MINUTES OF 66th MEETING OF EXPERT APPRAISAL COMMITTEE (INFRASTRUCTURE-2) HELD ON 16th JUNE, 2021.

VENUE: Through Video Conferencing

DATE: 16th June, 2021

PROCEEDINGS

66.1 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.

66.2 Confirmation of Minutes of 65th Meeting of Expert Appraisal Committee (Infrastructure-2) held during 27-28 May, 2021.

The Expert Appraisal Committee (Infrastructure-2), hereinafter called the EAC, was informed that PP (M/s DLF Home Developers Limited) for Agenda Item No. 65.4.4 considered in the 65th meeting has requested vide email dated 15.06.2021, for correction in the minutes of meeting under Agenda Item No. 65.4.4, point no. 1(iv), where it has been inadvertently mentioned that "The proposed office area will be 4214.66 sqm" which does not relate to the above said proposal. The committee took note of the observation and it was decided to make the necessary correction during file processing. The committee was informed that no other representation has been received regarding projects considered in 65th meeting. Minutes of 65th 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.

66.3 Consideration of Proposals: The EAC considered proposals as per the agenda adopted for 66th meeting. The details of deliberations held and decisions taken in the meeting are as under:

AGENDA ITEM NO. 66.3.1

Proposed establishment of Common Incinerator (8 TPD), CETP (5 MLD) and CBWTF (10TPD) at plot no 472, KIADB Harohalli Industrial Area – 3rd phase, Kanakapura Taluk, Ramanagar District, Karnataka by M/s. Mother Earth Environtech Pvt. Ltd. - Environmental Clearance

(IA/KA/MIS/193187/2021; F. No. 21-50/2021-IA-III)

1. The Project Proponent (M/s. Mother Earth Environtech Pvt. Ltd.) along with his consultant 'M/s Gaurang Environmental Solutions Pvt. Ltd.', made a presentation on the key parameters and salient features of the project to the EAC (Infra-2). The EAC took note of following key parameters and salient

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

- i. The project is located at Plot No. 472, KIADB Harohalli Industrial Area, Jakkasandra village, Kanakapura taluk, Ramanagara district of Karnataka with coordinates 12°39'41.70"N 12°39'48.39"N Latitude and 77°25'36.79"E 77°25'28.55"E Longitude.
- ii. The project is new.
- iii. The project has obtained ToR vide Letter No. 10-61/2020-IA-III dated 28.01.2021 and its subsequent ToR amendment vide Letter No. 10-61/2020-IA-III dated 12.03.2021.
- iv. The salient features of the project are given as follows:

Location & Land Size	KIADB Harohalli Industrial Area, Kanakapura, Ramanagar, Karnataka. 3.59 ha (8.88 acres)
Land Use Classification	Industrial Estate
Plant Capacity	Hazardous Waste Incinerator – 8 TPD (400 kg/hr) CETP - 5.0 MLD BMW Incinerator – 10 TPD (2 x 250 kg/hr), Autoclave – 5.0 KL, Shredder – 500 kg/hr, Ash Pit – 1 No, Sharp Pit – 1 No.
Source of Waste / Effluent	Industrial Units in and around Harohalli Industrial Area Hospitals in and around Ramanagara, Mandya & Bangalore Districts Household Biomedical & Sanitary Waste from waste collection centers of BBMP Corporation
Treatment Technology	HW Incinerators – Pyrolysis & Controlled air combustion BMW Incinerator – Pyrolysis & Controlled air combustion Autoclave – Vaccum Type, Automatic Shredder – Low Rotational type CETP - Primary, Secondary, Tertiary treatment followed by UF / RO→MEE – ZLD concept
Manpower	Constructional - 50 - 60 Nos & Operational - 150 Nos
Power Requirement	6000 KVA & Source – BESCOM
Backup power	5 No x 500 KVA DG Sets
Water Requirement	Domestic – 10 KLD, Lab use – 2 KLD, Autoclave – 5 KLD & Source – KIADB Boiler make-up – 576 KLD, Scrubber– 15 KLD, Vehicle washing – 10 KLD –STP
Fuel Requirement	Coal for Boiler – 1.0 TPH LDO/LSHS – 300 Lit/hr Diesel - DG sets (300 Lit/hr while operating)
Effluent Generation	42 KLD, Treated in proposed CETP

Project Cost

v. Karnataka Industrial Area Development Board (KIADB) has allotted 3.59 Ha (8.88 Acres) of land to M/s MEEPL at Plot No. 472 to establish the above facility. The land use breakup is given as follows:

S. No.	Description	Area (Ha)	Percentage (%)
1.	СЕТР	1.597	44.39
	CETP Tanks	1.20	
	Utilities	0.35	
	Storage – Chemicals & Consumables	0.01	
	Storage – Sludge, Salt & Waste	0.05	
2.	HW Incinerator	0.403	11.23
	Incinerator Plant	0.150	
	Waste Storage Area	0.250	
	Utilities	0.003	
3.	CBMWTF	0.400	11.23
	Incinerator, Autoclave & Shredder	0.200	
	Waste Storage Area	0.170	
	Utilities	0.030	
4.	Green belt	1.190	33.15
	Total	3.590	100

- vi. The proposed project of Incinerator falls under Category 'A', Schedule 7(d)
 Common hazardous waste treatment, storage and disposal facilities (TSDFs), Category 'B', Schedule 7(da) Common Biomedical Waste Treatment Facility and CETP falls under Category 'B', Schedule 7(h) Common Effluent Treatment Plants (CETP's) as per Environmental Impact Assessment (EIA) Notification, 2006 and its subsequent amendments
- vii. The proposed project involves installation of a common incinerator of 8 TPD to treat the incinerable Hazardous Waste and CETP of 5 MLD to treat the effluent generated from existing and proposed industries in Harohalli Industrial Area and its surrounding districts such as pharmaceutical, chemical Textile, Bottling and its oriented industries. The additional Bio Medical Waste Incinerator will be used to treat the BMW generated from Ramnagara and its surrounding districts.
- viii. It is also proposed to provide Common Biomedical Waste Treatment Facility (CBWTF) which involves installation of 2 No of Incinerators of 250 kg/hr each with wet scrubber followed by stack of 30 m, 1 No of Autoclave of 5.0 KL/Batch and 1 No of Shredder of 500 kg/hr.
- ix. It is proposed to install all incinerators in single phase and 5.0 MLD CETP in 5 phases.

- x. In Phase 1, 125 KLD CETP for the treatment of organic or Low TDS trade effluents and 125 KLD CETP for the treatment of inorganic or high TDS trade effluents. In Phase 2, additional 250 KLD CETP for the treatment of organic or Low TDS trade effluents and 250 KLD CETP for the treatment of inorganic or high TDS trade effluents will be developed. In Phase 3, additional 1250 KLD CETP for the treatment of organic or Low TDS trade effluents will be developed. In Phase 3, additional 1250 KLD CETP for the treatment of organic or Low TDS trade effluents and 500 KLD CETP for the treatment of inorganic or high TDS trade effluents will be developed. In Phase 4, additional 500 KLD CETP for the treatment of organic or Low TDS trade effluents will be developed. In Phase 4, additional 500 KLD CETP for the treatment of inorganic or high TDS trade effluents will be developed. In Phase 5, additional 1000 KLD CETP for the treatment of organic or Low TDS trade effluents will be developed. In Phase 5, additional 1000 KLD CETP for the treatment of 0 organic or Low TDS trade effluents will be developed. In Phase 5, additional 1000 KLD CETP for the treatment of 0 organic or Low TDS trade effluents will be developed.
- xi. It is also proposed to provide 4 Nos. of 6 TPH boiler to generate steam for operation of MEE and it will be provided with individual bag filter followed by 30 m height stack.
- xii. Water requirement of the proposed project is estimated as 618 KLD which is mainly for boiler make-up in MEE plant (576 KLD), scrubber make-up in Incinerators (15 KLD), Autoclave (5 KLD), vehicle washing (10 KLD), Lab usage (2 KLD) and domestic uses (10 KLD). About 17 KLD of fresh water for domestic, Autoclave and lab operation will be sourced from KIADB. About 601 KLD of water will be required for Boiler make-up, vehicle washing and scrubber operation, for which treated effluent from CETP will be used.
- xiii. About 23 KLD of effluent will be generated as blow down in boiler operation, 10 KLD from vehicle washing, 2 KLD from Lab, 2 KLD from autoclave and 5 KLD of bleed off will be generated from scrubber which will be treated in the proposed CETP. Sewage generation of about 8.0 KLD will be disposed through septic tank followed by soak pit.
- xiv. Incinerator Ash, ETP Sludge and MEE salt will be disposed to TSDF. Recovered solvents, if any from High TDS Effluent treatment scheme and HW storage containers will be disposed to Authorized Recyclers. Autoclaved and shredded waste will be disposed to authorized Recyclers. Fly ash from the boiler will be disposed to brick making units/nearby cement plants.Recyclable plastic & Recyclable metal waste will be disposed to Authorized recyclers. Municipal solid waste will be sent to composting plant of KIADB.
- xv. The gases after being burnt at 1050°C shall be run into multi cyclone and a venture scrubber followed by a flooded scrubber with quenching arrangement. The scrubber shall be an alkaline scrubber to neutralize the gases and ensure trapping of any pollutants escaping into the environment also we will use Quencher, and two Cyclonic Droplet Separators as pollution control devices. The purpose of water quenching is to reduce the temperature of the gases which are at high temperature and to clean the gases and the purpose of dry pollution control devices is to ensure that clean gases are let out into the environment. The scrubbed water shall be collected into a sump, where the water is neutralized, and then sent into the proposed CETP.

- xvi. Total power requirement will be 6000 KVA which will be sourced from BESCOM. In case of power failure, 5 Nos D.G. sets having capacity 500 KVA each will be used.
- xvii. 20 nos. of percolation pits are proposed to be installed as rain water recharge inside the project area.
- xviii. Adequate Truck/Tanker parking will be provided to park effluent/waste carrying vehicles.
- xix. Public hearing is exempted as the site is located in a notified Industrial Estate.
- xx. 20 coconut trees shall be cut for the project. The greenbelt coverage area for the proposed project is about 33.15% of total area at 11900 sqm (1.19 Ha) with approx. 450 plants.
- xxi. The project does not fall under Critically Polluted Area.
- xxii. The project is not located with 10 km of Eco Sensitive Zone. NBWL Clearance is not required.
- xxiii. Forest Clearance is not required.
- xxiv. No Court Case is pending against the project.
- xxv. Expected timeline for completion of the project is 5-7 years.
- xxvi. Investment/Cost of the project is ₹ 267.89 Crores.
- xxvii. Employment potential: 50–60 persons during construction & 150 Persons during operational phase.
- xxviii. Benefits of the project: The proposed TSDF, CBWTF and CETP will provide treatment facility for HW & BMW and effluent with ZLD concept for the solid/liquid waste generated from various industries in the industrial area and surrounding locations with cost effective way. It will also pave the way for delivering multi-pronged benefit on the ground by establishing regulatory adherence, environmental sustainability and enhancing business and economic sustainability in the region and for this sector.

2. The EAC noted that the project/activity is covered undercategory 'A' of item 7(d) 'Common hazardous waste treatment, storage and disposal facilities (TSDFs)', category 'B' of item 7(da) 'Bio MedicalWaste Treatment Facilities' and category 'B' of item 7(h) 'Common Effluent Treatment Plants (CETP's)' of the Schedule to the EIA Notification, 2006 and its subsequent amendments. Therefore, the project requires appraisal at Central level by sectoral EAC.

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

i. The proponent should ensure that the project fulfills all the provisions of Hazardous and other Wastes (Management and Transboundary Movement) Rules, 2016, Bio-Medical Waste Management Rules, 2016 and the 'Protocol for Performance Evaluation and Monitoring' for the same as published by the CPCB including collection, transportation, design etc.

- ii. Guidelines for Common Hazardous Waste Incineration and for Common Biomedical Waste Treatment Facility (CBWTF) issued by CPCB shall be followed.
- iii. MoU shall be made with authorized TSDF for disposal of ash generated from incinerators.
- iv. No landfill site is allowed within the CBWTF site.
- v. The Project proponent shall not store the Hazardous Wastes more than the quantity that has been permitted by the CPCB/SPCB.
- vi. The proponent shall comply with the Environmental standards notified by Ministry of Environment & Forest for incinerators along with the technology/guidelines.
- vii. Necessary provision shall be made for fire-fighting facilities within the complex.
- viii. Project proponent should prepare and implement an on-site Emergency Management Plan.
- ix. Employees shall be provided work specific PPE such as helmets, safety shoes, masks etc.
- x. Air pollution control systems such as Scrubbers, Quenching, Cyclonic Droplet Separators, shall be implemented as proposed. Incinerator & DG Set shall be provided with a stack height meeting MOEF&CC Guidelines for proper dispersion of cleaned gases in atmosphere.
- xi. Ambient air quality monitoring shall be carried out at upwind and downwind locations. The parameters shall include Dioxins and Furan. Online real-time continuous monitoring facilities shall be provided as per the CPCB or State Board directions.
- xii. Project proponent should develop green belt all along the periphery of the TSDF with plant species that are significant and used for the pollution abatement. Total green belt area of 11900 sqm (@33.15% of plot area) shall be maintained as proposed. The tree species shall be selected as suited to site conditions in consultation with concerned forest department.
- xiii. PP shall ensure proper handling of all spillages by introducing spill control procedures for various chemicals.
- xiv. MoU with member units shall be finalized before setting up the CETP.The MoU between CETP and member units shall indicate the maximum quantity of effluent to be sent to the CETP along with the quality.
- xv. Fresh water requirement from local authority shall not exceed 17 KLD during operational phase.
- xvi. As committed, no groundwater abstraction shall be done during construction as well as operation phase of the project.
- xvii. As committed, there shall be no discharge of treated wastewater from the CETP. The treated wastewater shall be recycled and reused for Greenbelt development, feed water for CETP's boiler & Industrial purposes as committed.
- xviii. 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.

- xix. 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.
- xx. No non-hazardous wastes, as defined under the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, and Bio-Medical Waste Management Rules, 2016 shall be handled in the premises.
- xxi. The solid wastes shall be segregated, managed and disposed as per the norms of the Solid Waste Management Rules, 2016. 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 MSW generated from project.
- xxii. 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.
- xxiii. 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.
- xxiv. 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 2 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 2 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 PWD/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.
- xxv. 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.

AGENDAITEM NO. 66.3.2

Remediation and Reclamation of Existing Dumpsite and Construction, Operation and Maintenance of Sanitary Landfill at Village Nimbri,

Panipat Dumpsite by M/s Municipal Corporation Panipat – Terms of Reference

(IA/HR/MIS/202327/2021; F. No. 21-51/2021-IA-III)

1.The PP (M/s. Municipal Corporation Panipat) along with his consultant 'M/s Amaltas Enviro Industrial Consultants LLP' made a presentation on the key parameters and salient features of the project to the EAC (Infra-2). The Committee took note of the following key parameters and salient features of the project presented during the meeting and as provided in the brief and application for this project:

- i. The project is located at Nimbri village, Panipat, Haryana
- ii. The project is new.
- iii. The height of the Nimbri Dumpsite is 3 meters, depth is 12 meters and total area is about 51,677.96 sqm (12.77 acres). This land is owned by Municipal Corporation Panipat and has been used for open dumping of mixed MSW since the year 2010. About 4.09 lakh ton municipal solid waste has already been deposited at the site. At present, the site receives an estimated of 400 Tons of Municipal Solid Waste ("MSW") per day.
- iv. The Authority/MC Panipat proposes to excavate the compacted MSW by using suitable mechanical sieving, separating machines or other equipment's. The work envisages economically viable and environmentally sustainable method for Remediation and Reclamation of site in accordance with the applicable law of SWM 2016. The Authority/MC Panipat intends to reclaim the legacy waste over an area of 12.77 acre (8.7acre Processing + 4 acre private land).
- v. The project involves 'Bio-mining' of legacy waste at the existing dumpsite. "Bio-Mining" refers to the excavation of old dumped waste and make windrow of legacy waste thereafter stabilization of the waste through bio-remediation. i.e. exposure of all the waste to air along with use of composting bio-cultures, i.e. screening of the stabilized waste to recover all valuable resources (like organic fines, bricks, stones, plastics, metals, clothes, rags etc.)
- vi. As this is already an existing dumpsite so no alternative sites were examined and as per the CPCB guidelines of Disposal of Legacy waste (Feb.2019) and SWM rules 2016, the existing dumpsite is fulfilling all the site selection criteria.

S.No.	Criteria			Criteria	Available distance from
				distance	proposed SLF site
1	Distance	from	nearest	100 m	Yamuna River – Approx. 10
	River				Km in East direction
2	Distance	from	Nearest	200 m	210 m in West direction.
	Pond				
3	Distance	from	nearest	200 m	NH-1(Delhi-Amritsar road)
	Highway (N	IH-2)			6.30 Km in West direction
4	Distance	from	nearest	200 m	Nimbri Village – 450 m in
	habitation				West direction

5	Distance from nearest Public Parks	200 m	Kala Amb Park – 2.07 Km in NW direction
6	Distance from nearest water supply wells	200 m	-
7	Distance from nearest Airport/Airbase	20 km	Karnal Airport – 36.53 Km in North direction

- vii. The activities planned in the proposed project include collection, transportation, segregation, treatment & disposal of municipal solid waste in compliance to the Solid Waste Management Rules 2016. The pre-processing and post-processing rejects/inerts shall be handled as per Solid Waste Management Rules, 2016 amended from time to time.
- viii. The disposal of processing rejects & inerts shall be limited to a maximum of 20% of total waste quantity.
- ix. In this case, the landfilling area of 6.174 acre for segregated wastes and residues is earmarked by Municipal Corporation Panipat, which shall be a part of the project site.
- x. The closure of the site shall be according to SWM Rules, 2016 before completion and exit from the project. There should be inspection of subsidence, cracks and fissures in the top cover to ensure the prompt repair. Vegetation should be planted in the top cover and adequate provision for irrigating the plant should be made. The final cap of the landfill should consist of atleast5 layers, i.e., gas drainage layer, geomembrane, drainage layer, clay layer and re-vegetation layer.
- xi. There shall be necessary arrangements to transport inerts/processing rejects to the concerned facility including but not limited to SLF or C&D Waste Plant or scientific landfill for hazardous waste etc. In order to prevent environmental impacts of the activities as per the Solid Waste Management Rules, 2016.

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xii.	The salient features	of the pr	oposed proi	lect are given	as follows:
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S.	Particulars	Details
No.		
1.	Land Area	12.77 Acres (8.7 acre Processing
		+4 acre private land)
2.	Estimated Project	2021
	Duration	
3.	Power Requirement	Operation Phase: 49 KW –
		UHBVN
4.	Water Requirement	20 KLD
<u> </u>		
5.	Total Waste Generation	400 TPD

xiii. The area breakup is given as follows:

S. No.	Description	Area (sqm)	Area (Acre)
1.	Plant area	2,500	0.61
2.	Office Building	100	0.024

3.	Common toilets/ security cabin/ beverage room/	500	0.12
	store room		
4.	Internal approach roads	2,500	0.61
5.	Leachate evaporation pond	2,500	0.61
6.	Horticulture area	8,862.54	2.19
7.	SLF	8,000	1.97
8.	Vehicle parking shed	180	0.04
	Total SLF area	25,143	6.174
9.	MRF and compost pit	10,521.75	2.6
10.	Private Land	16,187.30	4
	Total Site Area	51,852	12.774

- xiv. Water requirement during construction phase will be 0.5 KLD and will be supplied through tankers. During operation phase water requirement will be 20 KLD and will be sourced through ground water.
- xv. During operation phase Leachate generation will be 15 KLD. Leachate will be collected in leachate collection pit and treated in treatment plant of 20 KLD capacity. During construction phase 0.4 KLD of sewage will be generated which will be disposed off through soak pit.
- xvi. Power requirement during operation phase will be 49 KW and will be met through UHBVN. 1 No. of DG set of 50 KVA capacity will be used as backup.
- xvii. Employment potential: Approx.10-12 individuals will be benefitted directly.
- xviii. Estimated cost of the project is \gtrless 28 Crores.
- xix. Benefits of the project: No open dumping of waste will be carried out, which leads to soil, water & air pollution. Also littering waste is ground for breeding mosquitoes, which become agents of various deadly diseases. This project involves scientific management of waste which will prevent environmental pollution & spread of disease.

2.The EAC noted that the project/activity is covered under category 'B' of item 7(i) 'Common Municipal Solid Waste Management Facility (CMSWMF)' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at State level. However, General Condition is applicable due to the project being located in a Critically Polluted Area as defined by CPCB. Therefore, the project comes under category 'A' and requires appraisal at Central level by sectoral EAC

3. The EAC (Infra-2), based on the information and clarifications provided by the Project Proponent and detailed discussions held on all the issues, recommended for grant of Terms of Reference as specified by the Ministry as Standard ToR in April, 2015 for the said project/activity and the following ToR in addition to Standard ToR for preparation of EIA-EMP report:

i. Importance and benefits of the project.

- ii. A sensitivity analysis of the site shall be carried out as per the MoEF&CC criteria and form part of the EIA report.
- iii. The EIA would include a separate chapter on the conformity of the proposals to the Municipal Solid Waste Management Rules, 2016 and the Construction and Demolition Waste Management Rules, 2016 including the sitting criteria therein.
- iv. Characteristics and source of waste to be handled and methodology for remediating the project site, which is presently being used for open dumping of garbage.
- v. Details of storage and disposal of pre-processing and post-processing rejects/inerts.
- vi. List of proposed end receivers for the rejects/inerts should be provided. MoUs to be submitted in this regard.
- vii. Details of various waste management units with capacities for the proposed project. Details of utilities indicating size and capacity to be provided.
- viii. The EIA would also examine the impacts of the existing land fill site and include a chapter on the closure of the exiting site including disposal of accumulated wastes and capping.
 - ix. A pond is present at 200 m from the project site. EIA should include the impact of the proposed project on the pond's water quality.
 - x. The project proponents should consult the Municipal solid waste Management manual of the Ministry of Urban Development, Government of India and draw up project plans accordingly.
- xi. Waste management facilities should maintain safe distance from the nearby pond.
- xii. Layout maps of proposed solid waste management facilities indicating storage area, plant area, greenbelt area, utilities etc.
- xiii. Details of air emission, effluents generation, solid waste generation and their management.
- xiv. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract).
- xv. Process description along with major equipment's and machineries, process flow sheet (quantitative) from waste material to disposal to be provided.
- xvi. Hazard identification and details of proposed safety systems.
- xvii. Details of Drainage of the project upto 5 km radius of study area. If the site is within 1 km radius of any major river, peak and lean season river discharge as well as flood occurrence frequency based on peak rainfall data of the past 30 years. Details of Flood Level of the project site and maximum Flood Level of the river shall also be provided.
- xviii. Details of effluent treatment and recycling process.
 - xix. Action plan for measures to be taken for excessive leachate generation during monsoon period.
 - xx. Detailed Environmental Monitoring Plan.
 - xxi. Timeline for implementation of the project shall be included in the EIA Report.

- xxii. Report on health and hygiene to be maintained by the sanitation workers at the work place.
- xxiii. A tabular chart with index for point wise compliance of above ToRs.

AGENDA ITEM No. 66.3.3

Proposed Shillong Peak Ropeway of 955-meter length from Lawsohtun to Shillong Viewpoint, Shillong, Meghalaya by Directorate of Tourism, Government of Meghalaya- Terms of Reference

(IA/ML/MIS/205504/2021; F. No. 21-49/2021-IA-III)

1.The PP (M/s. Directorate of Tourism, Government of Meghalaya) along with his consultant 'M/s. RITES Limited.made a presentation before EAC (Infra-2) on the key parameters and salient features of the project. The Committee took note of the following key parameters and salient features of the project presented during the meeting and as provided in the brief and application for this project:

- i. The project is located at Shillong, Meghalaya.
- ii. The project is new.
- Land on Upper Terminal belongs to the Riat Laban Darbar, which will be leased to the Tourism Department, Government of Meghalaya. Land on Lower Terminal belongs to the State Forest Department, Government of Meghalaya, which will be transferred to the Tourism Department. Hence, permanent change of land use is expected due to development of thisproject.
- iv. Land use around the site up to 10 km radius is predominately Settlement and Agriculture followed byForest.
- v. While selecting the appropriate alignment, following approach & methodology was adopted:
 - a. Availability of adequate space for terminals i.e. Lower Terminal and Upper Terminal. b. Easy land acquisition.
 - b. Ropeway system matching with traffic and construction point of view.
 - c. Easy connectivity to terminals from adjacent area.
 - d. Minimum rehabilitation and tree cutting.
 - e. Easy traffic handling at terminal stations.
- vi. The project site partially lies with the Upper Shillong Protected Forest.Total 2.3 Hectare of forest land is involved for the development of project. Forest Clearance is required for which application is yet to be submitted.
- vii. The general features of the project area are given as follows:

S. No.	Parameters	Description
1.	Seismic Zone	Zone V as per Seismic Zoning Map of India

2.	Terrain	Hilly
3.	State boundaries	Nil (within 15 km radius)
4.	Defence Installations	Shillong Cantonment Board, 1.88 km
5.	Ecological Sensitive Places	Shillong Protected Forest
6.	Critically Polluted Area as per CPCB	Nil (within 15 km radius)
7.	Existing Land Use Pattern	Forest land
8.	Climate Data	Minimum Temperature: 4° C
9.	Project Cost	₹ 83.56 Crore
10.	Construction Time	12 Months
11.	Employment Generation	During Operation: 35 Nos

viii. The salient features of the project are given as follows:

S. No.	Parameters	Description
1.	System	Mono Cable Detachable Gondola
2.	Lower Terminal Point (LTP)	Existing forest nursery Riat Laban near Madan Laban Nepali Secondary School.
3.	Upper Terminal Point (UTP)	End of the Fire line
4.	Alignment	Straight
5.	Horizontal length , m	955
6.	Ropeway Capacity, PPH	2500 PPH
7.	Line speed, m/sec.	6
8.	Cabin capacity, passenger	8
9.	Headway, Sec	48
10.	Travel time	3 min, 10 sec
11.	Nos. of cabin	8 Nos., 34 Nos.
12.	Diameter of Rope	40-52 mm
13.	Rope Length	2390m
14.	Motor Power	360-560 KW
15.	No. Of Towers	5
16.	No. Of Station	2
17.	Stand by D.G. set	750 KVA and 100 KVA.
18.	Water Requirement	Construction phase: 5 KLD Operation phase: 62 KLD
19.	Power Requirement	Power connection of the order 1 MVA is required at lower station and about

		100KVA is required for Upper Terminal Station.
20.	Power Supply	Meghalaya Energy Corporation Limited (MECL)
21.	Backup Power	750 KVA, 100KVA
22.	Solid Waste Generated	Construction phase: 6 Kg/day Operation phase: 407 Kg/day
23.	Parking	283

ix. Building construction proposed at terminals:

Lower Terminal Point:

i.

- a. It should be fully covered RCC and high strength hollow blocks to prevent injury during wall collapse.
- b. The station will have G + four floors segregating waiting area from boarding, de-boarding area at fourth floor. The waiting area, recreational facilities, restaurant, sanitary block, etc. will be situated on the third floor and boarding, de-boarding area will be on the fourth floor.
- c. The recommended passenger waiting area of the proposed ropeway station should not be less than 1.2 Sqm per person. This will provide sufficient space for waiting and circulation. The area can be made airconditioned for more comfort. Reception area is proposed at the groundfloor
- d. Parking Two-wheeler and four-wheeler parking area of 6000 sqm is proposed on ground floor, 1st floor and secondfloor.
- e. DG set of minimum 750 KVA is also proposed at this ropewaystation.
- f. Control room, ticketing, administration office, cabin garage will be on the thirdfloor.
- ii. Upper Terminal Point:
 - a. It should be fully covered RCC and high strength hollow blocks to prevent injury during wallcollapse.
 - b. The station building will have G + three floors. At UTP parking is not required. The recreational facilities, waiting area, food court, sanitary block, etc. will be situated on the ground floor, first floor and second floor. The Boarding, deboarding will be on the third floor along with control room, ticketing, administration office, cabingarage.
 - c. A DG set of about 100 KVA is proposed at upper terminalstation.
 - d. The recommended passenger waiting area at upper station of the proposed ropeway should not be less than 1.2 Sqm per person. This will provide sufficient space for waiting and circulation.
 - e. 10 m wide pathway of approx. 85 m from station to viewpoint isproposed.

r		1	1	-
Year/Month	2015	2016	2017	2018
Jan	41607	46276	53941	69104
Feb	45872	42874	54405	68956
Mar	44699	53838	58099	72140
Apr	25501	39318	62968	86806
May	71801	62277	74317	110376
Jun	77313	69059	79087	93558
Jul	70196	78475	92726	108488
Aug	52238	59452	61949	123868
Sep	51222	60570	71523	72755
Oct	64155	74433	78531	98544
Nov	50957	59985	70928	90242
Dec	48830	60262	77493	99588
Total	644391	706819	835967	1094425
Avg.Traffic				
Permonth	53700	58901	69663	91202
Peak Traffic	44%	33.20%	33%	21%
Average% Peak Traffic	k 32.80%			

x. Expected influx of people is given as follows:

- xi. The water requirement during construction phase will be 5 KLD and 62 KLD during operation phase. Water shall be sourced through municipal water supply. The sewage generated from the project during construction will be 4 KLD and during operation 50 KLD. It will be treated in Modular STP.
- xii. Solid waste generation will be 6 kg/day during construction phase and 407 kg/day during operation phase.
- xiii. Power connection of the order 1 MVA is required at lower station and about 100KVA is required for Upper Terminal Station. Each station should have independent power supply from the state electricity board. 11 KV power supply is available near proposed LTP by the Meghalaya Energy Corporation Limited (MECL). The commercial power at 415V should be made available for station building etc. at LTP and UTP. The power shall be supplied from main substations. During power failure DG sets of 750 KVA at LTP and 100 kVA at UTP isproposed.
- xiv. The project is not located in Critically Polluted Area.
- xv. The baseline data will be collected in the non-monsoon period.
- xvi. There is no court case against the project.
- xvii. Investment/Cost of the project is ₹ 83.56 (incrore).
- xviii. Employment potential: 35 Number of staff will be directly employed during operation.
- xix. Benefits of theproject: To reach the Shillong Peak view point, Cantonment area needs to be crossed. Due to security reasons, heavy checking is done at the gates, and tourists are asked to deposit their

cameras. Due to high traffic it takes minimum 1 hour to reach Air Force Entrance Gate. As limited area is available at viewpoint, the vehicle is stopped at the entrance gate and Air force allows vehicle to go to the viewpoint if any other vehicle is not retuning back from viewpoint. Because of this, approximate 1- 1:30 Hrs extra waiting is needed at Air Force entrance. Tourists are permitted from air force entrance only between 9:00 AM to 03:00 PM. Due to more waiting time and limited visit hours, many tourists are not able to visit Shillong Viewpoint. In order to remove above discussed problems Government of Meghalaya has proposed a construction of ropeway from Riat Laban to Shillong Viewpoint and intends that a feasibility report for the same will be worked out. Elderly, children, disabled people who needs to climb the hill will be able to take safe and convenient travel by using ropeway.

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

3. The EAC noted that the proposed project is in a sensitive location w.r.t environmental aspects as well as national security due to close proximity to Cantonment area. The committee also expressed dissatisfaction with the feasibility report and the presentation and found it lacking in regards of site photographs, current site scenario as well as proper justification for the need for the proposed project.

4. 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 and asked the Project Proponent to provide the following additional information:

- i. Detailed Project Feasibility Report including recent site photographs and considering the suitability of the site w.r.t seismicity, rainfall, landslides etc.
- ii. NOC from Defence Cantonment Board and Airport Authority of India.
- iii. Forest Clearance.

AGENDA ITEM NO. 66.3.4

Establishment of Hotel Cum Commercial Project namely "Carpe Diem" at Kharar, Tehsil Kharar district SAS Nagar Punjab by M/s Credo Assets (P) Ltd –Reconsideration for Amendment in Environmental Clearance

(IA/PB/MIS/184936/2020; F. No. 21-102/2020-IA.III)

1. The EAC noted that the proposal was earlier examined in its 58th Meeting held on 17th December, 2020, wherein the project was recommended for

amendment of EC. However, on examination in the ministry, it was found to be a case of expansion rather than amendment. Accordingly, the PP was asked for following additional information:

- i. Revised Application by the way of submitted dully signed FORM-1, FORM-1A and Conceptual Plan so as to seek Environmental Clearance for expansion of the project in question.
- ii. Certified Compliance Report providing status of compliance of the conditions mentioned in existing Environmental Clearance (EC) issued by State Level Environment Impact Assessment Authority (SEIAA), Punjab vide their letter No. DECC/SEIAA/2020/1811 dated 29.07.2020.
- iii. Status of construction activity completed as per existing EC and as on 01.02.2021.

2. The PP (M/s Credo Assets (P) Ltd) along with his consultant 'M/s Chandigarh Pollution Testing Laboratory – EIA Division' made a presentation and provided the following information:

i. The response to the ADS is given as follows:

S.No.	Observations	Reply
1	Revised Application by the way of submitted dully signed FORM-1, FORM -1A and Conceptual Plan as reply to this ADS so as to seek Environmental Clearance for expansion Hotel Cum Commercial Project namely "Carpe Diem" at	The instant case pertains for Amendment in EC without any change in land & builtup area. Total plot area will remain 11098 sqm with total construction (Built-up) area of 34,939 sqm as per earlier EC.
	Kharar, Tehsil Kharar district SAS Nagar Punjab.	Only change is project configuration is proposed.
2.	Certified Compliance Report providing status of compliance of the conditions mentioned in existing Environmental Clearance (EC) issued by State Level Environment Impact Assessment Authority (SEIAA), Punjab vide their letter No. DECC/SEIAA/2020/1811 dated 29.07.2020.	Amendment in EC without any change in land & built up area and does not require Certified Compliance Report as the same is required for expansion cases. (Ref: MoEF&CC circular dated 30 th May, 2012)
3.	Status of construction activity completed as per existing EC and as on 01.02.2021.	No construction has been started till now.

ii. The details of the proposed amendment are given as follows:

Parameter	Existing as per EC dated 29.07.2020	Proposed Amendment	Total after Amendment
Plot area	11098 sqm	NA	11098 sqm

D 11	0.4000	37.4	0.4000
Built – up area	34939 sqm	NA	34939 sqm
Rooms	318 Rooms	+242 Rooms	560 Rooms
Shops	11 Shops	+17 Shops	28 Shops
Estimated	499 persons	+397 persons	896 persons
population			_
Power	1800 KW	+1000 KW	2800 KW
requirement			
Total Domestic	84 KLD	+65 KLD	149 KLD
Water			
Requirement			
Waste Water	67 KLD	+52 KLD	119 KLD
Generation			
Flushing Water	21 KLD	+16 KLD	37 KLD
Required			
Waste Water	46 KLD	+35 KLD	81 KLD
into Sewer			
Mode of	Reuse in flushing, green area & sewer		
Disposal			
Solid Waste	100 Kg/Day	+247 Kg/Day	347 Kg/Day
Generation			
STP capacity	150 KLD	NA	150 KLD
D.G SETS	1x500, 1x 125	NA	1x500, 1x 125
	KVA & 63 KVA		KVA & 63 KVA

3. The EAC also 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 Punjab at the time of initial consideration of the proposal, it required appraisal at Central level by sectoral EAC.

4. The EAC also noted that the PP has submitted an affidavit stating that the number of rooms and shops were incorrectly given in the previous EC due to typographical error and that there is no change in plot area or the built-up area of the project. It was also noted that although there is increase in pollution load due to the change in project parameters, the STP capacity as per the earlier EC is sufficient to handle the additional load and no expansion is required in this regard.

5. The EAC found the response to the queries as satisfactory. The EAC (Infra-2), based on the information and clarifications provided by the Project Proponent and detailed discussions held on all the issues, recommended amending the environmental clearance granted by SEIAA Punjab vide their letter No. DECC/SEIAA/2020/1811 dated 29.07.2020 to the extent of project parameters as mentioned in table under para 1(ii) above of this agenda item. All other conditions, as specified in the aforesaid EC letter shall remain unchanged.

AGENDA ITEM NO. 66.3.5

Establishment of a Commercial Mall namely "Homeland Mall" in Sector 67, Distt. SAS Nagar (Mohali), Punjab by M/s. A.B ALCOBEV (P) Ltd. – Reconsideration for Environmental Clearance

(IA/PB/MIS/185207/2020; F. No. 21-104/2020-IA.III)

1. The EAC noted that the proposal was earlier examined in its 58th Meeting held on 17th December, 2020, wherein the project was recommended for amendment of EC. However, on examination in the ministry, it was found to be a case of expansion rather than amendment. Accordingly, the PP was asked for following additional information:

- i. Revised Application by the way of submitted duly signed FORM-1, FORM -1A and Conceptual Plan so as to seek Environmental Clearance for expansion of the project in question.
- ii. Certified Compliance Report providing status of compliance of the conditions mentioned in existing Environmental Clearance (EC) issued by State Level Environment Impact Assessment Authority (SEIAA), Punjab vide their letter No. SEIAA/2016/3149 dated 22.08.2016.
- iii. Status of construction activity completed as per existing EC and as on 15.02.2021.

2. The PP (M/s. A.B ALCOBEV (P) Ltd.) along with his consultant 'M/s. Eco Laboratories & Consultants Pvt. Ltd.' made a presentation and provided the following information:

i. Revised Form-I, Form-IA and Conceptual Plan stating the expansion of project has been submitted. The details of the project are given as follows:

S. No.	Description	EarlierECaccorded	Proposed	Total(AfterExpansion)
	Name of the Project	Homeland Mall	-	C.P. 67
2	Total Plot Area	16,888.620 sqm (or 4	.17acres)	
3	Components	100 service apartments, cinema having 1500 seats, hotel having100 rooms, commercial & offices	-560 seats of multiplex, & club	100 studio hotel rooms, 940 seats for cinema, retail, office block & club
4	Built up Area	92,205.87 sqm	15,990.43 sqm	1,08,196.296 sqm
	Estimated Population	6,857 Persons	4,080 Persons	10,937 Persons

6	Domestic Water Demand	402 KLD	-32 KLD	370 KLD (Freshwater Demand=239KLD)
7	Wastewater Generated	322KLD	-20KLD	302 KLD
8	STP capacity	Proposed STP of 390 K	LD capacity	
9	Solid waste generation	1,491 kg/day	1,076 kg/day	2,567 kg/day
10	Power Load	8,000 KW	-4,034 KW	3,966 KW
11	DG sets	4 No. of DG Sets (2 No. of capacity 1500 KVA each and 2 No. of capacity 240 KVA each)	Change in capacity of DG sets	5 No. of DG sets (4No. of capacity 1500 KVA and 1 DG set of capacity 500 KVA)
12	Parking Proposed	914 ECS	140 ECS	1054 ECS
13	Project Cost	₹160.0Crores	₹276.61 crores	₹436.61 crores

- ii. Verified Compliance Letter has been received from MoEF&CC vide F.No. 16-27/2016-RO(NZ)/276-277-278 dated 15.04.2021; Reply regarding the observations raised on verification of compliance of earlier Environmental Clearance has been submitted.
- iii. Construction of 85,407 sqm out of 92,205.87 sqm has been done as on 15.02.2021 as per previous accorded EC. Undertaking stating the same has been submitted.

3. The EAC also 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 Punjab at the time of initial consideration of the proposal, it required appraisal at Central level by sectoral EAC.

4. The EAC found that the plot area as per earlier EC (issued by SEIAA Punjab vide letter No. SEIAA/2016/3149 dated 22.08.2016) is only 16,556 sqm, whereas it is given as 16888.620 sqm and 16875.39 sqm in the Conceptual Plan and presentation. As such, the committee decided to defer the project and asked the PP to clarify the same and resubmit Form-1, Form – 1A and Conceptual Plan with correct information.

AGENDA ITEM NO. 66.3.6

Group housing project "Green Lotus Avenue" earlier "Maya Garden Avenue", Village Singhpura, Adjoining Cosmos Plaza, Zirakpur-Ambala Highway, Zirakpur, S.A.S Nagar, Punjab by M/s Barnala Developers-Reconsideration for Environmental Clearance

(IA/PB/MIS/189229/2020; F.No. 21-113/2020-IA-III)

1. The EAC noted that the proposal was earlier examined in its 59th Meeting held on 8th January, 2021, wherein the project was recommended for amendment of EC. However, on examination in the ministry, it was found to be a case of expansion rather than amendment. Accordingly, the PP was asked for following additional information:

- i. Revised Application by the way of submitted duly signed FORM-1, FORM -1A and Conceptual Plan so as to seek Environmental Clearance for expansion of the project in question.
- ii. Certified Compliance Report providing status of compliance of the conditions mentioned in existing Environmental Clearance (EC) issued by State Level Environment Impact Assessment Authority (SEIAA), Punjab vide their letter No. SEIAA/2953 dated 28.05.2015.
- iii. Status of construction activity completed as per existing EC and as on 15.02.2021.

2. The PP (M/s. Barnala Developers) along with his consultant 'M/s. Eco Laboratories & Consultants Pvt. Ltd.' made a presentation and provided the following information:

i. Revised Form-I, Form-IA and Conceptual Plan stating the expansion of project has been submitted. Earlier, plot area was wrongly mentioned as 14,888.50 sqm due to typographic error. However, correct plot area is 14,388.07 sqm. Further, due to change in planning i.e. upgradation of some flats from 2 BHK to 3BHK; accordingly, built-up area has been slightly increased from 38,282 sqm to 39,874.95 sqm and no. offlats reduced from 302 flats to 235 flats. Comparison between accorded EC and details after expansion are given as follows:

S.No.	Description	EC Accorded	Proposed	Total (After
	-		Variation	Expansion)
1.	Name of the	Maya Garden	-	Green Lotus
	Project	Avenue		Avenue
2.	Total Site	14,888.50 sqm	-500.43 sqm	14,388.07 sqm
	Area	(or 3.679 acres)		(or 3.555 acres)
3.	Built-Up	38,282 sqm	+ 1,592.95 sqm	39,874.95 sqm
	Area			
4.	Features	302 Flats & 10	-67 Flats	235 Flats, Club
		Shops	-10 Shops	& Gymnasium
			+ Club &	
			Gymnasium	
5.	Green Area	2,560 sqm	-321.35 sqm	2,238.65 sqm

6.	Population	1,530 no.	-237 no.	1,293 no.	
7.	Domestic	205 KLD	-41 KLD	164 KLD	
	Water				
	Demand				
8.	Wastewater	164 KLD	-33 KLD	131 KLD	
	Generation				
9.	STP	Already installed STP of capacity 175 KLD			
	Capacity				
10.	Flushing	53 KLD	+2 KLD	55 KLD	
	Water				
	Requirement				
11.	Solid Waste	608 kg/day	-114 kg/day	494 kg/day	
12.	Power Load	1,700 KW	-553 KW	1147 KW	
13.	DG Sets	500 KVA & 200 KVA (Already installed)			
		Proposed 1 DG of capacity 500 kVA			
14.	Cost of project	Å Å Å			

- ii. Verified Compliance Letter has been received from MoEF&CC vide Letter no. 5-794/2015-RO(NZ)/313-314-315 dated 27.04.2021. Reply regarding the observations raised on verification of compliance of earlier Environmental Clearance has been submitted.
- iii. Construction of 37,899 sqm out of 38,282 sqm has been done as on 15.02.2021 as per previous accorded EC. Undertaking stating the same has been submitted.
- iv. Partial Consent to Operate (Air & Water) has been obtained for 103 no. of flats from PPCB vide Letter no. CTOW/Fresh/SAS/2018/8013558 & CTOA/Fresh/SAS/2018/8014535 dated 21.11.2018 which was valid till 31.03.2019 and 31.03.2023 respectively. Application was filed to PPCB for CTO renewal, but the same was refused for not obtaining revised Environmental Clearance for increase in built-up area. Thus, the CTO (Air & Water) renewal application will be filed immediately after grant of revised EC.

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

4. The EAC informed the PP regarding complaint received alleging that the project is a case of violation and that PP and consultant have submitted incorrect information in the application form and affidavit. As such, the Committee was of the opinion that decision on the project can be taken only after proper clarification is received from the PP in this regard.

AGENDA ITEM NO. 66.3.7

Group Housing Project namely "Altura Jagan'z Classic Residency" located at Nagla Road, Singhpura, Zirakpur, Distt. S.A.S Nagar (Mohali), Punjab by M/s D.D.Builders – Reconsideration for Environmental Clearance

(IA/PB/MIS/185222/2020; F. No. 21-103/2020-IA.III)

1. The EAC noted that the proposal was earlier examined in its 58th Meeting held on 17th December, 2020, wherein the project was recommended for amendment of EC. However, on examination in the ministry, it was found to be a case of expansion rather than amendment. Accordingly, the PP was asked for following additional information:

- i. Revised Application by the way of submitted dully signed FORM-1, FORM -1A and Conceptual Plan so as to seek Environmental Clearance for expansion of the project in question.
- ii. Certified Compliance Report providing status of compliance of the conditions mentioned in existing Environmental Clearance (EC) issued by State Level Environment Impact Assessment Authority (SEIAA), Punjab vide their letter No. SEIAA/2986 dated 28.05.2015.
- iii. Status of construction activity completed as per existing EC and as on 15.02.2021.

2. The PP (M/s. D.D.Builders) along with his consultant 'M/s Eco Laboratories & Consultants Pvt. Ltd.' made a presentation and provided the following information:

i. Revised Form-I, Form-IA and Conceptual Plan stating the expansion of project has been submitted. Comparison between accorded EC and details after expansion are given as follows:

S.No.	Description	Earlier EC	Proposed	Total
		accorded		(After
				Expansion)
1	Total Plot		3.93 acres	
	Area			
2	Components	259 No. of Flats	3 No. of Flats, One	262 No. of
		along with shops	Meeting Hall	Flats, One
			And shops	Meeting Hall,
				10 No. of Shops
3	Builtup Area	31,429 sqm	8,865.47 sqm	40,294.47 sqm
4	Estimated	1,295 Persons	166 Persons	1,461
	Population			Persons
5	Domestic	175 KLD	9 KLD	184 KLD
	Water			
	Demand			
6	Wastewater	140 KLD	15 KLD	155 KLD
	generated			

7	STP capacity	Proposed STP of 200 KLD capacity			
8	Solid waste generation	518kg/day	36kg/day	554kg/day	
9	PowerLoad	1,400KW			
10	DG sets	4 DG Sets (2 X 500 KVA, 1 X 125 KVA and 1X 63 KVA)	Changeincapacityof DGsets	3DG Sets (2X 200 KVA and 1 X 380 KVA)	
11	Project Cost	₹98 Crores	₹ 10.79 Crores	₹ 108.79 Crores	

- ii. Verified Compliance Letter has been received from MoEF&CC vide Letter no. 5-795/2015-RO (NZ)/292-293-294 dated 19.04.2021. Reply regarding the observations raised on verification of compliance of earlier EChas been submitted.
- iii. Construction of 17,873 sqm out of 31,429 sqm has been done as on 15.02.2021 as per previous EC. Undertaking stating the same has been submitted.
- iv. Partial Consent to Operate (CTO) has been obtained from PPCB for 102 flats vide dated 07.05.2021 which is valid upto 31.03.2023.

3. The EAC also 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 Punjab at the time of initial consideration of the proposal, it required appraisal at Central level by sectoral EAC.

4. The EAC found that the plot area as per earlier EC (issued by SEIAA Punjab vide letter No. SEIAA/2986 dated 28.05.2015) is 16,461 Sqm whereas plot area is mentioned as 15903.209 sqm (3.93 acres) in Form-1, Form -1A and Conceptual Plan. Also, project name is mentioned as 'Jagan'z Classic Residency' as per previous EC and as "Altura Jagan'z Classic Residency" as per current application. However, name change has not been requested as per application form. As such, the committee decided to defer the project and asked the PP to clarify the same and resubmit Form-1, Form - 1A and Conceptual Plan with correct information.

AGENDA ITEM NO. 65.3.8

Construction of Group Housing Society on Residential Plot with increase in built-up area from 22761.528 sqm to 32,624.75 sqm at Plot No. 8 B, Sector - 11. Dwarka, New Delhi by M/s Modest Ketki Corp. Group Housing Society Ltd. – Reconsideration for Amendment in Environmental Clearance

(IA/DL/MIS/210804/2021; F. No. 21-48/2020-IA-III)

1. The EAC noted that the proposal was earlier examined in its 65th Meeting held during 27-28 May, 2021. The PP was asked for following additional information:

- i. Submission of approved layout plan for the proposed expansion.
- ii. Clarification on variation in built-up area and height of building w.r.t to existing EC.
- iii. Detailed breakup of the total built-up area and proposed amendment.

2. The PP (M/s. Modest Ketki Corp. Group Housing Society Ltd.) along with his consultant 'ATMOS Sustainable Solutions Pvt. Ltd.' made a presentation and provided the following information:

- i. Building plan approval is under processes and will be approved after submitting the Environment Clearance to the concerned office.
- Area Statement (All Details in sqm) and Other Details As Per Previous EC TotalPlotArea 13000.00 sqm FARArea 25,965.17 sqm StiltArea 1,945.92 sqm 199.08 (say 200) sqm CommunityArea BasementArea 4,513.656 sqm Built Up area 32,624.75 sqm Permissible Existing Permissible Proposed 21710.00 22761.53 26000 25965.17 FAR (sqm) (167%) (175.088%)(199.74%)(200%)
- ii. Area bifurcation as per previous EC is given as follows:

iii. Proposed area bifurcation (for amendment) is given as follows:

Area Statement (All Details in sqm) and Other Details				
		As per plan [Existing + Amendment] sqm		
Total Plot Area	А	13000.00 sqm		
Balconyarea(Freeof	В	11,188.35 sqm		
FAR)				
ESS	С	160 sqm		
GuardRoom	D	9.95 sqm		
CommonToilet	Е	8.75 sqm		
ATM	F	9.00 sqm		
Reduction of	200 sqm - 199.08	0.92 sqm		
previous	sqm			

community hall area		
Non-FAR Area	G = (B+C+D+E+F-	11375.13 sqm
	0.92)	
Previous EC Built-Up	Н	32,624.75 sqm
Area		
Total Built Up area	I= (G+H)	43,999.88 sqm
Height of Building		33.35 m

- iv. In the earlier EC, BUA was 32,624.75 sqm. This figure came through by adding FAR (25,965.17 sqm) + Stilt (1945.92 sqm) +Community area (200 sqm){which is actually a round off figure of 199.08 sqm} + Basement (4513.656 sqm). However, the actual BUA is 43,999.88 sqm, which apart from the former should have also comprised of ESS (160 sqm) + Guardroom (9.95sqm) + Common toilet area (8.75sqm)+ ATM (9 sqm). This all adds up to 43,999.88 sqm.
- v. The figure of 11,375.13 sqm comprises of the left out areas of Non-FAR, which were not mentioned in the earlier EC collectively i.e.
 - a. Balcony area 11,188.35 sqm
 - b. Guard room 9.95 sqm
 - c. Common toilet 8.75 sqm
 - d. ATM 9 sqm
 - e. ESS 160 sqm
- vi. Addition of the total (i.e., balcony area, guard room, common toilet, ATM and ESS) minus the 0.92 sqm (which is the difference in the calculation mentioned in the community hall area) comes to11,375.13 sqm.
- vii. As per the suggestion of the Hon'ble committee we would like clarify that the maximum height of the building was never 25 mtrs as mentioned in the previous environment clearance letter. The correct maximum height of the building is 33.35 mtrs. Affidavit certifying the same along with Section Elevation Plan is submitted with breakup of total built-up area details for further clarification.

2. The EAC noted that the project/activity is covered under category 'B' of item 8(a) 'Building and Construction projects' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at State level. However, due to non-existence of SEIAA in Delhi, the proposal required appraisal at Central level by sectoral EAC.

3. The EAC found the response to the queries as satisfactory. The EAC (Infra-2), based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, recommended amending the environmental clearance granted vide F. No. 21-48/2020-IA-III dated 18.11.2020 to the extent of project parameters as mentioned in table under para 1(iii). All other conditions, as specified in the aforesaid EC letter shall remain unchanged.

66.4 Any other item with the permission of Chair: The Member Secretary informed the committee of the representation dated 12.04.2021 received from M/s Gomti Incinco requesting for reconsideration of their proposal for 'Expansion of Common Hazardous Waste Incineration Facility at Plot No. 3-B-2, First Phase, KIADB Industrial Area, Kumbalgodu, Mysore Road, Bengaluru'. The proposal was earlier considered during the 63rd meeting of EAC (Infra 2) held on 19th March, 2021, wherein the project was deferred on being identified as a violation case. The committee was of the opinion to verify the matter with the violation division in the Ministry before arriving at a decision in this regard.

LIST OF PARTICIPANTS OF EAC (INFRASTRUCTURE-2) IN 66th MEETING OF EAC (INFRA-2) HELD ON 16th JUNE, 2021 THROUGH VIDEO CONFERENCING

S.	Name	Designation	Attendance	Sign
No.		_	16.06.2021	Thro VC
1.	Dr. N. P. Shukla	Chairman	Р	-
2.	Dr. H. C.	Member	Р	-
	Sharatchandra			
3.	Shri V. Suresh	Member	Р	-
4.	Dr. V. S. Naidu	Member	Р	-
5.	Shri B. C. Nigam	Member	Р	-
6.	Dr. Manoranjan Hota	Member	Р	-
7.	Dr. Dipankar Saha	Member	Р	-
8.	Dr. Jayesh Ruparelia	Member	Р	-
9.	Dr. (Mrs.) Mayuri H.	Member	А	-
	Pandya			
10.	Dr. M. V. Ramana	Member	Р	-
	Murthy			
11.	Prof. Dr. P.S.N. Rao	Member	А	-
12.	Dr. Dharmendra	Scientist F &	Р	-
	Kumar Gupta	Member		
		Secretary		

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 NOx in reference to SO₂ and NOx emissions) within and outside the airport area at least at four locations (one within and three outside the plant area at an angle of 120°each), covering upwind and downwind directions.
- (ii) Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.
- (iii) A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.
- (iv) Soil and other construction materials should be sprayed with water prior to any loading, unloading or transfer operation so as to maintain the dusty material wet
- (v) The excavation working area should be sprayed with water after operation so as to maintain the entire surface wet.
- (vi) Excavated materials shall be handled and transported in a manner that they do not cause any problems of air pollution.
- (vii) The soil/construction materials carried by the vehicle should be covered by impervious sheeting to ensure that the dusty materials do not leak from the vehicle.

III. Water quality monitoring and preservation:

- (i) Run off from chemicals and other contaminants from aircraft maintenance and other areas within the airport shall be suitably contained and treated before disposal. A spillage and contaminant containment plan shall be drawn up and implemented to the satisfaction of the State Pollution Control Board.
- Proper drainage systems, emergency containment in the event of a major spill during monsoon season etc. shall be provided.

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

IV. Noise monitoring and prevention:

- (i) Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
- (ii) Noise from vehicles, power machinery and equipment on-site should not exceed the prescribed limit. Equipment should be regularly serviced. Attention should also be given to muffler maintenance and enclosure of noisy equipments.
- (iii) Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.
- (iv) During airport operation period, noise should be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.
- (v) Where construction activity is likely to cause noise nuisance to nearby residents, restrict operation hours between 7 am to 6 pm.

V. Energy Conservation measures:

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

VI. Waste management:

- 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 anv infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- (iii) A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
- (iv) Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- (v) Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

X. Miscellaneous:

- (i) The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular 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_{10} , $PM_{2.5}$, SO_2 , NOx (ambient levels) shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
- (vii) The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- (viii) The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- (ix) The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- (x) No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- (xi) Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- (xii) The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- (xiii) The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- (xiv) The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data/ information/monitoring reports.
- (xv) The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts/NGT and any other Court of Law relating to the subject matter.
- (xvi) Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

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 NOx in reference to SO₂ and NOx emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120°each), covering upwind and downwind directions.
- iv. Sampling facility at process stacks and at quenching towers shall be provided as per CPCB guidelines for manual monitoring of emissions.
- v. The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- vi. Appropriate Air Pollution Control (As proposed, air pollution control device viz. gas quencher; treatment with mixture of hydrated lime and activated powder for adsorption of partial acidity and VOCs (if any); 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 approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to checks and balances and bring focus have proper to into anv infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

X. Miscellaneous:

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular 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; $PM_{2.5}$, PM_{10} , SO_2 , NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
- vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- viii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- x. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- xi. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts/NGT and any other Court of Law relating to the subject matter.
- xvi. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

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 devises (quenching, Venturi scrubber, mist eliminator) should be provided for compliance of emission standards.
- vi. Masking agents should be used for odour control.

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

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

X. Miscellaneous:

- i. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular languagewithin seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- v. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vi. The criteria pollutant levels namely; PM_{2.5}, PM₁₀, SO₂, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
- vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- viii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- x. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- xi. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts/NGT and any other Court of Law relating to the subject matter.
- xvi. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

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 and checks balances and to bring into focus have proper anv infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

X. Miscellaneous:

- i. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- v. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.

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

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.

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

V. Waste management:

- i. ETP sludge generated from CETP facility shall be handled and disposed to nearby authorized TSDF site as per Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.
- ii. Non-Hazardous solid wastes and sludge arising out of the operation of the CETP shall be adequately disposed as per the Consent to be availed from the State Pollution Control Board. Non-Hazardous solid wastes and sludge shall not be mixed with Hazardous wastes.
- iii. The CETP shall have adequate power back up facility, to meet the energy requirement in case of power failure from the grid.
- iv. The site for aerobic composting shall be selected and developed in consultation with and to the satisfaction of the State Pollution Control Board. Odour and insect nuisance shall be adequately controlled.
- v. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016.
- vi. The solid wastes shall be segregated, managed and disposed as per the norms of the Solid Waste Management Rules, 2016.

VI. Energy Conservation measures:

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

VII. Green Belt:

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

VIII. Public hearing and Human health issues:

- i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- ii. Adequate infrastructure, including power, shall be provided for emergency situations and disaster management.

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

IX. Corporate Environment Responsibility:

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

X. Miscellaneous:

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

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

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, NOx and CO from the incinerator stack. The periodical monitoring of Dioxins and Furans in the Stack emissions shall be carried out.
- iii. Analysis of Dioxins and Furans shall be done through CSIR-National Institute for Interdisciplinary Science and Technology (NIIST), Thiruvananthapuram or equivalent NABL Accredited laboratory.
- iv. Incinerator shall be designed as per CPCB guidelines. Energy shall be recovered from incinerator.
- v. Gas generated in the Land fill should be properly collected, monitored and flared.
- vi. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g., PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NOx in reference to SO₂ and NOx emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions.

- 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.
- All leachates arising from premises should be collected and treated in the ETP followed by RO.
 RO rejects shall be evaporated in MEE. Toxicity Characteristic Leaching Procedure (TCLP) test to be performed on leachates.
- viii. Scrubber water, leachate water or wheel wash effluent shall be treated in the effluent treatment plant followed by RO to achieve zero liquid discharge.
- ix. Sewage Treatment Plant shall be provided to treat the wastewater generated from the project. Treated water shall be reused within the project.
- x. A certificate from the competent authority for discharging treated effluent/ untreated effluents into the Public sewer/ disposal/drainage systems along with the final disposal point should be obtained.

IV. Waste management:

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

V. Transportation:

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

VI. Green belt:

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

VII. Public hearing and Human health/safety issues:

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

VIII. Corporate Environment Responsibility:

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 01.05.2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus anv infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.

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

IX. Miscellaneous:

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently. (for projects involving incineration)
- ii. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed (For projects involving only Landfill without incineration)
- iii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iv. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vii. The criteria pollutant levels namely; PM_{2.5}, PM₁₀, SO₂, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain (in case of incineration involved).
- viii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- ix. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- x. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- xi. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- xii. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xiii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiv. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xvi. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xvii. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

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

I. Statutory compliance:

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

- 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, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
- vi. Sand, murram, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.
- vii. Wet jet shall be provided for grinding and stone cutting.
- viii. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
- ix. All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Management Rules 2016.
- x. The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.
- xi. The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise

pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.

xii. For indoor air quality the ventilation provisions as per National Building Code of India.

- 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 bring have proper checks and balances and to into focus anv infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.

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

XI. Miscellaneous:

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