

MINUTES OF 88th MEETING OF EXPERT APPRAISAL COMMITTEE (INFRASTRUCTURE-2) HELD ON 19th MAY, 2022.

VENUE: Through Video Conferencing

DATE: 19th May, 2022

PROCEEDINGS

88.1 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.

88.2 Confirmation of Minutes of 87th Meeting of Expert Appraisal Committee (Infrastructure-2) held on 29th April, 2022.

The Expert Appraisal Committee (Infrastructure-2), hereinafter called the EAC, was informed that no representation has been received regarding projects considered in 87th meeting. Minutes of 87th 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.

88.3 Consideration of Proposals: The EAC considered proposals as per the agenda adopted for the 88th meeting. The details of deliberations held and decisions taken in the meeting are as under:

AGENDA ITEM NO. 88.3.1

Common Hazardous Waste Incinerator and Common Bio-Medical Waste Treatment Facility of 10 TPD capacity at Village Madhogarh, Barauli, Aligarh, Uttar Pradesh by M/s Globe Tech Hazardous Waste (India) Pvt. Ltd. – Terms of Reference

IA/UP/MIS/271724/2022; F. No. 21-51/2022-IA-III

1. The Project Proponent (M/s. Globe Tech Hazardous Waste (India) Pvt. Ltd.) along with their consultant 'M/s. Ind Tech House Consult', made a presentation on the key parameters and salient features of the project to the EAC (Infra-2). The EAC took note of following key parameters and salient features of the project, as presented during the meeting; provided in the brief and application for this project:

- i. The project is located at khasra no. 358, 359 mi and 370, Madhogarh Village, Gabhana Tehsil, Aligarh District, Uttar Pradesh.
- ii. The project is new.
- iii. Total land area of the proposed site is 22,110 sqm. The project components including the activities and facilities to be developed are listed as follows:

- a. Collection of incinerable hazardous wastes from industries
 - b. Collection of bio-medical waste from health care establishments
 - c. Transportation of the wastes to the project site
 - d. Weighting the wastes (Weighbridge)
 - e. Temporary storage of wastes
 - f. Incineration of hazardous wastes and incinerable bio-medical wastes (500 kg/hr) (i.e. 10 TPD)
 - g. Autoclaving (1000 l/hr)
 - h. Shredding (700 kg/hr)
 - i. Storage of shredded materials
 - j. Admin and Laboratory
- iv. Three sites have been examined and the best suited site has been selected for this project. The details of the sites examined for the establishment of the proposed plant are given as follows:

S.No.	Criteria	Site-1	Site-2	Site-3
1.	Site Address	Khasra No. 358, 359 mi, 370, Village Madhogarh, Barauli, Aligarh, UP	Khasra no. 802,803 village- Bahrauli, Aligarh, UP	Khata No. 194,195 Near Village-Bahrauli, Aligarh, UP
2.	Land Area	2.21 Ha	0.826 Ha	1.18 Ha
3.	Geographical Coordinates	28°03'20.16"N/ 78°02'58.66"E	28°04'56.62"N/ 78°03'19.18"E	28°06'02.22"N/ 78°03'20.56"E
4.	Nearest Habitation	There is no existing habitation within 500m.	There is existing habitation within 500m (approx. 119m) of the site.	There is existing habitation within 500m (approx. 200m) of the site
5.	Nearest School	There is no existing school within 500m	Shyami Lal Maheshwari Inter College at a distance of 7m, W Direction R.B.S Inter College at a distance of 300 m, S Direction	There is no existing school within 500m
6.	Nearest water body	Canal (for irrigation) is situated at an aerial distance of 5 m, E Direction	Upper Ganga Canal (for drinking) at a distance of 1000 m, NE direction	Ganga canal (for drinking) at a distance of 40 m, NE direction

- v. The proposed project site is an agricultural land. The land use of the project site will be converted from agricultural to industrial.
- vi. The project site is at the vicinity of an irrigation canal of about 10 m wide. To enable the approach road to the site from the existing road, culvert needs to be constructed on this irrigation canal so that the approach road can cross to the site.

- vii. There is no existing habitation within 500m from the proposed project site.
- viii. Total water requirement for proposed project is approx. 21 KLD. Out of that, fresh water requirement will be approx. 14.7 KLD which will be met through onsite groundwater abstraction. Necessary permission will be obtained. Effluent generated from Incinerator for cooling flue gas and from autoclave will be treated through in-house ETP. The treated effluent will be recycled back to the cooling process.
- ix. Solidwaste generated such as fly ash and ETP sludge will be collected, stored and sent to common hazardous waste TSDF facility for landfilling.
- x. There is no displacement of any houses, habitation or livestock, hence no rehabilitation is involved.
- xi. 250 KW power demand for the project will be sourced from Uttar Pradesh Power Corporation Limited. 250 KVA capacity D.G. Set will be provided at site as back up during power failure.
- xii. The project is not located in industrial area.
- xiii. Forest Clearance is not required.
- xiv. NBWL Clearance is not required.
- xv. CRZ Clearance is not required.
- xvi. No court case is pending against the project.
- xvii. Investment/Cost of the project is ₹4.52 Crore.
- xviii. Employment potential: 60 persons.
- xix. Benefits of the project: The proposed project will facilitate a safe & environmentally sound treatment facility for waste generating industries and health care units in nearby areas. It will have benefits like reducing the consumption of resources by recycling the disinfected waste materials, reducing pollution and reducing the volume of waste that must be treated and disposed off. Local people will get direct and indirect employment in the project, during operation phase. Cost burden of transportation of incinerable waste to far off facilities will get reduced. The proposed project for treatment of industrial incinerable hazardous wastes and bio-medical wastes from healthcare units will prevent proliferation of health hazard and disease in the area. It will also reduce pressure on regulatory agencies for compliance monitoring. By operating the plant at its full capacity, the cost of treatment per kilogram will get significantly reduced.

2.The EAC noted that the project/activity is covered under category 'A' of item 7(d) 'Common hazardous waste treatment, storage and disposal facilities (TSDFs)' as well as category 'B' of item 7(da) 'Common Bio-Medical Waste Treatment Facility' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and therefore requires appraisal at Central level by sectoral EAC.

3.The EAC noted that the project has been proposed on agricultural land located adjacent to an irrigation canal, and was informed by the project proponent (PP) that cultivation of rice and pulses is prevalent in the area. Also, the conversion of land use from agricultural use to industrial use has

not been obtained. The committee observed that irrigation potential is developed at a huge cost and expressed that it was not in favour of conversion of prime agricultural land, with assured irrigation, to industrial use.

4. *Based on the information submitted, clarifications provided by the project proponent and detailed discussions held on all the issues, the EAC found the proposed site unsuitable for the proposed project. Therefore, the EAC (Infra 2) returned the instant proposal and asked the project proponent to consider alternate site locations for the proposed project.*

AGENDA ITEM NO. 88.3.2

Proposed Construction of E.S.I.C 300 bedded including 50 Super Speciality Beds Hospital with built up area of 47,410.65 sqm. at Plot No. - F1, Sector-3A, IIE, SIDCUL, District – Haridwar, Uttarakhand by M/s Employee’s State Insurance Corporation (ESIC), Haridwar – Reconsideration for Environmental Clearance

IA/UK/MIS/262829/2022; F. No. 21-42/2022-IA-III

1. The proposal was earlier considered by EAC (Infra-2) in its 85th meeting held on 30-31 March, 2022 and 86th held on 19-20 April, 2022. The proposal was deferred as absent case in the 85th meeting. The details of the project, as per the documents submitted by the project proponent, and also as informed during the 86th meeting are provided below for reference:

- i. The project is located at Plot No. - F1, Sector-3A, IIE, SIDCUL, District – Haridwar, Uttarakhand. Site co-ordinates of the project site are 29°57'30.68"N Latitude and 78°3'33.86"E Longitude.
- ii. The project is new.
- iii. The total plot area is 20,266 sqm.; Total FAR area proposed is 33,583.83 sqm; and total construction (Built-up) area is 47,410.65 sqm. Maximum height of the building is 34.050m (up to Mumty). The project involves design and Construction of 300 bedded hospital including 50 Super Specialty Beds (2B+G+6), Multilevel Car parking (S+2), Type-II Quarters (28 Nos., S+7), Type-III Quarters (18 Nos., S+9), Type-IV Quarters (12Nos., S+6) and other miscellaneous small buildings like ESS Building, Gas Manifold LOT Building, Bio/Chemical waste building and Canteen/Sarai building, including development works, horticulture works and other associated miscellaneous works for ESIC. Details are as follow:

Description	Built Up Area (BUA) (sqm.)	FSI/FAR Area (sqm.)	Building Components
Proposed	47,410.65	33,583.83	1. Hospital building 2. Residential building-

			<p>Blocks;Quarters:</p> <ul style="list-style-type: none"> • Type-II (Unit-28); • Type-III (Unit-18); • Type-IV (Unit-12) <p>3. MLCP</p>
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- iv. During construction phase, total water requirement is expected to be 1,308.72 ML which will be met from private water or treated water from nearby CSTP. Approx. 4.5 KLD of fresh water will be required for drinking purpose which will be imported in form of bottled cans from the local fresh water supplier during the days of construction. During the construction phase, soak pits and septic tanks will be provided for disposal of waste water. Temporary sanitary toilets will be provided during peak labor force.
- v. During operational phase, total water demand of the project is expected to be approx. 475 KLD (Hospital – 452 KLD + Residential Block – 23 KLD) and the same will be met by 305 KLD fresh water from Municipal Supply and 170 KLD recycled water. Domestic wastewater generation will be 175 KLD and the effluent generation from clinical activity and laundry shall be approx. 37 KLD. The domestic sewage will be treated through sewage treatment plant (STP) of 210 KLD capacity and effluent shall be treated in ETP of 45 KLD capacity. The treated water will be reused for flushing (61 KLD), greenbelt development (8 KLD), for HVAC (83 KLD) & for DG cooling (18 KLD). Dual plumbing shall be adopted.
- vi. About 1,005 kg/day solid wastes will be generated in the project comprising of municipal waste (about 480 kg/day) and biomedical waste (about 525 kg/day). The biodegradable waste (about 288 kg/day) will be processed in OWC and the non-biodegradable waste generated (about 192 kg/day) will be handed over to authorized local vendors.
- vii. Maximum Demand load estimated is approx. 2,100kVAfor (hospital +MLCP + residential). Source of power supply shall be Uttarakhand Power Corporation Limited (UPCL). Power shall be received 11 KV/0.433 KV Substation of minimum capacity 3*1250 kVA for Hospital and other non-residential buildings and 1*250 kVA for residential building. The Hospital shall be provided with partial power provision backup. Accordingly, the provision has been made for 2*1250 kVA DG set with load sharing & synchronizing panel.
- viii. Rooftop rainwater of buildings will be collected in 5 RWH pits for harvesting after filtration.
- ix. Parking facility for 704 ECS is proposed to be provided against the requirement of 540 ECS (according to local norms).
- x. A minimum of 20% hot water requirement shall be met by solar water heating systems. Solar energy system of 75 kW is considered meeting the criteria of ECBC and achieving about 5% of the total energy load (1680 KW).
- xi. Green area of 2,559.09 sqm will be developed and 260 trees are proposed for plantation. No tree cutting is involved in the project.

- xii. The project is not located in Critically Polluted area.
- xiii. The project is not located within 10 km of Eco Sensitive Zone. NBWL Clearance is not required.
- xiv. Forest Clearance is not required.
- xv. No court case is pending against the project.
- xvi. CRZ Clearance is not required.
- xvii. Expected timeline for completion of the project - within 2.5 years after the grant of all necessary permissions.
- xviii. Investment/Cost of the project is ₹ 259.84 Crores.
- xix. Employment potential—About 705 persons during operation phase.
- xx. Benefits of the project – Project will provide hospital, residential and parking facilities.

2. The EAC noted that the proposal was deferred in its 86th meeting held during 19-20 April, 2022 and the project proponent was asked to provide the following additional information:

- i. Clarify the discrepancy in the maximum height of the building as submitted in Form 1, Form 1A, online Form 2 and Presentation.
- ii. Provide the details of provision for electrical vehicles charging.
- iii. Clarify the details of solar energy installation proposed.
- iv. Clarify the details of green area and landscaping proposed.
- v. Submit revised EMP budget considering the proposed changes.

3. The Project Proponent [M/s Employee's State Insurance Corporation (ESIC), Haridwar] along with his consultant 'Atmos Sustainable Solutions Pvt. Ltd.', made a presentation and provided the following information:

- i. Due to typographical error maximum height of the building in Form 1, Form 1A and online Form 2 was submitted as 37.95 m, whereas the exact height of the building is 34.05 m (up to Mumty) which was submitted in the presentation. Site Elevation Plan has been submitted.
- ii. 20% of 4-wheeler parking i.e. 141 ECS (Equivalent Car Space) will be equipped with electric charging facility. Electric charging facility for 16 ECS will be provided in the Multi Level Car Parking (MLCP). Electric charging facility for 20 ECS will be provided in surface parking and remaining electric charging facility for 105 ECS will be provided in basement. An undertaking regarding the same has been submitted.
- iii. Solar panels for 168 KW power generation will be provided which will in turn save the 10% of the energy through renewable source. An undertaking regarding the same along with solar plan has been submitted.
- iv. Green area of 4,053.2 sqm. which is 20% of the total plot area will be provided. An undertaking regarding the same along with landscape plan has been submitted.
- v. Revised EMP budget provides for ₹331 lakhs capital cost and ₹88 lakhs recurring cost.

4. 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 Uttarakhand, it required appraisal at Central level by sectoral EAC.

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

- i. Fresh water requirement from local authority shall not exceed 305 KLD during operational phase.
- ii. As proposed, wastewater shall be treated in onsite STP of 210 KLD capacity and ETP of 45 KLD capacity. At least 170 KLD of treated water from the STP and the ETP shall be recycled and re-used for flushing (61 KLD), greenbelt development (8 KLD), for HVAC (83 KLD) and for DG cooling (18 KLD). There shall be no discharge of treated water outside the project premises, as committed.
- iii. The project proponents would commission a third-party study on the implementation of conditions related to quality and quantity of recycle and reuse of treated water, efficiency of treatment systems, quality of treated water being supplied for flushing (specially the bacterial counts), comparative bacteriological studies from toilet seats using recycled treated waters and fresh waters for flushing, and quality of water being supplied through spray faucets attached to toilet seats.
- iv. Area for greenery shall be provided as per the details provided in the project document i.e., area under plantation/greenery will be 4,053.2 sqm. As proposed, at least 260 trees shall be maintained within the site during the operation phase of the project. The landscape planning should include plantation of native species. A minimum of 01 tree for every 80 sqm. of land should be planted and maintained. The existing trees will be counted for this purpose. Plantations to be ensured species cut to species planted. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.
- v. The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. As proposed, 5 Nos. RWH pits shall be provided by PP for rain water harvesting after filtration.
- vi. The solid waste shall be duly segregated into biodegradable and non-biodegradable components and handled in separate area earmarked for segregation of solid waste, as per SWM Rules, 2016. As committed, biodegradable waste shall be utilized through the Organic Waste

Composter unit to be installed within the site. Inert waste shall be disposed off as per norms at authorized site. The recyclable waste shall be sold to authorized vendors/recyclers. Construction & Demolition (C&D) waste shall be segregated and managed as per C&D Waste Management Rules, 2016. Bio-medical wastes shall be disposed as per Bio-Medical Waste (Management & Handling) Rules, 2016.

- vii. The PP shall provide electric charging points in parking areas for e-vehicles as committed.
- viii. As committed, solar energy installation of 168 KW capacity to meet atleast 10% of the total demand load shall be implemented.
- ix. The Environmental Clearance to the project is primarily under provisions of EIA Notification, 2006. The Project Proponent is under obligation to obtain approvals/clearances under any other Acts/Regulations or Statutes as applicable to the project.

AGENDA ITEM No. 88.3.3

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

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

1. The proposal was earlier considered by EAC (Infra-2) in its 84th meeting held on 16-17 March, 2022 and 85th meeting held on 30-31 March, 2022. The details of the project, as per the documents submitted by the project proponent, and also as informed during the aforesaid meetings are provided below for reference:

- i. The project is located at Maharajpur, Gwalior, Madhya Pradesh with coordinates 26°16'55.35"N Latitude and 78°12'59.75"E Longitude.
- ii. The proposal is for 'Expansion under para 7(ii)'.
 - iii. Gwalior Airport (Rajmata Vijayaraje Scindhia Terminal) is a Civil Enclave Airport at Maharajpur Air Force Station. The airport was established before 1994, therefore earlier Environmental Clearance was not applicable.
 - iv. Now, under UDAN 4.1(Ude Desh ka Aam Nagarik) scheme under Regional Air Connectivity Scheme of National Civil Aviation Policy 2016, increasing tourist footfall and complaisance of PM Modi's Flagship Smart Cities Mission, Airports Authority of India (AAI) has proposed for expansion of civil enclave at Gwalior airport.
 - v. Baseline monitoring was carried out from 1st December, 2021 to 28th February, 2022 (winter season).
 - vi. The proposed project will involve the following infrastructural facilities:
 - a. The terminal building will be state of the art centrally air-conditioned, one and half level terminal building with

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

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

			Sludge)
	Recyclable Waste	kg/day	1758
	Total Waste	kg/day	3532
	Power Requirement	kVA	2404
	Power Backup (DG Sets)	kVA	3 x 1500
	Parking	ECS	700

- ix. The total plot area of airport will be 172.60 acres (excluding IAF Base & Runway). The existing plot area of airport is 29.405 acres. Under proposed expansion, additional 143.20 acres of land has been transferred to Airports Authority of India (AAI).
- x. There will be demolition of AAI residential quarters & hostel in the site. New residential quarters and hostel will be developed outside the airport premises. New residential quarters are not a part of activities proposed under this proposal.
- xi. The total water requirement of airport will be 845 KLD. Out of which, freshwater requirement of 357 KLD will be sourced from groundwater through borewells. Total wastewater generation will be 514 KLD that will be treated in proposed Sewage Treatment Plant of capacity 600 KLD. Approx. 488 KLD treated water will be generated from STP treatment that will be reused in the airport for flushing, HVAC cooling, gardening purposes. It will be a “Zero-liquid Discharge Project”.
- xii. Total solid waste generation from the airport will be 3,532 kg/day. Out of total, 1,758 kg/day of biodegradable waste will be treated in Organic Waste Convertor (OWC) for reuse as manure. 16 kg/day of STP Sludge will be used directly for manure in green area. 1,758 kg/day of recyclable waste will be given to authorized recyclers. Solid Waste Management Rules, 2016 will be followed.
- xiii. Total power requirement of the airport will be 2,404 kVA. For backup purposes, 3 no. of DG sets of capacity 1,500 kVA (each) will be installed. Electricity will be sourced by Madhya Kshetra Vidyut Vitaran Company (MPCZ) Portal. It is planned to achieve 4-star rating of GRIHA rating.
- xiv. It is proposed to make the airport energy positive by installing 2500 kWp online grid solar power plant corresponding to about 104% of the total power requirement.
- xv. Approx. 20,245 sqm. of green area will be developed under proposed airport development. There are approximately 616 no. of trees located within the proposed site that will be cleared, for which NOC has been obtained. Compensatory afforestation (CA) is proposed for trees to be cut in ratio of 1:10 and NPV will also be paid to forest department.
- xvi. The project is not located in Critically Polluted area.
- xvii. The project is not located within 10 km of Eco Sensitive Zone. NBWL Clearance is not required.
- xviii. Forest Clearance is not required.
- xix. No court case is pending against the project.
- xx. Investment/Cost of the project is ₹446.12 Crores.
- xxi. Employment Potential – About 250 persons.

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

2. The EAC observed that in its 84th meeting held during 16-17 March, 2022, the Committee appraised the proposal under para 7(ii) of the EIA Notification for exemption from public hearing and EIA Report. The EAC initially agreed for exemption from public hearing on the understanding that the project was operating with earlier issued EC/CTO prior to EIA Notification, and asked the project proponent to present the project along with EIA Report. However, since the project proponent failed to produce any such document and the CTO granted to the project is only from December 2021, the EAC, in its 85th meeting held on 30-31 March, 2022, noted that the project is not eligible for exemption from public hearing under para 7(ii) of the EIA Notification. Accordingly, the EAC (Infra-2) decided to withdraw the exemption from public hearing and asked the project proponent to provide the following additional information:

- i. Public hearing should be conducted and the proceedings to be incorporated in the EIA Report.
- ii. The EAC noted that the superimposed map shows the project boundary crossing over an adjacent water body, which the consultant mentioned as an error. Accordingly, the same should be verified and explanation to be submitted confirming whether the boundary line passes over the water body or not?
- iii. Flora and Fauna details to be verified and revised accordingly.
- iv. Details of proposed green area and plantation to be provided.
- v. The EMP budget allocated for the solar power installation was found to be grossly inadequate. The same should be recalculated and revised suitably.

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

4. The project proponent [M/s Airports Authority of India (AAI)] submitted a request letter vide email dated 18.05.2022 for delisting the proposal from the agenda for the 88th EAC meeting as they will submit Final EIA Report with Public Hearing Proceedings in accordance with granted Terms of

Reference (F.No. 21-114/2021-IA-II dated 04.01.2022) after completion of Public Hearing. Accordingly, the EAC deferred the proposal.

AGENDA ITEM No. 88.3.4

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

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

1. The proposal was earlier considered by EAC (Infra-2) in its 59th meeting held on 8th January, 2021, 65th meeting of EAC (Infra 2) held on 27-28 May 2021 and 66th meeting of EAC (Infra-2) held on 16.06.2021. The details of the project, as per the documents submitted by the project proponent, and also as informed during the aforesaid meetings are provided below for reference:

- i. The project is located at Village Singhpura, Adjoining Cosmos Plaza, Zirakpur-Ambala Highway, Zirakpur, S.A.S Nagar, Punjab with coordinates 30°37'42.77"N Latitude and 76°49'21.15"E Longitude.
- ii. The project has been granted Environmental Clearance in the name of "Maya Garden Avenue" for 302 flats and 10 shops by SEIAA, Punjab vide their Letter no. SEIAA/2953 dated 28.05.2015 for built-up area of 38,282 sqm
- iii. 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 Variation	Total (After Expansion)
1.	Name of the Project	Maya Garden Avenue	-	Green Lotus Avenue
2.	Total Site Area	14,888.50 sqm (or 3.679 acres)	-500.43 sqm	14,388.07 sqm (or 3.555 acres)
3.	Built-Up Area	38,282 sqm	+ 1,592.95 sqm	39,874.95 sqm
4.	Features	302 Flats & 10 Shops	-67 Flats -10 Shops + Club & Gymnasium	235 Flats, 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 Water Demand	205 KLD	-41 KLD	164 KLD
8.	Wastewater Generation	164 KLD	-33 KLD	131 KLD
9.	STP Capacity	Already installed STP of capacity 175 KLD		
10.	Flushing Water Requirement	53 KLD	+2 KLD	55 KLD
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	Rs.91.48 crores		

- iv. 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 EC has been submitted.
- v. Construction of 37,899 sqm out of 38,282 sqm has been done as on 15.02.2021 as per previous accorded EC. An Undertaking as well as an Affidavit stating the same has been submitted.
- vi. Partial Consent to Operate (Air & Water) has been obtained for 103 no. of flats from Punjab Pollution Control Board (PPCB) vide letter no. CTOW/Fresh/SAS/2018/8013558 & CTOA/Fresh/SAS/2018/8014535 dated 21.11.2018 which 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.
- vii. During construction phase, total water requirement is 5 KLD, which is met by treated water. During the construction phase, septic tank has been provided for disposal of waste water. Temporary sanitary toilets have been provided during peak labor force.
- viii. During operational phase, total domestic water requirement of the project is expected to be 164 KLD out of which, fresh water requirement will be 109 KLD fresh water from borewell and 55 KLD recycled water. Wastewater generated (131 KLD) will be treated in STP of 175 KLD capacity. 67 KLD of treated wastewater will be recycled and re-used (55 KLD for flushing and 12 KLD for gardening). About 61 KLD will be disposed in to MC sewer or nearby construction activities.
- ix. About 0.49 TPD solid wastes will be generated in the project. The biodegradable waste (0.22 TPD) will be processed in mechanical composter and the non-biodegradable/hazardous waste generated (0.27 TPD) will be handed over to authorized local vendor.

- x. The total power requirement during construction phase is 50 KW and met from temporary connection from Punjab State Power Corporation Limited (PSPCL). Total power requirement during operation phase is 1,147 KW and will be met from PSPCL.
- xi. Green area proposed is 2,238.65 sqm and 180 trees to be planted.
- xii. Four (4) Rain water recharging pits have been constructed.
- xiii. Parking facility for 360 ECS is proposed against the requirement of 201 ECS (according to local norms).
- xiv. Proposed energy saving measures would save about 16% of power.
- xv. The project is not located in a Critically Polluted area
- xvi. The project is not located within 10 km of Eco Sensitive Zone. NBWL Clearance is not required.
- xvii. Forest Clearance is not required.
- xviii. No court case is pending against the project.
- xix. Expected timeline for completion of the project: March, 2021
- xx. Investment/Cost of the project is ₹ 91.48 Crores.
- xxi. Employment potential – About 100 persons during construction phase.
- xxii. Benefits of the project: Providing housing facility.

2. The proposal was initially submitted for amendment in EC and was recommended by the EAC (Infra-2) in its 59th meeting held on 8th January, 2021. However, on examination in the Ministry, it was found to be a case of expansion rather than amendment. Accordingly, the project proponent (PP) was asked for the 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 (EC) for expansion of the project in question.
- ii. Certified Compliance Report providing status of compliance of the conditions mentioned in existing Environmental Clearance 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.

3. Thereafter, on receiving the response to the aforesaid queries, the proposal was placed for consideration in the 65th meeting of EAC (Infra 2) on 27-28 May 2021. Since SEIAA Punjab had already been constituted on 03.02.2021, the committee was initially of the opinion that the proposal may accordingly be transferred to the SEIAA Punjab. However, taking the OM issued by the Ministry dated 23.10.2017 into consideration, the proposal was later appraised in the 66th meeting of EAC (Infra-2) on 16.06.2021, wherein the PP was also informed 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 and accordingly the proposal was deferred.

4. The PP submitted a response stating that the allegations against the project are false and that they stand by the information submitted in the affidavit earlier. However, in the meantime, the Ministry also instructed IRO Chandigarh to conduct a fresh site visit to the project site and submit the report to this Ministry. Accordingly, the matter was placed on hold.

5. IRO Chandigarh submitted the report dated 06.05.2022 based on site visit conducted on 30.03.2022. The findings of the aforesaid report are listed as follows:

- i. As per the layout plan submitted by the PP together with the EC application, there were total 5 towers in the project. The details area as follows:

S. No.	Tower	Layout plan submitted by the PP together with the EC application dated 28.05.2015		Latest approved plan dated 01.09.2017	
		Area (sqm.)	No. of units	Area (sqm.)	No. of units*
1	B1	7010.65	48	7043.272	235
2	B2	10037.20	104	10525.081	
3	B3	6783.80	50	7030.103	
4	B4	3648.10	72	4394.444	
5	B5 (EWS)	1024.82	28	1299.079	
	Total	28504.57	302	30291.979	235

- ii. PP has obtained CTO under Air Act for 103 flats vide PPCB letter dated 21.11.2018, which is valid up to 31.02.2023. CTO under Water Act, however was refused due to violation of the provisions of EIA Notification, 2006.
- iii. A time series Google map from Sep 2015, May 2016 and Feb 2022 were evaluated on the issues of construction and development of the site vis-a-vis progress of the project. It was inferred that EC was granted by SEIAA Punjab on 28.05.2015 and the development of the site was started after obtaining the prior EC.
- iv. As per the layout plan and application submitted by the PP, an EWS block of 28 units having a built-up area of 1,024.82 sqm. was proposed. However, PP has submitted that they have deposited Rs. 21,32,000 as a fee to change EWS flats to normal flats as per Punjab Government Policy. However, this modification has not been communicated to SEIAA, Punjab.
- v. PP has constructed tower B5 (tower 'E' as per complaint) and has achieved a total built-up area of 39,874.95 sqm. Instead of 38,282 sqm. mentioned in the EC dated 28.05.2015. There has been an increase of 1,592.95 sqm. in the built-up area compared to the proposed layout submitted by the PP together with the previous EC application. However, there has been a decrease of 67 flats as

- compared to the layout plan submitted by the PP with the previous EC application.
- vi. PP has obtained Partial Occupancy Certificate for towers B1 to B4 from the Municipal Corporation, Zirakpur vide letter dated 12.04.2018.
 - vii. Recent status of the overall construction and disputed tower 'B5', as noticed during the site visit on 30.03.2022 is shown in photos. No construction activity was noticed during this site visit. It was observed that some of the flats were occupied in tower B5. However, PP has not submitted the occupancy certificate for the same.
 - viii. PP has applied for amendment in the EC vide proposal no. IA/PB/MIS/189229/2020 dated 20.12.2020 through PARIVESH portal. In this regard, IRO Chandigarh has already submitted the certified compliance report vide letter dated 27.04.2021. As the PP did not submit the approved building plan of the project during the previous monitoring/reporting, the facts analysed here could not be highlighted earlier.
 - ix. It is evident that PP has changed the EWS tower to normal tower. Further, there has been a modification in built-up area and numbers of units as compared to the proposed layout plan submitted by the PP together with the previous EC application.
 - x. In view of above analysis based on the site visit and documents submitted by the SEIAA Punjab and PP, the Ministry may take necessary action as deemed fit.

6. 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.

7. The project proponent (M/s Barnala Developers) along with his consultant 'M/s Eco Laboratories And Consultants Private Limited', made a presentation and submitted that the project has already been granted EC by SEIAA, Punjab dated 28.05.2015. Also, as per expansion, there is minor increase in built-up area and decrease in overall pollution load with respect to water, wastewater generation and solid waste generation. Moreover, Six Monthly Compliance Reports are being regularly submitted and commitments made in the Environment Management Plans are being adhered. Accordingly, PP requested that expansion in Environmental Clearance may kindly be issued. However, on deliberation regarding the IRO Report dated 06.05.2022, the project proponent and consultant accepted that the project has already achieved built-up area of 39,874.95 sqm. for which application for amendment, and later expansion, has been submitted.

8. The EAC observed that the increase in built-up area of the project is of 1,592.95 sqm. which is less than 5% of the approved built-up area of 38,282

sqm. (as per EC dated 28.05.2015) and even with the increase in built-up area, the population load and therefore the pollution load has decreased due to change in planning of the project (i.e. upgradation of some flats from 2 BHK to 3BHK). However, based on the following observations, the proposal appears to be a case of violation of the previous EC granted vide letter no. SEIAA/2953 dated 28.05.2015:

- i. Part B – General Condition No. II (v) of EC granted by SEIAA Punjab vide letter no. SEIAA/2953 dated 28.05.2015 states that:
“In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by State Environment Impact Assessment Authority, Punjab.”
- ii. Based on the IRO Report dated 06.05.2022, it is evident that the project proponent has changed the EWS tower to normal tower as well as increased the built-up area and modified the project configuration as approved in the EC dated 28.05.2015, prior to obtaining the EC for expansion.
- iii. The project proponent and consultant have repeatedly submitted misleading information and concealed the facts regarding the completion status of the project and the conversion of EWS units.

9. *The EAC (Infra-2), based on the information submitted, clarifications provided by the Project Proponent and detailed discussions held on all the issues, noted that the proposal appears to be a case of violation of the EC conditions stipulated vide letter no. SEIAA/2953 dated 28.05.2015. In view of the foregoing, the EAC recommended to consider the project as a violation case and deal with it as per the extant rules and regulations under EIA Notification, 2006 and revised SOP for violation cases dated 07.07.2021.*

AGENDA ITEM No. 88.3.5

Remediation and Reclamation of Existing Dumpsite and construction, operation and maintenance of Sanitary Landfill at Ramsinghpura Village, Rewari, Haryana by Municipal Council Rewari – Reconsideration for Terms of Reference

IA/HR/MIS/259055/2022; F. No. 21-41/2022-IA-III

1. The proposal was earlier considered by EAC (Infra-2) in its 85th meeting held on 30-31 March, 2022 and 86th held on 19-20 April, 2022. The proposal was deferred as absent case in the 85th meeting. The details of the project, as per the documents submitted by the project proponent, and also as informed during the 86th meeting are provided below for reference:

- i. The project is located at Khasra No. 23/13, 9/22, 18/1, 17/1, 11/2, 24/12, 8/3, 18/2, 16/2, 25/2, 25/1, Ramsinghpura Village, Bawal Tehsil, Rewari District, Haryana.

- ii. The project is new.
- iii. The land in Rewari where Ramsinghpura (Bawal) dumpsite is located is owned by Municipal Council Rewari and has been used for open dumping of mixed MSW since the year 2015. The height of the Ramsinghpura (Bawal) Dumpsite is 1.22 meters, to 3.20 m and total area is about 14.625 acre (59184.82 sqm.). Approx. 0.6 lakh ton of MSW has already been deposited at the dumpsite. At present, the dumpsite receives an estimated 81 Tons of Municipal Solid Waste (“MSW”) per day.
- iv. The Authority/MC Rewari proposes to excavate the compacted MSW by using suitable mechanical sieving, separating machines or other equipment. The work envisages economically viable and environmentally sustainable method for Remediation and Reclamation of the dumpsite in accordance with the applicable law. The Authority/MC Rewari intends to reclaim the total dumpsite area out of the 14.625 acre.
- 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.) followed by its sustainable management through recycling, co-processing, road making etc.
- vi. As this is already an existing dumpsite so no alternative sites were examined and as per the SWM rules 2016, the existing dumpsite is fulfilling all the site selection criteria.

S.No.	Criteria	Criteria distance	Available distance from proposed SLF site
1	Distance from nearest River	100 m	Sahibi River – 25.42 Km in North direction
2	Distance from Nearest Pond	200 m	Pond Near Village odhi 0.9 Km in W direction
3	Distance from nearest Highway (NH-2)	200 m	SH-15 3.5 km (W) Rajasthan/Haryana State Boundary – 2km (SSW)
4	Distance from nearest habitation	200 m	Near Village odhi -1km (W) direction
5	Distance from nearest Public Parks	200 m	Mahatma Gandhi Memorial Herbal Park – 9.61 Km in NNW direction
6	Distance from nearest water supply wells	200 m	-
7	Distance from nearest Airport/Airbase	20 km	IGI Airport -75.5 km (NE)

- vii. The activities planned in the proposed landfill project include collection, transportation, treatment & disposal of municipal solid waste in compliance to the SWM Rule (2016).
- viii. Water requirement during construction phase will be 0.5 KLD and will be supplied through tankers. During operation phase water requirement will be 40 KLD and will be sourced through ground water and treated water.
- ix. During operation phase leachate generation will be 3 KLD. Leachate will be collected in leachate collection pit and treated in treatment plant of 3.5 KLD capacity.
- x. Power requirement during operation phase will be 49 KW and will be met through DHBVN. 1 No. of DG set of 15 KVA capacity will be used as backup.
- xi. The project is not located within 10 km of Eco Sensitive Zone. NBWL Clearance is not required.
- xii. Forest Clearance is not required.
- xiii. No court case is pending against the project.
- xiv. CRZ Clearance is not required.
- xv. Estimated cost of the project is ₹4.02 Crores.
- xvi. Employment potential: Approx. 20-25 individuals will be benefitted directly.
- xvii. Benefits of the project: No open dumping of waste will be carried out. This will reduce the chances of air, water & soil contamination and also will reduce emission odour. This will improve the living standard of society & will provide safe & hygienic surroundings. Efficient waste collection & disposal of waste will have made the living & health condition in the area better. Project will improve the health condition of the area. The project will lead to improvement in aesthetic value of the area.

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 presence of interstate boundary of Haryana and Rajasthan within 2 km from the project site. Accordingly, the project comes under category 'A' and requires appraisal at Central level by Sectoral EAC.

3. The EAC noted that the proposal was deferred in its 86th meeting held during 19-20 April, 2022, as the application was not as per the Standard Operating Procedure (SOP) dated 07.07.2021 for identification and handling of violation cases under EIA Notification, 2006 even though the project proponent had applied for ToR on PARIVESH Portal under violation category. Accordingly, the project proponent was asked to revise the application as per SOP dated 07.07.2021.

4. The project proponent was unable to attend the meeting after repeated attempts due to network issues. Accordingly, the EAC decided to defer the project as absent case.

AGENDA ITEM NO. 88.4

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

LIST OF PARTICIPANTS OF EAC (INFRASTRUCTURE-2) IN 88th MEETING OF EAC (INFRA-2) HELD ON 19th MAY, 2022 THROUGH VIDEO CONFERENCING

S. No.	Name	Designation	Attendance	Sign
			19.05.2022	Through VC
1.	Dr. N. P. Shukla	Chairman	P	-
2.	Dr. H. C. Sharatchandra	Member	P	-
3.	Shri V. Suresh	Member	P	-
4.	Dr. V. S. Naidu	Member	P	-
5.	Shri B. C. Nigam	Member	P	-
6.	Dr. Manoranjan Hota	Member	P	-
7.	Dr. Dipankar Saha	Member	P	-
8.	Dr. Jayesh Ruparelia	Member	P	-
9.	Dr. (Mrs.) Mayuri H. Pandya	Member	P	-
10.	Dr. M. V. Ramana Murthy	Member	A	-
11.	Prof. Dr. P.S.N. Rao	Member	A	-
12.	Dr. Ragavan P	Special Invitee	P	-
13.	Dr. Ashish Kumar	Additional Director & Member Secretary	P	-

ANNEXURE-1

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

I. Statutory compliance:

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

II. Air quality monitoring and preservation:

- i. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g., PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NO_x in reference to SO₂ and NO_x emissions) within and outside the airport area at least at four locations (one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions.
- ii. Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG

sets may be decided with in consultation with State Pollution Control Board.

- iii. A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.
- iv. Soil and other construction materials should be sprayed with water prior to any loading, unloading or transfer operation so as to maintain the dusty material wet
- v. The excavation working area should be sprayed with water after operation so as to maintain the entire surface wet.
- vi. Excavated materials shall be handled and transported in a manner that they do not cause any problems of air pollution.
- vii. The soil/construction materials carried by the vehicle should be covered by impervious sheeting to ensure that the dusty materials do not leak from the vehicle.

III. Water quality monitoring and preservation:

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

- vii. Sewage Treatment Plant shall be provided to treat the wastewater generated from airport. Treated water shall be reused for horticulture, flushing, backwash, HVAC purposes and dust suppression
- viii. A certificate from the competent authority for discharging treated effluent/ untreated effluents into the Public sewer/ disposal/drainage systems along with the final disposal point should be obtained.
- ix. A detailed drainage plan for rain water shall be drawn up and implemented.

IV. Noise monitoring and prevention:

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

V. Energy Conservation measures:

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

VI. Waste management:

- i. Soil stockpile shall be managed in such a manner that dust emission and sediment runoff are minimized. Ensure that soil stockpiles are designed with no slope greater than 2:1 (horizontal/vertical).
- ii. The project activity shall conform to the Fly Ash notification issued under the E.P. Act of 1986.
- iii. Solid inert waste found on construction sites consists of building rubble, demolition material, concrete; bricks, timber, plastic, glass, metals, bitumen etc shall be reused/recycled or disposed off as per Solid Waste Management Rules, 2016 and Construction and Demolition Waste Management Rules, 2016.
- iv. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016.
- v. The project proponents shall implement a management plan duly approved by the State Pollution Control Board and obtain its permissions for the safe handling and disposal of:

- a. Trash collected in flight and disposed at the airport including segregation, collection and disposed.
 - b. Toilet wastes and sewage collected from aircrafts and disposed at the Airport.
 - c. Wastes arising out of maintenance and workshops
 - d. Wastes arising out of eateries and shops situated inside the airport complex.
 - e. Hazardous and other wastes
- vi. The solid wastes shall be segregated as per the norms of the Solid Waste Management Rules, 2016. Recycling of wastes such as paper, glass (produced from terminals and aircraft caterers), metal (at aircraft maintenance site), plastics (from aircrafts, terminals and offices), wood, waste oil and solvents (from maintenance and engineering operations), kitchen wastes and vegetable oils (from caterers) shall be carried out. Solid wastes shall be disposed in accordance to the Solid Waste Management Rules, 2016 as amended.
- vii. A certificate from the competent authority handling municipal solid wastes should be obtained, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project.
- viii. Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination.

VII. Green Belt:

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

VIII. Public hearing and Human health issues:

- i. Construction site should be adequately barricaded before the construction begins.
- ii. Traffic congestion near the entry and exit points from the roads adjoining the airport shall be avoided. Parking should be fully internalized and no public space should be utilized.
- iii. Provision of Electro-mechanical doors for toilets meant for disabled passengers. Children nursing/feeding room to be located conveniently near arrival and departure gates.
- iv. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- v. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- vi. Occupational health surveillance of the workers shall be done on a regular basis.

IX. Miscellaneous:

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- v. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholder's / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- vi. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
- vii. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- viii. Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
- ix. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.

- x. The criteria pollutant levels namely; PM₁₀, PM_{2.5}, SO₂, NO_x (ambient levels) shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
- xi. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- xii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- xiii. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- xiv. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- xv. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xvi. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xvii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xviii. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data/ information/monitoring reports.
- xix. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts/NGT and any other Court of Law relating to the subject matter.
- xx. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

ANNEXURE-2

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

I. Statutory compliance:

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

II. Air quality monitoring and preservation:

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.

- ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986.
- iii. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g., PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NO_x in reference to SO₂ and NO_x emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120°each), covering upwind and downwind directions.
- iv. Sampling facility at process stacks and at quenching towers shall be provided as per CPCB guidelines for manual monitoring of emissions.
- v. The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- vi. Appropriate Air Pollution Control (As proposed, air pollution control device viz. gas quencher; treatment with mixture of hydrated lime and activated powder for adsorption of partial acidity and VOCs (if any); bag filter/ESP for removal of particulate matter; venturi scrubber followed by packed bed scrubber with caustic circulation to neutralize the acidic vapours in flue gas; and demister column for arresting water carry over will be provided to the incinerator) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
- vii. The periodical monitoring of Dioxins and Furans in the Stack emissions shall be carried out. Analysis of Dioxins and Furans shall be done through CSIR-National Institute for Interdisciplinary Science and Technology (NIIST), Thiruvananthapuram or equivalent NABL Accredited laboratory
- viii. Gas generated in the Land fill should be properly collected, monitored and flared
- ix. A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 02 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 02 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.

III. Water quality monitoring and preservation:

- i. The project proponent shall install continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
 - ii. Sufficient number of Piezometer wells shall be installed in and around the project site to monitor the ground water quality in consultation with the State Pollution Control Board / CPCB. Trend analysis of ground water quality shall be carried out each season and information shall be submitted to the SPCB and the Regional Office of MoEF&CC.
 - iii. The project proponent shall submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
 - iv. No discharge in nearby river(s)/pond(s).
 - v. The depth of the land fill site shall be decided based on the ground water table at the site.
 - vi. The Company shall ensure proper handling of all spillages by introducing spill control procedures for various chemicals.
 - vii. All leachates arising from premises should be collected and treated in the ETP followed by RO. RO rejects shall be evaporated in MEE. Toxicity Characteristic Leaching Procedure (TCLP) test to be performed on leachates.
 - viii. The Company shall review the unit operations provided for the treatment of effluents, specially the sequencing of MEE after tertiary treatment, the source of permeate when no R.O. is recommended and the treatment of MEE condensate. The scheme for treatment of effluents shall be as permitted by the Pollution Control Board/Committee under the provisions of consent to establish.
 - ix. Scrubber water, leachate water or wheel wash effluent shall be treated in the effluent treatment plant followed by RO to achieve zero liquid discharge.
 - x. Total fresh water use shall not exceed the proposed requirement as provided in the project details. Prior permission from competent authority shall be obtained for use of fresh water.
 - xi. Sewage Treatment Plant shall be provided to treat the wastewater generated from the project. Treated water shall be reused within the project.
 - xii. A certificate from the competent authority for discharging treated effluent/ untreated effluents into the Public sewer/ disposal/drainage systems along with the final disposal point should be obtained.
 - xiii. Rain water runoff from hazardous waste storage area shall be collected and treated in the effluent treatment plant.
- IV. Noise monitoring and prevention:**
- i. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.

- ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.
- iii. Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.

V. Energy Conservation measures:

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

VI. Waste management:

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

VII. Green Belt:

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

VIII. Public hearing and Human health issues:

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

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

IX. Miscellaneous:

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- v. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental/forest/wildlife norms/conditions. The company shall have defined system of reporting infringements/deviation/violation of the environmental/forest/wildlife norms /conditions and/or shareholder's/stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- vi. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
- vii. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- viii. Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
- ix. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control

- Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- x. The criteria pollutant levels namely; PM_{2.5}, PM₁₀, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
 - xi. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
 - xii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
 - xiii. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
 - xiv. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
 - xv. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
 - xvi. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
 - xvii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
 - xviii. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
 - xix. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts/NGT and any other Court of Law relating to the subject matter.
 - xx. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

ANNEXURE-3

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

I. Statutory compliance:

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

II. Air quality monitoring and preservation:

- i. The project proponent shall install emission monitoring system including Dioxin and furans to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.

- ii. Periodical air quality monitoring in and around the site including VOC, HC shall be carried out.
 - iii. Incineration plants shall be operated (combustion chambers) with such temperature, retention time and turbulence, so as to achieve Total Organic Carbon (TOC) content in the slag and bottom ashes less than 3%, or their loss on ignition is less than 5% of the dry weight of the material.
 - iv. Venturi scrubber (alkaline) should be provided with the incinerator with stack of adequate height (Minimum 30 meters) to control particulate emission within 50mg/Nm³.
 - v. Appropriate Air Pollution Control (APC) system shall be provided for fugitive dust from all vulnerable sources, so as to comply prescribed standards. All necessary air pollution control devices (quenching, Venturi scrubber, mist eliminator) should be provided for compliance of emission standards.
 - vi. Masking agents should be used for odour control.
- III. Water quality monitoring and preservation:**
- i. The project proponent shall install effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
 - ii. Waste water generated from the facility shall be treated in the ETP and treated waste water shall be reused in the APCD connected to the incinerator. The water quality of treated effluent shall meet the norms prescribed by State Pollution Control Board. Zero discharge should be maintained.
 - iii. Process effluent/any waste water should not be allowed to mix with storm water.
 - iv. Total fresh water use shall not exceed the proposed requirement as provided in the project details. Prior permission from competent authority shall be obtained for use of fresh water.
 - v. Sewage Treatment Plant shall be provided to treat the wastewater generated from the project. Treated water shall be reused within the project.
 - vi. A certificate from the competent authority for discharging treated effluent/ untreated effluents into the Public sewer/disposal/drainage systems along with the final disposal point should be obtained.
 - vii. The leachate from the facility shall be collected and treated to meet the prescribed standards before disposal.
 - viii. Magnetic flow meters shall be provided at the inlet and outlet of the ETP & all ground water abstraction points and records for the same shall be maintained regularly.
 - ix. Rain water runoff from hazardous waste storage area shall be collected and treated in the effluent treatment plant.

IV. Noise monitoring and prevention:

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

V. Energy Conservation measures:

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

VI. Waste management:

- i. Incinerated ash shall be disposed at approved TSDF and MoU made in this regard shall be submitted to the Ministry prior to the commencement.
- ii. The solid wastes shall be segregated as per the norms of the Solid Waste Management Rules, 2016.
- iii. A certificate from the competent authority handling municipal solid wastes should be obtained, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project.
- iv. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016
- v. No landfill site is allowed within the CBWTF site
- vi. The Project proponent shall not store the Hazardous Wastes more than the quantity that has been permitted by the CPCB/SPCB.

VII. Green Belt:

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

VIII. Public hearing and Human health issues:

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

IX. Miscellaneous:

- i. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEF&CC/SEIAA website where it is displayed
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- v. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental/forest/wildlife norms/conditions. The company shall have defined system of reporting infringements/deviation/violation of the environmental/forest/wildlife norms/ conditions and / or shareholder's/stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- vi. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
- vii. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- viii. Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
- ix. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- x. The criteria pollutant levels namely; PM_{2.5}, PM₁₀, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters,

indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.

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

ANNEXURE-4

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

I. Statutory compliance:

- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan/Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report (in case of the presence of schedule-I species in the study area)
- iv. The project proponent shall obtain Consent to Establish/Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/Committee.
- v. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
- vi. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, the Forest Conservation Act, 1980 and the Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities.

II. Air quality monitoring and preservation:

- i. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g., PM₁₀ and PM_{2.5} in reference to PM emission) covering upwind and downwind directions.
- ii. Appropriate Air Pollution Control (APC) system (both during the construction and operation) shall be provided for all the dust generating points *inter alia* including loading, unloading, transfer points, fugitive dust from all vulnerable sources, so as to comply prescribed standards.
- iii. Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.
- iv. Adequate parking shall be constructed at upper terminal and lower terminal. PP shall ensure smooth traffic management.

III. Water quality monitoring and preservation:

- i. Storm water from the project area shall be passed through settling chamber.
- ii. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.
- iii. Total fresh water use shall not exceed the proposed requirement as provided in the project details.
- iv. Prior permission from competent authority shall be obtained for use of fresh water.
- v. No wastewater shall be discharged in open. Appropriate Water Pollution Control system shall be provided for treatment of waste water.
- vi. A certificate from the competent authority, in case of discharging treated effluent/ untreated effluents into the Public sewer/ disposal/drainage systems along with the final disposal point should be obtained.

IV. Noise monitoring and prevention:

- i. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
- ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

V. Energy Conservation measures:

- i. Energy conservation measures like installation of LED/CFLs/TFLs for lighting should be integral part of the project design and should be in place before project commissioning.
- ii. Solar energy shall be used in the project i.e., at upper terminal and lower terminal to reduce the carbon footprint.

VII. Waste management

- i. The solid wastes shall be segregated, managed and disposed as per the norms of the Solid Waste Management Rules, 2016.
- ii. The waste oil, grease and other hazardous waste shall be disposed of as per the Hazardous & Other Wastes (Management and Transboundary Movement) Rules, 2016.
- iii. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016.

VII. Public hearing and Human health/safety issues:

- i. Comply with the safety procedures, norms and guidelines (as applicable) as outlined in IS 5228, IS 5229 and IS 5230, code of practice for construction of aerial ropeways, Bureau of Indian Standards.
- ii. Maintaining hoists and lifts, lifting machines, chains, ropes, and other lifting tackles in good condition.
- iii. Ensuring that walking surfaces or boards at height are of sound construction and are provided with safety rails or belts.

- iv. The project should conform to the norms prescribed by the Director General Mine safety. Necessary clearances in this regard shall be obtained.
- v. Adequate infrastructure, including power, shall be provided for emergency situations and disaster management.
- vi. Adequate first aid facility shall be provided during construction and operation phase of the project.
- vii. Regular safety inspection shall be carried out of the ropeway project and a copy of safety inspection report should be submitted to the Regional Office.
- viii. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.

VIII Miscellaneous:

- i. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEF&CC/SEIAA website where it is displayed.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- v. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental/forest/wildlife norms/conditions. The company shall have defined system of reporting infringements/deviation/violation of the environmental/forest/wildlife norms /conditions and/or shareholder's/stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- vi. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
- vii. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and

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

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

ANNEXURE-5

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

I. Statutory compliance:

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

II. Air quality monitoring and preservation:

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

III. Water quality monitoring and preservation:

- i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time and connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. Total fresh water use shall not exceed the proposed requirement as

- provided in the project details. Prior permission from competent authority shall be obtained for use of fresh water.
- iii. There shall be flow meters at inlet and outlet of CETP to monitor the flow. Suitable meters shall be provided to measure the quantity of effluent received, quantity of effluent recycled/reused and discharged.
 - iv. The units and the CETP will maintain daily log book of the quantity and quality of discharge from the units, quantity of inflow into the CETP, details of the treatment at each stage of the CETP including the raw materials used, quantity of the treated water proposed to be recycled, reused within the Industrial park/units, quantity of the treated effluent discharged. All the above information shall be provided on- line of the web site exclusively prepared for the purpose by the CETP owner. The website shall be accessible by the public. The financial and energy details of the CETP will also be provided along with details of the workers of the CETP.
 - v. The CETP operator will maintain an annual register of member units which will contain the details of products with installed capacities and quality and quantity of effluents accepted for discharge. This will form a part of the initial and renewal applications for consent to operate to be made before the State Pollution Control Board.
 - vi. No changes in installed capacity, quality or quantity of effluents as agreed upon in the initial MOU between the operator and the member units, addition of any new member units shall be carried without prior approval of the ministry
 - vii. The Unit shall inform the State Pollution Control Board at least a week prior to undertaking maintenance activities in the recycle system and store/dispose treated effluents under their advice in the matter.
 - viii. The unit shall also immediately inform the Pollution Control Board of any breakdown in the recycling system, store the effluents in the interim period and dispose effluents only as advised by the Pollution Control Board.
 - ix. The MoU between CETP and member units shall indicate the maximum quantity of effluent to be sent to the CETP along with the quality.
 - x. The unit shall maintain a robust system of conveyance for primary treated effluents from the member units and constantly monitor the influent quality to the CETP. The Management of the CETP and the individual member shall be jointly and severally responsible for conveyance and pre-treatment of effluents. Only those units will be authorized to send their effluents to the CETP which have a valid consent of the Pollution Control Board and which meet the primary treated standards as prescribed. The CETP operator shall with the consent of the State Pollution Control Board retain the powers to delink the defaulter unit from entering the conveyance system.
 - xi. The effluent from member units shall be transported through pipeline. In case the effluent is transported thorough road, it shall be transported through CETP tankers only duly maintaining proper manifest system. The vehicles shall be fitted with proper GPS system.
 - xii. Before accepting any effluent from member units, the same shall be as

permitted by the SPCB in the consent order. No effluent from any unit shall be accepted without consent from SPCB under the Water Act, 1974 as amended.

- xiii. Treated water shall be disposed on land for irrigation. An irrigation management plan shall be drawn up in consultation with and to the satisfaction of the State Pollution Control Board.
- xiv. The Project proponents will build operate and maintain the collection and conveyance system to transport effluents from the industrial units in consultation with and to the satisfaction of the State Pollution Control Board and ensure that the industrial units meet the primary effluent standards prescribed by the State Pollution Control Board.
- xv. The State Pollution Control Board will also evaluate the treatment efficiency of the Effluent Treatment Plant (ETP) and its capability of meeting the prescribed standards. The final scheme of treatment would be such as is approved by the Pollution Control Board in the Consent to Establish.
- xvi. The project proponents will create an institutional arrangement for the involvement of individual members in the management of the CETP.

IV. Noise monitoring and prevention:

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

V. Waste management:

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

VI. Energy Conservation measures:

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

VII. Green Belt:

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

VIII. Public hearing and Human health issues:

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

IX. Miscellaneous:

- i. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEF&CC/SEIAA website where it is displayed.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- v. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental/forest /wildlife norms /conditions. The company shall have defined system of reporting infringements/deviation/violation of the

environmental/forest/wildlife norms /conditions and/or shareholder's/stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.

- vi. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
- vii. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- viii. Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
- ix. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- x. The criteria pollutant levels or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
- xi. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of operation by the project.
- viii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- x. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- xi. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full

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

ANNEXURE-6

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

- I. Statutory compliance:**
- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1980, in case of the diversion of forest land for non-forest purpose involved in the project.
 - ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
 - iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan/Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report (in case of the presence of schedule-I species in the study area)
 - iv. The project proponent shall obtain Consent to Establish/Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/Committee.
 - v. The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
 - vi. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
 - vii. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable by project proponents from the respective competent authorities.
- II. Air quality monitoring and preservation:**
- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories. (for projects involving incineration).
 - ii. As proposed, air pollution control device viz. gas quencher; treatment with mixture of hydrated lime and activated powder for adsorption of partial acidity and VOCs (if any); bag filter/ESP for removal of particulate matter; venturi scrubber followed by packed bed scrubber with caustic circulation to neutralize the acidic vapours in flue gas; and demister column for arresting water carry over will be provided to the incinerator. Online pollutant monitoring shall be provided as per

CPCB guidelines for monitoring particulate matter, SO₂, NO_x and CO from the incinerator stack. The periodical monitoring of Dioxins and Furans in the Stack emissions shall be carried out.

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

III. Water quality monitoring and preservation:

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

- x. A certificate from the competent authority for discharging treated effluent/untreated effluents into the Public sewer/disposal/drainage systems along with the final disposal point should be obtained.

IV. Waste management:

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

V. Transportation:

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

VI. Green belt:

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

VII. Public hearing and Human health/safety issues:

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

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

IX. Miscellaneous:

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently. (for projects involving incineration)
- ii. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed (For projects involving only Landfill without incineration)
- iii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iv. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- v. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental/forest/wildlife norms/conditions. The company shall have defined system of reporting infringements/deviation/violation of the environmental/forest/wildlife norms/ conditions and/or shareholder's/stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- vi. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
- vii. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in

separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

- viii. Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
- ix. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- x. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- xi. The criteria pollutant levels namely; PM_{2.5}, PM₁₀, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain (in case of incineration involved).
- xii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- xiii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- xiv. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- xv. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- xvi. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xvii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xviii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xix. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xx. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability

Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

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

ANNEXURE-7

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

I. Statutory compliance:

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

II. Air quality monitoring and preservation:

- i. Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.
- ii. A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.
- iii. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the

- main pollutants released (e.g. PM₁₀ and PM_{2.5}) covering upwind and downwind directions during the construction period.
- iv. Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.
 - v. Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3-meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murrum and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
 - vi. Sand, murrum, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.
 - vii. Wet jet shall be provided for grinding and stone cutting.
 - viii. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
 - ix. All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Management Rules 2016.
 - x. The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.
 - xi. The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.
 - xii. For indoor air quality the ventilation provisions as per National Building Code of India.

III. Water quality monitoring and preservation:

- i. The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bio-swales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water.
- ii. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.

- iii. Total fresh water use shall not exceed the proposed requirement as provided in the project details.
- iv. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.
- v. A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.
- vi. At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.
- vii. Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.
- viii. Use of water saving devices/fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.
- ix. Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.
- x. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- xi. The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rain water harvesting recharge pits/storage tanks shall be provided for ground water recharging as per the CGWB norms.
- xii. A rain water harvesting plan needs to be designed where the recharge bores of minimum one recharge bore per 5,000 square meters of built up area and storage capacity of minimum one day of total fresh water requirement shall be provided. In areas where ground water recharge is not feasible, the rain water should be harvested and stored for reuse. The ground water shall not be withdrawn without approval from the Competent Authority.
- xiii. All recharge should be limited to shallow aquifer.
- xiv. No ground water shall be used during construction phase of the project.
- xv. Any ground water dewatering should be properly managed and shall conform to the approvals and the guidelines of the CGWA in the matter. Formal approval shall be taken from the CGWA for any ground water abstraction or dewatering.

- xvi. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.
- xvii. Sewage shall be treated in the STP with tertiary treatment. The treated effluent from STP shall be recycled/re-used for flushing, AC make up water and gardening. As proposed, no treated water shall be disposed in to municipal drain.
- xviii. No sewage or untreated effluent water would be discharged through storm water drains.
- xix. Onsite sewage treatment of capacity of treating 100% waste water to be installed. The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Treated waste water shall be reused on site for landscape, flushing, cooling tower, and other end-uses. Excess treated water shall be discharged as per statutory norms notified by Ministry of Environment, Forest and Climate Change. Natural treatment systems shall be promoted.
- xx. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.
- xxi. Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.

IV. Noise monitoring and prevention:

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

V. Energy Conservation measures:

- i. Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC.
- ii. Outdoor and common area lighting shall be LED.

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

VI. Waste Management:

- i. A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project shall be obtained.
- ii. Disposal of muck during construction phase shall not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
- iii. Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials.
- iv. Organic waste compost/Vermiculture pit/Organic Waste Converter within the premises with a minimum capacity of 0.3 kg /person/day must be installed.
- v. All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.
- vi. Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.
- vii. Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials.
- viii. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended

as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.

- ix. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016.
- x. Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination.

VII. Green Cover:

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

VIII. Transport

- i. A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria.
 - a. Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
 - b. Traffic calming measures.
 - c. Proper design of entry and exit points.
 - d. Parking norms as per local regulation.
- ii. Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours.
- iii. A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved

upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.

IX. Human health issues:

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

X. Miscellaneous:

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

- v. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental/forest/wildlife norms/conditions. The company shall have defined system of reporting infringements/deviation/violation of the environmental/forest/wildlife norms/conditions and/or shareholders/stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- vi. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
- vii. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report
- viii. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- ix. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- x. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- xi. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report and also that during their presentation to the Expert Appraisal Committee.
- xii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change (MoEF&CC).
- xiii. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xiv. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xv. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xvi. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full

cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.

- xvii. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xviii. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
