

MINUTES OF 74th MEETING OF EXPERT APPRAISAL COMMITTEE (INFRASTRUCTURE-2) HELD ON 8th OCTOBER, 2021.

VENUE: Through Video Conferencing

DATE: 8thOctober, 2021

PROCEEDINGS

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

74.2 Confirmation of Minutes of 73rd Meeting of Expert Appraisal Committee (Infrastructure-2) held on 29th September, 2021.

The Expert Appraisal Committee (Infrastructure-2), hereinafter called the EAC, was informed that no representation has been received regarding projects considered in 73rd meeting. Minutes of 73rd 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.

74.3 Consideration of Proposals: The EAC considered proposals as per the agenda adopted for 74th meeting. The details of deliberations held and decisions taken in the meeting are as under:

AGENDA ITEM NO. 74.3.1

On-going project for establishment of Navi Mumbai International Airport (NMIA) at Panvel Tehsil, Raigad district by M/s Navi Mumbai International Airport Limited - Environmental and CRZ Clearance.

(IA/MH/MIS/154209/2020; F. No. 21-60/2021-IA-III)

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

- i. The project is proposed on the land located at Villages Vadghar (Chinchpada), Kopar, Pargaon (Kohli), Pargaon-Dungi, Owale (Upper and Lower Owale+ Waghivali Wada), Ulwe (Ulwe + Ganeshpuri), Targhar (Targhar + Kombhadbuje), Waghivali-Khar Taluka Panvel, Raigad District, Maharashtra.

- ii. The project involves Construction and Development of Greenfield airport at Navi Mumbai having passenger capacity 60 MPPA and Cargo capacity 1.5 MTPA over site area of 1160 Ha.
- iii. The Government of Maharashtra vide Notification No. TPS 1711/2495/CR-202/11/UD-12 dated 21st March 2012 has incorporated “International Airport & Allied Activities/Service Zone” in the Navi Mumbai Development Plan (NMDP) and changed the land use in surrounding area. As per approved NMDP, the site area of 1160 Ha is designated as Airport and Allied Activities/Services Zone.
- iv. Stage-I and Stage-II Forest clearance for 250.0635 Ha land has been obtained from MoEF&CC vide letter No. 8-95/2012-FC dated 17.12.2013 and 24.04.2017 respectively.
- v. Earlier, the project was granted Environmental and CRZ Clearance by MoEF&CC vide letter No. 10-53/2009-IA.III dated 22.11.2010 in the name of City & Industrial Development Corporation of Maharashtra Limited (CIDCO). Subsequently, the validity of the Environmental and CRZ Clearance was extended up to 21.11.2020 vide letter dated 20.12.2017. Thereafter, the aforesaid Environmental and CRZ was transferred in the name of M/s Navi Mumbai International Airport Limited (NMIAL) from CIDCO vide Letter No.10-53/2009-IA.III dated 17.08.2020. As per amendment in EIA Notification issued vide S.O. 221(E) dated 18.01.2021 (in view of COVID-19), the aforesaid EC is valid upto 21.11.2021.
- vi. ToR was issued vide letter No. 10-53/2020-IA-III dated 29.10.2020 for Fresh Environmental Clearance for the same project without any change in location, scope, area or capacity. There may be some internal changes in the configuration of facilities to be developed. Considering the earlier Environmental and CRZ Clearance, construction status/physical progress of the work and no change in location, scope, area or capacity, the project was exempted from requirement of Public Hearing for preparation of EIA/EMP report.
- vii. Baseline data has been collected during 1st December 2019 to 29th February 2020 (Winter Season).
- viii. Project has obtained CRZ recommendation from Environment & Climate Change Department, Govt. of Maharashtra vide letter No. CRZ 2021/CR 156/TC 4 dated 27.09.2021.
- ix. Certified compliance report from MoEF&CC Integrated Regional Office, Nagpur has been obtained vide letter No. 6-22/2010(ENV)/7994 dated 31.03.2021 for which action taken report has been submitted against the observations raised.
- x. Total Built-Up area of the project is 14,13,069.178 sqm, including Passenger Terminals 1-3, Airside development (Hangars, ATC Tower, GSE Maintenance Building, Heliport Terminal, ARFF etc.), Cargo complex, Utility area, Support facilities (CISF Barracks, Reserved housing, Flight kitchens, Admin buildings, Maintenance buildings, Customs building, Quarantine area etc.) and Landside development (Terminal Hotel, Bus/Metro/Taxi Terminal, Parking, Metro station etc.), Runway Dimension: 3700 m X 60 m separated by 1580 m (Development of Two Code ‘F’ Parallel Runway).

- xi. Pre-Development Works for the project started in April 2017 which included cutting and filling in the Site up to 5.5 m AMSL and has been completed. Construction of Ulwe Recourse Channel (URC) for diversion of Ulwe River has been completed in June 2019. Shifting of EHVT lines is nearing completion. Status of completed/on-going works as per existing EC are given as follows:

S.No.	Work	Status
1	Cutting of Ulwe Hill & Filling of Airport Site	Completed, Up to +5.5 m AMSL
2	Design & Construction of Ulwe Recourse Channel	Completed
3	Diversion & Filling of Existing Ulwe River	Completed
4	Construction & Widening of Roads for Airport Connectivity	Completed - NH 4B Completed - Amara Marg Interchanges - In Progress Ulwe Coastal Road - In Progress
5	Design & Construction of Northern Channel	Design In Progress
6	Tree Cutting & Transplantation	In Progress Out of total 9492 trees, 9053 have been cut. Out of total 3319 trees to be transplanted, 1493 trees have been transplanted by CIDCO.
7	Detailed Traffic Management Plan & Improvement of Airport Connectivity and Mass Public Transportation	In Progress. Projects under Implementation. New Airport Connectivity projects proposed.
8	Development of Mangrove Park and Plantation & protection of Mangroves	Plantation of Mangroves completed in 400 ha. Thru FDCM by CIDCO + 250 Ha Mangroves in Vaghivali island will be maintained
9	Shifting of EHVT Lines/Utilities from Airport Site	Tata EHVT Lines - Completed MSETCL EHVT Lines- In Progress

- xii. Remaining Airport Development Works includes land development to cut hillock on site and further fill and level the site up to + 8.0 m to + 9.5 m AMSL; construction and development of entire airport infrastructure inclusive of airside, terminals, landside, cargo and utility infrastructure of airport, within site area of 1160 ha. Airport development is proposed to be implemented in four phases as follows:

Terminal	Phase	Year Of Commissioning	Capacity (MPPA)	Cumulative Capacity (MPPA)
T1	Phase-I	2024 (DEC)	10	20
	Phase-II		10	
T2	Phase-III	2028	20	40
T3	Final Phase (Phase-IV)	2032	20	60

- xiii. The total water demand in Final Phase is 21.82 MLD, of which, freshwater demand of 10.61 MLD will be sourced from CIDCO and balance 11.21 MLD shall be recycled water from on-site STP. Entire treated water from STP will be recycled and reused for flushing, cooling and gardening purposes within the project site. Sewage treatment plants will be modular, based on the sewage load and shall be augmented in each phase as per requirement. For 60 MPPA (final phase), three STPs of total 14.25 MLD capacity are planned (11 MLD at West, 2.5 MLD at East & 0.75 MLD at North).
- xiv. The solid waste generation for the airport in the Phase-I will be 17 TPD increasing to 29 TPD in Phase-II, 50 TPD in Phase-III and finally 72 TPD in Phase-IV. The solid waste generated during operation phase will be collected, segregated, stored, treated and disposed in a scientific manner, considering the integrated approach as per the relevant rules. The bio-degradable will be treated by bio-composting process and the manure will be used for horticulture. Sewage sludge generated from the STPs will be dried and used as manure for horticulture purpose. Recyclable wastes will be disposed through authorized recyclers. E-waste will be stored separately, and disposed through authorized recyclers approved by MPCB. Hazardous wastes will be stored in secured place with adequate secondary containment and labelling and disposed as per the requirements of Hazardous Wastes Management Rules.
- xv. The de-plane wastes include sanitary wastes generated in the toilets and the galley wastes includes waste generated from in-flight catering and other services. The sanitary wastes will be collected by lavatory trucks and treated in the Triturator facility proposed at the airport, as a primary treatment & will be pumped to STP for secondary & Tertiary Treatment. The galley waste will be collected from the aircrafts and segregated as bio-degradable and non-biodegradable waste. After segregation, it will be treated along with municipal solid waste managed at the airport.
- xvi. The expected power requirement for the airport in the Phase-I is 27 MVA increasing to 36 MVA in Phase-II, 69 MVA in Phase-III and finally 96 MVA in Phase-IV. The power supply requirement will be met through Maharashtra State Electricity Distribution Company Limited (MSEDCL). The total estimated DG power requirement will be 35.0 MVA in the final phase (considering 60% diversity as DG capacity on over all proposed terminal loads). The combined Phase I&II power back-up demand is about 12 MVA to meet the power requirement in

- the event of power failure, which will be subsequently augmented in phased manner.
- xvii. More than 23% of the total peak power demand of connected load of the airport buildings is planned to be sourced from solar power systems. Final phase solar generation capacity of 22.14 MW is proposed. The solar panels/photo-voltaic cells will be set-up at the terminal roof-top and ground mounted at designated areas parallel to north and south runway.
- xviii. The total green space area proposed is 384.90 Ha. (i.e. 33.18% of airport site area of 1160 Ha), including green/open spaces on airside and landside of NMIA. Cutting of 9053 trees has been completed out of total 9492 trees and 1493 trees were transplanted out of 3319 with due permission by tree authority. Off-site plantation of about 14,000 trees on 50.620 ha of land outside the project site is proposed on land provided by Forest Department near Jite Village in Raigad District of Maharashtra.
- xix. A rainwater harvesting pond is proposed along the main drain alignment path with 11,899 sqm area and 29,747 cum capacity. Weir is proposed at the pond outfall location to avert salt water intrusion into the pond. Stored water shall be used for landscape irrigation purposes.
- xx. Project is not located in Critically Polluted Area.
- xxi. NBWL Clearance is not required.
- xxii. PIL No. 57 of 2019 is pending in respect of the project before the Hon'ble High Court of Judicature at Bombay. However, the same is yet to be admitted and there have been no orders passed yet.
- xxiii. Estimated timeline for completion is December 2024 for the Phase I & II together/combined (for Capacity of 20 MPPA). Subsequently, Phase-III and Final/Phase-IV will commence based on traffic triggers, indicatively in 2028 & 2032 respectively.
- xxiv. Investment/Cost of the project is estimated to be ₹41,302 Crores (for all four phases).
- xxv. Employment potential: Temporary - 15,000 (Approx.) Permanent - 90,000 (Approx.).
- xxvi. Benefits of the project – The social benefits envisioned from the implementation of the project will involve, inter-alia; availability of alternate air transport facility to unserved population in Navi Mumbai and MMR Region; socio-economic opportunities for business and employment for people in Navi Mumbai and MMR Region; skill development and technical expertise enhancement possibilities due to influx of aviation related institutions in Navi Mumbai, etc. The financial benefits envisioned from the project are- over 50,000 direct and indirect employments due to aviation business leading to stimulation of economic growth in MMR outside Mumbai city; stimulation of local economy due to direct and indirect impact of aviation and related business, large investment around proposed airport by other parties due to NMIA development. The environmental benefits will include; reducing congestion in Mumbai city, creation of environmentally friendly and sustainable infrastructure in and around

NMIA like metro, new STPs, large garden and parks and well-planned drainage, decongestion and enhancement of environmental conditions around CSMIA.

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 project proponent submitted that implementation of specific conditions (ii), (v), (vi), (viii), (ix), (x), (xi), (xviii), (xix) (xx) and (xxvii), given in existing EC dated 22.11.2010, lies with CIDCO and requested to the EAC for waiver of the responsibility for aforesaid conditions to the project proponent (M/s NMIAL). The Committee expressed that waiver may not be considered as the conditions pertain to the proposal for the development of Navi Mumbai International Airport. Therefore, even if CIDCO is the implementing agency w.r.t the said conditions, the PP shall continue to be involved in the process, to monitor and ensure compliance to aforesaid conditions.

4. The PP also submitted that as per specific condition (xxiv) and (xxxiv) given in existing EC dated 22.11.2010, High Level Advisory and Monitoring Committee (HLAMC) was constituted by Govt. of Maharashtra vide its order dated 13th May 2011, but no meeting has been held so far. However, it may be noted that Chief Secretary, GoM; Principal Secretary, Urban Development Dept, GoM; MD, CIDCO and other senior officials of GoM, as well as Secretary, Civil Aviation have been reviewing NMIA project on regular basis, including its environmental aspects. Therefore, PP requested EAC to amend the condition suitably, so that separate review by HLAMC is not required. EAC was of the opinion that PP should have to comply both specific conditions (xxiv) and (xxxiv), given in existing EC (22.11.2010).

5. With respect to specific condition (iv) given in existing EC dated 22.11.2010, the PP submitted that the Urban Development Department, GoM has sanctioned change in Navi Mumbai Development Plan vide letter G.R.No.TPS/1711/2495/C.R.202/11/UD-12 dated 21st March, 2012. Plantation & Protection of 310 ha + 60 ha + 20 ha has been completed by Mangrove Cell, State Forest Department as submitted by CIDCO in the earlier six-monthly report. In addition, 108 ha Mangrove plantation has been completed in Kolekhar village near this No-development Zone(NDZ) as per the Forest Clearance condition of compensatory mangrove plantation. It is also submitted that villagers (Vaghivali village) have not vacated the village and considering the recommendation of Bombay Natural History Society (BNHS) to not develop mangrove park at Vaghivali Village, the island will be protected as NDZ, and mangroves will be retained in their natural state. The EAC took cognizance of the submission made by PP and was the opinion that PP has to follow the Navi Mumbai Development Plan notified by Urban Development Department, Government of Maharashtra vide letter G. R. No. TPS/1711/2495/C.R.202/11/UD -12 dated 21st March, 2012.

6. *The EAC (Infra-2), based on the information submitted and clarifications provided by the Project Proponent, after detailed discussions held on all the issues, and considering the fact that it is an ongoing project, 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. Conditions specified in Environmental & CRZ Clearance issued vide letter No. 10-53/2009-IA.III dated 22.11.2010 shall be strictly complied.
- ii. PP shall submit compliance report to IRO-MoEF&CC, Nagpur for pending compliances within 6 months.
- iii. Where construction activity is likely to cause noise nuisance to nearby residents, restrict operation hours between 7 am to 6 pm.
- iv. 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.
- v. 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.
- vi. Solar power generation capacity of 22.14 MW shall be established as proposed.
- vii. Rainwater harvesting pond of 29,747 cum capacity shall be provided as proposed. 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.
- viii. 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.
- ix. Fresh water requirement from local authority shall not exceed 10.61 MLD during final operational phase. As committed, no groundwater abstraction shall be done during construction as well as operation phase of the project.
- x. As proposed, waste water shall be treated in onsite STPs of total 14.25 MLD capacity (during final phase). 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.

- xi. 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.
- xii. Area for greenery shall be provided as per the details provided in the project document i.e., about 384.90 Ha will be developed as green area.
- xiii. PP shall explore the use of non-ozone depleting substances in air conditioning systems.
- xiv. The PP shall also provide electric charging points in the parking areas for e-vehicles.
- xv. 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.

7. Above mentioned conditions are specified only with respect to environmental clearance for the project; conditions for CRZ clearance shall be specified by CRZ division of MoEF&CC on examination of the recommendation forwarded by the Environment & Climate Change Department, Government of Maharashtra vide letter No. CRZ 2021/CR 156/TC4 dated 27.09.2021. Thereafter, recommendations for Environmental & CRZ clearance shall be processed.

AGENDA ITEM NO. 74.3.2

Semi-Permanent/Temporary ICU Hospital with built up area of 22176.61 sqm at Sultanpuri, New Delhi by M/s Health Maintenance Division (North), Public Works Department, Govt. of NCT of Delhi – Reconsideration for Environmental Clearance.

(IA/DL/MIS/218466/2021; F. No. 21-81/2021-IA-III)

1. The EAC noted that the proposal was deferred in its 68th, 70th, 71st and 72nd meeting held on 15th July, 17th August, 31st August and 16th September, 2021 respectively and the PP was asked to provide the following additional details:

- i. Revised calculation of water requirement with water balance diagram.
- ii. Detailed calculation of solid waste generation along with disposal mechanism.

2. The Project Proponent (M/s. Health Maintenance Division (North), Public Works Department, Govt. of NCT of Delhi) along with his consultant 'M/s. Oceao Enviro Management Solutions (India) Pvt. Ltd.', made a presentation and provided the following information:

- i. The revised water requirement calculations along with water balance diagram have been submitted. Total water requirement of the project is expected to be approx. 379 KLD. Fresh Water demand will be 177 KLD and the same will be met through Delhi Jal Board (DJB). There will be a provision of separate and dedicated lines of plumbing from OT, Labs and other sources that are high in COD, through which 14 KLD of effluent will be diverted to ETP of 20 KLD capacity. The treated wastewater from ETP of about 11.52 KLD will be again treated in STP. Thus, total wastewater of 224.5 KLD (208 KLD of domestic wastewater + 5 KLD of filter backwash + 11.52 KLD of ETP treated water) will be treated in the STP of 250 KLD Capacity based on MBR technology. 202 KLD of treated wastewater will be generated from STP which will be used within the project site for the purpose of horticulture (5 KLD), flushing (80 KLD), filter backwash (5 KLD) and HVAC (112 KLD) which leads to zero liquid discharge unit.
- ii. About 1113.43 kg/day solid waste will be generated in the project comprising of biomedical waste 278.36 kg/day (@ 25% of total solid waste), biodegradable waste 556.715 kg/day (50%), recyclable & inert dry waste 272.79 kg/day (24.5%) and E-waste 5.57 kg/day (0.5%). Organic wastes shall be collected at site and disposed off through Municipal corporation. Biomedical Waste will be disposed off through authorized BMW facility. Recyclable waste, inert waste, hazardous waste, E-waste etc. will be disposed through CPCB authorized vendors. 1.21 kg/day ETP sludge will be disposed through CPCB authorized agency. 19.36 kg/day STP sludge will be used as manure and surplus sold to authorized agency. Hazardous waste of 250 ltr./annum used oil and about 20 oil filters will be sent to authorized agency for recycling/disposal.

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 Delhi at the time of initial consideration of the proposal, it required appraisal at Central level by sectoral EAC.

4. *The EAC found 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. Guidelines issued by IGBC for Fast Track and Emergency Facilities for Treating COVID-19 Patients shall be followed.
- ii. Fresh water requirement from local authority shall not exceed 177 KLD during operational phase. As committed, no groundwater abstraction shall be done during construction as well as operation phase of the project.
- iii. As proposed, waste water shall be treated in onsite STP of 250 KLD capacity and ETP of 20 KLD capacity. Treated wastewater shall be reused within site for flushing, landscaping, HVAC and filter backwash. Guidelines issued by CPCB shall be followed.
- 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 1596.01 sqm. The landscape planning should include plantation of native species. As proposed, at least 177 trees to be maintained within the premises during the operation phase of the project. 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. 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. 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, 3Nos RWH pits shall be provided for harvesting after filtration.
- vii. The solid waste shall be duly segregated into biodegradable and non-biodegradable components and handled in separate area earmarked for segregation of solid waste. As committed, biodegradable waste shall be segregated and disposed through municipal corporation. Inert waste shall be dumped to authorized site. The recyclable waste shall be sold to resellers. Construction & Demolition waste shall be segregated and managed as per C&D Waste Management Rules, 2016. Bio-medical wastes shall be handled and disposed as per Bio-Medical Waste Management Rules, 2016 and guidelines issued by CPCB.
- viii. The PP shall also provide electric charging points in the parking areas for e-vehicles as committed.
- ix. Anti-Smog gun shall be provided to curb air pollution during construction phase.
- x. As committed by PP, solar panels shall be installed to meet about 10% (260 KWH) of power requirement.
- xi. The Environmental Clearance to the project is primarily under provisions of EIA Notification, 2006. The Project Proponent is under

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

AGENDA ITEM No. 74.3.3

Proposed Residential Project at Survey Nos. 19, 24, 25, 26, 31, 32, 34 & 35 of Olavanna Village and Panchayat, Kozhikode District, Kerala by M/s HiLite Builders Pvt Ltd – Amendment in Environmental Clearance.

(IA/KL/MIS/231630/2021; F. No. 21-61/2021-IA-III)

1. The Project Proponent (M/s. HiLite Builders 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 Olavanna Village and Panchayat, Kozhikode District, Kerala with coordinates from 11°14'41.88"N to 11°14'32.67"N Latitude and 75°50'09.97"E to 75°49'54.15"E Longitude.
- ii. The proposal is for 'Amendment' in EC.
- iii. Earlier, the project has obtained Environmental Clearance (EC) from MoEF&CC vide letter No. 21-345/2017-IA.III dated 15.06.2018 for Residential Project. However, due to COVID restrictions and delay in obtaining other approvals, the construction work is yet to begin at site. Now, application has been submitted for amendment in EC for the following changes:
 - a. Change in project configuration - The project proposal approved as per existing EC was for 2 towers with total 1600 residential units. Now, due to the market conditions and for executing construction in a phased manner, the management has decided to construct 3 towers with total 1176 residential units (Phase-1(Tower-1) with 526 units, Phase-2 (Tower-2) with 490 units & Phase-3 (Tower-3) with 160 units).
 - b. Amendment of Survey Nos. - In the earlier EC dated 15.06.2018, there were 8 Survey Nos. (19, 24, 25, 26, 31, 32, 34 & 35). However, Survey No. 24 was wrongly mentioned in our application. Further, Survey No. 33 is also part of the project site and it was missed out in our application due to oversight. Therefore, Survey No. 24 is to be deleted and Survey No. 33 is to be added in EC. It may be noted that there is no change in the plot area of the project site with the above-mentioned deletion and addition. Property sketch certified by village officer has been submitted in this regard.

- c. Inclusion of quantity of Ordinary Earth (O.E.) - As part of the construction activities, there is excavation of Ordinary Earth due to the undulating topography of the project site. The excavated ordinary earth would be partially utilized for backfilling and for landscape development within the site. For disposal of the excess Ordinary Earth, moving permits are necessary from Mining & Geology Department, Govt. of Kerala. The moving permits would be issued only if there is a mention of the quantity of Ordinary Earth to be disposed. Therefore, it is requested to include the details of Ordinary Earth in the EC. N.H. 66 is the National Highway near the project site and the widening works of the highway is in progress. It is submitted that the excess Ordinary Earth would be utilized only for the National Highway widening works. The quantified details of the excavated Ordinary Earth and its re-use/disposal are provided below:

Total quantity of excavation of O.E.	6,45,784 cu.m.
Top soil to be preserved for future landscaping purposes	42,913 cu.m.
O.E. to be used for internal road construction	23,447 cu.m.
O.E. to be used for backfilling purposes	2,70,647 cu.m.
Excess O.E. to be disposed	3,08,777 cu.m.

- iv. After amendment, the total plot area will remain the same, i.e., 89,534 sqm. FSI area will be 2,52,994 sqm and total construction (Built-up) area will be 3,73,457 sqm. The project will comprise of 3 nos. of residential apartment tower. Total 1176 nos. of residential units shall be developed. Maximum height of the building is 93.25 m (above G.F.). The details of building after proposed amendment are as follows:

Name of Building	Max. no. of floors	Max. Height	Built-up area
Apartment Block-1	6 Lower ground + Ground + 26 floors	93.25 m.	1,19,154
Apartment Block-2	2 Basement + Ground + 29 floors	93.25 m.	1,30,000
Apartment Block-3	1 Basement + Ground + 21 floors	90.00 m.	1,24,303
TOTAL			3,73,457

- v. The comparative details of the proposed amendment are given as follows:

Particular	Details as per EC dated 15.06.2018	Details of Amendment sought	Remarks
Survey Nos.	19, 24, 25, 26, 31, 32, 34 & 35	19, 25, 26, 31, 32, 33, 34 & 35	Survey No. 24 is a typographical error in

			existing EC and Survey no. 33 requested to be included in amended EC.
Plot area	89,534 sqm	89,534 sqm	No change
Built-up area	4,40,201.03 sqm	3,73,457 sqm	Reduction of 15%
FSI area	2,53,392.02 sqm	2,52,994 sqm	Reduction of 0.011%
Landscape area	55,094.33 sqm	55,094.33 sqm	No change
No. of Residential Apartments	1,600 units	1,176 units	Reduction of 26.5%
No. of Towers proposed	2 towers	3 towers	Increase in no. of towers.
Max. height of the building	93.25 meters	93.25 meters (Above GF)	No change
Domestic Water Requirement	1,106 KLD (734 KLD fresh water)	835 KLD (548 KLD fresh water)	Reduction of 24.5%
Sewage generation	885 KLD	668 KLD	Reduction of 24.5%
STP capacity	1,062 KLD	802 KLD	Reduction of 24.5%
Daily solid waste generation	3.28 tons	2.48 tons	Reduction of 24.5%
Total Power Requirement	11.80 MVA	10.00 MVA	Reduction of 15.25%
Parking	1,900 four wheelers & 2,220 two wheelers	1,500 four wheelers & 1,700 two wheelers	As per norms
Total Ordinary Earth excavated	-	6,45,784 cu.m.	Request to include the details of Ordinary Earth generated in the project in order to obtain necessary permits to utilize excess O.E. for nearby National Highway widening works.
Topsoil for landscaping purposes	-	42,913 cu.m.	
Ordinary Earth for internal road construction	-	23,447 cu.m.	
Ordinary Earth for backfilling (within site)	-	2,70,647 cu.m.	
Excess Ordinary Earth for disposal	-	3,08,777 cu.m.	

- vi. During construction phase, total water requirement is expected to be 52 KLD which will be met by recycled water from portable STP/Stored rain water (tank) for construction purposes and Kerala Water Authority supply for meeting the domestic water requirement. During

the construction phase, portable STP will be provided for disposal of wastewater. Temporary sanitary toilets will be provided during peak labor force.

- vii. During operational phase, total domestic water demand of the project is expected to be 835 KLD (548 KLD fresh water + 287 KLD recycled water). Fresh water requirement of 548 KLD will be met by from Stored Rain Water/KWA supply. Wastewater generated (668 KLD) will be treated in STP of total 802 KLD capacity. 601 KLD of treated wastewater will be recycled and re-used (287 KLD for flushing, 275 KLD for gardening and 39 KLD for floor washing/car washing purposes etc.). No treated/untreated water will be disposed in to municipal drain.
- viii. About 2.48 TPD solid waste will be generated in the project. The biodegradable waste (1.24 TPD) will be processed in bio-gas generation unit/bio-bin system and the non-biodegradable waste generated (1.24 TPD) will be handed over to authorized local vendor.
- ix. The total power requirement during operation phase is 10 MVA and will be met from Kerala State Electricity Board (KSEB) & DG Sets (standby) and total power requirement during construction phase is 0.5 MVA and will be met from KSEB& DG Sets (standby).
- x. Rooftop rainwater of buildings will be collected in RWH tank of total 400 KL + 225 KL capacity and pond of total 5 ML capacity for harvesting after filtration.
- xi. Parking facility for 1,500 four wheelers and 1,700 two wheelers is proposed to be provided against the requirement of 1,466 four wheelers and 1,600 Two wheelers respectively (according to local norms).
- xii. Proposed energy saving measures would save about 22% of power.
- xiii. The project is not located within 10 km of Eco Sensitive areas. NBWL Clearance is not required.
- xiv. Project is not located in Critically Polluted Area.
- xv. Forest Clearance is not required.
- xvi. No court case is pending against the project.
- xvii. Total area for landscaping proposed is 55,094.33 sqm (about 61% of total plot area) and about 1,900 tree species will be planted within the site.
- xviii. Expected timeline for completion of the project - About 84 months from the date of start of construction.
- xix. Investment/Cost of the project is ₹ 900 Crores.
- xx. Employment potential - About 1,000 persons.
- xxi. Benefits of the project – Employment opportunities & Revenue to the State. The residential 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(b) 'Townships and Area Development projects' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires

appraisal at State level. However, due to non-existence of SEIAA in Kerala, it requires appraisal at Central level by sectoral EAC.

3. *The EAC (Infra-2), based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, recommended amending the environmental clearance granted vide letter No. 21-345/2017-IA.III dated 15.06.2018 to the extent of project parameters as mentioned in table under para 1(v) above of this agenda item subject to the following additional conditions. All other conditions, as specified in the aforesaid EC letter shall remain unchanged.*

- i. PP shall obtain permits from the concerned agency for disposal of excess ordinary earth generated in the project (about 3,08,777 cu.m.) as committed.

AGENDA ITEM NO. 74.3.4

Proposed Expansion of Group Housing Project “Parsvnath La Tropicana” with increase in built up area from 2,55,262 sqm to 2,93,649.69 sqm at Magazine Road, Khyber Pass, New Delhi by M/s Parsvnath Landmark Developers Pvt. Ltd.–Reconsideration for Environmental Clearance.

(IA/DL/MIS/152851/2019; F. No. 21-73/2019-IA-III)

1. The EAC noted that the proposal was deferred in its 70th meeting held on 17th August, 2021, and the PP was asked to provide the following additional details:

- i. Submit the recent certified compliance report from IRO based on compliance to EC dated 14.07.2020.
- ii. Clarify the details of rain water harvesting tank capacity.
- iii. Provide details of proposed solar power generation as proposed.
- iv. Provide undertaking for the reuse of surplus treated water as proposed.

2. The Project Proponent (M/s. Parsvnath Landmark Developers Pvt. Ltd.) along with his consultant ‘M/s. Ind Tech House Consult’, made a presentation and provided the following information:

- i. Certified compliance report from MoEF&CC Integrated Regional Office, Jaipur has been obtained vide file no. 4372/07 dated 29.09.2021 and is submitted.
- ii. 2 Nos. of rainwater harvesting tanks are proposed for the project with capacities of 67.25 and 90.25 cu.m. respectively.
- iii. Solar Photovoltaic (SPV) for 5% of total power load will be installed in the terrace area and deck area across the project.
- iv. An agreement has been signed with NDMC for the maintenance of 22 urinals near the project (City Sadar; Paharganj zone). Copy of the

agreement with NDMC for the maintenance of urinals is submitted. In future, it is proposed to take-up maintenance of more NDMC urinals and nearby parks for the reuse of available treated water.

3. The EAC noted that the project/activity is covered under category 'B' of item 8(b) 'Townships and Area Development projects' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at State level. However, due to non-existence of SEIAA in Delhi at the time of initial consideration of the proposal, it requires appraisal at Central level by sectoral EAC.

4. The EAC also noted that PP has obtained certified compliance report from MoEF&CC Integrated Regional Office, Jaipur vide letter No. 4372/07 dated 29.09.2021. As per the report, based on site visit dated 10.09.2021, most of the conditions were observed to be complied and no major non-compliance was observed. The PP has also submitted the action taken report vide letter dated 01.10.2021.

5. *The EAC found the response to the queries are satisfactory. The EAC (Infra-2), based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, recommended granting environmental clearance to the project subject to the following specific conditions and other Standard EC Conditions as specified by the Ministry vide OM dated 4th January, 2019 for the said project/activity while considering for accord of environmental clearance:*

- i. Fresh water requirement from local authority shall not exceed 350 KLD during operational phase. As committed, no groundwater abstraction shall be done during construction as well as operation phase of the project.
- ii. As proposed, wastewater shall be treated in onsite STP of 520 KLD capacity. At-least 171 KLD of treated water from onsite STP shall be recycled and reused for cooling, flushing and gardening in the project site. Surplus treated water of about 182 KLD shall be used for maintenance of NDMC urinals and nearby parks as proposed.
- 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 34065.133 sqm. The landscape planning should include plantation of native species. As proposed, at least 846 trees to be maintained within the premises during the operation phase of the project. 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. 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, 2 Nos. of rainwater harvesting tanks shall be provided for 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 committed, biodegradable waste shall be composted by use of Composter. Inert waste shall be dumped to authorized site. The recyclable waste shall be sold to resellers. Construction & Demolition 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 and implemented to ensure that the service of the roads near project site may not get adversely impacted after the implementation of the project. The plan should stipulate, inter-alia, the path and appropriate time for the movement of vehicles to and from site. The Plan shall be vetted by concerned agency in the State Govt.
 - viii. Anti-Smog gun shall be provided to curb air pollution during construction phase.
 - ix. The PP shall also provide electric charging points in the parking areas for e-vehicles as committed.
 - x. Solar Photovoltaic (SPV) for at-least 5% of total power load shall be installed in the terrace area and deck area across the project as committed.
 - xi. The Environmental Clearance to the project is primarily under provisions of EIA Notification, 2006. The Project Proponent is under obligation to obtain approvals/clearances under any other Acts/Regulations or Statutes as applicable to the project.

AGENDA ITEM NO. 74.3.5

Construction of “Group Housing Colony” with built up area of 3,47,102 sqm at Ashok Vihar, Plot-B, District-North West, Delhi, by M/s Godrej Green Woods Private Limited - Reconsideration for Environmental Clearance.

(IA/DL/MIS/223502/2021; F. No. 21-57/2021-IA-III)

1. The EAC noted that the proposal was deferred in its 71st Meeting held on 31st August, 2021, and the PP was asked to provide the following additional details:
 - i. Revised tree plantation details including details of compensatory plantation (as per Delhi Gazette Notification dated 24.12.2020) for tree

cutting and transplantation along with approval of competent authority.

- ii. Submit undertaking for the reuse of surplus treated water as proposed.
- iii. Submit MOU with C&D waste disposal site.

2. The Project Proponent (M/s Godrej Green Woods Private Limited) along with his consultant 'M/s. Perfect Enviro Solutions Pvt. Ltd.', made a presentation and provided the following information:

- i. A total green area of 19677.5 sqm will be developed within the plot area of the project. Plantation of native plants will be done. Approximately 2337 trees are present at the site out of which 305 nos. of trees will be retained and 946 nos. of trees will be transplanted within site and 1086 nos. of invasive trees will be cut/trimmed for the construction of residential buildings. Additional 39 new trees will be planted at the site. Thus, total 1290 trees will be maintained at the site (i.e. 305+946+39).
- ii. Application for tree cutting/transplantation has been submitted by Rail Land Development Authority to Forest Department in 2019. If required, the compensatory plantation will be done in consultation with the Forest Department at the following locations:
 - a. Adarsh Nagar Railway Station
 - b. Narela - Rathdhana Station
 - c. Gherva Station
 - d. Mundka Railway Station
 - e. Nangloi Railway Station
 - f. Narela Yard
 - g. Palam Railway Station
- iii. Undertaking for the reuse of surplus treated water in nearby areas for horticulture purposes has been submitted.
- iv. Letter has been submitted to M/s IL&FS Environmental Infrastructure & Services Ltd. for processing the C&D waste generated in the project.

3. The EAC noted that the project/activity is covered under category 'B' of item 8(b) 'Townships and Area Development projects' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at State level. However, due to non-existence of SEIAA in Delhi at the time of initial consideration of the proposal, it requires appraisal at Central level by sectoral EAC.

4. *The EAC found the response to the queries are satisfactory. The EAC (Infra-2), based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, recommended granting environmental clearance to the project subject to the following specific conditions and other Standard EC Conditions as specified by the Ministry vide OM dated 4th January, 2019 for the said project/activity while considering for accord of environmental clearance:*

- i. Fresh water requirement from local authority shall not exceed 757 KLD during operational phase. As committed, no groundwater

- abstraction shall be done during construction as well as operation phase of the project.
- ii. As proposed, waste water shall be treated in onsite STP of 1250 KLD capacity. At-least 471 KLD of treated water from onsite STP shall be recycled and reused for domestic flushing, gardening and cooling purposes. 287 KLD of excess treated water will be given to nearby areas for horticulture purposes.
 - 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 19677.5 sqm. The landscape planning should include plantation of native species. As proposed, at least 1290 trees to be maintained within the premises during the operation phase of the project. 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. 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/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.
 - vi. 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, 29 Nos. RWH pits shall be provided for harvesting after filtration.
 - vii. The solid waste shall be duly segregated into biodegradable and non-biodegradable components and handled in separate area earmarked for segregation of solid waste. As committed, biodegradable waste shall be composted by use of Composter. Inert waste shall be dumped to authorized site. The recyclable waste shall be sold to resellers. Construction & Demolition waste shall be segregated and managed as per C&D Waste Management Rules, 2016.
 - viii. A detailed traffic management and traffic decongestion plan shall be drawn and implemented to ensure that the service of the roads near project site may not get adversely impacted after the implementation of the project. The plan should stipulate, inter-alia, the path and appropriate time for the movement of vehicles to and from site. The Plan shall be vetted by concerned agency in the State Govt.
 - ix. Anti-Smog gun shall be provided to curb air pollution during construction phase.

- x. The PP shall also provide electric charging points in the parking areas for e-vehicles @ 20% of the total parking provision as committed.
- xi. As committed, PP shall install solar renewable energy equivalent to 5% of the total demand load and utilize solar energy from solar power plants for electrical power requirements in common areas.
- 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. 74.3.6

Expansion of secured landfill cell in existing Integrated Common Hazardous Waste Treatment Storage & Disposal Facility at Village Juna Kataria, Lakadi, District Kutch, Gujarat by M/s Detox India Private Limited (DIPL) - Reconsideration for Split of Environmental Clearance between two entities DIPL and SEPPL for the project.

(IA/GJ/MIS/187575/2020; F. No. 10-36/2016-IA-III)

1. The EAC noted that, in its 61st meeting held on 8th February, 2021, the proposal was recommended for the split of the EC granted vide F.No. 10-36/2016-IA-III dated 30.07.2020, between the two entities, M/s. DIPL and M/s. SEPPL. However, during processing in the Ministry, further clarification was sought regarding the split of responsibilities for compliances of the conditions of the present EC. Accordingly, the matter is placed for reconsideration.
2. The Project Proponent (M/s Detox India Private Limited (DIPL)) along M/s Saurashtra Enviro Projects Private Limited (SEPPL), made a presentation and provided the following information:
 - i. Mr. Hiral P. Desai, Director of M/s. Detox India Private Limited (DIPL) and Mr. Chetan C. Contractor, Director of M/s. Saurashtra Enviro Projects Private Limited are jointly undertaking the responsibility for any unforeseen events including on site emergencies and compliance of conditions of the present EC.
 - ii. An undertaking in this regard has been submitted.
3. The EAC noted that the project/activity is covered under category 'A' of item 7(d) 'Common Hazardous Waste Collection, Reception, Treatment, Storage, Transport & 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 observed that joint responsibility for EC compliance may not be practically possible and that the responsibilities undertaken by either project proponent (M/s DIPL and M/s SEPPL) ought to be specific and actionable. The committee advised the project proponents (PPs) to examine

component-wise responsibility for the facility/activity that falls in that PP's land area. The project proponents accepted the suggestion and agreed to submit revised undertaking.

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, decided to defer the project proposal and asked the project proponent to provide the following additional information:*

- i. Component-wise split of responsibility between the two entities (M/sDIPL and M/s SEPPL).
- ii. Submit revised undertaking specifying the division of responsibility.

LIST OF PARTICIPANTS OF EAC (INFRASTRUCTURE-2) IN 74th MEETING OF EAC (INFRA-2) HELD ON 8th OCTOBER, 2021 THROUGH VIDEO CONFERENCING

S. No.	Name	Designation	Attendance	Sign
			08.10.2021	Through VC
1.	Dr. N. P. Shukla	Chairman	P	-
2.	Dr. H. C. Sharatchandra	Member	P	-
3.	Shri V. Suresh	Member	P	-
4.	Dr. V. S. Naidu	Member	P	-
5.	Shri B. C. Nigam	Member	P	-
6.	Dr. Manoranjan Hota	Member	P	-
7.	Dr. Dipankar Saha	Member	P	-
8.	Dr. Jayesh Ruparelia	Member	P	-
9.	Dr. (Mrs.) Mayuri H. Pandya	Member	P	-
10.	Dr. M. V. Ramana Murthy	Member	A	-
11.	Prof. Dr. P.S.N. Rao	Member	A	-
12.	Dr. Dharmendra Kumar Gupta	Scientist "F"& Member Secretary	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. Corporate Environment Responsibility:

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

X. Miscellaneous:

- (i) The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular 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 project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- (vi) The criteria pollutant levels namely; 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.
- (vii) The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- (viii) The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- (ix) The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- (x) No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- (xi) Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- (xii) The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- (xiii) The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- (xiv) The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data/ information/monitoring reports.
- (xv) The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts/NGT and any other Court of Law relating to the subject matter.
- (xvi) Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

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. Corporate Environment Responsibility:

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

X. Miscellaneous:

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular 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 project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.

- vi. The criteria pollutant levels namely; PM_{2.5}, 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.
- vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- viii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- x. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- xi. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts/NGT and any other Court of Law relating to the subject matter.
- xvi. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

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. Corporate Environment Responsibility:

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 01.05.2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or 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.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.

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

X. Miscellaneous:

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

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.
- VIII. Public hearing and Human health/safety issues:**
- i. Comply with the safety procedures, norms and guidelines (as applicable) as outlined in IS 5228, IS 5229 and IS 5230, code of practice for construction of aerial ropeways, Bureau of Indian Standards.
 - ii. Maintaining hoists and lifts, lifting machines, chains, ropes, and other lifting tackles in good condition.
 - iii. Ensuring that walking surfaces or boards at height are of sound construction and are provided with safety rails or belts.
 - iv. The project should conform to the norms prescribed by the Director General Mine safety. Necessary clearances in this regard shall be obtained.
 - v. Adequate infrastructure, including power, shall be provided for emergency situations and disaster management.
 - vi. Adequate first aid facility shall be provided during construction and operation phase of the project.
 - vii. Regular safety inspection shall be carried out of the ropeway project and a copy of safety inspection report should be submitted to the Regional Office.
 - viii. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- IX Corporate Environment Responsibility:**
- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 01.05.2018, as applicable, regarding Corporate Environment Responsibility.
 - ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or 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.
 - iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
 - iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
 - v. Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
- X. Miscellaneous:**
- i. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of 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 project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.

- vi. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- vii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- viii. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- ix. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- x. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xi. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiii. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xiv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xv. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

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. Corporate Environment Responsibility:**
- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 01.05.2018, as applicable, regarding Corporate Environment Responsibility.
 - ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or 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.
 - iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
 - iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
 - v. Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
- X. Miscellaneous:**
- i. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of 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 project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
 - vi. The criteria pollutant levels or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
 - vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of operation by the project.
 - viii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
 - ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
 - x. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
 - xi. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
 - xii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
 - xiii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

- xiv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xvi. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

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.

VIII. Corporate Environment Responsibility:

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 01.05.2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly 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.

- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- v. Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

IX. Miscellaneous:

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently. (for projects involving incineration)
- ii. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of 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 project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vii. The criteria pollutant levels namely; PM_{2.5}, 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).
- viii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- ix. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- x. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- xi. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- xii. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xiii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiv. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xvi. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xvii. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

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. Corporate Environment Responsibility:

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 01.05.2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or 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.

- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

XI. Miscellaneous:

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