport staff.

4. The EAC observed that the project activity considered for the Environmental Clearance granted vide letter no. F. No. 10-31/2019-IA.III dated 23.11.2020 is only for the expansion of domestic airport at Hisar under item 7(a) of the EIA Notification, 2006 and its subsequent amendments. Accordingly, the proposed land uses of residential, commercial and industrial zones were not considered in the impact assessment and appraisal of the project at the time of grant of its EC. The EAC also raised the query on how the application can be submitted for a separate EC for the proposed IMC under item 7(c) when the land area is already included in the existing EC granted under item 7(a) of the EIA Notification, 2006.

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, expressed that the proposed amendment involves a drastic change in*

land use, which may not be considered without a comprehensive impact assessment of the proposed changes. Also, only a peripheral idea of the proposed activities within the 7200 acres of land area has been provided. The Committee was of the opinion that only land area required for the development of airport should be included in the Environmental Clearance for the airport. Therefore, the EAC (Infra 2) decided to return the instant proposal and asked the project proponent to clearly demarcate the land area required for the development of the airport (excluding the additional area for other land uses) and apply for amendment in EC accordingly.

AGENDA ITEM NO. 80.3.2

Common Hazardous Waste Incineration Facility (CHWIF) of 20 TPD capacity and preparation of Alternate Fuel and Raw material (AFR) for co-processing (20 TPD capacity) at Plot No. 20 (Corner) of Sira Industrial Area, 1st Phase, Tumkur Dist., Karnataka by M/s Indian Eco Solutions – Reconsideration for Terms of Reference.

(IA/KA/MIS/239361/2021; F. No. 21-102/2021-IA-III)

The Project Proponent (M/s. Indian Eco Solutions) expressed inability to attend the meeting and requested for deferment of the proposal vide email dated 19.01.2022. Accordingly, the Committee decided to defer the project as absent case.

AGENDA ITEM No. 80.3.3

Proposed apartment cum villas project with total built-up area of 68,830 Sqm. at Cheruvakkal Village, Thiruvananthapuram Municipal Corporation, Thiruvananthapuram Taluk & District, Kerala by M/s MOR Realtors – Environmental Clearance

(IA/KL/MIS/250693/2022; F. No. 21-129/2021-IA-III)

1. The Project Proponent (M/s. MOR Realtors) along with his consultant 'M/s. Environmental Engineers & Consultants 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 Re-survey Nos. 121/13, 121/11, 122/8, 122/20, 122/22, 122/25-2, 122/5, 122/23, 122/24, 122/18, 122/15-1, 122/17, 122/15, 122/6, 122/19, 122/1, 122/16, 120/5-1, 120/5, 120/5-1-1, 123/6, 123/5, 123/4, 123/3, 123/2,

- 123/1, 124/2, 124/3, 115/30, 115/29, 115/28, 115/11, 115/23, 115/24, 115/26, 115/25, 155/27-1, 115/27-3, 129/4-1, 129/1-2, 129/1-3, 129/1-7, 129/1-5, 1259/1-6, 129/1-4, 130/16, 129/1-1-3, 129/1-1 at Cheruvakkal Village, Thiruvananthapuram Municipal Corporation, Thiruvananthapuram Taluk & District, Kerala with coordinates from 08°32'03.35"N to 08°32'00.74"N Latitude and 76°54'14.18"E to 76°54'05.04"E Longitude.
- ii. The project is new.
 - iii. The total plot area is 49,287 Sqm. FAR area is 55,695 Sqm. and total construction (Built-up) area is 68,830 Sqm. The project will comprise of apartment cum villas project which consists of 3 apartment towers (225 Dwelling Units @ 75 units in each tower) + 100 nos. villas. Maximum height of the building is 50 m.
 - iv. During construction phase, total water requirement is expected to be 63 KLD which will be met by recycled water from portable STP/ stored rain water (tank) for construction purposes and well water/ Kerala Water Authority (KWA) supply for meeting the domestic water requirement expected to be 11 KLD. During the construction phase, portable STP will be provided for disposal of waste water. Temporary sanitary toilets will be provided during peak labour force.
 - v. During operational phase, total water demand of the project is expected to be 288 KLD (fresh water 192 KLD + 96 KLD recycled from STP) and the same will be met by 192 KLD fresh water from stored rain water tanks/KWA/well water and 96 KLD recycled water. Wastewater generated (230 KLD) will be treated in STP of total 275 KLD capacity. 207KLD of treated wastewater will be generated of which 156 KLD will be recycled and re-used (96 KLD for flushing, 60 KLD for gardening etc.) within the project. The excess treated water (51 KLD) will be used for horticulture purposes outside the project site (farming & horticulture purposes of avenue plantation along NH-66).
 - vi. About 850 kg/day solid waste will be generated in the project. The biodegradable waste (425 kg/day) will be processed in bio-bin unit and the non-biodegradable waste generated (425 kg/day) will be handed over to authorized local vendor. An area equivalent of about 200 Sqm. for about 15 days storage of non-biodegradable waste would be provided. The hazardous waste (used oil & discarded batteries attached to D.G. sets) will be stored in the designated services area and will be disposed to CPCB/SPCB authorized vendors.
 - vii. The total excavated soil is about 24,316 cu.m and will be completely used within the site. The excavated earth of about 5,265 cu.m. will be preserved for landscaping purposes, 13,169 cu.m for backfilling purposes and 5,882 cu.m to be used for internal road construction.
 - viii. The total power requirement during operation phase is 2,500 kW (connected load) and will be met from Kerala State Electricity Board (KSEB) & DG Set (600 kVA x 1 no.) as standby.

- ix. Rooftop rainwater of buildings will be collected in RWH tanks of 75KL capacity for each multistoried apartment tower (i.e. 75 X 3 = 225 KL) and 10 KL for each villa, for harvesting after filtration.
- x. Parking facility for 517 cars + 120 two wheelers for the apartments and 1 car + 1 two wheeler per villa is proposed to be provided against the requirement of 365 cars + 90 two wheelers for the apartments and 1 car + 1 two wheeler per villa respectively (according to local norms). Provision for charging for electrically operated vehicles (20%) is proposed in each parking floor.
- xi. Solar PV installation of 260 kWp capacity shall be provided to meet 10.4% of the connected load.
- xii. Total area for landscaping proposed is 20,000 Sqm. (about 41% of total plot area). 25 trees will be cut and it is proposed to plant about 866 trees within the site & the project vicinity in consultation with the local authority.
- xiii. The project is not located in Critically Polluted area.
- xiv. The project is not located within 10 km of Eco Sensitive Zone. NBWL Clearance is not required.
- xv. Cheruvakkal Village is not included in the list of Villages in ESA of the Western Ghats as per Appendix 3 of the report of the High Level Working Group (HLWG) on Western Ghats.
- xvi. Forest Clearance is not required.
- xvii. No court case is pending against the project.
- xviii. CRZ Clearance is not required.
- xix. Expected timeline for completion of the project - About 48 months from the date of start of construction.
- xx. Investment/Cost of the project is ₹270 Crores.
- xxi. Employment potential - About 150 persons during construction phase and about 250 persons during operation phase.
- xxii. Benefits of the project – Employment opportunities & revenue to the State. The proposed Apartment cum Villas project would provide better residential facilities with supporting infrastructure facilities and amenities to the residents.

2. 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.

3. *Some discrepancies and gaps were noted in the details provided in the Annexure IV, Form I, Form IA and in the Presentation. Accordingly, the EAC (Infra-2), decided to defer the proposal and asked the project proponent to provide the following additional information:*

- i. Submit the break-up of built-up area for the proposed project components and clarify the maximum building height.

AGENDA ITEM NO. 80.3.4

Development of Integrated Common Hazardous Waste Treatment, Storage, Disposal and Recycling Facilities at Undurmikidakkulam, Thiruchli Taluk, Virudhunagar District, Tamil Nadu by M/s Tamil Nadu Waste Management Limited (a division of M/s Ramky Enviro Engineers Limited) - Reconsideration for Extension of Validity of Environmental Clearance

(IA/TN/MIS/241559/2021; F. No. 21-120/2021-IA-III)

1. The EAC noted that the proposal was deferred in its 78th meeting held during 14-15th December, 2021 and the project proponent was asked to provide the following additional information:

- i. Details of completed and pending works at site specifying the percentage of completion.
- ii. Submit detailed timeframe for the completion of pending works.
- iii. Submit a copy of the latest six-monthly compliance report submitted by the PP to Integrated Regional Office of MoEF&CC.

2. The Project Proponent (M/s Tamil Nadu Waste Management Limited (a division of M/s Ramky Enviro Engineers Limited)) along with his consultant 'M/s. Ramky Enviro Services Pvt. Ltd.', made a presentation and provided the following information:

- i. Of the facilities for which Environmental Clearance has been issued by MoEF&CC vide F. No. 10-77/2012-IA.III dated 06.02.2014 for the project, only Landfill and Treatment/Stabilization units have been operational as on date. The item wise percentage of completion is given as follows:

Facility	Capacity	Percentage of completion
Secured Landfill	1,50,000 TPA	100%
Treatment/ Stabilization	90,000 TPA	100%
Bio Medical Waste	30,000 Beds	25%
E-Waste	30,000 TPA	25%
Spent Solvent Recycling	10,000 KL	25%
Incineration	20,000 TPA	25%
Used Oil Recycling	10,000 KL	25%
Alternate Fuel & Raw Material Facility	10,000 TPA	90%
Used Lead Acid Batteries	24,000 TPA	25%
Waste Plastic Recycling	10,000 TPA	25%
Waste Paper Recycling	10,000 TPA	25%
Renewable Energy	2 MW	25%
Waste to Energy	2 MW	25%

- ii. Detailed timeline has been prepared and submitted for the completion of the pending works within 3 years.
- iii. A copy of the latest Six-Monthly EC Compliance Report (for the period 01.04.2021 to 30.09.2021) submitted to MoEF&CC, Regional Office (South Eastern Zone), Chennai, vide letter dated 03.01.2022 has been provided.

3. The EAC noted that the project/activity is covered under category ‘A’ of item 7(d) ‘Common hazardous waste treatment, storage and disposal facilities (TSDFs)’ of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at Central level by sectoral EAC.

4. The EAC also noted that the amendment to the EIA Notification, 2006 issued vide S.O. 221(E) dated 18th January, 2021 provides that period from 1st April, 2020 to 31st March, 2021 shall not be considered for the purpose of calculation of the period of validity of Environmental Clearances, in view of outbreak of Corona Virus (COVID-19) and subsequent lockdowns (total or partial) declared for its control, however, all activities undertaken during this period in respect of the Environmental Clearance granted shall be treated as valid. As per the abovementioned amendment notification, the EC dated 06.02.2014 automatically stands valid up to 05.02.2022.

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 that the request for extension should be considered as per provisions of EIA Notification, 2006 and its subsequent amendments, which allows for extending validity further for a period of three years from the date on which validity of EC is expiring.*

AGENDA ITEM NO. 80.3.5

Proposed building construction project consisting of a multiplex complex [Group J, KMBR, an integrated entertainment and shopping center, cinema hall with multi-cinema screens with seating capacity of 900 seats, food court with seating capacity of 200 seats & Multi Level Car Parking (MLCP)] with total built up area of 30,264.85 Sqm. at Pathaikkara Village, Perinthalmanna Municipality, Perinthalmanna Taluk, Malappuram District, Kerala by M/s Secura Developers Pvt. Ltd. – Environmental Clearance.

(IA/KL/MIS/250216/2022; F. No. 21-131/2021-IA-III)

1. The Project Proponent (M/s Secura Developers Pvt. Ltd.) along with his consultant ‘M/s. Environmental Engineers & Consultants 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 Survey Nos. 148/2-5, 148/3-1, 11/1-3, 11/1-5, 148/1-25, 148/1-17 & 14/1B1-4 (partial), Pathaikkara Village, Perinthalmanna Municipality, Perinthalmanna Taluk, Malappuram District, Kerala with coordinates from 10°58'34.51"N to 10°58'27.85"N Latitude and 76°14'28.80"E to 76°14'28.95"E Longitude.
- ii. The project is new.
- iii. The total plot area is 9,716.19 Sqm., FSI area is 19,043.73 Sqm. and total construction (Built-up) area is 30,264.85 Sqm. The project will comprise of an integrated entertainment and shopping center, cinema hall with multi-cinema screens with seating capacity of 900 seats, food court with seating capacity of 200 seats & Multi Level Car Parking (MLCP). Maximum height of the building is 30 m.
- iv. During construction phase, total water requirement is expected to be 28 KLD which will be met by recycled water from portable STP/stored rain water (tank) for construction purposes and well water/Kerala Water Authority (KWA) supply for meeting the domestic water requirement expected to be 11 KLD. During the construction phase, portable STP will be provided for disposal of wastewater. Temporary sanitary toilets will be provided during peak labour force.
- v. During operational phase, total water demand of the project is expected to be 126 KLD and the same will be met by 57 KLD fresh water from stored rain water tanks/KWA/well water and 69 KLD recycled water. Wastewater generated (76 KLD) will be treated in STP of total 100 KLD capacity. 69 KLD of treated wastewater will be generated which will be completely recycled and re-used within the site (60 KLD for flushing, 1 KLD for gardening and 8 KLD for Cooling towers attached with the HVAC System).
- vi. About 466 kg/day solid waste will be generated in the project. The biodegradable waste (about 250 kg/day) will be processed in bio-bin unit and the non-biodegradable waste generated (about 250 kg/day) will be handed over to authorized local vendor. An area of about 400 Sqm. is earmarked for storage of the non-biodegradable waste. The hazardous waste (used oil & discarded batteries attached to D.G. sets) will be stored in the designated services area and will be disposed to CPCB/SPCB authorized vendors.
- vii. The total excavated soil is about 5,500 cu.m. The excavated earth of 300 cu.m. will be preserved for landscaping purposes, 1,300 cu.m. will be used for backfilling purposes and 300 cu.m. will be used for internal road construction purposes. The remaining excess excavated earth of about 3,600 cu.m. will be utilized for the road leading to Hotel project developed by M/s Fitco Infra LLP.
- viii. The total power requirement during operation phase is 2,450 kW (connected load) and will be met from Kerala State Electricity Board (KSEB) & DG Sets (500 kVA x 4 nos.) for standby.
- ix. Rooftop rainwater of buildings will be collected in RWH tank of 124 KL capacity for harvesting after filtration.

- x. Parking facility for 380 cars + 480 two wheelers is proposed to be provided according to local norms. Provision for charging for electrically operated vehicles (20%) is proposed in each parking floor.
- xi. Solar PV installation of 268 kWp capacity shall be provided to meet 10.91% of the connected load.
- xii. Total area for landscaping proposed is 1,103.84 Sqm. 30 trees will be cut and it is proposed to plant 421 trees within the site & the project vicinity in consultation with the local authority.
- xiii. The project is not located in Critically Polluted area.
- xiv. The project is not located within 10 km of Eco Sensitive Zone. NBWL Clearance is not required.
- xv. Pathaikkara Village is not included in the list of Villages in ESA of the Western Ghats as per Appendix 3 of the report of the High Level Working Group (HLWG) on Western Ghats.
- xvi. Forest Clearance is not required.
- xvii. No court case is pending against the project.
- xviii. CRZ Clearance is not required.
- xix. Expected timeline for completion of the project - About 48 months from the date of start of construction.
- xx. Investment/Cost of the project is ₹ 80.23 Crores.
- xxi. Employment potential – About 150 persons during construction phase and about 450 persons during operation phase.
- xxii. Benefits of the project – Employment opportunities & revenue to the State. The proposed multiplex complex [an integrated entertainment and shopping center & Multi Level Car Parking] project will provide better facilities with supporting infrastructure facilities and amenities to the people. The potential for employment and access to new services may draw people to the area around the project. There will be an increase in economic activity and employment for the local community, local skills development.

2. 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.

3. *Some discrepancies and gaps were noted in the details provided in the Annexure IV, Form I, Form IA and Presentation. Accordingly, the EAC (Infra-2), decided to defer the proposal and asked the project proponent to provide the following additional information:*

- i. Submit the break-up of built-up area for the proposed project components along with building height details.
- ii. Clarify the quantity of solid waste generated in the project.

AGENDA ITEM NO. 80.3.6

**Proposed Residential Project with built-up area of 45,420.44 Sqm. at Edappally South Village, Cochin Corporation, Kanayannoor Taluk, Ernakulam District, Kerala to be jointly developed by M/s Sunny Apartments Pvt. Ltd. & M/s United Developers Pvt. Ltd.-
Reconsideration for Environmental Clearance**

(IA/KL/MIS/243083/2021; F. No. 21-116/2021-IA-III)

1. The EAC noted that the proposal was deferred in its 78th meeting held during 14-15th December, 2021 and the project proponent was asked to provide the following additional information:

- i. Clarify the details of landscaping area.
- ii. Resubmit water requirement calculation and water balance diagram.
- iii. Details of alternate arrangements for reuse of excess treated water if not collected by M/s Sahyadri Gardens.
- iv. Details of existing structures at site.
- v. Resubmit Form-1 and Form IA with correct information.

2. The Project Proponent (M/s. Sunny Apartments Pvt. Ltd. & M/s United Developers Pvt. Ltd.) along with his consultant 'M/s. Environmental Engineers & Consultants Pvt. Ltd.', made a presentation and provided the following information:

- i. Total area for landscaping proposed is 4,300 Sqm. (700 Sqm. at natural ground level + 3,600 Sqm. at 2nd floor podium level). 35 trees will be cut and it is proposed to plant 460 trees within the site.
- ii. During operational phase, total water demand of the project is expected to be 72 KLD and the same will be met by 45 KLD fresh water from stored rain water tanks/KWA/well water and 27 KLD recycled water. Wastewater generated (56 KLD) will be treated in STP of total 68 KLD capacity. 51 KLD of treated wastewater will be generated of which 27 KLD will be recycled and re-used within the project (25 KLD for flushing, 2 KLD for gardening etc.). About 24 KLD of excess treated water from STP will be used for farming & horticulture purposes by Sahyadri Gardens or make-up water requirement for cooling purposes by M/s Lulu Shopping Mall.
- iii. Earlier it was proposed that the excess treated water from STP (24 KLD) will be used for farming & horticulture purposes at M/s Sahyadri Gardens, a park of 6.2 acres, land extent, located at 4 km from project site. Now, an alternate arrangement has been made with the management of Lulu Shopping Mall located at Edappally (about 1.5 km from project site) for utilising the excess treated water to be generated from the proposed housing project for their cooling tower make up water.
- iv. There are old buildings (150 Sqm. of total built-up area)/sheds 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. Revised Form-1 and Form IA have 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 Kerala, it required appraisal at Central level by sectoral EAC.

4. *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 45 KLD during operational phase.
- iii. As proposed, wastewater shall be treated in an onsite STP of total 68 KLD capacity. At least 27 KLD of treated water from the STP shall be recycled and re-used for flushing (25 KLD) and for gardening (2 KLD). Excess treated water from STP (24 KLD) will be utilised 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.
- 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 4,300 Sqm. As proposed, at least 460 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 120 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 236 kWp capacity to meet atleast 10.5% 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.

AGENDA ITEM NO. 80.3.7

Proposed Residential Building with built-up area of 20665.23 Sqm. at Chathamangalam Panchayath, Poolokode Village, Kozhikode Taluk & District, Kerala by M/s Cancer and Allied Ailments Research (CARE) Foundation - Reconsideration for Environmental Clearance

(IA/KL/MIS/242431/2021; F. No. 21-117/2021-IA-III)

1. The EAC noted that the proposal was deferred in its 78th meeting held during 14-15th December, 2021 and the project proponent was asked to provide the following additional information:

- i. Revised project layout demarcating separate access to the proposed residential project from the main road.
- ii. Details of shared amenities with the adjacent hospital project. MoU to be submitted for the same specifying the existing capacities of the units and their adequacy to cater to the project.
- iii. Revised details of energy conservation measures including solar energy.
- iv. Details of provision for charging for electrically operated vehicles.

2. The Project Proponent (M/s. Cancer and Allied Ailments Research (CARE) Foundation) along with his consultant 'M/s. ULTRA TECH', made a presentation and provided the following information:

- i. The project layout has been revised such that the 10 m wide access road of the existing Cancer Hospital from the Chulur-Nayarkuzhi road bifurcate into two roads at a distance of 92.5 m from the access point on the Chulur-Nayarkuzhi road. Thus a separate 4m wide access road will be available for the proposed building during both the construction and operation phases. This will ensure that the vehicular movement of the proposed building will not cause any hindrance to the vehicular movement of the existing Cancer Hospital. A single access point is maintained to ensure that the residential building is accessible only to the patients/by-standers/families of the Cancer Hospital. The revised layout plan for the residential project demarcating the separation in roads has been submitted.
- ii. The Cancer Hospital and the proposed building project are owned by the same project proponent. A declaration made by the proponent on behalf of the Cancer Hospital permitting the proposed building project to utilise the shared amenities has been submitted. The details of the amenities shared between the existing Cancer Hospital and the proposed residential project are given as follows:

S. No.	Amenity of the Cancer Hospital proposed to be shared	Quantity/ Specifications	Purpose	Remarks
1	Water source (open well)	9.75 KLD	Water requirement during construction phase.	The region has ample groundwater availability.
2	Access road from Chulur-Nayarkuzhi road	92.5 m from the access point at Chulur-Nayarkuzhi road	Access road during the construction and operation phase.	Single access road so that the residential building is accessible only to patients/by-standers/families of the Cancer Hospital.
3	Sewage	63 KLD	Wastewater	The STP has a total

	Treatment Plant		treatment during operation phase.	capacity of 500 KLD of which only 250 KLD is currently used.
4	Biomedical waste storage area	As per requirement	Management of biomedical waste generated.	Existing MoU of Cancer Hospital with M/s IMAGE has to be revised if required.

- iii. Solar PV installation of 120 kWp capacity shall be provided to meet 6.67 % of the total power requirement. The power generation from the solar panels shall be used for lighting of common areas and for water heating.
- iv. 6 Nos. e-charging points for charging of electrically operated vehicles has been proposed in the parking area.

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 pointed out that the minimum width of road to residential apartment building should be atleast 6m as per NBC norms. Accordingly, the project proponent agreed to increase the width of the access road to the proposed residential building from 4m to 6m.

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. The PP shall provide a separate 6m wide access road for the proposed building as committed.
- ii. Abstraction of ground water shall be subject to the permission of Central Ground Water Authority (CGWA). Fresh water requirement shall not exceed 47 KLD during operational phase.
- iii. As proposed, wastewater shall be treated in the STP of existing Cancer Hospital having total 500 KLD capacity. Atleast 40 KLD (non-monsoon season) of treated water from the STP shall be recycled and re-used for flushing (23 KLD), gardening (11 KLD) and for car and floor washing (6 KLD). Excess treated water of about 16.7 KLD shall be disposed into the green area of the Cancer hospital for landscaping purposes. 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.

- 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 1475.81Sqm. As proposed, at least 518 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 120 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. Bio-medical wastes shall be disposed as per Bio-Medical Waste (Management & Handling) 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 120 kWp capacity to meet atleast 6.67 % of the total power requirement 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.

AGENDA ITEM NO. 80.3.8

Environment Clearance for Proposed Expansion of the Apartment cum Villa Project with increase in built-up area from 19,897.98 Sqm. to 24,008.21 Sqm. at Karakulam Village & Panchayat, Nedumangad Taluk, Thiruvananthapuram District, Kerala to be developed by M/s Cordon Constructors & Realtors Pvt. Ltd. - Reconsideration for Environmental Clearance

(IA/KL/MIS/243239/2021; F. No. 21-115/2021-IA-III)

1. The EAC noted that the proposal was deferred in its 78th meeting held during 14-15th December, 2021 and the project proponent was asked to provide the following additional information:

- i. Clarify the details of power requirement.
- ii. Resubmit water requirement calculation and water balance diagram.
- iii. Resubmit Form-1 and Form IA with correct information.

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

- i. The total power requirement during operation phase is 1,250 kW and the total connected power load is 1,000 kW which will be met from Kerala State Electricity Board (KSEB) & DG Set of capacity 400 kVA x 1 no. is proposed as standby.
- ii. During operational phase, total water demand of the project is expected to be 88 KLD and the same will be met by 57 KLD fresh water from stored rainwater tanks/KWA/well water and 31 KLD recycled water. Wastewater generated (68 KLD) will be treated in STP of 82 KLD capacity. 61 KLD of treated wastewater will be generated of which 31 KLD will be recycled and re-used within site for flushing (28 KLD) and Horticulture (3 KLD), etc. About 30 KLD treated water from STP will be used for farming & horticulture purposes of M/s Pankaja Kasthuri Herbals Ind. Pvt. Ltd.
- iii. Revised Form-1 and Form IA have 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 Kerala, it required appraisal at Central level by sectoral EAC.

4. *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 57 KLD during operational phase.
- ii. As proposed, wastewater shall be treated in an onsite STP of total 82 KLD capacity. Atleast 31 KLD of treated water from the STP shall be recycled and re-used for flushing (28 KLD) and for gardening (3 KLD). Excess treated water from STP (30 KLD) shall be utilised for farming & horticulture purposes outside the sites 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 1,246.64 Sqm. As proposed, at least 198 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. 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, RWH tank of 100 KL capacity for multi storied apartment tower and 10 KL capacity for each villa 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. The PP shall provide electric charging points in parking areas for e-vehicles as committed.
- x. As committed, solar energy installation of 110 kWp capacity to meet atleast 11% of the connected load shall be implemented.
- 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.

Consideration of Proposals on Day-II (21st January, 2022): The EAC considered proposals as per the agenda adopted for Day-II of 80th meeting. The details of deliberations held and decisions taken in the meeting are as under:

AGENDA ITEM NO. 80.4.1

Passenger Ropeway Facility from Har-Ki-Pauri to Chandi Devi Temple in Haridwar City, Uttarakhand by M/s Uttarakhand Metro Rail, Urban Infrastructure and Buildings Construction Corporation Limited-Environmental Clearance

(IA/UK/MIS/202744/2021; F. No. 21-133/2021-IA-III)

1. The Project Proponent (M/s. Uttarakhand Metro Rail, Urban Infrastructure and Buildings Construction Corporation Limited) along with his consultant 'M/s. RITES Limited', 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 Khasra No 7,17,18,22 of Laljiwala Pargana, Jwalapur, Haridwar City of Uttarakhand.
- ii. The project is new.
- iii. The proposal was issued Standard ToR vide File No. 21-32/2021-IA-III dated 05.05.2021.
- iv. The proposed project is a passenger ropeway system to reach the Chandi devi temple from Har ki Pauri. The project is 2,305 m long ropeway, covering an area of 6,210 Sqm. (2900 Sqm. of Forest Land and 3310 Sqm. of Government Land) for the development of ropeway station and tower. The salient features of the project are as follows:
 - Length- 2,305 m
 - Area- 0.62 Hectares (6,210 Sqm.)
 - Carrying Capacity- 1800 PPH
 - ROW- 10 m
 - Project components: Construction of Lower Terminal, Upper Terminal and 13 nos. of Towers
- v. Total 65.5 KLD of water will be required. 23 KLD fresh water will be supplied by Uttarakhand Jal Nigam and 43 KLD recycled water will be required for the purpose of flushing. 52 KLD of waste water will be generated which will be treated by the Advanced Eco reactortechnology. Treated water will be reused within the premises.
- vi. Total solid waste generation during operation will be 435 Kg per day. Segregated waste near the project site will be given to Municipal Corporation for treatment and disposal.
- vii. Power requirement will be 15 KW for Upper Terminal and 425 KW for Lower Terminal. Power will be supplied by the Uttarakhand Power Corporation Ltd. During power failure 02 Number of DG sets of Capacity 625 KVA for Lower Terminal and 25 KVA for Upper Terminal will be provided.
- viii. Solar PV of 15 kW has been proposed.
- ix. Pt. Deen Dayal Upadhyay parking has two levels of parking floor which will be extended to 4 levels in due course, increasing the current parking capacity of 1,000 to around 2,000 cars. Traffic will be coming to Pt. Deen Dayal Upadhyay Marg from national highway and from interior roads of Haridwar which will be easy to manage due to huge parking lot at Har Ki Pauri.
- x. Public Hearing for the proposed Ropeway project was organized on 12.11.2021, at C.C.R Bhawan (Mela Prashashan) Rodibelabala, Haridwar by the Uttarakhand State Pollution Control Board (UKSPCB).
- xi. Total area of forest land involved in this project is 0.29 hectare and approval for diversion of Forest land for use of non-forest purposes is under process. Stage-I Forest clearance has been received on 18.11.2021 from MoEF&CC Integrated Regional Office Dehradun.
- xii. Raja Ji National Park, is located at 190 m from the project site. A letter dated 4.10.2021 has been received from Chief Wildlife Warden stating that the proposed project does not impact the section 29 and section 35 (6) of the Wildlife protection act 1972.

- xiii. 38 Trees will be felled. 580 plants to be planted. Compensatory Afforestation will be done for 0.58 hectare.
- xiv. The project is not located in Critically Polluted area.
- xv. No court case is pending against the project.
- xvi. CRZ Clearance is not required.
- xvii. Expected timeline for completion of the project: 24 months
- xviii. Investment/Cost of the project is ₹149.70 Crores.
- xix. Employment potential: 15 Number of staff will be directly employed during Operation.
- xx. Benefits of the project - Since the ropeway is at Har Ki Pauri to Chandi Devi Mandir itself, so it will connect more people to reach at Maa Chandi Devi temple directly for the pilgrims reaching Haridwar and coming at Har ki Pauri. This will reduce the time and effort of the people in reaching Maa Chandi Devi Temple. It will generate local employment opportunities during construction and operation of the said project. Due to Har Ki Pauri to Chandi Devi ropeway project, there will be increase in tourism in State of Uttarakhand due to better connectivity.

2. The EAC noted that the project/activity is covered under category 'A' of item 7(g) 'Aerial Ropeways' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at Central level by sectoral EAC.

3. *The EAC found several gaps and discrepancies in the EIA Report and expressed displeasure at the consultant for lack of quality assurance. Since it is a repeated observation against the consultant, the EAC was also of the opinion to make a formal complaint against the consultant to NABET for debar for a certain period. The Committee noted that biodiversity survey includes species (such as Philippine deer) which are not found in India; also, the scientific names are not given in proper manner; the details of water management need to be clarified with a detailed water balance diagram and also provide a layout map showing the STP; The capacity of STP needs to be specified; etc. Accordingly, the EAC (Infra-2) decided to defer the proposal and asked the project proponent to revise and resubmit the EIA report with necessary checks and corrections in light of the aforesaid observations.*

AGENDA ITEM NO. 80.4.2

Expansion in existing common TSDF and MEE facility by introducing common incineration facility (capacity 1000 Kg/Hr.) at Plot No. 499, 500, 501, GIDC Industrial Estate, Saykha, Vagra Taluk, Dist. Bharuch, Gujarat by M/s Shesh Enviro Infra Pvt. Ltd. - Terms of Reference

(IA/GJ/MIS/240960/2021; F. No.21-139/2021-IA-III)

1. The Project Proponent (M/s. Shesh Enviro Infra Pvt. Ltd.) along with his consultant 'M/s. Envision Environmental Services', 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 Plot No. 499, 500, 501 GIDC Industrial Estate, Saykha, Dist. Bharuch, Gujarat.
- ii. The project is an 'Expansion'.
- iii. Earlier, the project has obtained Environmental Clearance (EC) from SEIAA Gujarat vide letter no. SEIAA/GUJ/EC/7(d)/1661/2020 dated 31.12.2020 under category B of item 7(d) 'Treatment Storage and Disposal Facilities (TSDFs)' for landfill capacity of 3,58,285 MT and for receipt, treatment and disposal of wastewater in common stripper column followed by MEE and spray dryer. However, there is no construction done at the site as per the EC obtained dated 31.12.2020. Only compound wall building and levelling work is on.
- iv. Total 8576.38 Sqm. land area is available for future expansion, out of which 2224.0 Sqm. land will be utilized for proposed common incinerator. The details of the proposed expansion are given as follows:

S. No.	Particular	Capacity
1	Incineration plant	500 kg/hr x 2 nos; (Total 1000 kg/hr) for Thermal capacity 2.75 M k.cal/hr

- v. Source of water will be Saykha GIDC. 14.9 KLD of wastewater from proposed incinerator will be treated in primary treatment. Domestic wastewater of 0.8 KLD will be treated in in-house STP of 4.0 KLD capacity & treated water will be reused for gardening purpose. Hence, the system will have Zero Liquid Discharge.
- vi. Total power requirement will be 300 KVA for proposed Incinerator. In case of Power failure, D. G. sets of 250 KVA will be provided to fulfil the power requirement.
- vii. About 800 Sqm. area will be developed as green belt at plant boundary, road side, around offices and buildings and stretch of open land. About 134 trees will be planted in green belt area.
- viii. NBWL Clearance is not required.
- ix. Forest Clearance is not required.
- x. CRZ Clearance is not required.
- xi. No court case is pending against the project.
- xii. Expected timeline for completion of the project - 18 months.
- xiii. Investment/Cost of the project is ₹18.35 Cr. Total capital cost for environmental pollution control measures would be ₹64.55 Lacs and recurring cost would be ₹15.50 lacs per annum.
- xiv. Employment potential – About 12 persons.
- xv. Benefits of the project – The activity of the proposed project coupled with the ancillary industries in surrounding, would contribute to the overall socio-economic development of the region as well as country through safe disposal of Hazardous Waste.

2. The EAC noted that the project/activity is covered under category 'A' of item 7(d) 'Common hazardous waste treatment, storage and disposal facilities (TSDFs)' 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), based on the information, 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. Certified Compliance Report should be obtained from MoEF&CC Integrated Regional Office.
- iii. Details of various waste management units with capacities for the proposed project. Details of utilities indicating size and capacity to be provided along with land area breakup.
- iv. List of waste to be handled and their source along with mode of transportation. Characteristics of each type of waste to be handled.
- v. List of proposed end receivers for the rejects/inert should be provided. MoUs to be submitted in this regard.
- vi. The EIA would address to the conformity of site to the stipulations as made in the Hazardous and Other Wastes (Management and Trans-boundary Movement) Rules, 2016 and will have a complete chapter indicating conformity to the said rules.
- vii. Project proponents would also submit a write up on how their project proposal conform to the stipulations made in the "Protocol for Performance evolution and monitoring of the Common Hazardous Waste Treatment Storage and Disposal facilities including common Hazardous Waste incinerators", published by the CPCB on May 24, 2010.
- viii. Other chemicals and materials required with quantities and storage capacities.
- ix. Details of temporary storage facility for storage of hazardous waste at project site.
- x. Details of pre-treatment facility of hazardous waste at TSDF.
- xi. Details of air emissions, effluents, hazardous/solid waste generation and their management.
- xii. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract).
- xiii. Process description along with major equipment and machineries, process flow sheet (quantitative) from waste material to disposal to be provided.
- xiv. Hazard identification and details of proposed safety systems.
- xv. Details of drainage of the project up to 5 km radius of study area. If the site is within 1 km radius of any major river, peak and lean season river discharge as well as flood occurrence frequency based on peak

- rainfall data of the past 30 years. Details of Flood Level of the project site and maximum Flood Level of the river shall also be provided.
- xvi. Ground water quality monitoring in and around the project site.
 - xvii. The Air Quality Index shall be calculated for base level air quality.
 - xviii. Status of the land purchases in terms of land acquisition Act.
 - xix. Details of effluent treatment and recycling process.
 - xx. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project.
 - xxi. A detailed plan for green belt development.
 - xxii. A detailed layout of the project site indicating all the project components.
 - xxiii. A certificate 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.
 - xxiv. The project proponents shall satisfactorily address all the complaints/suggestions that have been received against the project till the date of submission of proposals for Appraisal.
 - xxv. Cost of project and time of completion.
 - xxvi. A tabular chart with index for point wise compliance of above TORs.
 - xxvii. 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.

4. Since the project is located GIDC Industrial Estate, Saykha which is a notified industrial area, EAC exempted from the requirement of conducting Public consultation for the proposed project, as per para 7(i) III Stage (3)(i)(b) of EIA Notification, 2006 for preparation of EIA/EMP report for this project.

5. It was also recommended that 'ToR' prescribed by EAC should be considered with the exemption from the requirement of public consultation/hearing for preparation of EIA/EMP report for the above-mentioned project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006.

AGENDA ITEM NO. 80.4.3

Proposed multistoried residential project with total built up area of 84,592 Sqm. at Resurvey no. 35/1, Pantheerankavu Village, Olavanna Panchayath, Kozhikode Taluk & District, Kerala by M/s CL Township Developers LLP – Environmental Clearance

(IA/KL/MIS/250276/2022; F.No. 21-132/2021-IA-III)

The Project Proponent (M/s. CL Township Developers LLP) along with his consultant 'M/s. Environmental Engineers & Consultants Pvt. Ltd.', made a presentation on the key parameters and salient features of the project to the EAC (Infra-2). The EAC observed that a similar residential project by M/s CL Townships LLP (having the same individuals as partners of the firm) was recommended by the committee during its 77th meeting held on 30th November, 2021, located very close to the proposed project location in the same village and having built-up area of 97,466.3 Sqm. Therefore, the EAC raised a query on whether both the projects are interconnected on land and being developed by the same proponent, as it would then have to be considered as an integrated township project. The project proponent and consultant informed that M/s CL Township LLP and M/s CL Township Developers LLP are separate entities and agreed to provide details to clarify the concerns regarding the location and ownership of the project in the forthcoming meeting. Accordingly, the EAC decided to defer the proposal and asked the project proponent to submit the clarification to the aforesaid queries.

AGENDA ITEM NO. 80.4.4

Expansion of existing Integrated Terminal Building and Construction of New ATC Tower cum Technical Block & Miscellaneous Works at Madurai Airport, Tamil Nadu by M/s Airports Authority of India, Madurai Airport - Environmental Clearance

(IA/TN/MIS/250599/2020; F. No. 21-140/2021-IA-III)

1. The Project Proponent (M/s. Airports Authority of India, Madurai Airport) along with his consultant 'M/s. ABC Techno Labs India Private Limited', 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 Perungudi and Ayanpappakudi villages of Madurai South Taluk and Madurai District, Tamil Nadu with coordinates from 09°49'47.48" to 09°50'26.50" N Latitude and 78°04'32.33" to 78°06'14.80" E Longitude.
- ii. The proposal is for 'Expansion'.
- iii. The project was granted ToR vide letter F. No. 10-47/2020-IA-III dated 15.09.2020.
- iv. The proposed expansion involves expansion of existing Integrated Terminal Building, construction of new ATC Tower cum Technical Block (Category – II) & Miscellaneous Works. The existing Integrated Terminal Building is proposed to be expanded by an area of 7,680 Sqm. to have a total built-up area of 25,240 Sqm. The total peak hour occupancy of the building after expansion will increase from 700 to 2600 peak hour passengers (Pax) (Domestic-1800 Pax. &

International-800 Pax.) corresponding to annual capacity of 4.15 MPPA by the year 2024-25 after incorporation of additional facilities such as X-ray machines with security lanes (in both domestic and International), additional conveyor belt & 1 no. of aerobridge.

- v. The proposed ATC Tower cum Technical Block is a four-storied structure with tower cabin at 33.4 m above ground level. The salient features are as follows:
 - a. Total Plot area – 13380.42 Sqm. (3.3 acres approx.)
 - b. Ground Coverage – 1782.42 Sqm. (13.32%)
 - c. Total Built-up area – 7154.76 Sqm.
 - d. Height of Technical Block – 21.0 m
 - e. Height of ATC Tower – 39.9 m + 5 m (for antenna) = 44.9 m. (Total height inclusive of antenna)
- vi. The proposed new terminal building is designed with consideration to achieve the 4-star rating under GRIHA V-2015.
- vii. Other allied Works include Electrical Work, CNS Works, IT & Airports Systems Works, etc.
- viii. The existing airport is spread over an area of 502 acres (203.16 ha) and no additional land is required for the proposed expansion. The site for the proposed development activities and allied works is free from vegetation and buildings. Land use breakup after the proposed expansion is given as follows:

S. No.	Activity	Area in Acres	Percentage (%)
1	Buildings	6.78	1.35
2	Runway, Taxiway, Apron, GSE, Isolation Bay	80.09	15.95
3	Internal Roads	18.60	3.71
4	Parking Area	16.75	3.34
5	Gardening/Green Belt	11.81	2.35
6	Remaining open area	367.97	73.30
	Total	502.00	100.0

- ix. Total fresh water requirement for domestic use, HVAC and landscaping is estimated to be 1388 KLD. Out of which, fresh water requirement of 608 KLD will be met through Tamil Nadu Water Supply and Drainage (TWAD) Board water supply and bore wells. About 822 KLD sewage will be generated which will be treated in MBBR based STP of 900 KLD capacity (Existing: 200 KLD, Expansion: 300 KLD – Phase I & 400 KLD – Phase II). Treated wastewater from STP of about 780 KLD will be completely utilized for toilet flushing (380 KLD) and landscaping (400 KLD) etc. within the project.
- x. Approx. 1500 kg/day municipal solid waste will be generated from the Airport premises and Aircraft. Wastes collected will be segregated as recyclable wastes, biodegradable organic wastes and non-biodegradable inert wastes and disposed as per the provisions of the Solid Waste Management Rule, 2016 through hired agency.

- xi. Parking facilities will be provided for 66 cars, VIP parking for 10 cars, Visitor parking for 70 two wheelers, taxi parking and coach parking
- xii. The public hearing for the proposed expansion project was conducted on 10.08.2021 at GK Chitra Mahal, Madurai by Tamil Nadu Pollution Control Board and implementation action plan has been submitted against the queries raised.
- xiii. Total connected load during operation phase will be 1900 KVA after the development activities and shall be drawn from TANGEDCO power supply. DG sets (750 KVA x 2 Nos and 400 KVA x 2 Nos) will be used as power backup source in case of power cut or failure.
- xiv. Solar power generation units having capacity of 100 KW and 60 KW will be provided in building roof tops as per ECBC, 2017. A ground mounted solar power plant of 3.9 MW is also proposed.
- xv. Green belt/plantation area of 47,793.37 Sqm. is proposed and the open area will be covered with landscaping and grasses. The site is free from trees. Therefore, no tree cutting is required. It is proposed to plant 1500 saplings within the project.
- xvi. The project is not located in Critically Polluted area.
- xvii. The project is not located within 10 km of Eco Sensitive Zone. NBWL Clearance is not required.
- xviii. Forest Clearance is not required.
- xix. No court case is pending against the project.
- xx. CRZ Clearance is not required.
- xxi. Investment/Cost of the project is ₹145 Crores.
- xxii. Employment potential - About 400 direct and 500 indirect employments during construction phase and 200 direct and 1000 indirect employments during operational phase.
- xxiii. Benefits of the project - Air Connectivity to Madurai and nearby districts. Increase in regional economy as it will boost tourism, trade and commercial activities in the region. Generation of more revenue to the state, hence more development of the region. Employment opportunity to people. More business and industrial opportunities.

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 the Central level by sectoral EAC.

3. The EAC expressed that the term 'Miscellaneous Works' is not appropriate in the title of the project and the proposed activities should be specified. The project proponent agreed to submit an affidavit clarifying the same.

4. The EAC also noted that the project has obtained Certified Compliance Report from MoEF&CC Integrated Regional Office, Chennai vide letter F.No. EP/12.1/677/TN/1209 dated 08.12.2021 and the PP has submitted Action Taken Report for the observed non-compliances vide letter no. AAI/MDU/CIVIL/A-4/2021/6113 dated 06.01.2022.

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 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. Compliance report to observations of the IRO shall be submitted within six months (from the date of issue of EC) and closure report shall be obtained from the concerned regulatory authority.
- ii. Where construction activity is likely to cause noise nuisance to nearby residents, restrict operation hours between 7 am to 6 pm.
- iii. Hazard Identification and Risk Assessment for the project shall be carried out 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.
- iv. 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.
- v. Solar power generation capacity of 100 KW and 60 KW (roof tops) and 3.9 MW (ground mounted) shall be established as proposed.
- vi. 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.
- vii. A certificate from the competent authority/agency 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. Fresh water requirement from local authority shall not exceed 608 KLD during operational phase. Abstraction of ground water shall be subject to the permission of Central Ground Water Authority (CGWA).
- ix. As proposed, wastewater shall be treated in onsite STP of 900 KLD capacity. Treated water from the STP shall be recycled and re-used for gardening, flushing etc. There shall be no discharge of treated water from the project as proposed.
- x. 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.

- xi. PP shall explore the use of non-ozone depleting substances in air conditioning systems.
- xii. The PP shall also provide electric charging points in the parking areas for e-vehicles as committed.
- 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. 80.4.5

Capacity enhancement of Secured Landfill Facility (SLF) from 10 to 20 lacs MT at Common Hazardous Waste Treatment, Storage and Disposal Facilities (TSDF) at Survey No. 1244/1, 1437/1, 1430/1 & 1510/1, Village Majra, P.O. Dabhota, Tehsil Nalagarh, Solan District, Himachal Pradesh by M/s Shivalik Solid Waste Management Ltd. – Reconsideration for Environmental Clearance

(IA/HP/MIS/239636/2018; F. No. 21-112/2021-IA-III)

1. The EAC noted that the proposal was deferred in its 78th meeting held during 14-15th December, 2021 and the project proponent was asked to provide the following additional information:

- i. Submit revised Form-2 and Form-1 in Parivesh Portal specifying the pending litigation along with all relevant orders and documents.
- ii. Clarify and resubmit the calculations for water requirement, recycling and reuse along with water balance diagram.
- iii. Provide details of parking provision and proposed solar energy installation.
- iv. Clarify and resubmit the details of solid waste and hazardous waste generation and management.
- v. Resubmit the EIA Report with correct information.

2. The Project Proponent (M/s. Shivalik Solid Waste Management Ltd.) along with his consultant 'M/s. Perfact Enviro Solutions Pvt. Ltd.', made a presentation and provided the following information:

- i. The revised Form-2 and Form-1 have been submitted along with all relevant documents regarding the pending litigation.
- ii. There is a litigation pending on this project in the High Court of Himachal Pradesh (Case No. CWPIIL No. 45 of 2021). The court Order dated 14.10.2021 states that the concerned authority to carry out necessary inspection and take further action in accordance with law

and also to submit an action taken report. The inspection was carried out by NPC and the report was submitted to SDM, Solan and HPSPCB.

- iii. Total water requirement for the project will be 26.2 KLD during non-monsoon period and 22 KLD during monsoon period. The ultimate source of water will be tube well (1 no.). Fresh water demand for the project will be 12 KLD during non-monsoon period and 9 KLD during monsoon period. The remaining water demand will be met by treated water from MEE Condensate of 9 KLD and from collected rainwater reuse (5.2 KLD during non-monsoon period and 4 KLD during monsoon period) from onsite 1100 KL pond. Wastewater of 8 KLD generated from domestic use will be disposed to septic tank via soak pits. 10 KLD of wastewater generated from the processes will be treated in MEE of 20 KLD capacity. 9 KLD of treated water will be generated which will be utilized in wheel washing (3 KLD), scrubber (3 KLD) & boiler makeup (3 KLD).
- iv. There is use of approx. 19 no of vehicles daily for transportation purposes. For the proposed expansion, total parking space for 58 no. vehicles is earmarked for parking of trucks and cars within the facility premises.
- v. Solar cells will be installed after total capping of the landfill. Tentative proposal for solar power installation is of 130 KW. Total Energy savings will be 34.8 % of the power load. 11 Solar Street lights of 7 watts have been installed within project premises in 2011.
- vi. The details of solid waste management are given as follows:

Category	Type of Waste	Treatment Method	Details kg/day	In TPA
Biodegradable	Organic Waste	Is being treated in biogas plant	3	1.056
Non-Biodegradable	Recyclable Waste (Plastic, paper, wood, glass, etc.)	Recycled within the site	4.5	1.584
	Total		7.5	2.64

- vii. The details of the hazardous waste generated (from process) are given as follows:

S.No.	Category (as per HWM Rules, 2016)	Unit	Waste Quantity	Disposal
1	Used Oil	KL/year	600	To registered recycler
2	MEE residue	MT/day	2	Landfill After Treatment

- viii. The revised EIA report has been submitted.

3. The EAC noted that the project/activity is covered under category 'B' of item 7(d) 'Common hazardous waste treatment, storage and disposal facilities (TSDFs)' of the Schedule to the EIA Notification, 2006 and its subsequent amendments. However, General Condition is applicable and the

project falls under Category "A" since the interstate boundary of Himachal Pradesh and Punjab falls within 2.47 km (Aerial Distance) and 4.5 km (Road distance) from the proposed site. Therefore, it requires appraisal at Central level by sectoral EAC.

4. The Committee noted that the details of solid waste management submitted in revised Form 1 (12 Kg/day) varies from the solid waste management details submitted in ADS (7.5 kg/day). Accordingly, the EAC (Infra-2) decided to defer the proposal and asked the project proponent to submit an affidavit specifying the correction.

AGENDA ITEM NO. 80.4.6

Proposed commercial complex project with total built up area of 76,604 Sqm. at survey nos. 105, 106, Marutharode Village & Panchayat, Palakkad Taluk & District, Kerala by M/s HiLITE Properties Private Limited – Environmental Clearance

(IA/KL/MIS/250640/2022; F. No. 21-130/2021-IA-III)

1. The Project Proponent (M/s. HiLITE Properties Private Limited) along with his consultant 'M/s. Environmental Engineers & Consultants 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 survey nos. 105, 106, Marutharode Village & Panchayat, Palakkad Taluk & District, Kerala with coordinates from 10°45'55.53"N to 10°45'52.99"N Latitude and 76°40'31.52"E to 76°40'25.72"E Longitude.
- ii. The project is new.
- iii. The total plot area is 19,053 Sqm., FSI area is 60,970 Sqm. and total construction (Built-up) area is 76,604 Sqm. The proposed commercial complex project comprises of 1 no.s building block (Basement 2 + LGF + GF + 4 floors) consisting of retail shopping area, multiplex (1500 seats) and food court/restaurant (700 seats). Maximum height of the building is 50 m.
- iv. During construction phase, total water requirement is expected to be 70 KLD which will be met by recycled water from portable STP/stored rain water (tank) for construction purposes and well water/Kerala Water Authority (KWA) supply for meeting the domestic water requirement expected to be 11 KLD. During the construction phase, portable STP will be provided for disposal of waste water. Temporary sanitary toilets will be provided during peak labour force.
- v. During operation phase, total water demand of the project is expected to be 409 KLD and the same will be met by 193 KLD fresh water from stored rain water tanks/KWA/well water and 216 KLD recycled water.

Wastewater generated (240 KLD) will be treated in STP of total 300 KLD capacity. 216 KLD of treated wastewater will be generated which will be completely recycled and re-used within the project for flushing (188 KLD), gardening (1 KLD) and as for cooling towers attached with the HVAC system (27 KLD).

- vi. About 1.7 MT/day solid waste will be generated in the project. The biodegradable waste (850 kg/day) will be processed in bio-bin unit and the non-biodegradable waste generated (850 kg/day) will be handed over to authorized local vendor. An area equivalent of about 400 Sqm. for about 15 days storage of non-biodegradable waste would be provided. The hazardous waste (used oil & discarded batteries attached to D.G. sets) will be stored in the designated services area and will be disposed to CPCB/SPCB authorized vendors.
- vii. The total excavated soil is about 43,344 cu.m. The excavated earth of 120 cu.m. will be preserved for landscaping purposes, 10,004 cu.m. will be used for backfilling purposes and 500 cu.m. will be used for internal road construction purposes. The remaining excess excavated earth of about 32,720 cu.m. will be stored in an assigned area nearby site and will be used for the widening work of NH-544 abutting the project site.
- viii. The total power requirement during operation phase is 3,600 kW (connected load) and will be met from Kerala State Electricity Board (KSEB) & DG Sets (1500 kVA x 3 nos.) as standby.
- ix. Solar PV installation of 385 kWp capacity shall be provided to meet 10.7 % of the connected load.
- x. Rooftop rainwater of buildings will be collected in RWH tank of 200 KL capacity for harvesting after filtration.
- xi. Parking facility for 860 cars + 964 two wheelers is proposed to be provided according to local norms. Provision for charging for electrically operated vehicles (25%) is proposed in each parking floor.
- xii. Total area for landscaping proposed is 478 Sqm. There are no trees existing at site. Hence no tree cutting is involved. 240 trees are proposed to be planted within the site.
- xiii. The project is not located in Critically Polluted area.
- xiv. The project is not located within 10 km of Eco Sensitive Zone. NBWL Clearance is not required.
- xv. Marutharode Village is not included in the list of Villages in ESA of the Western Ghats as per Appendix 3 of the report of the High Level Working Group (HLWG) on Western Ghats.
- xvi. Forest Clearance is not required.
- xvii. No court case is pending against the project.
- xviii. CRZ Clearance is not required.
- xix. Expected timeline for completion of the project - About 48 months from the date of start of construction.
- xx. Investment/Cost of the project is ₹160 Crores.
- xxi. Employment potential - About 150 persons during construction phase and about 1326 persons during operation phase.
- xxii. Benefits of the project –The project would provide better commercial retail shopping area with supporting infrastructure facilities and

amenities to the people. Employment opportunities generation and revenue to the State. The potential for employment and access to new services may draw people to the area around the project. There will be an increase in economic activity and employment for the local community, local skills development.

2. 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.

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. Abstraction of ground water shall be subject to the permission of Central Ground Water Authority (CGWA). Fresh water requirement shall not exceed 193 KLD during operational phase.
- ii. As proposed, wastewater shall be treated in an onsite STP of total 300 KLD capacity. At least 216 KLD of treated water from the STP shall be recycled and re-used for flushing (188 KLD) and for gardening (1 KLD) and for cooling towers attached with the HVAC system (27 KLD). There shall be no discharge of treated water outside the project premises, as committed.
- 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 478 Sqm. As proposed, at least 240 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. 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 200 KL capacity 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, solar energy installation of 385 kWp capacity to meet 10.7 % of the connected load shall be implemented.
 - 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. 80.4.7

Expansion of Existing Retail Shopping Complex project at survey nos. 43, 44, 29, 55, 54, 45, 51/1, 14, 13, 47, 47/1, 46, 11, 7, 10, 9/1, 9/2, 3 and 4 at Muttambalam Village, Kottayam Municipality, Kottayam Taluk and District, Kerala by Smt. Beena Veeriah Reddy - Extension of Validity of Environmental Clearance

(IA/KL/MIS/245296/2021; F. No. 21-134/2021-IA-III)

1. The Project Proponent (Smt. Beena Veeriah Reddy) along with her consultant 'M/s. Environmental Engineers & Consultants 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 survey nos. 43, 44, 29, 55, 54, 45, 51/1, 14, 13, 47, 47/1, 46, 11, 7, 10, 9/1, 9/2, 3 and 4 at Muttambalam Village, Kottayam Municipality, Kottayam Taluk and District, Kerala.
- ii. The project was accorded Environmental Clearance (EC) by SEIAA, Kerala vide Order no. 296/SEIAA/KL/1495/2014 dated 24.05.2014 for the expansion of existing retail shopping complex project in favour of Late Shri V. Thiruvengitram for a built-up area of 27,615.33 Sqm. (existing BUA prior to 2000 + proposed BUA) in the plot area of 0.8754 ha.
- iii. The existing showroom is in operation since 1953 and the project is for the expansion of existing textile showroom.
- iv. Since Sh. V. Thiruvengitram expired on 14.04.2020, the EC dated 24.05.2014 was transferred to his Legal heir viz. Smt. Beena Veeriah Reddy by SEIAA, Kerala vide its Order no. SIA/KL/MIS/198814/2021;1881/EC3/2021/SEIAAdated03.06.2021.
- v. The validity of EC dated 24.05.2014 was for 7 years i.e. 2014 – 2021 (23.05.2021) as per the amendment notification S.O. 1141(E) dated 29.04.2015. Further, vide amendment to the EIA Notification, 2006 issued vide S.O. 221(E) dated 18.01.2021 (in view of COVID-19), the validity of EC is extended up to 23.05.2022.
- vi. Since the project could not be completed due to various reasons, extension of validity of EC has been sought. The current status of construction is given as follows:

Total built-up area	27,615.33 Sqm. (Existing 10,250.45 Sqm., constructed & commissioned prior to 2000 + Proposed 17,364.88 Sqm.)	
Total built-up area yet to construct as per EC	8,090.43 Sqm.	
Total built-up area already constructed as per EC (since 2014)	9,274.45 Sqm.	
Details of completed construction as per EC		
S.No.	Description	Built-up area (in Sqm.)
Extension of showroom		
1	Sub-basement	1,119.44
2	Basement	1,145.04
3	Lower ground	1,261.87
4	Ground floor	1,411.24
5	1st floor	1,489.02
	Total	6,426.61
Parking block		
1	3rd basement	350.61
2	2nd basement	832.41
3	1st basement	832.41
4	Ground floor	832.41

	Total	2,847.84
	Grand Total	9,274.45

- vii. The present proposal for Extension of Validity of EC is for a further period of 3 years as per the provisions of EIA Notification, 2006.
- viii. There is no change in project configuration as per EC accorded by SEIAA Kerala dated 24.05.2014.

2. 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.

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 that the request for extension should be considered as per provisions of EIA Notification, 2006 and its subsequent amendments, which allows for extending validity further for a period of three years from the date on which validity of EC is expiring.*

AGENDA ITEM NO. 80.5

With the due permission of the Chairman, additional agenda items were also discussed. The MoM for the additional agenda shall be circulated separately.

LIST OF PARTICIPANTS OF EAC (INFRASTRUCTURE-2) IN 80th MEETING OF EAC (INFRA-2) HELD DURING 20 – 21st JANUARY, 2022 THROUGH VIDEO CONFERENCING

S. No.	Name	Designation	Attendance		Sign
			20.01.2022	21.01.2022	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. Manoranjan Hota	Member	P	P	-
7.	Dr. Dipankar Saha	Member	P	P	-
8.	Dr. Jayesh Ruparelia	Member	P	P	-
9.	Dr. (Mrs.) Mayuri H. Pandya	Member	P	P	-
10.	Dr. M. V. Ramana Murthy	Member	A	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 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; 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 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; 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 MoEF&CC/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 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 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.
