# MINUTES OF 64th MEETING OF EXPERT APPRAISAL COMMITTEE (INFRASTRUCTURE-2) HELD DURING 12-13 APRIL, 2021.

**VENUE: Through Video Conferencing** 

DATE: 12th- 13thApril, 2021

### **PROCEEDINGS**

**64.1 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.

# 64.2 Confirmation of Minutes of 63<sup>rd</sup>Meeting of Expert Appraisal Committee (Infrastructure-2) held on 19<sup>th</sup>March, 2021.

The Expert Appraisal Committee (Infrastructure-2), hereinafter called the EAC, was informed that no representation has been received regarding projects considered in 63<sup>rd</sup>meeting.Minutes of 63<sup>rd</sup>Meeting of EAC were confirmed. The typo errors, if any noticed during processing of these case may be corrected in the light of facts and figures provided by the respective Project Proponent.

**64.3 Consideration of Proposals on Day-I (12<sup>th</sup> April, 2021):** The EAC considered proposals as per the agenda adopted for Day-I of 64<sup>th</sup>meeting. The details of deliberations held and decisions taken in the meeting are as under:

#### AGENDA ITEM NO. 64.3.1

Development of Water Aerodrome at Swaraj Island, Andaman & Nicobar by M/s. Andaman and Nicobar Administration - Environmental Clearance

### (IA/AN/MIS/124243/2019; F. No. 10-53/2019-IA-III)

- 1. The Project Proponent (M/s. Andaman and Nicobar Administration) along with his consultant 'M/s. Enviro Resources', 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 Swaraj Dweep (erstwhile Havelock Island), Village GovindNagar, Taluka Port Blair, District-South Andaman, Andaman & Nicobar.
- ii. The project is new.
- iii. The project consists of the following main components:

- i. Onshore facilities Passenger Terminal Building (PTB), Utility Building, Parking Area, Walkway towards Floating Jetty.
- ii. Offshore facilities Floating Jetty, Access Gangway, Passenger Transfer Vessel, Floating Dock, Fire and Rescue Boat, Sea Planes and a suitable water operating area, including identified approach and departure paths.
- iii. Connectivity to the site: The project location viz, Swaraj Dweep is connected to surrounding Islands by ferries, further a 5-6 m wide road is proposed which will ultimately connect the project site to SH4.
- iv. The total plot area is 3,500.00 sqm and the total built-up area is 744.25 sqm. The proposed land use of water aerodrome site is given as follows:

SN	Description	Area (sqm)	Percentage area (%)
1	Green Belt	1155	33.00%
2	PTB plinth area	600.25	17.15%
3	Road	1341.75	38.34%
4	Utility/Services	144	4.11%
5	Parking	82	2.34%
6	Hard Paving	177	5.06%
	Total Plot Area	3500	100%

v. Project components in CRZ area are given as follows. The ANCZMA has recommended the project for approval.

Sr.No.	Description	CRZ Classification	Area (sqm)	Total Area (sqm)
1	Jetty near Runway and Jetty near Terminal Building	CRZ- IV	619.2	619.2
2	Proposed Road <sup>1</sup>	CRZ- III (NDZ)	644.9	
		Mangroves (CRZ- IA)	453.3	1718.6
		Outside CRZ	620.4	
3	Runway	CRZ- IV	58904	58904
4	Terminal Building <sup>2</sup>	CRZ- III (NDZ)	1917.3	3486.2*
		Mangroves (CRZ- IA)	1568.9	3400.2

#### Note:

- 1 The proposed road mentioned includes the walkway from the rear side of the Project Site to the Floating Jetty as well as the Approach Road connecting the project site with the main street.
- 2 The Terminal Building here mentioned is for the Total Project Site Area (including PTB Area as well as associated facilities)
- \* The total project site area is 3,500 m<sup>2</sup>.
- vi. Altogether following 4 sites viz.: Site 1 Char Nariyal; Site 2 South of Kalapahtar; Site 3 Vijayanagar Beach Site; and Site 4 Lacam

Harbour (Near Havelock Jetty); were considered based environmental, resources sustainability & accessibility for proposed water aerodrome project. Site No. 1, 2 & 3 were not feasible being exposed to action by open sea, moreover the beaches are rocky in nature and water retreats to a great extent during low tide exposing the rocks. Such rocky terrain and tidal variation is not recommended for safe Water Aerodrome Operations. Whereas Site No. 4 at Lacam Harbour (proposed site) is best suited for Water Aerodrome Operations as it falls in protected waters. Further the minimum water depth requirement of ~1.8 m is available and has been confirmed with the Bathometry Studies at the proposed runway/taxiway site.

- vii. The project location viz, Swaraj Dweep is connected to surrounding Islands by ferries, further a 5-6 m wide road is proposed which will ultimately connect the project site to SH4. Sea plane proposed for use in this project is having capacity of 19 Passengers. It is proposed to develop the infrastructure facility for 380 passengers per day. The flight duration of the seaplanes in proposed project will be of around 13 mins. Sea plane operations will not be done during night time.
- viii. Total water requirement during construction phase will be 7.5 KLD, which shall be sourced through tanker supply. Mobile sanitation facilities will be provided to workers, which will be periodically cleaned by Night Soil Tankers.
  - ix. During operational phase, initial water requirement for proposed project activities will be 24.1 KLD & in later stage, the net freshwater requirement will be 16.4 KLD (through reuse of 7.1 KLD treated sewage). The fresh water requirement for project activities will be met through Andaman Public Water Works. Wastewater generation during operational phase will be 8.5 KLD which shall be treated in STP of 10 KLD capacity. STP will comprise of Primary, Secondary & Tertiary treatment facility using MBBR technology. The proposed project will be a ZLD (Zero Liquid Discharge) project. The seas planes to be operated for proposed project will not have lavatories/ toilet facilities and hence no sewage will be generated in this regard.
  - The total municipal solid waste (MSW) generated on-site will be x. approximately 86 kg/day (@ 0.2kg/capita/day). The organic approximately 34.4 kg/dav be (40%)waste inorganic/inert waste shall be approximately 51.6 kg/day (60%). Food/beverages will not be served for short duration flights as envisaged in proposed project. However; minimal trash such as paper, etc. if any will be collected by the airline's ground support team and placed at a waste transfer station. At the passenger terminal building (PTB), wet and dry waste collection bins shall be placed including eateries and shops. Subsequently, all the waste collected will be transported to the Centralized Waste Processing Facility within the PTB. Here, the waste will be segregated and transported by ship/road to the authorized agency of local body as per MSW Rules, 2016.

- xi. The maintenance of the seaplanes to be used in proposed project as needed shall be carried out at a designated Apron at Port Blair Airport and not on the proposed project site (i.e. Swaraj Dweep) hence maintenance & work shop wastes will not be generated. No maintenance facility will be provided at the proposed project site but at Port Blair Airport. Maintenance, workshop wastes (used grease, used oil and cotton wastes) shall be collected, stored in the workshop and disposed to authorized vendor by Port Blair Airport Authority as per the Hazardous Waste and other Waste (Management and Transboundary Movement) Rules, 2016.
- xii. During Construction Phase, one D.G of 320 kVA shall be used as power source. During Operational phase, anticipated connected power load will be approximately 143 KW, which shall be sourced through Electricity Department, Andaman and Nicobar.2 Nos. DG sets of 50 kVA each shall be provided as backup for power failure scenario.
- xiii. Energy conservation and reduction in carbon footprint in proposed project is envisaged through following measures:
  - i. Glass façade has been proposed at two sides of the terminal building which reduce the requirement of artificial light at daytime.
  - ii. Solar power harvesting system of 60 KW (DC) capacity (150 numbers of Solar modules each having capacity of 400 watt) has been provisioned.
  - iii. Solar operated transfer boats will be used.
  - iv. Compliance to ECBC norms.
- xiv. Surface run off rain water will be harvested through the storm water drainage network proposed for complete terminal premises, a holding tank of 20 KL along with de-silting chamber is provisioned to store the collected water & proposed to be used for green belt & flushing. Overflow of the tank will be connected to sea.
- xv. Parking area of 82 sqm is proposed.
- xvi. High Speed Diesel for D.G Operations (only during power failure scenarios) will be the only fuel to be stored at proposed project site. The fuel back up will be as such required only for power failure hours & will be stored in barrels, thus there is no fuel tank farm provision for proposed project.
- xvii. Green belt will be developed in 33% of project area which is 1,155 sq. m. 82 trees shall be cut, however it does not involve any protected or endangered species. 91 trees are proposed to be planted for greenbelt development.
- xviii. No Court Case is pending against the project.
  - xix. Project is not located in a Critically Polluted area.
  - xx. The proposed project site is located at approximate distance of 2.8 km from Rani Jhansi Marine National Park (RJMNP). Since the proposed project site is outside the notified eco-sensitive zone of the RJMNP, NBWL Clearance is not envisaged.
  - xxi. The site of Swaraj Dweep was previously under forest area. Therefore, extent of the forestland involved is 3,500 sqm (i.e. total plot area). Presently the site has been transferred to Andaman and Nicobar

Islands Integrated Development Corporation Ltd (ANIIDCO) for the Water Aerodrome development. There is no habitation/ community available at the project location. The application for forest land diversion is submitted to the Deputy Director General of Forests (Central), Integrated Regional Office, Chennai, for finalization of Stage I process.

- xxii. Expected timeline for completion of proposed project is within 8-10 months, after obtaining Environment Clearance & necessary permissions from Andaman and Nicobar Pollution Control Committee (ANPCC) and other statutory approvals as required.
- xxiii. Estimated project cost is 24.79 Crore
- xxiv. Employment potential: During construction phase, 30-40 No.s contractual construction labourers will be employed. The total manpower envisaged for the project including regular and contractual workforce during operation phase is approximately 50 persons.
- Benefits of the project: This project will connect remote areas of island XXV. to Port Blair to promote tourism, resulting into growth in economic condition. Job opportunities to local people in terms of direct and indirect employment. Demands of community services and commercial development also create additional employment. Connecting to main or developed land will results into infrastructural development of these islands. Considering clean ecosystem of this island, foreign tourists are assumed to be attracted at these places, resulting into good foreign exchange amount. Install Solar panels for generation of electricity, which will reduce the additional load on electricity department. It will be ZLD project; entire treated sewage will get used for gardening. Prefabricated materials are preferred for construction of building, will reduce on site waste generation from conventional construction practices. Greenbelt with mandatory area will be provided, ultimately increasing aesthetic value of project site
- Public Hearing has been conducted for the proposed Water Aerodrome Project at Swaraj Island dated 25th September, 2020 at the Panchayat Bhavan, Govind Nagar Panchayat, Swaraj Dweep, South Andaman District. Apart from welcoming the project, the issues raised during consultation were on; impact of the project on fishermen, approach road and employment opportunities to local people. Budgetary allocation of Rs. 1.58 Crore has been made for development of approach & internal roads. Project Proponent further informed that the proposed project is the part of UDAAN Scheme of Government of India.
- XXVII. One third portion of the project site is 0.5m below the High Tide Line (HTL) level of 6.5m ground level. Hence plinth level of the terminal building has been proposed at a level of 7.9 m to mitigate water logging issue. To channelize the high tide water and restrict the entry of this water into terminal building area, a peripheral drain has been proposed. The approx. quantity of filling required is 5283cum, which

will be generated from the site levelling work and adjacent area, and approach road cutting/levelling work and proposed adjacent borrow pit.

- xxviii. Baseline study was conducted in winter season during the period: December 2019 to February 2020, No. of Locations: Air 7, Noise 7, Surface water 6, Ground water GW4, Soil 8, Biotic Environment survey locations 7. The observed pollutant levels were compared with CPCB National Ambient Air Quality Standards and found to be within standards.
  - **2.** The EAC noted that the project/activity is covered under category 'A' of item 7(a) 'Airports' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at Central level by sectoral EAC.
  - **3.** EAC expressed displeasure on the inadequate preparation of EIA by the 'M/s. Enviro Resources' consultant. EAC opined to take necessary action i.e. to issue SCN by MoEF&CC on inadequate EIA and collection of information. After due deliberation, EAC observed several gaps in the project and deferred the project for want of following;
    - i. Since the EIA consists of mostly secondary data on biodiversity without conducting actual site specific biodiversity studies w.r.t aquatic and natural environment in effect of tourism, PP needs to resubmit the revised EIA covering Biodiversity Conservation / Management Plan including water and air quality data. The study on biodiversity should be conducted by any national lab.
    - ii. Submission of comprehensive risk analysis for sea-plane crashing / catching fire at the sea-aerodrome with estimated HSD consumption.
  - iii. Status of CRZ clearance at state and central level.
  - iv. Reassessment of Impact of noise level during landing & take-off on fauna in the area.
  - v. Proper Water conservation measures with wastewater treatment and reuse/reuse. Source of water for construction to be defined properly rather than saying taker supply.
  - vi. As per the EIA report, proposed project site for construction of terminal building (1568.9 sqm) and associate infrastructure (453.3 sqm) falls partly in Mangroves (CRZ-IA). Also, the speedboat pathway is dominated by mangrove vegetation on both sides. However the management plan does not address the impact on the mangroves due to project activities. Detailed plan for mangrove protection due to proposed activities to be prepared for protection.

In light of the above mentioned observations, the EAC (Infra-2), recommended to defer decision on the project and asked the PP to submit the revised EIA report w.r.t the aforesaid observations.

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#### AGENDA ITEM NO. 64.3.2

Expansion of Common hazardous waste incineration facility at Plot No. 342-B, 2nd Phase, Harohalli Industrial Area, Kanakapura Taluk, and Ramanagara District, Karnataka by M/s. E Nano Incintech - Environmental Clearance

## (IA/KA/MIS/62543/2017; F. No. 10-37/2020-IA-III)

**1.**The PP (M/s. E Nano Incintech) along with his consultant 'M/s. Shree Green Consultants' made a presentation on the key parameters and salient features of the project to the EAC (Infra-2). The Committee took note of the following key parameters and salient features of the project presented during the meeting and as provided in the brief and application for this project:

- i. The project is located at Plot No. 342 B, 2nd Phase, Harohalli Industrial Area, Kanakapura Taluk, Ramanagara District, Karnataka with coordinates of the four corners of the project site: A: 12.680155, 77.441414; B: 12.680069, 77.441854; C: 12.679471, 77.441726; D: 12.679557, 77.441279.
- ii. The proposal is for 'Expansion'.
- iii. The project was granted ToR from MoEFCC vide letter F. No. 10-37/2020-IA-111 dated 13th July, 2020 for expansion of incinerator capacity from 2400 MTA to 6000 MTA and accordingly current application has been submitted for EC.
- After expansion, total land area will remain the same i.e., 4043 sqm. iv. Project Capacity will be increased to 6000 MTA. All hazardous waste (HW) having calorific value above 2500 kCal/kg will be handled by the facility in accordance to guidelines issued by CPCB under acts such as Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016. The proposed expansion will provide for the reclamation of AFR (Alternate Fuel and Raw materials) ahead of Rotary Kiln Incinerator. The AFR Plant is a Waste to Resource Recovery facility and will be installed with required systems for waste segregation, neutralization, proportionate mixing and value addition sections to enhance the mineral value and calorific value to qualify as feed for coprocessing in cement industry along with other raw materials. The reject materials from AFR facility and other waste which have materials in a non-recoverable state will be done to ash in Rotary Kiln Incinerator. The Incinerator will have Waste Proportionate Mixer for preparing a qualified Feed Stream for optimized operating conditions of the Incinerator and towards achieving Incineration efficiency at 99.99%. The details of the proposed expansion are as follows:

ExistingDetails	After Proposed Expansion (Final Configuration)
• 500Kg/hr	• 500Kg/hr(Rotary kiln – proposed)
• 8T/day	• 500 kg/hr(double chamber – existing)
• 2400MTA	<ul> <li>6000MTA(3600MTAofHW Incineration&amp;2400MTApre- processingofHWforAFR)</li> </ul>

v. Total water requirement will be 11.0 KLD (Existing 8.6 KLD + Proposed 2.4 KLD), water is/will be sourced from Karnataka Industrial Area Development Board (KIADB) water supply system. The details of wastewater generation, treatment and disposal are given as follows:

Particulars	Existing	Addition	Total	Disposal Mode
Domestic water consumption	0.7 KLD	1.44 KLD	2.14 KLD	Dispose to septic tank and Soak pit
Industrial purpose	0.7 KLD	0.7 KLD	1.4 KLD	After primary treatment at facility dispose to CETP M/s. Pai & Pai Chemicals located at Kumbalagodu Industrial Area.
Total	1.4 KLD	2.14 KLD	3.54 KLD	CETP membership is obtained

- vi. Power requirement for the facility will be 50 KVA and it will be sourced from Bangalore Electricity Supply Company Limited (BESCOM).62.5 KVA DG set will be used as backup power.
- vii. Details of solid waste and hazardous waste management are given as follows:

Type of	Quantity			Source	Waste Management
Waste	Existing	Proposed	Proposed		Reuse/Recycle/Disposal
			Total		
Office waste	0.0	2.5	2.5	Office	Dispose to authorized
/paper waste					vendor
/waste					
carton box					
Hazardous W	aste				
Used/Spent	0.1	0.0	0.1	Prime	Reuse in plant for
oil	KLA	KLA	KLA	Movers	lubrication and/or
					selling to authorized
					processor.
Incineration	200	50	250	Incinerator	Incineration ash is
ash	MTA	MTA	MTA		disposed to SPCB

		authorized	secured
		landfill cell in B	angalore

- The air pollution control system includes: Rapid quenching system to viii. prevent reformation of dioxins; Filter Bag House for removal of particulates; Wet alkaline scrubber (Venturi and Packed Bed) for neutralization of acidic gases (HCl, HF, and SO2), removal of organic constituents and adsorption by activated carbon to remove any dioxin & furans, mercury (if present in waste feed) in the flue gases; Mist eliminator to eliminate the mist in the stack emissions; ID Fan to maintain the entire system in negative draft for proper removal of flue gases; HEPA Filter to remove the very fine particulates before they are let out into the atmosphere though the chimney; Stack: Incinerator & DG Set will be provided with a stack height meeting MOEF&CC Guidelines (minimum 30 m & 5.0 m, respectively) for proper dispersion of cleaned gases in atmosphere; Controls and monitoring: computerised systems to make automatic adjustments to key functions as necessary for operation within the key parameters of the combustion process.
  - ix. Green area of 1335.00 sqm (@33% of plot area) is developed. approx. 350 trees are proposed to be planted in the next 5 years as follows:

Year	No. of Trees	Species of Plant
1 <sup>st</sup>	100	Acacia auriculiformis,
Year		Azadirachtaindica, Bougainvillea
$2^{\rm nd}$	80	Spectabilis, Delonixregia,
Year		Neriumindicum, Polyathialongifolia,
3 <sup>rd</sup>	70	Syzygiumcumini, Terminalia
Year		catapppa,
4 <sup>th</sup>	50	Thespesiapopulneoides
Year		
5 <sup>th</sup>	50	
Year		

- x. Baseline study was conducted during the period March 2020 to June 2020 at 8 monitoring locations. The observed pollutant levels were compared with CPCB National Ambient Air Quality Standards and found to be satisfactory.
- xi. The project is not located in Critically Polluted area.
- xii. No Court Case is pending against the project.
- xiii. The project is not located with 10 km of Eco Sensitive Zone. NBWL Clearance is not required.
- xiv. Forest Clearance is not required.
- xv. Expected timeline for completion of the project November 2021
- xvi. Investment/Cost of the project: The total project cost after expansion will be Rs. 6.67 Cr (Exiting 3.17 Cr + Proposed 3.50 Cr).
- xvii. Employment potential: Approx. 55 persons will get employment.
- xviii. Benefits of the project: Improving the degraded environment by establishing an Integrated Common Hazardous Waste Treatment,

Storage, and Disposal Facility for better management of industrial wastes. It reduces the number of hazardous waste dump sites in the area and also eliminates the pollution potential. The management of wastes is relatively easier & economically viable at common facility. Cost of environmental monitoring is less at common facility. Reduced environmental liability due to captive storage of hazardous waste in the premises of industries. Prevention of natural resource contamination thereby improving overall environmental status of the state and region.

- **2.**The EAC (Infra-2)noted that the project/activity is covered under category 'A' of item 7(d) 'Common hazardous waste treatment, storage and disposal facilities (TSDFs)' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at Central level by sectoral EAC.
- **3.** The EAC also noted that the project was earlier granted Environmental Clearance for Common hazardous waste incineration facility of 500 kg/hr capacity and to incinerate 1200 MTA of hazardous incinerable waste from MoEFCC vide letter F.No.10-88/2010-1A.111 dated 10th May, 2012. EC for expansion i.e., increasing the operational hours from 8 hours/day to 16 hours/day and capacity from 1200 MTA to 2400 MTA was also obtained from MoEFCC vide letter F.No. 10-26/2017-1A-111 dated 21st March, 2018. Later, the project has obtained ToR for expansion of incinerator capacity from 2400 MTA to 6000 MTA from MoEFCC vide letter F. No. 10-37/2020-IA-111 dated 13th July, 2020 wherein the project was given exemption from the requirement of Public Hearing due to project site being located inside notified industrial area.
- **4.** The EAC observed that the PP has obtained certified compliance report from MOEFCC Integrated Regional Office, Bangalore vide File No. EP/12.1/2017-18/15/KAR 1330 dated 11.03.2021. As per the report based on site visit dated 05.01.2021, the compliance to the various conditions of environment clearance is satisfactory.
- **5.** The EAC (Infra-2), based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, recommended granting environmental clearance to the project subject to the following specific conditions and other Standard EC Conditions as specified by the Ministry vide OM dated 4th January, 2019 for the said project/activity while considering for accord of environmental clearance:
  - i. The proponent should ensure that the project fulfills all the provisions of Hazardous and other Wastes (Management and Transboundary Movement) Rules, 2016 and the 'Protocol for Performance Evaluation and Monitoring' for the same as published by the CPCB including collection, transportation, design etc.
  - ii. Guidelines for Common Hazardous Waste Incineration issued by CPCB shall be followed.
- iii. Incinerated ash shall be disposed at approved TSDF and MoU shall be

- made within 3 months and information in this regard to be RO, MoEF&CC.
- iv. MoU shall be made with authorized recycler for disposal of spent/used oil.
- v. Membership shall be maintained with authorized CETP for treatment of process wastewater and dedicated transportation system to be developed with GPS facility and SCADA for tracking the vehicle.
- vi. The proponent shall comply with the Environmental standards notified by Ministry of Environment & Forest for incinerators along with the technology / guidelines.
- vii. Necessary provision shall be made for firefighting facilities within the complex.
- viii. Project proponent should prepare and implement an On Site Emergency Management Plan.
- ix. Employees shall be provided work specific PPE such as helmets, safety shoes, masks etc.
- x. Air pollution control systems such as Rapid quenching system, Filter Bag House, Wet alkaline scrubber (Venturi and Packed Bed), Mist eliminator, ID Fan, HEPA Filter, Computerized controls and monitoring systems etc. shall be implemented as proposed. Incinerator & DG Set shall be provided with a stack height meeting MOEF&CC Guidelines for proper dispersion of cleaned gases in atmosphere.
- xi. Ambient air quality monitoring shall be carried out at upwind and downwind locations. The parameters shall include Dioxins and Furan. Online real-time continuous monitoring facilities shall be provided as per the CPCB or State Board directions.
- xii. Project proponent should develop green belt all along the periphery of the TSDF with plant species that are significant and used for the pollution abatement. Total green area of 1335.00 sqm @33% of plot area) and 350 trees shall be maintained as proposed.
- xiii. Fresh water requirement from local authority shall not exceed 11.0 KLD during operational phase. As committed, no groundwater abstraction shall be done during construction as well as operation phase of the project.
- xiv. 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. 64.3.3

Construction of Commercial Building Project 'Mall Cum Multiplex' with built up area 76136.24 sqm at Plot Nos. 1223, 1224, 1225, 1229, 1230, 1232, 1234, 1235, 1237-1258, 1861, Mauza Sheikhpura, Raza Bazaar, Bailey Road, Patna, Bihar by M/s. Bailey Properties Pvt. Ltd. - Environmental Clearance

## (IA/BR/MIS/207885/2021; F. No. 21-25/2021-IA.III)

- 1. The PP (M/s. Bailey Properties Pvt. Ltd.) along with his consultant 'M/s. Paramarsh (Servicing Environment & Development)'made a presentation before EAC (Infra-2) on the key parameters and salient features of the project. The Committee took note of the following key parameters and salient features of the project presented during the meeting and as provided in the brief and application for this project:
  - i. The project is located at Plot Nos. 1223, 1224, 1225, 1229, 1230, 1232, 1234, 1235, 1237-1258, 1861, Mauza Sheikhpura, Raza Bazaar, Bailey Road, Patna, Bihar with coordinates25°36'14.12"N Latitude and 85° 5'15.47"E Longitude.
  - ii. The project is new.
- iii. The total plot area is 17791.07 sqm, and total construction (Built-up) area of 76136.24 sqm. The project will comprise of 1 Building. It is a commercial building project. No flats will be developed. Maximum height of the building will be 30.15 m. AGL. The details of building are as follows:

Particulars	Details			
a. Total Plot Area	17791.07 sqm (1.77 Ha.)			
b. Total Built-up Area	76136.24 sqm			
	Lower Basement	11056.78 sqm		
	Upper Basement	11056.78 sqm		
	Lower Ground Floor	11056.78 sqm		
	Ground Floor	8855.89 sqm		
	01st Floor	9322.76 sqm		
	02 <sup>nd</sup> Floor	9322.76 sqm		
c. Break-up of Built-up Area	03 <sup>rd</sup> Floor	8795.02 sqm		
	04 <sup>th</sup> Floor	6669.46 sqm		
	TOTAL BUILT UP	76136.24 sqm		
	AREA			
	Parking Area	15873.14 sqm		
	(included in Lower			
	& Upper Basement)			
d. Provided Green Belt / space & Landscape Area	2948.89 sqm (20 % o	f total land area)		
e. Max. Height of Buildings	30.15 m. (AGL)			

- iv. During construction phase, total water requirement is expected to be 30 KLD which will be met by Water tankers or municipal water supply. 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 requirement of the project is expected to be 501 KLD and the same will be met by 296 KLD fresh water from Municipal Water Supply and 205 KLD Recycled Water. Wastewater generated (228 KLD) will be treated in MBBR type STP of total 250 KLD capacity. 205 KLD of treated wastewater will be

- recycled and reused (139 KLD for flushing, 6 KLD for gardening & 60 KLD for HVAC). No waste water will be discharged outside premises.
- vi. About 2.24 TPD solid wastes will be generated in the project. The biodegradable waste (1.52 TPD) will be processed in Bio-composting pits / OWC and the non-biodegradable waste generated (0.72 TPD) will be handed over to authorized local vendor.
- vii. The total power requirement during construction phase is 1200 KVA and will be met from South Bihar Power Distribution Co. Ltd. (SBPDCL) and total power requirement during operation phase is 4304 KVA and will be met from SBPDCL. DG sets (3 x 1000 KVA and 1 x 500 KVA) will be used for power backup during power failure.
- viii. Rooftop rainwater of buildings will be recharged to ground water aquifer through 4 Nos. recharge pits within premises.
- ix. Parking facility for 500 four wheelers and 800 two wheelers is proposed to be provided against the requirement of 357 and 500 respectively (according to local norms).
- x. Proposed energy saving measures would save about 1 % of power through use of solar energy.
- xi. The project is not located in a Critically Polluted area.
- xii. The project is not located within 10 km of Eco Sensitive Zone. NBWL Clearance is not required.
- xiii. Forest Clearance is not required.
- xiv. No court case is pending against the project.
- xv. An area of 2948.89 sqm will be developed and maintained for green belt within the project premises. Approx. 222 nos. of trees will be planted within and outside the proposed commercial project premises in consultation with Forest Dept. Govt. of Bihar. No tree felling/transplantation is envisaged for the project.
- xvi. Expected timeline for completion of the project Maximum 12-15 months after grant of EC.
- xvii. Investment/Cost of the project is Rs 250 Crore.
- xviii. Employment potential approx. 100 persons during construction phase and 1850 persons during operation phase.
  - xix. Benefits of the project New employment opportunities will be generated.
  - **2.** The EAC (Infra-2) also noted that the project/activity is covered under category 'B' of item 8(a) 'Building and Construction projects' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at State level. However, due to non-existence of SEIAA in Bihar, the proposal is appraised at Central level by sectoral EAC.
  - **3.** The EAC (Infra-2), based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, recommended granting environmental clearance to the project subject to the following specific conditions and other Standard EC Conditions as specified by the Ministry vide OM dated 4th January, 2019 for the said project/activity, while considering for accord of environmental clearance:

- i. 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.
- ii. Fresh water requirement from local authority shall not exceed 296 KLD during operational phase.
- iii. As proposed, waste water shall be treated in an onsite STP of total 250 KLD capacity. Atleast 205 KLD treated water from the STP shall be recycled and re-used for flushing (approx. 139 KLD), HVAC (approx. 60 KLD) and for gardening (approx. 6 KLD). There shall be no discharge of treated water from the project as proposed.
- iv. The project proponents would commission a third-party study on the implementation of conditions related to quality and quantity of recycle and reuse of treated water, efficiency of treatment systems, quality of treated water being supplied for flushing (specially the bacterial counts), comparative bacteriological studies from toilet seats using recycled treated waters and fresh waters for flushing, and quality of water being supplied through spray faucets attached to toilet seats.
- v. Area for greenery shall be provided as per the details provided in the project document i.e., area under plantation/greenery will be 2948.89 sqm. As proposed, at least 222 trees to be maintained within and outside the proposed commercial project premises in consultation with Forest Dept. Govt. of Bihar 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. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.
- vi. The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. As proposed, 4 Nos. of RWH pits shall be maintained for rainwater harvesting after filtration.
- vii. The solid waste shall be duly segregated into biodegradable and non-biodegradable components and handled in separate area earmarked for segregation of solid waste. As committed, biodegradable waste shall be composted by use of Composter. Inert waste shall be dumped to authorized site. The recyclable waste shall be sold to resellers.
- viii. A detailed traffic management and traffic decongestion plan shall be drawn and implemented to ensure that the service of the roads near project site may not get adversely impacted after the implementation of the project. The plan should stipulate, inter-alia, the path and appropriate time for the movement of vehicles to and from site. The Plan shall be vetted by concerned agency in the State Govt.
- ix. The PP shall also provide electric charging points in the parking areas for e-vehicles as committed.
- x. PP should explore enhancing energy conservation up to at least 5%

- through use of solar energy.
- xi. PP shall explore the use of non-ozone depleting substances in air conditioning systems.

#### AGENDA ITEM NO. 64.3.4

Construction of Commercial cum Residential Building Project with built up area of 70945.24 Sq. m at Plot No. 44, 45, 123, Khata No. 93, Mauza Sundrayan, Purab Pally Road, Kishanganj, Dist. Kishanganj, Bihar by M/s SPSR Developers LLP - Environmental Clearance

# (IA/BR/MIS/207998/2021, F. No. 21-27/2021-IA.III)

- 1. The PP (M/s SPSR Developers LLP) along with his consultant 'M/s. Paramarsh (Servicing Environment & Development)' made a presentation before EAC (Infra-2) on the key parameters and salient features of the project. The Committee took note of the following key parameters and salient features of the project presented during the meeting and as provided in the brief and application for this project:
  - i. The project is located at Plot No. 44, 45, 123, Khata No. 93, Mauza Sundrayan, Purab Pally Road, Kishanganj, Bihar with coordinates 26°6'8.27"N Latitude and 87°57'46.00"E Longitude
  - ii. The project is new.
- iii. The total plot area is 15787 sqm and total construction (Built-up) area of 70945.24 sqm. The project will comprise of 5 Buildings. It is a commercial cum residential building project. Total Nos. of Residential Flats will be 144. Maximum height of the building will be 40 m AGL. The details of building are as follows:

Particulars	Details				
1. Total Plot Area	1:	5787 sqn	ı		
2. Total Built-up Area including Parking	709	945.24 sc	ım		
3. Residential Built-up Area	28042.4 sqm				
4. Commercial Built-up Area	22044.84 sqm				
5. Total Covered Parking Area (UB + LB floor)	20858 sqm				
6. Building wise Built-up	Floor	Block 1	Block 2	Block 3	
area break-up	Upper Basement	691	691	691	
	Lower Basement	691	691	691	
	Ground Floor	620.75	620.75	1148.14	
	01st Floor	620.75	620.75	1148.14	
	02 <sup>nd</sup>	620.75	620.75	1148.14	

03 <sup>rd</sup>	620.75	620.75	1148.14
04 <sup>th</sup>	620.75	620.75	1148.14
05 <sup>th</sup>	620.75	620.75	1148.14
06 <sup>th</sup>	620.75	620.75	1148.14
07 <sup>th</sup>	620.75	620.75	1148.14
08 <sup>th</sup>	620.75	620.75	1148.14
09 <sup>th</sup>	620.75	620.75	1148.14
Total Built Up Area (G+9 Floor)	7589.5	7589.5	12863.4
Total Residential	2	28042.4 s	qm
Built-Up Area	(144 No	s. Reside	ntial Flats)
Built-up Area Details	s of Comr	nercial B	lock
Floor	Bloo	ck 4	Block 5
Upper Basement		Parking A	
Lower Basement	I	Parking Ar	
Ground Floor		5.46	1917.77
01st Floor	150	5.46	1917.77
$02^{\mathrm{nd}}$		5.46	1917.77
03 <sup>rd</sup>	150	5.46	1917.77
04 <sup>th</sup>	150	5.46	1917.77
05 <sup>th</sup>		5.46	1917.77
06 <sup>th</sup>	150	5.46	NA
Total Built-up Area	1053	38.22	11506.62
Total Commercial Built Up Area	2	22044.84sc	
Parking Area in UB & LB	20858 sq1		Įm
Total Built-Up Area Of Project (including Covered Parking Area)	70945.24 s		sqm

- iv. During construction phase, total water requirement is expected to be 20 KLD which will be met by water tankers or proposed borewell. 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 labour force.
- v. During operational phase, total water requirement of the project is expected to be 240 KLD and the same will be met by 83 KLD fresh water from Municipal Water Supply or ground water and 157 KLD Recycled Water. The total wastewater generated will be 159 KLD which will be treated in two STPs of capacities 100 KLD (for residential buildings) and 75 KLD (for commercial building). 157 KLD of treated water from STPs will be recycled and reused (85 KLD for flushing, 17 KLD for horticultural use, 50 KLD for HVAC systems and 5 KLD for dust suppression). No waste water will be discharged outside premises.

- vi. About 2.08 TPD solid wastes will be generated in the project. The biodegradable waste (1.44 TPD) will be processed in Bio-composting pits / OWC and the non-biodegradable waste generated (0.64 TPD) will be handed over to authorized local vendor.
- vii. The total power requirement during construction phase is 800 KVA and will be met from North Bihar Power Distribution Co. Ltd. (NBPDCL) and total power requirement during operation phase is 2500 KW and will be met from NBPDCL. DG Sets (2 x 1000 KVA and 1 x 500 KVA) will be installed for power backup.
- viii. Rooftop rainwater of buildings will be recharged to ground water aquifer through 5 Nos. recharge pits within premises.
  - ix. Parking facility for 600 four wheelers and 950 two wheelers is proposed to be provided against the requirement of 445 and 500 respectively (according to local norms).
  - x. Proposed energy saving measures would save about 1 % of power through use of solar energy.
- xi. The project is not located in Critically Polluted area.
- xii. The project is not located within 10 km of Eco Sensitive Zone. NBWL Clearance is not required.
- xiii. Forest Clearance is not required.
- xiv. No Court case is pending against the project.
- xv. An area of 3296.34 sqm will be developed and maintained for green belt within the project premises. Approx. 200 nos. of trees will be planted within and outside the proposed commercial cum residential project premises in consultation with Forest Dept. Govt. of Bihar. No tree felling/transplantation is envisaged for the project.
- xvi. Expected timeline for completion of the project is Max. 12-15 months after grant of EC.
- xvii. Investment/Cost of the project is Rs 95 Crore.
- xviii. Employment potential is 200 persons.
- xix. Benefits of the project New employment opportunities will be generated.
- **2.** The EAC also noted that the project/activity is covered under category 'B' of item 8(a) 'Building and Construction projects' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at State level. However, due to non-existence of SEIAA in Bihar, the proposal required appraisal at Central level by sectoral EAC.
- **3.** The EAC (Infra-2), based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, recommended granting environmental clearance to the project subject to the following specific conditions and other Standard EC Conditions as specified by the Ministry vide OM dated 4th January, 2019 for the said project/activity, while considering for accord of environmental clearance:
  - i. Fresh water requirement shall not exceed 83 KLD during operational phase. Groundwater abstraction to meet the fresh water requirement shall be considered only in absence of water supply from local

- authority. Abstraction of ground water shall be subject to the permission of Central Ground Water Authority (CGWA).
- ii. As proposed, waste water shall be treated in two onsite STPs of capacities 100 KLD (for residential buildings) and 75 KLD (for commercial building). At least 157 KLD of treated water from STPs shall be recycled and reused (85 KLD for flushing, 17 KLD for horticultural use, 50 KLD for HVAC systems and 5 KLD for dust suppression). There shall be no discharge of treated water from the project as proposed.
- iii. The project proponents would commission a third-party study on the implementation of conditions related to quality and quantity of recycle and reuse of treated water, efficiency of treatment systems, quality of treated water being supplied for flushing (specially the bacterial counts), comparative bacteriological studies from toilet seats using recycled treated waters and fresh waters for flushing, and quality of water being supplied through spray faucets attached to toilet seats.
- iv. Area for greenery shall be provided as per the details provided in the project document i.e., area under plantation/greenery will be 3296.34 sqm. As proposed, at least 200 trees to be maintained within and outside the proposed commercial cum residential project premises in consultation with Forest Dept. Govt. of Bihar during the operation phase of the project. Green belt shall also be developed between residential and commercial area as committed. 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. 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. recharge pits shall be maintained for rainwater harvesting after filtration.
- vi. The solid waste shall be duly segregated into biodegradable and non-biodegradable components and handled in separate area earmarked for segregation of solid waste. As committed, biodegradable waste shall be composted by use of Composter. Inert waste shall be dumped to authorized site. The recyclable waste shall be sold to resellers.
- vii. Separate Entry / Exit shall be provided for Residential and commercial area as committed. A detailed traffic management and traffic decongestion plan shall be drawn and implemented to ensure that the service of the roads near project site may not get adversely impacted after the implementation of the project. The plan should stipulate, inter-alia, the path and appropriate time for the movement of vehicles to and from site. The Plan shall be vetted by concerned agency in the State Govt.
- viii. The PP shall also provide at least 5 nos of electric charging points in the parking areas for e-vehicles as committed.

- ix. PP should explore enhancing energy conservation up to at least 5% through use of solar energy.
- x. PP shall explore the use of non-ozone depleting substances in air conditioning systems.
- xi. The Environmental Clearance to the project is primarily under provisions of EIA Notification, 2006. The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/Regulations or Statutes as applicable to the project.

#### AGENDA ITEM 64.3.5

Warehouse Project with built up area of 67,126.800 sqm at Survey No. 302/303, National Highway No. 22, Hajipur Sarai Road, Village: Afajalpur Dhobghatti, Bihar by M/s. Alcaso Infraspace Pvt. Ltd. - Environmental Clearance

## (IA/BR/MIS/208048/2021; F. No. 21-28/2021-IA.III)

- 1. The PP (M/s. Alcaso Infraspace Pvt. Ltd.) along with his consultant 'Grass Roots Research & Creation India (P) Ltd.' made a presentation before EAC (Infra-2) on the key parameters and salient features of the project. The Committee took note of the following key parameters and salient features of the project presented during the meeting and as provided in the brief and application for this project:
  - i. The project is located at Survey No. 302/303, National Highway no. 22, Hajipur Sarai Road, Village: Afajalpur Dhobghatti, Bihar with coordinates 25°45'45.9"N Latitude and 85°15'39.1"ELongitude.
  - ii. The project is new.
- iii. The total plot area is 1, 02,090.19 sqm, FSI area is 67,126.800 sqm and total construction (Built-up) area of 67,126.800 sqm [Block (A&B)= 35,641.60 sqm; Block C =31,485.20 sqm]. The project will comprise of 3 Blocks/ Buildings. Maximum height of the building is 18 m. The details of building are as follows:

S. No.	Particulars	Total Area
		(sqm)
1.	Total Plot Area	1,02,090.19
2.	Permissible Ground Coverage @ 60% of the total plot	61,254.114
	area)	
3.	Proposed Ground Coverage @ 55.773% of the total	56,939.000
	plot area)	
	Block (A&B)	31,385.75
	Block C	25,553.25
4.	Total Permissible FAR (@ 150% of the total plot area)	1,53,135.285
5.	Proposed FAR (@ 65.752% of the total plot area)	67,126.800
	Block (A&B)	35,641.60
	Block C	31,485.2

6.	Permissible Landscape Area (10% total plot area)	
		10,209.019
7.	Landscape Area @ 13.501% of the total plot area)	13,783.197
	Block (A&B)	7,597.53
	Block C	6,185.66
8.	Built Up Area	67,126.800
	Block (A&B)	35,641.60
	Block C	31,485.20
9.	Proposed Parking Area (@ 30% of the built-up area)	20,138.04
10.	Road & Pathway	11,229.92
11.	Maximum height of the building (meters)	18

- iv. During construction phase, total water requirement is expected to be 134.25 ML which will be met by Municipal Corporation. 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 requirement of the project is expected to be 188 KLD [99 KLD (Block A & B); 89 KLD (Block C)] and the same will be met by 109 KLD [56 KLD (Block A & B); 53 KLD (Block C)] fresh water from borewell and 79 KLD [43 KLD (Block A & B); 36 KLD (Block C)] of Recycled Water. Wastewater generated will be 92 KLD [49 KLD (Block A & B); 43 KLD (Block C)]) and will be treated in 2 STPs of total 127 KLD capacity which includes 62 KLD (Block A & B) and 65 KLD (Block C) through which 79 KLD [43 KLD (Block A & B); 36 KLD (Block C)] of treated wastewater will be recycled and reused for flushing, and for gardening. About 46 KLD [24 KLD (Block A& B); 22 KLD (Block C)] will be disposed in to municipal drain.
- vi. About 0.997 TPD [0.529 TPD (Block A& B); 0.467 TPD (Block C)] solid wastes will be generated in the project. The biodegradable waste of 0.398 TPD; [0.2116 TPD (Block A& B); 0.186 TPD (Block C)] will be processed in OWC and the non-biodegradable waste generated 0.598 TPD [0.317 TPD (Block A& B); 0.280 TPD (Block C)] will be handed over to authorized local vendor.
- vii. The total power requirement during construction phase is 150 KVA and will be met from Bihar State Electricity Board (BSEB) and total power requirement during operation phase is 1083.43 KVA which includes 575.26 kVA for Block A & B and 508.17 kVA for Block C and will be met from BSEB.
- viii. Rooftop rainwater of buildings will be collected in 22 RWH pits and 1 Rain Garden/Pond of 500cu.m of total 664.89 KLD capacity for harvesting after filtration.
  - ix. Total parking area proposed is 20,138.04sqm (30% of built up area) which includes 102 no. of trucks and 681 no. of cars
  - x. Proposed energy saving measures would save about 18.5 % of power.
  - xi. The project is not located in Critically Polluted area.
- xii. The project is not located within 10 km of Eco Sensitive Zone. NBWL Clearance is not required.
- xiii. Forest Clearance is not required.

- xiv. No Court case is pending against the project.
- xv. Total green area measures 13,783.197sqm i.e. 13.501% of the plot area which includes 7,597.53 sqm area for Block (A&B) and 6,185.66sqm area for Block C. Plantation will be done at project boundary as well as at peripheral areas. And organized green area would be planted on land available between blocks which would enhance the aesthetic beauty of the area. No tree felling or transplantation will be done in the project premises.
- xvi. Expected timeline for completion of the project: 2 years
- xvii. Investment/Cost of the project is Rs. 60 Crore.
- xviii. Employment potential: 3360 persons.
  - xix. Benefits of the project: Employment and Infrastructure
  - **2.** The EAC also noted that the project/activity is covered under category 'B' of item 8(a) 'Building and Construction projects' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at State level. However, due to non-existence of SEIAA in Bihar, the proposal required appraisal at Central level by sectoral EAC.
  - **3.** The EAC (Infra-2), based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, recommended granting environmental clearance to the project subject to the following specific conditions and other Standard EC Conditions as specified by the Ministry vide OM dated 4th January, 2019 for the said project/activity, while considering for accord of environmental clearance:
    - i. Abstraction of ground water shall be subject to the permission of Central Ground Water Authority (CGWA). Fresh water requirement shall not exceed 109 KLD during operational phase.
    - ii. As proposed, waste water shall be treated in two onsite STPs of capacities 62 KLD and 65 KLD. Atleast 79 KLD of treated water from STPs shall be recycled and reused for flushing and gardening. PP shall explore options for reuse of excess treated water for dust suppression, wheel washing, irrigation, construction use etc.
  - 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 13,783.197 sqm. 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. 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, 22 RWH pits and 1 Rain Garden/Pond of 500 cu.m of total 664.89 KLD capacity for harvesting after filtration.
- vi. The solid waste shall be duly segregated into biodegradable and non-biodegradable components and handled in separate area earmarked for segregation of solid waste. As committed, biodegradable waste shall be composted by use of Composter. Inert waste shall be dumped to authorized site. The recyclable waste shall be sold to resellers.
- vii. A detailed traffic management and traffic decongestion plan shall be drawn and implemented to ensure that the service of the roads near project site may not get adversely impacted after the implementation of the project. The plan should stipulate, inter-alia, the path and appropriate time for the movement of vehicles to and from site. The Plan shall be vetted by concerned agency in the State Govt.
- viii. Maintenance area for trucks shall be provided as committed.
  - ix. The PP shall also provide electric charging points in the parking areas for e-vehicles as committed.
  - x. The Environmental Clearance to the project is primarily under provisions of EIA Notification, 2006. The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/Regulations or Statutes as applicable to the project.

## AGENDA ITEM NO. 64.3.6

RDF based Waste to Energy Plant in Municipal Solid Waste Processing & Disposal Facility at Shishambada, Vikasnagar, Dehradun by M/s. Dehradun Waste Management Private Limited (DWMPL) - Reconsideration for Terms of Reference

### (IA/UK/MIS/194487/2021; F.No. IA3-21/6/2021-IA.III)

The Project Proponent expressed inability to attend the meeting due to being affected by COVID-19 and requested to consider the project in forthcoming meeting of EAC vide letter dated 08.04.2021. Accordingly, the Committee decided to defer the project as absent case.

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#### AGENDA ITEM NO. 64.3.7

Expansion of 'D Mall' (shopping complex) with increase of built-up area from 34,803.405 sqm to 40,886.47 sqm at Plot no. A-1, District Centre, Wazirpur (Netaji Subhash Place), New Delhi by M/s. Mera Baba Reality Associates Pvt. Ltd. - Environmental Clearance

## (IA/DL/MIS/193991/2019; F. No. 21-24/2021-IA.III)

- 1. The PP (M/s. Mera Baba Reality Associates Pvt. Ltd.) along with his consultant 'Perfact Enviro Solutions Pvt. Ltd' made a presentation before EAC (Infra-2) on the key parameters and salient features of the project. The Committee took note of the following key parameters and salient features of the project presented during the meeting and as provided in the brief and application for this project:
  - i. The project is located at Plot no. A-1, District Centre, Wazirpur (Netaji Subhash Place), New Delhi with coordinates 28°41'33.48"N Latitude and 77°9'10.31"ELongitude.
  - ii. The proposal is for 'Expansion'.
- iii. Earlier, Environmental Clearance was granted to the project vide letter no. DPCC/MS/SEIAA-SEAC/09/222, dated 24.04.2009 for plot area of 5124.228 sqm and built up area of 31297.246 sqm. Later on another EC was granted vide letter No. 21-62/2019/IA-III dated 18.10.2019 for expansion of the project with a plot area of 5124.228 sqm and built up area of 34803.4 sqm. Now, due to amendment in UBBL Bye laws, further expansion has been proposed.
- iv. As the project involves expansion of the existing shopping complex, the total Plot area of the project will remain the same i.e. 5124.228 sqm. Ground coverage of the project will decrease from 2417.05 sqm to 2401.22 sqm. Total FAR area of the proposed project will change from 24063 sqm to 23204.582 sqm. Total basement area of the project will remain the same i.e 7798.243 sqm. Non FAR area (including basement area) will change from 8996.154 sqm to 9883.645 sqm. Therefore, the total built up area of the project will increase from 34,803.405sqm to 40,886.47 sqm. The number of floors after expansion will remain the same G+16. The maximum height of the building will be 71 m. For the proposed expansion, no construction has been commenced at the site. The details of the building are as follows:

		Details			
Particulars	Unit	Existing operational	Proposed	Total After Expansion	
Cost of the project	Rs(in Cr.)	178.36	13	191.36	
Total Plot Area	sqm	5124.228			
GROUND COVERAG	GROUND COVERAGE				
Ground Coverage (Permissible)	sqm	2417.205			
Ground Coverage (Achieved/Proposed)	sqm	2228.29	172.927	2401.22	
FAR Permissible	sqm	23499.83			

Purchasable FAR	sqm	564		
Total FAR Permissible	sqm	24063		
Proposed FAR	sqm	18009.01	5195.574	23204.582
Total Basement area	sqm	7798.243		
Total Non-FAR Area	sqm	8996.154	887.491	9883.645
Atrium Area (included in FAR)	sqm	512.423		
Built-up Area (FAR + Non FAR) (including basement area + service area)	sqm	34803.405	6083.065	40886.47
Maximum No. of Floors	nos	G+16	Nil	G+16
Max. height of building (upto terrace level)	m	71	Nil	71
No. of Basement	No.	3	Nil	3
Total population	No.	5000	Nil	5000
Staff	No.	450	Nil	450
Visitors	No.	4550	Nil	4550
Total solid waste generation	kg/day	750	Nil	750
Total Power Load	kW	2600	Nil	2600
DG Sets	kVA	2 x1010 KVA & 1x 500 KVA(stand by)	Nil	2 x1010 KVA & 1x 500 KVA (stand by)
HVAC capacity	TR	3 x375 TR (air cooled) & 1 x400 TR (water cooled)	Nil	3 x 375 TR (air cooled) & 1 x400 TR (water cooled)
No. of Rain Water Harvesting pits	No.	1	Nil	1
Total Water demand	KLD	222	Nil	222
Waste water discharge	KLD	159	Nil	159
STP capacity	KLD	250	Nil	250

Parking requirement	ECS	464	Nil	464
Parking provision	ECS	482	Nil	482

- v. During construction phase, total water requirement is 7 KLD out of which 5 KLD water will be sourced through treated water from nearby STP for construction activities. For domestic use, 2 KLD water will be sourced through tankers.
- vi. During operational phase, at present, the total water requirement of the complex is 222 KLD. 109 KLD of freshwater requirement is met by Delhi Jal Board (DJB) for domestic purposes. Total waste water generated is 159 KLD which is being treated in STP of capacity 250 KLD based on MBBR Technology. 113 KLD treated water generated from in house STP will be reused for flushing, gardening, HVAC cooling & Misc. purposes. The Excess treated water of 30 KLD will be used for sprinkling in the green area and construction site.
- vii. At present, total solid waste generation is 750 kg/day (274 TPA) from the complex. Out of which, bio-degradable waste of 300 kg/day (110 TPA) is being treated in organic waste converter and converted to manure. 225 kg/day (82 TPA) of non-biodegradable waste and 225 kg/day (82 TPA) of plastic waste is given to authorised recyclers. 27 lit/month of used oil generated from the DG sets is being kept in an isolated area and in a leak proof container and given to the authorised recycler. 2-4 kg /month of E- waste is also be given to approved vendors. Battery waste is generated from inverters & UPS. It is being properly managed as per Batteries (Management and Handling) Rules 2001.No additional solid waste generation is envisaged as there is no increase in population in the expansion part.
- viii. The total power requirement of the project before and after expansion will be 2600 kVA (2137.5 kw)which will be met by the Tata Power Delhi Distribution limited (TATA Power-DDL). DG sets of capacity 2 x 1010 KVA & 1 x 500 KVA (Existing) will be installed as power backup for common utilities during power failure. Adequate stack height of 6 m & 4.5m from roof level respectively will be maintained which will help in reducing the air pollution.
  - ix. 1 no. of Rain Water collection tank is provided in the project site.
  - x. The total existing parking provision is 482 ECS and same will be used for the expansion phase.
- xi. The solar photovoltaic system of 60 KWp generates approximately 89701 Kwh estimated through PVwatts India Calculator. Total saving is 2% of total energy.
- xii. The project is not located in a 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. Total capital cost towards EMP will be Rs.163.79 lakhs and recurring cost will be Rs. 6.20 lakhs per year.
- xvii. Green belt/greenery is developed near the plot in the district as well as along roads. Existing area under plantation / greenery is 1793.47 sqm (35% of plot area). 64 trees are required to be maintained (@plot area/ 80 sqm), of which 40 trees are existing and 24 trees are proposed for plantation.
- xviii. Expected timeline for completion of the project: 2 years
- xix. Investment/Cost of the project: Total cost of the project after expansion is estimated to be Rs. 191.36 crores. Cost of expansion will be INR 13 Crores.
- xx. Employment potential: Approx.50 labourers will be hired during the construction phase and during the operation phase about 450 employment opportunities will be generated.
- xxi. Benefits of the project: The project will provide good quality, ecofriendly, safe and secured working space. It will lead to an increase in the infrastructure of the area and encourage others to develop planned commercial complexes. Social infrastructure improvement by the project to uplift the skill levels of local population
- **2.** The EAC noted that the project/activity is covered under category 'B' of item 8(a) 'Building and Construction projects' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at State level. However, due to non-existence of SEIAA in Delhi, the proposal required appraisal at Central level by sectoral EAC.
- **3.** The EAC also noted that the PP has obtained certified compliance report from MOEFCC Integrated Regional Office, Jaipur vide File No. 4/785/10/SPL-23to24 dated 25.02.2021. As per the report based on site visit dated 02.02.2021, most of the conditions were observed complied and no major non-compliance was observed. The PP also provided compliance action for the observations raised in the aforesaid report.
- **4.** The EAC (Infra-2), based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, recommended granting environmental clearance to the project subject to the following specific conditions and other Standard EC Conditions as specified by the Ministry vide OM dated 4th January, 2019 for the said project/activity, while considering for accord of environmental clearance:
  - i. Compliance report /reply to observations of IRO shall be submitted within 3 months and closure report shall be obtained from concerned regulatory authority.
  - ii. Fresh water requirement from local authority shall not exceed 109 KLD during operational phase. As committed, no groundwater abstraction shall be done during construction as well as operation phase of the project.
- iii. As proposed, waste water shall be treated in an onsite STP of total 250 KLD capacity. Atleast 113 KLD treated water from the STP shall be

- recycled and re-used for flushing, gardening, HVAC cooling & Misc. purposes. The excess treated water of 30 KLD shall be used for sprinkling in the green area and construction site as proposed.
- iv. The project proponents would commission a third-party study on the implementation of conditions related to quality and quantity of recycle and reuse of treated water, efficiency of treatment systems, quality of treated water being supplied for flushing (specially the bacterial counts), comparative bacteriological studies from toilet seats using recycled treated waters and fresh waters for flushing, and quality of water being supplied through spray faucets attached to toilet seats.
- v. Area for greenery shall be provided as per the details provided in the project document i.e., area under plantation/greenery will be 1793.47 sqm. As proposed, at least 64 trees to be maintained during the operation phase of the project. The landscape planning should include plantation of native species. A minimum of 01 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.
- vi. The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. As proposed, 1 Nos. of RWH pits shall be maintained for rainwater harvesting after filtration.
- vii. The solid waste shall be duly segregated into biodegradable and non-biodegradable components and handled in separate area earmarked for segregation of solid waste. As committed, biodegradable waste shall be composted by use of Composter. Inert waste shall be dumped to authorized site. The recyclable waste shall be sold to resellers.
- viii. A detailed traffic management and traffic decongestion plan shall be drawn and implemented to ensure that the service of the roads near project site may not get adversely impacted after the implementation of the project. The plan should stipulate, inter-alia, the path and appropriate time for the movement of vehicles to and from site. The Plan shall be vetted by concerned agency in the State Govt.
- ix. Anti-Smog gun shall be provided to curb air pollution during construction phase.
- x. PP should implement for enhancing energy conservation up to 5% through use of solar energy.
- xi. The Environmental Clearance to the project is primarily under provisions of EIA Notification, 2006. The Project Proponent is under obligation to obtain approvals/clearances under any other Acts/Regulations or Statutes as applicable to the project.

#### AGENDA ITEM NO. 64.3.8

Expansion of Commercial Complex "Salcon Rajvilas" with increase of built-up area from 20636.081 sqm to 23459.81 sqm at Plot No. D-1 & P3A, Saket Place, New Delhi by M/s. Laxmi Buildtech Pvt. Ltd. – Reconsideration for Environmental Clearance

## (IA/DL/MIS/170243/2007;F.No.IA3-21/11/2021-IA.III)

- **1.** The EAC noted that the proposal was earlier examined in its 61<sup>st</sup>Meeting held on 8<sup>th</sup> February, 2021. The PP was asked for following additional information:
  - i. Submit copy of valid Consent to Operate during the period of 2009 to 2014
  - ii. Timeline of construction of STP since 2009 i.e, after occupancy certificate obtained from DDA and reason of upgradation of STP capacity from 80 KLD to 100 KLD without obtaining the EC.
- iii. Submit action plan for compliance to the observations raised in certified compliance report issued by MOEFCC Integrated Regional Office, Jaipur vide file no. 4-464/08/1166 dated 15.01.2021.
- **2.** The EAC asked PP to provide the aforesaid information. The PP (M/s. Laxmi Buildtech Pvt. Ltd.) along with his consultant 'M/s. Perfact Enviro Solutions Pvt. Ltd.' made a presentation and provided the following information:

Sr.	Query Raised by EAC	Response by PP	
No.	Submit copy of valid Consent to Operate during the period of 2009 to 2014	Consent application was submitted on 22.09.2009 to DPCC for 5 years but consent order was not issued. Receipt of application submission is attached.  Again consent to operate was applied on 29.01.2014 and Consent was granted vide order No.DPCC/CMC/2014/34606 dated 16.07.2014 valid till 28.01.2019. Subsequently, renewal CTO was granted vide order No. DPCC/CMC/2019/300990 dated10.11.2020 valid from 29/01/2019 to 28/01/2024.	
ii	Timeline of construction of STP since 2009 i.e after occupancy certificate obtained from DDA and reason of upgradation of STP capacity from 80 KLD to 100 KLD without obtaining the EC	As per Environmental Clearance we have ordered for 80 KLD STP installation. The vendor has designed the STP considering 80 KLD as average flow and applied a factor of 1.25for peak flow based on the nature of waste water generation in the commercial complex. The STP is being operated now @ 50 to 60 KLD with regulated treatment.	

iii	Submit action plan for A	Action plan for compliance to
	compliance to the c	observation raised in certified
	observations raised in c	compliance Report issued by MoEFCC
	1 - 1	Integrated Regional Office, Jaipur has
	issued by MOEFCC 1	been submitted on 24.02.2021. Copy of
	Integrated Regional Office, I	Reply is attached
	Jaipur vide file no. 4-	
	464/08/1166	
	dated15.01.2021	

- **3.** The EAC also noted that the project/activity is covered under category 'B' of item 8(a) 'Building and Construction projects' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at State level. However, due to non-existence of SEIAA in Delhi, the proposal required appraisal at Central level by sectoral EAC.
- **4.**The EAC found the response to the queries as satisfactory. The EAC (Infra-2), based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, recommended 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 47 KLD during operational phase. As committed, no groundwater abstraction shall be done during construction as well as operation phase of the project.
  - ii. As proposed, waste water shall be treated in an onsite STP of total 100 KLD capacity. Atleast 79 KLD treated water from the STP shall be recycled and re-used for flushing, gardening and cooling purposes. There shall be no discharge of treated water from the project as proposed.
- iii. The project proponents would commission a third-party study on the implementation of conditions related to quality and quantity of recycle and reuse of treated water, efficiency of treatment systems, quality of treated water being supplied for flushing (specially the bacterial counts), comparative bacteriological studies from toilet seats using recycled treated waters and fresh waters for flushing, and quality of water being supplied through spray faucets attached to toilet seats.
- iv. The solid waste shall be duly segregated into biodegradable and non-biodegradable components and handled in separate area earmarked for segregation of solid waste. As committed, biodegradable waste, inert waste and recyclable waste shall be disposed through authorised agencies.
- v. Area for greenery shall be provided as per the details provided in the project document i.e., area under plantation/greenery will be 465 sqm. The landscape planning should include plantation of native species. A minimum of 01 tree for every 80 sqm of land should be

planted and maintained. The existing trees will be counted for this purpose. Plantations to be ensured species (cut) to species (planted). The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.

- vi. The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. As proposed, 2 no.s of rain water harvesting pits shall be maintained for rainwater harvesting after filtration.
- vii. The PP shall also provide electric charging points in the parking areas for e-vehicles as committed.
- viii. Energy conservation up to at least 10% shall be achieved through use of solar energy as committed.
- 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.

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### AGENDA ITEM NO. 64.3.9

Development of Hotel (Beach Resort) located at Survey 129/1, 130/1, 130/2, 130/3, 130/4, 130/5, 130/7, 131/1, 132/2, 136/1 and 137/3, Arrossim Village, Mormugao taluka, District South Goa by M/s Daffodils Hotels Pvt. Ltd. – Amendment in Environmental Clearance

### (IA/GA/MIS/201956/2021; F. No.16-1/2009-IA-III)

- 1. The PP (M/s Daffodils Hotels Pvt. Ltd.) along with his consultant 'M/s. Perfact Enviro Solutions Pvt. Ltd.' made a presentation on the key parameters and salient features of the project to the EAC (Infra-2). The Committee took note of the following key parameters and salient features of the project presented during the meeting and as provided in the brief and application for this project:
  - i. The project is located at Survey 129/1, 130/1, 130/2, 130/3, 130/4, 130/5, 130/7, 131/1, 132/2, 136/1 and 137/3, Arrossim Village, Mormugao taluka, District South Goa, Goa with coordinates 15°20'12.95"N Latitude and 73°53'43.46"E Longitude.
  - ii. The proposal is for 'Amendment' in existing Environmental Clearance (EC).
- iii. Earlier, the project was granted EC Vide F.No.16-1/2009-IA-III dated 28.07.2017 in the name of M/s Competent Automobiles Ltd. by MOEFCC. Transfer in EC was granted for name change from M/s Competent Automobiles Ltd. to M/s Daffodils Hotels Pvt. Ltd, by MOEFCC vide File No. 16-1/2009-IA-III (Pt) dated 12.04.2019. The

- project has not yet initiated construction activities at the site. Now, due to change in internal planning, there is slight change in building plan, slight increase in FAR, decrease in the number of hotel rooms, population & hence decrease in pollution load. There is no change in the total plot area of the project but there will be a slight decrease in built up area from 20553.08 sqm to 20547.33 sqm. Hence, an amendment of the EC issued for the project is being sought.
- iv. The proposed project is an amendment in EC with built up area less than 1,50,000 sqm. Hence it falls under item 8(a) as per Schedule of EIA Notification, 2006 and its subsequent amendments. The project falls under CRZ-III as per Coastal Regulation Zone Notification, 2011. Although SEIAA Goa is in existence, application for amendment has been submitted to MoEF&CC as directed by SEIAA Goa that amendment needs to be obtained from the authority that granted original EC.
- v. The total plot area of the project after amendment will be 78,506.80 sqm with Ground coverage 10490.65 sqm. The total FAR Area will be 16,274.43 sqm and the Non-FAR Area including lower ground floor will be 4,272.90 sqm. The total built-up area of the project after amendment will be 20,547.33 sqm. The configuration after amendment will be LG + GF with a maximum height of 9 m. The activities in the proposed complex will be the following: Main Building, Block A and B, Spa Building, pool side restaurant, ballroom and guard room. The details of the proposed amendment are given as follows:

Details/	Unit	As per EC	Proposed	Total after	Impact
Description		granted on 28.07.2017	variation	Amendment	_
Ground Coverage	sqm	12,906.50	(-) 2415.85	10490.65	Decrease
FAR area	sqm	15,404.37	(+) 870.06	16276.43	Increase
Non FAR area including lower ground (LG) floor	sqm	5,148.71	(-) 875.81	4,337.30	Decrease
Built-up Area	sqm	20,553.08	(-) 5.75	20,547.33	Decrease
No. of hotel rooms	No.	160	(-) 44	116	Decrease
No. of Floors	No.	Basement, Ground and One floor structure	(-) Basement	Lower Ground floor and Ground floor	Decrease
Total Population	No.	920	(-) 178	742	Decrease
Total water requirement	KLD	269	(-) 38	231	Decrease
Fresh water requirement	KLD	244	(-) 127	117	Decrease

Total waste	KLD	243	(-) 119	124	Decrease
water					
generation					
STP capacity	KLD	300	(-) 140	160	Decrease
Total solid	kg/day	464	(-) 238	226	Decrease
waste					
Organic	kg/day	279	(-) 143	136	Decrease
waste					
Non bio-	kg/day	185	(-) 95	90	Decrease
degradable					
waste					
Rainwater	No.	-	-	2	-
Harvesting					
Total Parking	No.	207	(+) 14	221	Increase
Provision					
Road area &	sqm	36,417.39	(+) 2415.85	38,833.24	Increase
open area					
including					
surface					
parking					

- vi. During construction phase, total 15 KLD water will be required out of which 9 KLD of water will be required by labourers for domestic & flushing purposes which will be sourced from tanker supplier and 6 KLD for construction purpose which will be sourced from nearby STP treated water. Temporary Toilets will be provided for labourers during the construction period which will be cleaned regularly and hygienic conditions will be maintained. 7 KLD of waste water will be generated that will be discharged to septic tanks with soak pits to be cleaned regularly.
- vii. During Operation Phase, total water requirement of the project after amendment will be 231 KLD. 117 KLD of freshwater requirement will be met by the Public Works Department. Total waste water generation will be 124 KLD which will be treated in STP of capacity 160 KLD based on Sequential Batch Reactor (SBR) Technology. The kitchen waste water of 9 KLD will be treated initially in the pre-treatment unit and will be sent to STP for further treatment. 114 KLD treated water generated from STP will be reused for flushing, gardening and HVAC cooling purposes.
- viii. Total 23 kg/day of waste will be generated from labourers during construction phase which will be disposed off at solid waste sites. Construction debris and excavated soil will be used in levelling & backfilling purposes to the extent possible & rest will be sent to the construction & demolition facility. Recyclable material of construction phase like aluminium, steel, wood pieces, cement bags, plastic containers, cartons, glass etc. will be sold to recyclers.
- ix. During operation phase, after amendment, a total of 226 kg/day (82 TPA) of domestic solid waste will be generated from the project. Out of which, bio-degradable waste of 136 kg/day (49 TPA) will be treated in organic waste converter and converted to manure. 90 kg/day (33 TPA) of non-biodegradable waste will be given to authorised recyclers. 500-

- 750 lit/year of used oil generated from the DG sets will be kept in an isolated area and in a leak proof container and will be given to the authorised recycler. 2-3 Kg /month of E-waste will also be given to approved vendors. Battery waste will be generated from inverters & UPS. It will be properly managed as per Batteries (Management and Handling) Rules 2001.
- x. DG set of 2 x 125 kVA will be installed for power supply for the construction works. DG sets will be acoustically enclosed & stack height of 30 m from Finish Ground level (FGL) will be provided. The total power requirement of the project after amendment will be 3000 KW during operation phase which will be met by the Goa Electricity Board. In case of power failure, power backup will be provided through DG sets. DG sets of capacities of 2 x 1000 KVA will be installed at the project site. Stack height of 30 m will be provided for the DG Sets to reduce the air emissions meeting all the norms prescribed by CPCB.
- xi. Total parking provision of 221 ECS will be made against requirement of 221 ECS. 84 ECS will be provided in LG and 137 ECS will be provided in the surface.
- xii. Total 2 no. of Rain water harvesting pits will be constructed which for recharging the underground water. Runoff from roof top, landscape area, Open and road area will be connected to rain water harvesting pits.
- xiii. Green belt/greenery of 29,183 sqm (37 % of the Total plot area) will be developed at the project area. As per existing EC, the project site has 520 trees existing on the plot (out of them 470 nos. are coconut trees, remaining are of mango, jackfruit etc). 200 trees will be felled with permission of the concerned Department and others will be retained. About 500 trees of native and indigenous species are proposed to be planted at site.
- xiv. Employment Potential: 200 nos. of local labour will be employed for the project during construction phase and 150 staff members will be employed during operation phase.
- xv. Investment/Cost of the project: Rs. 100 Crores.
- **2.** The EAC also noted that the project/activity is covered under category 'B' of item 8(a) 'Building and Construction projects' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at State level. However, since the previous EC in which amendment is sought was issued by MOEFCC and also as per the recommendation of SEIAA Goa vide letter no. 1-1-2020/GSEIAA/Misc/341 dated 24.03.202, directing the PP to approach the MOEFCC for the said amendment, the proposal is considered at Central level by sectoral EAC.
- **3.** The EAC (Infra-2), based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, recommended amending the environmental clearance granted vide letter F.No.16-1/2009-IA-III dated 28.07.2017 and amendment in EC for name change granted vide File No.16-1/2009-IA-III (Pt) dated 12.04.2019, to

the extent of project parameters as mentioned in table under para 1(v) above subject to the following additional specific conditions. All other conditions, as specified in the aforesaid EC letters shall remain unchanged.

- i. PP shall obtain amendment in CRZ clearance for the project as applicable.
- ii. Fresh water requirement from local authority shall not exceed 117 KLD during operational phase. As committed, no groundwater abstraction shall be done during construction as well as operation phase of the project.
- iii. As proposed, waste water shall be treated in an onsite STP of total 160 KLD capacity. Atleast 114 KLD treated water from the STP shall be recycled and re-used for flushing, gardening and HVAC cooling purposes.
- iv. The project proponents would commission a third-party study on the implementation of conditions related to quality and quantity of recycle and reuse of treated water, efficiency of treatment systems, quality of treated water being supplied for flushing (specially the bacterial counts), comparative bacteriological studies from toilet seats using recycled treated waters and fresh waters for flushing, and quality of water being supplied through spray faucets attached to toilet seats.
- v. The solid waste shall be duly segregated into biodegradable and non-biodegradable components and handled in separate area earmarked for segregation of solid waste. As committed, biodegradable waste, inert waste and recyclable waste shall be disposed through authorised agencies.
- vi. Area for greenery shall be provided as per the details provided in the project document i.e., area under plantation/greenery will be 29,183 sqm. The landscape planning should include plantation of native species. As proposed, at least 820 trees to be maintained during the operation phase of the project. A minimum of 01 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. 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.
- vii. 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).
- viii. 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.

- ix. 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, 2no.s of rain water harvesting pits shall be maintained for rainwater harvesting after filtration.
- x. The PP shall also provide electric charging points in the parking areas for e-vehicles as committed.
- xi. Energy conservation up to at least 5% shall be achieved through use of solar energy as committed.
- xii. PP shall explore the use of non-ozone depleting substances in air conditioning systems.
- xiii. The Environmental Clearance to the project is primarily under provisions of EIA Notification, 2006. The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/Regulations or Statutes as applicable to the project.

#### **AGENDA ITEM NO. 64.3.10**

Construction of district court with built up area of 29,411.3 sqm at Plot No. 08, District Centre Shastri Park, North-East Delhi by M/s Law & Justice Department, Govt. of NCT Delhi – Reconsideration for Environment Clearance (Absent Case)

## (IA/DL/MIS/192851/2021; F. No. IA3-21/8/2021-IA.III)

- **1.** The EAC noted that the proposal was earlier deferred during its 61<sup>st</sup> Meeting held on 8<sup>th</sup> February, 2021 and during its 62<sup>nd</sup> Meeting held on 1<sup>st</sup> March, 2021 as the Project Proponent (PP) did not attend the meetings.
- **2.** The PP (M/s Law & Justice Department, Govt. of NCT Delhi) along with his consultant 'M/s. Oceao-Enviro Management Solutions (India) Pvt. Ltd.' made a presentation on the key parameters and salient features of the project to the EAC (Infra-2). The Committee took note of the following key parameters and salient features of the project presented during the meeting and as provided in the brief and application for this project:
  - i. The project is located at Plot No. 08, District Centre, Shastri Park, North-East Delhi with coordinates 28°40'23.70"N Latitude and 77°15'43.48"E Longitude.
  - ii. The project is new.
- iii. The total plot area is 4,500 sqm, FSI area is 13,448.252 sqm and total construction (Built-up) area of 29,411.3 sqm. The project will comprise of 1 Building with 3 basements and 11 floors (G+10). Maximum height of the building is 50.70 m. The details of building are as follows:

S. No.	Particulars	Proposed
--------	-------------	----------

	I	. = 0 0 0
1	Total plot area	4500.00 sqm
		(1.112 acre)
2	Permissible Ground Coverage (@50% of	2,250.00 sqm
	Total Plot area)	
3	Total Proposed Ground Coverage	1,533.15 sqm
	(@34.07% of Total plot area)	
4	Permissible FAR (@300% of Total plot	13,500.00 sqm
	area)	
5	Proposed FAR @298.85% of Total plot	13,448.252 sqm
	area)	
a)	Ground Floor	246.397 sqm
b)	First floor	1,398.255 sqm
c)	Second Floor	1,465.464 sqm
d)	Third Floor	1,465.464 sqm
e)	Fourth Floor	1,465.464 sqm
f)	Fifth Floor	1,465.464 sqm
g)	Sixth Floor	1,465.184 sqm
h)	Seventh Floor	1,465.464 sqm
i)	Eighth Floor	1,465.464 sqm
i)	Ninth Floor	919.610 sqm
k)	Tenth Floor	626.026 sqm
6	Services (Lift, lobby, Staircase, etc)	7,623.770 sqm
7	Basement Area	8,339.250 sqm
a)	Basement 1	2,772.460 sqm
b)	Basement 2	2,862.500 sqm
c)	Basement 3	2,704.290 sqm
8	Total Built Up Area (5+6+7)	29,411.3 sqm
9	Landscape area (@33% of Plot area)	1,485.000 sqm
10	Open/Paved Area (@32.93% of Plot	1,481.850 sqm
	area)	· ·
11	Total Population	2845 No.s
12	Total Water Requirement	121 KLD
13	Fresh Water Requirement	47 KLD
14	Treated Water Requirement	74 KLD
15	Wastewater Generation	87 KLD
16	Source of Water Supply	Delhi Jal Board
17	Capacity STP	100 KLD
18	Technology of STP	MBR
19	Rain Water Harvesting Pits	1 No.s
20	Solid Waste Generation	567.27 kg/day
21	Power Requirement	1565 KW
22	Source of Power	BSES Yamuna Power
		Limited
23	No. of DG sets with capacity	2*1010 + 1*500 =
	and the second second	2445 KVA
24	Project Cost	Rs. 169.27 Crores
25	Height of Building	50.7 m
26	Parking	Required – 271 ECS
40	1 arming	required 271 Deb

Proposed – 280 ECS

- iv. During construction phase, total water requirement is expected to be 417.64 KLD which will be met by nearby CSTP through private water tankers. 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 requirement of the project is expected to be 121 KLD. Maximum Fresh water requirement will be 47 KLD during summer season and the same will be met through Delhi Jal Board and 74 KLD Recycled Water from onsite STP. Wastewater generated 87 KLD will be treated in STP of MBR Technology of total 100 KLD capacity. 74 KLD of treated wastewater will be recycled and re-used (54 KLD for flushing, 4 KLD for gardening, 10 KLD for filter backwash, 6 KLD for HVAC etc.). The complex is proposed to achieve Zero Liquid Discharge (ZLD).
- vi. About 0.567 TPD solid wastes will be generated in the project. The biodegradable waste (0.23 TPD) will be processed in OWC and the non-biodegradable waste generated (0.23 TPD recyclable waste and 0.11 TPD inert waste) will be handed over to authorized local vendor.
- vii. The total power requirement during construction phase is 50 KVA and will be met from DG Set and total power requirement during operation phase is 1565 KW and will be met from BSES Yamuna Power Limited. Power backup will be met through 3 DG sets of total capacity 2445 KVA (2\*1010 + 1\*500).
- viii. Rooftop rainwater of buildings will be collected in 1 RWH Pits of total 35.325 KLD capacity for harvesting after filtration.
- ix. Parking facility for 280 four wheelers is proposed to be provided against the requirement of 271 (according to local norms).
- x. Proposed energy saving measures would save about 20 % of power.
- xi. The project is not located in Critically Polluted area.
- xii. The project is not located within 10 km of Eco Sensitive areas. NBWL Clearance is not required.
- xiii. Forest Clearance is not required.
- xiv. No court case is pending against the project.
- xv. Green area of 1,485 sqm with 71 trees will be developed. There are no plants/trees present at the project site and so no tree cutting is involved.
- xvi. Expected timeline for completion of the project. 3 years
- xvii. Investment/Cost of the project is Rs 169.27 Crores.
- xviii. Employment potential: 2845 persons
  - xix. Benefits of the project: Social employment.
  - **3.** The EAC noted that the project/activity is covered under category 'B' of item 8(a) 'Building and Construction projects' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at State level. However, due to non-existence of SEIAA in Delhi, the proposal required appraisal at Central level by sectoral EAC.

- **4.** The EAC observed that the PP has proposed STP in the  $2^{nd}$  and  $3^{rd}$  basement of the building and was of the opinion that PP should explore the option of moving it to a higher level for energy conservation and operational efficiency. The PP agreed to the observation and committed to shift the STP to  $1^{st}$  and  $2^{nd}$  basement.
- **5.** The EAC also raised concern on the adequacy of parking space considering that the proposed building is a district court. The PP responded that, 280 ECS is proposed for parking against requirement of 271 ECS as per local norms. Out of this, 42 ECS will be reserved for judges and 238 ECS will be available for lawyers and litigants. Some of the ECS will be converted to 2-wheeler parking and will be able to accommodate more vehicles. The PP also clarified that due to area constraint, no more extra parking can be accommodated within the site. However, since the project is located in the DDA District centre, there is ample connectivity through public transport and the visitors can also use the parking space planned by DDA which will help to ease the parking requirement.
- **6.** The EAC (Infra-2), based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, recommended granting environmental clearance to the project subject to the following specific conditions and other Standard EC Conditions as specified by the Ministry vide OM dated 4th January, 2019 for the said project/activity, while considering for accord of environmental clearance:
  - i. Fresh water requirement from local authority shall not exceed 47 KLD during operational phase. As committed, no groundwater abstraction shall be done during construction as well as operation phase of the project.
  - ii. As proposed, waste water shall be treated in an onsite STP of total 100 KLD capacity. Atleast 74 KLD treated water from the STP shall be recycled and re-used for flushing (54 KLD), for gardening (4 KLD), for filter backwash (10 KLD), for HVAC (6 KLD) etc. There shall be no discharge of treated water from the project as proposed.
- iii. The project proponents would commission a third-party study on the implementation of conditions related to quality and quantity of recycle and reuse of treated water, efficiency of treatment systems, quality of treated water being supplied for flushing (specially the bacterial counts), comparative bacteriological studies from toilet seats using recycled treated waters and fresh waters for flushing, and quality of water being supplied through spray faucets attached to toilet seats.
- iv. The solid waste shall be duly segregated into biodegradable and non-biodegradable components and handled in separate area earmarked for segregation of solid waste. As committed, biodegradable waste shall be composted by use of OWC. Inert waste shall be dumped to authorized site. The recyclable waste shall be sold to resellers.
- v. Area for greenery shall be provided as per the details provided in the project document i.e., area under plantation/greenery will be 1,485 sqm. As proposed, at least 71 trees to be maintained during the

operation phase of the project. The landscape planning should include plantation of native species. A minimum of 01 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.

- vi. The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. As proposed, 1 nos. of RWH pits shall be maintained for rainwater harvesting after filtration.
- vii. A detailed traffic management and traffic decongestion plan shall be drawn and implemented to ensure that the service of the roads near project site may not get adversely impacted after the implementation of the project. The plan should stipulate, inter-alia, the path and appropriate time for the movement of vehicles to and from site. The Plan shall be vetted by concerned agency in the State Govt.
- viii. The PP shall also provide electric charging points (6nos) in the parking areas for e-vehicles as committed.
  - ix. Anti-Smog gun (2 nos) shall be provided to curb air pollution during construction phase.
  - x. Energy conservation measures shall be adopted for saving up to at least 20% of power as committed.
  - xi. PP shall use the non-ozone depleting substances in air conditioning systems.
- xii. The Environmental Clearance to the project is primarily under provisions of EIA Notification, 2006. The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/Regulations or Statutes as applicable to the project.

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**64.4 Consideration of Proposals on Day-2 (13th April, 2021):** The EAC considered proposals as per the agenda adopted for Day-II of 64th meeting. The details of deliberations held and decisions taken in the meeting are as under:

# AGENDA ITEM No. 64.4.1

Development/Redevelopment of Common Central Secretariat Buildings and Central Conference Centre along with Prime Minister's Residence, SPG Building and Vice President's Enclave, at 137, 120, 22A, 22B, 22C, 23D, 23C, 23B, 138, A&B Hutments, Part of Plot 30B and 108, New Delhi by M/s Central Public Works Department (CPWD) - Environmental Clearance

(IA/DL/MIS/206262/2020; F. No. 21-105/2020-IA-III)

- 1. The PP (M/s. Central Public Works Department (CPWD)) along with his consultant 'M/s. Kadam Environmental Consultants' made a presentation before EAC (Infra-2) on the key parameters and salient features of the project. The Committee took note of the following key parameters and salient features of the project presented during the meeting and as provided in the brief and application for this project:
  - i. The project is located at 137, 120, 22A, 22B, 22C, 23D, 23C, 23B, 138, A&B Hutments, Part of Plot 30B and 108, New Delhi with coordinates: North From: 28°36'39.27" To 28°36'53.78" (Latitude) and East From: 77°13'37.61" To 77°11'59.83" (Longitude).
  - ii. The project is a 'Redevelopment'.
- iii. Existing buildings for which redevelopment is proposed were constructed and operationalized before coming-in-force of the EIA notifications 1994/2006 except Jawaharlal Nehru Bhawan (MEA Office), for which EC was granted vide File No. 21-499/2006.IA.III dated 22.12.2006 by MoEF&CC.
- iv. The project was granted ToR vide File No. 21-105/2020-IA-III dated 04.01.2021 by MoEF&CC.
- v. The total plot area is 5,06,402.82 sqm, maximum FAR is 2 and total construction (Built-up) area of 17,21,500.0 sqm. The project will comprise of 51 Buildings. Maximum height of the building is 40 m. Existing Built-up area is 4,58,820 sqm (for all existing buildings). The details of building are as follows:

S. No	Particulars	CCS 1-9 & CCC		PMR	SPG	VP Enclave	Total
1	Plot Area (~sqm)	3,51,125.0	17,846.10	60,702.80	10,117.00	66,611.40	5,06,402.82
2	Plot Area (~Acres)	86.77	4.41	15	2.5	16.46	125.14
3	Plot Area (~Hectare)	35.11	1.8	6.07	1.01	6.66	50.63
4	Plot nos	137,120, 22 (22A,22B,2 2C), 23 (23B,23C, 23D)	138	A&B Hutments*	Part of Plot 30B	108	-
5	Permissible Ground coverage (~sqm)	1,75,551.5 0	8,923	30,351.40	5,059	33,305.7 0	2,53,190.41
6	Permissible FAR	2	2	2	2	2	-
7	Actual Ground Coverage (~sqm) achieved	1,35,750	4,920	9,500	5,050	9,500	1,64,720
8	Actual FAR achieved	2	1.34	0.3	2	0.27	-

9	Basement Area(~sqm)	4,46,800	11,300	NA	5,100	NA	4,63,200
10	Area To be demolished (BUA)/Exist ing BUA (~sqm)	3,88,677	7,162	24,423	19,379	19,179	4,58,820
11	No. of Floors	2B+G+UG +6, 2B+G+1	2B+G+5	G, G+1, G+2	B+G+1	G, G+1, G+2, G+4	-
12	Total No of Buildings	10	1	10	1	29	51
13	Maximum Height(m)	40	27	12	10	15	-
14	Total Parking provided (~)	13,032	687	112	175	89	14,095
15	Landscape / Green Area (~sqm)	32,870	2,700	25,800	1,010	18,840	81,220
16	Total Employee Population( ~)	51,900	400	1,000	500	1,000	54,800
17	Floating Population	12,400	300	500	300	500	14,000
18	Project Cost (~Cr)			13,450			13,450

- vi. During construction phase, total water requirement (fresh water/potable) is expected to be 1,390 KLD which will be met by New Delhi Municipal Corporation (NDMC). During the construction phase, STP will be provided for pre-treatment of waste water for construction. Toilets will be provided for labor force.
- vii. During operational phase, total water requirement of the project is expected to be 7,818 KLD and the same will be met by 2,609 KLD fresh water from NDMC and 5,209 KLD Recycled Water. Wastewater generated (3,928 KLD) will be treated in phase wise STPs of total 4,100 KLD capacity. Total 9 STPs are proposed. 3,535 KLD of treated wastewater will be recycled and reused (1,286 KLD for flushing, 3,354 KLD for HVAC and 569 KLD for gardening etc.). No discharge is envisaged to be disposed in to municipal drain. However, drainage connection will be kept for emergency, abnormal and maintenance related operations.
- viii. About 14.661 TPD solid wastes will be generated in the project. The biodegradable waste (5.924 TPD) will be processed in OWC and the non-biodegradable waste generated (7.240 TPD) will be handed over to authorized local vendor.
  - ix. The total power requirement during construction phase is 6,900 KW and will be met from NDMC and total power requirement during operation phase is 73,440 KW and will be met from NDMC.

- x. Rooftop rainwater of buildings will be collected in 15 RWH tanks of total 3,050 cu.m capacity for water harvesting after filtration.
- xi. Parking facility for 14,095 ECS is proposed to be provided.
- xii. Proposed energy saving measures would save about 7 % of power.
- xiii. Comparative analysis of existing /envision pollution load

S. No.	Parameter	Unit	Existing	After Expansion	Remarks
1	LAND USE	I		_ Dipanoion	
1.1	Plot Area	sqm	5,06,403	5,06,403	There is no addition of land as the project is rehabilitation or resettlement
1.2	Built-up Area	sqm	4,58,820	17,21,500	Built-up Area increases, but remains within FAR Norms
1.3	Ground Coverage	sqm	1,74,109	1,64,720	Total ground coverage (footprint of all buildings considered in this EC application) will reduce by about 5.4%.
1.4	Maximum Height of Building	m	25	40	Within permitted norms
2	WATER & WAST	E WAT	ER		
2.1	Raw Water – Source	-	NDMC	NDMC	Permission letter from the Competent Authority will be taken prior to commencement of works
2.2	Water permission/ other permissions	-	NDMC	NDMC	No ground water will be abstracted for the project
2.3	Raw Water Details				
	a. Potable	KLD	692	2,609	Permission letter from the Competent Authority will be taken prior to commencement of works
	b. Non Potable	KLD	857	4,640	Treated wastewater will be
	c. Irrigation	KLD	288	569	sourced from NDMC's Okhla STP and used (after further polishing / treatment as required) for non-potable requirements.
	d. Total	KLD	1,837	7,818	
2.4	Waste water	KLD	1,125	3,928	The additional wastewater generated will be entirely re-used for HVAC, gardening and flushing

2.5	STP Capacity	KLD	Nil	4,100	purposes after complete treatment. Release into sewers will stop; however sewer connections will be maintained for abnormal and emergency conditions.  Today maximum wastewater is let out into
					the drain. In the future, the entire wastewater will be treated and re-used completely, reducing stress on the public infrastructure and pollution load on the ultimate receptor (River Yamuna).
2.6	Reuse water	KLD	Nil	3,535	Currently reuse of water is not practiced and this will be practiced moving forward, as already mentioned.
3	AIR QUALITY &	POLLU	TION CONT	ROL	
3.1	No. of DG Sets	-	31	38	-
3.2	Total DG Set capacity	kVA	16,315	78,000	Increase in back-up power, will lead to increase in back-up DG set capacity.
3.3	No. of Vehicles (Parking Provided)	-	NA	14,095	-
4	POWER DEMAN	D			
4.1	Power Requirement via Grid	-	26,325.69 kVA	73,440 KW	-
5	SOLID & HAZAR	RDOUS '	WASTE MAN	NAGEMENT	
5.1	Hazardous Chemical Storage at Site				
	a. Diesel	L/hr.	4,501	15,520	Considering 2 days of HSD requirement for DG sets
5.2	Solid Waste Generation	TPD	5.555	14.66	Increase in solid waste with increase in population; the system of Solid Waste Management will now be state-of-the-art and will entail in-house management of wastes through segregation and compost preparation with

					recyclables sold out. Inerts will be sent to landfill visa-vis the current system of disposing the entire wastes into the NDMC system.
5.2.1	Bio degradable Waste Generation	TPD		5.92	Currently wastes are sent into the NDMC system. It is proposed that these fractions will be converted to compost, in-situ using equipment within the buildings.
5.2.2	Non-Bio degradable (essentially recyclable) waste generation	TPD		7.24	These wastes will be sorted and sent for recycling.
5.2.3	Inert waste generation	TPD		1.49	These wastes will be sent to landfill
6	ECOLOGY & BIO	DIVER	SITY		
6.1	Landscape / Green Area	sqm	41,009 (Area for CCS 1-9 & CCC)	81,220	Decrease in green areas within existing IGNCA (future CCS 1, 2 & 3); Increase in green areas in proposed VPE.
6.2	No. of trees in project area	No.	4,642	~3,165	It is expected that 1 tree per 80 sqm of open area.
6.3	No. of trees outside project area attributable to compensatory afforestation	No.	Nil	30,547	-

- xiv. The project is not located in Critically Polluted area.
- xv. The project is located ~8.58 km from Okhla Bird Sanctuary, however it is outside the eco-sensitive zone of Okhla Bird Sanctuary. NBWL Clearance is not required.
- xvi. Forest Clearance is not required.
- xvii. Details of Court Cases/Litigations/Show Cause/Closure Notice issued against the project are given as follows:

S. N.	Case Details	Status
		ing change in land use (which was 20 while 1 plot (V P Residence) is in

1	SLP(C) Diary no. 8430 of 2020 filed by Sh Rajeev Suri	Hearing related to change in land use for all other 7 plots has been
2	Transferred Case(Civil) 229 of 2020 filed by Sh Rajeev Suri	completed on 03.09.2020. Hon'ble Supreme Court dismissed all petitions on 05.01.2021.
3	Transferred Case(Civil) 230 of 2020 filed by Sh Anuj Shrivastava	
4	Writ Petition (Civil) 853 of 2020 filed by Sh Kavas Kapadia and others	
5	Writ petition (Civil) 684 of 2020 filed by Sh Rajeev Suri against notification for inviting objections for change in land use of plot no. 1(VP Residence)	Disposed off on 28.08.2020
6	WP (C ) 1378 of 2020 filed by Sh Rajeev Suri	Land use change for Plot No.108. Hon'ble Supreme Court directed that hearing will be taken up only after final Order is passed in matter at S.No. 1-4 above.
		Next date of hearing is pending.
В	granting of EC, no objection by	nging appointment of Consultant, Central Vista Committee, Approval n, Heritage Conservation, Inviting of ilding
1	Writ Petition (Civil) 510 of 2020 filed by Sh Rajeev Suri	November 2020. Hon'ble Supreme
2	WP(C) 638 of 2020 filed by Sh AGK Menon & Others	Court dismissed all petitions on 05.01.2021.
3	WP(C) 681 of 2020 filed by Sh Rajeev Suri	
4	WP(C) 845 of 2020 filed by Smt Meena Gupta and others	
5	WP(C) 922 of 2020 filed by Sh Rajeev Suri	
С	Additional order passed on 07- 12-2020	It was clarified that the authorities would be free to continue with procedural processes without altering the status of the site(s) in question in any manner, including to continue with the scheduled programme of foundation stonelaying on 10th December, 2020. Hon'ble Supreme Court finally

	dismissed	all	petitions	on
	05.01.2021.			

xviii. Details of commitment as mentioned in the Form 1A/Conceptual Plan/EIA:

SN.	Project Phase	Capital Cost	Recurring Cost (Annual)				
	Environmental Monitoring Plan						
1.	Construction	7 lakh	15.06 lakh				
	Phase						
2.	Operation Phase	16.90 lakh	41.16 lakh				
	En	vironmental Manage:	ment Plan				
1.	Construction	134.8 Cr	9.71 Cr				
	Phase						
2.	Operation Phase	113.91 Cr	16.89 Cr				
	Corp	orate Environment R	esponsibility				
1.	Construction /		5.0 Cr				
	Operation phase						

xix. Details of Green belt development and tree felling/transplantation are given as follows:

S. No.	Particulars	Value	Unit
1	No. of trees at site	4,642	Nos.
2	No. of trees to be retained at site	1,412	Nos.
3	No. of trees to be transplanted	3,230	Nos.
4	No. of trees to be added as part of	32,300	Nos.
	compensatory afforestation		
5	Area available for landscape/green cover	81,220	sqm
6	Plot area	5,06,402.82	sqm
7	Open area (considering 50% of plot area)	2,53,201.41	sqm
8	Tree requirement (1 tree per 80 m <sup>2</sup> of	3,165	Nos.
	open area)		
9	Total No. of trees to be retained+planted	3,165	Nos.
	within project area		
10	No. of additional trees to be planted	1,753	Nos.
	within project area as part of		
	compensatory afforestation		
11	No. of additional trees to be planted	30,547	Nos.
	outside project area as part of		
	compensatory afforestation		
	Total no. of trees, inside and outside	33,712	Nos.
	project area after completion of		
	construction		

xx. Undertaking to the effect that no activity has since been taken up: Attached

xxi. Expected timeline for completion of the project is as follows:

S. No.	Master Plan Component	Tentative Completion Month & Year <sup>1</sup>		
1	Expansion of Parliament Building / Construction of New Parliament Building	Nov-2022		
2	CCS 1, 2 and 3	May-23		
3	VP Enclave	May-22		
4	Executive Enclave*	Dec-22		
5	PM Residence (PMR)	Dec-22		
6	SPG Building	Dec-22		
7	CCS 10	Mar-24		
8	CCS 6,7,8	Jun-24		
9	CCS 4, 5,9	Jun-25		
10	Central Conference Centre (CCC)	Dec-26		
11	APM	Sep-26		

- xxii. Investment/Cost of the project is INR 13,450 (Crore).
- xxiii. Employment potential: 46,700 persons (Temporary employment during Construction).
- xxiv. Benefits of the project: Social: The Common Central Secretariat will consolidate all ministries of the Government of India and improve productivity and efficiency of administration. The Central Conference Centre will cater to their conferencing needs. These will also be connected by a people mover to the Delhi Metro. Modern and secure residential facilities for the Vice President and the Prime Minister will be equipped with all necessary spaces and infrastructure, including the Special Protection Group; Environmental: Landscape/greenbelt development, traffic decongestion, provision of STP, OWC, safety aspects including fire-fighting system, maximum use of treated waste water, well-designed network of storm water drains, rain water harvesting system etc.
  - **2.** The EAC noted that the project/activity is covered under category 'B' of item 8(b) 'Townships and Area Development projects' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at State level. However, due to non-existence of SEIAA in Delhi, the proposal required appraisal at Central level by sectoral EAC.
  - **3.** The EAC (Infra-2), based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, recommended granting environmental clearance to the project subject to the following specific conditions and other Standard EC Conditions as specified by the Ministry vide OM dated 4th January, 2019 for the said project/activity, while considering for accord of environmental clearance:

<sup>&</sup>lt;sup>1</sup>As per current planning.

- i. Fresh water requirement from local authority shall not exceed 2609 KLD during operational phase. As committed, no groundwater abstraction shall be abstracted during construction as well as operation phase of the project.
- ii. As proposed, waste water shall be treated in 9 onsite STPs (1100 KLD for CCS 1,2,3; 1100 KLD for CCS 6,7,8; 825 KLD CCS 4,5; 500 KLD for CCS 9; 100 KLD for CCC; 40 KLD for CCS 10; 200 KLD for PMR; 35 KLD for SPG; 200 KLD for VP Enclave) having total 4100 KLD capacity. At least 3,535 KLD treated water from the STP shall be recycled and re-used for flushing, gardening, HVAC etc. There shall be no discharge of treated water to municipal drain except in case of emergency, maintenance etc. as proposed. All 9 STPs shall be equipped with continuous online monitoring system for measurement of discharge and water quality. Data shall be shared/linked with DPCC regularly with web link.
- 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. The solid waste shall be duly segregated into biodegradable and non-biodegradable components and handled in separate area earmarked for segregation of solid waste. As committed, biodegradable waste shall be composted by use of OWC. Inert waste shall be dumped to authorized site. The recyclable waste shall be sold to resellers.
- v. Area for greenery shall be provided as per the details provided in the project document i.e., area under plantation/greenery will be 81,220 sqm. As proposed, at least 4918 trees to be maintained within the project 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. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.
- vi. The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. As proposed, 15 nos. of RWH tanks of total capacity 3050 cu.m shall be maintained for rainwater harvesting after filtration.
- vii. Project Proponent should install two continuous online AAQ Monitoring stations in the project area in consultation with Delhi Pollution Control Committee (DPCC) before the start of demolition work. Online Monitoring should cover parameters e.g. PM10, PM2.5 along with NOx, SOx, covering upwind and downwind directions during the construction period. Periodical monitoring of AAQ shall also be carried out through certified laboratory in order to validate the

- data. Data so generated should be displayed digitally on site for public display.
- viii. A detailed traffic management and traffic decongestion plan shall be drawn and implemented to ensure that the service of the roads near project site may not get adversely impacted during implementation of the project. The plan should stipulate, inter-alia, the path and appropriate time for the movement of vehicles to and from site. The Plan shall be vetted by concerned agency in the State Govt.
  - ix. Noise barriers/acoustics of adequate efficiency shall be provided at each construction site during construction phase.
  - x. As committed, atleast 50 anti-smog guns and 15 anti-smog towers shall be provided to curb air pollution during construction phase. 15 anti-smog towers shall be installed during operation phase as proposed.
- xi. PP shall obtain the necessary permission for dewatering of ground water from Central Ground Water Authority (CGWA).
- xii. The PP shall also provide adequate number of electric charging points (preferably more than 5 at each building parking area) in the parking areas for e-vehicles as committed.
- xiii. PP should implement all measure for enhancing energy conservation up to at least 10% through use of solar energy.
- xiv. Barricading shall be done as required having typical low pressure misting arrangements during construction phase as proposed.
- xv. Construction and Demolition (C&D) Waste shall be managed as per the C&D Waste Management Rules, 2016. PP shall explore the options for recycling and reuse of the C&D waste within the project to the maximum extent and maintain records of the same to be shared in 6 monthly report as required to be submitted by PP to respective IRO, MoEF&CC.
- xvi. Onsite STP of adequate capacity shall be provided during construction phase for pre-treatment of treated wastewater sourced from Okhla STP as committed. There shall be no discharge of treated wastewater from the construction site as proposed. Only treated wastewater shall be used for construction purposes.
- xvii. The workmen shall be provided with adequate PPE such as Safety shoes, helmets, masks, ear plugs etc. depending on the nature of the work.
- xviii. Proper housing, sanitation, medical facilities etc. shall be provided to the construction workforce.
  - xix. Conservation and Management plan shall be prepared for the proposed compensatory plantation and submitted to the Ministry.
  - xx. Air pollution management plan shall be prepared in the context of Graded Action Plan for Delhi & NCR and submitted to the Ministry.
- xxi. Project Proponent shall implement the use of non-ozone depleting substances in central air conditioning systems.
- xxii. Project Proponent shall implement the adoption of green building techniques or roof plantation to avoid the formation of heat island effect in the area.
- xxiii. Paints and coatings with low or no VOC content shall be used for

- interior wall and ceiling surface area to reduce adverse health impacts on building occupants.
- xxiv. Ready-mix concrete shall be used to the larger extent to minimize dust emissions at site. Concreting activity shall be scheduled to avoid traffic congestion at the site. Photographs of site in this regard shall be shared in 6 monthly report as required to be submitted by PP to respective IRO, MoEF&CC.
- xxv. PP shall develop an Environmental Management System (EMS) and detailed Environment Management Plan (EMP) for each component. A certified third-party agency shall be commissioned to audit the EMS and EMP for the construction and operation phase of the project on quarterly basis. The audit report shall be submitted along with the 6 monthly report as required to be submitted by PP to respective IRO, MoEF&CC.
- xxvi. 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. 64.4.2

Expansion of "Aakash Healthcare" Hospital with increase in built up area from 26,120.81 sqm to 35,133.00 sqm located at Road No. 201, Dwarka, Sec-3, New Delhi by M/s Aakash Healthcare Pvt. Ltd. - Environmental Clearance

# (IA/DL/MIS/184228/2015; F.No. 21-19/2021-IA-III)

- **1.** The EAC noted that the proposal was earlier examined in its 63<sup>rd</sup> Meeting held on 19<sup>th</sup> March, 2021. The PP was asked for following additional information:
  - i. Clarify and revise the data on green area development along with details of tree plantation.
  - ii. Explore the possibility of reuse of treated water from ETP based on the effluent characteristics of the treated water.
  - iii. Provide water balance diagram for the total water consumption after proposed expansion.
- **2.** The EAC asked PP to provide the aforesaid information. The PP (M/s. Aakash Healthcare Pvt. Ltd.) along with his consultant 'M/s. Perfact Enviro Solutions Pvt. Ltd.' made a presentation and provided the following information:
  - i. Total green area is 631.10 sqm (10% of the developed plot area) consisting of trees and shrubs species as submitted. Total No. of trees within the site required are 75 as per the guidelines of MOEF & CC (1 tree per 80 sqm of plot area). Furthermore, 328.9 sqm of terrace area shall be developed with ornamental species.

ii. The scheme for ETP has been revised; Treated effluent from the ETP will be subjected to Ultra-filtration (UF) followed by Ultraviolet (UV) reactor (UF Unit and UV reactor will be installed during the proposed expansion). After the implementation of these additional water treatment units, it will be ensured that the treated water having COD less than 100 mg/L and Total Coliform <10 MPN/100ml will be obtained which shall be suitable for reuse in the cooling water makeup requirement. 22.5 KLD of wastewater will be generated from the laboratory and other OPD area for which the existing ETP having capacity 25 KLD is adequate. Typical use of freshwater in the lab w.r.t. inpatients and outpatients is given below:

Particulars	Existing	Total After Expansion	Factor	Existing (KLD)	Total After Expansion (KLD)
No. of beds	200	260	80L/Bed	16.0	20.0
Outpatients	900	1170	7L/Person	6.3	8.0
Total Fresh w	22.3	28.0			
Waste water	19.0	22.5			

- iii. ETP treated water will be reused for cooling tower makeup water requirement and the scheme has been revised so that after the proposed expansion, the hospital will be a ZLD compliant unit and no treated water shall be discharged outside the premises of the project site. The revised water balance diagram has been submitted.
- **3.** The EAC found the response to the queries as satisfactory. The EAC (Infra-2), based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, recommended 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 183.3 KLD during operational phase. As committed, no groundwater abstraction shall be done during construction as well as operation phase of the project.
  - ii. As proposed, waste water shall be treated in an onsite STP of total 180 KLD capacity and waste water generated from the lab shall be treated in ETP of 25 KLD capacity. At least 153 KLD treated water from the STP shall be recycled and re-used for flushing (54 KLD), gardening (14 KLD), miscellaneous uses (6KLD) and HVAC system (79 KLD). 16.7 KLD treated water from the ETP shall be recycled and reused for HVAC cooling. There shall be no discharge of treated water from the project as proposed.
- iii. The project proponents would commission a third-party study on the implementation of conditions related to quality and quantity of recycle

- and reuse of treated water, efficiency of treatment systems, quality of treated water being supplied for flushing (specially the bacterial counts), comparative bacteriological studies from toilet seats using recycled treated waters and fresh waters for flushing, and quality of water being supplied through spray faucets attached to toilet seats.
- iv. The solid waste shall be duly segregated into biodegradable and non-biodegradable components and handled in separate area earmarked for segregation of solid waste. As committed, biodegradable waste shall be composted by use of OWC. Bio-Medical waste shall be segregated and disinfected and handed over to authorised agency. Inert waste shall be dumped to authorized site. The recyclable waste shall be sold to resellers.
- v. Area for greenery shall be provided as per the details provided in the project document i.e., area under plantation/greenery will be 631.10 sqm and 328.9 sqm of terrace area shall be developed with ornamental species. As proposed, at least 75 trees to be maintained during the operation phase of the project. The landscape planning should include plantation of native species. A minimum of 01 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.
- vi. The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. As proposed, 2 nos. of RWH pits shall be maintained for rainwater harvesting after filtration.
- vii. Anti-Smog gun shall be provided to curb air pollution during construction phase.
- viii. The PP shall also provide electric charging points in the parking areas for e-vehicles as committed.
- ix. PP should explore enhancing energy conservation up to at least 5% through use of solar energy.
- x. The Environmental Clearance to the project is primarily under provisions of EIA Notification, 2006. The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/Regulations or Statutes as applicable to the project.

# AGENDA ITEM No. 64.4.3

Construction of Group Housing with built up area of 137879.64 Sqm at 1,3 Cavalry Lane & 4 Chhatra Marg Near Vishwavidyalaya Metro Station, New Delhi by M/s Young Builders Pvt. Ltd. – Reconsideration for Environment Clearance

(IA/DL/MIS/197084/2021;F.No.IA3-21/15/2021-IA.III)

- **1.** The EAC noted that the proposal was earlier examined in its 62<sup>nd</sup> Meeting held on 1<sup>st</sup> March, 2021. The PP was asked for following additional information:
  - i. Clarification for the proposal of 2 basements with reference to recommendation of the committee constituted by NGT and Supreme Court Order.
  - ii. Analyse the discrepancies and resubmit the conceptual plan after making the necessary revisions. Water balance flowchart needs to be revised.
- iii. Air pollution management in the context of Graded Action Plan for Delhi & NCR.
- iv. Point-wise replies to representation made by Delhi University
- **2.** The EAC asked PP to provide the aforesaid information. The PP (M/s. Young Builders Pvt. Ltd.) along with his consultant 'M/s. Ind Tech House Consult' made a presentation and provided the following information:
  - Regarding Construction of 2 Basements: Ground water backing up around the basements and impacting neighbouring areas is a general consequence of basement construction below ground water levels. There are measures widely implemented in such situations and if correctly designed and constructed there should not be any significant ground water back up around the basement. This, however, does not form a critical concern in the National Building Code or in the guidelines of the Ministry of Urban affairs. A number of projects involving construction below the ground water levels are either constructed or under implementation in the vicinity of the project where basements are below the ground level and which have been cleared by the regulatory bodies. Since dewatering is also employed in the construction of sub water level structures and since prior permission for dewatering is a regulatory prerequisite, therefore the project proponents will take necessary permission from the competent Authority for dewatering for two basements as proposed and comply with all such conditions as may be imposed. The project has already planned to take suitable measures for controlling basement backup and would ensure that:
    - a. All necessary conditions in the permissions for dewatering for basement construction are complied with.
    - b. The excavation is kept dry.
    - c. The basement design includes protection against ground water ingress to the finished development. Designs, to the satisfaction of the competent Authority, will afford sufficient protection in the event of ground water flooding.
    - d. The basement design includes ground water drainage systems/ French Drains to prevent ground water backing up around the development and thereby protect neighbouring properties from impact.
    - e. Footing drains, sloping away from the basement and discharging into recharge structures or land, as necessary, are

also be provided with the concurrence of the competent authority, completely around the basement along with drains beneath the basement floor. The basement floor will rest on a bed of gravel, and the gravel will have perforated drain pipes laid in to prevent any water from accumulating beneath the basement floor. The drains will be perforated pipes, usually PVC or some other type of thermoplastic and laid on several inches of gravel at the base of the footings and covered by gravel. The gravel, being much more permeable than the soils, allows water to rapidly drain into the perforated pipes and channelled away before it can even contact the basement wall.

- f. Soil drains such as a French drain are installed, if necessary, to reduce the build-up of moisture in areas upstream of the basement.
- g. All basement construction projects follow the requirements of the British standard BS 8102:2009 code of practice for the protection of below ground structures against water from the ground.
- h. The Basement construction follows IS:3067(1988). Code of practice for general design details and preparatory work for damp proofing of building.
- i. The basement construction follows IS:12251(1987). Code of practice for drainage of building basements.
- j. The basement construction follows the guidelines given in IS 1742-1983 regarding disposal of Surface and subsoil waters
- ii. Conceptual plan has been revised and resubmitted with revised water balance flowchart. During operational phase, total water demand of the project is expected to be 222 KLD and the same will be met by 158 KLD fresh water from Delhi Jal Board (DJB) and 64 KLD Recycled Water. Wastewater generated (175 KLD) will be treated in 01 STP of total 210 KLD capacity. 64 KLD of treated wastewater will be recycled and reused (52 KLD for flushing, 12 KLD for gardening etc.). About 96 KLD will be disposed in to municipal drain.
- iii. Air pollution management plan has been prepared in the context of Graded Action Plan for Delhi & NCR and submitted.
- iv. Point wise reply to representation made by Delhi University has been submitted.
- **3.** The EAC observed that the PP has proposed STP in the 2<sup>nd</sup> basement of the building and was of the opinion that PP should explore the option of moving it to a higher level for energy conservation and operational efficiency. The PP agreed to the observation and committed to shift the STP to 1<sup>st</sup> basement.
- **4.** The EAC found the response to the queries as satisfactory. The EAC (Infra-2), based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, recommended 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:

- A STP for pre-treatment of wastewater shall be installed for construction phase. Only treated wastewater shall be used for construction purposes. As committed, no groundwater abstraction shall be done during construction as well as operation phase of the project.
- ii. Fresh water requirement from DJB shall not exceed 158 KLD during operational phase.
- iii. As proposed, waste water shall be treated in an onsite STP of total 210 KLD capacities. At least 64 KLD treated water from the STP shall be recycled and re-used for flushing (52 KLD), gardening (12 KLD), etc. PP shall reuse of excess treated water for horticultural use in nearby areas or HVAC cooling etc. No wastewater shall be discharge into the sewer line. Continuous online monitoring system shall be installed in the STP and data for its quality and quantity shall be shared and linked with DPCC.
- iv. Ready-mix concrete shall be used to the larger extent to minimize dust emissions at site. Concreting activity shall be scheduled to avoid traffic congestion at the site in view of institutional zone. Photographs of site in this regard shall be shared in 6 monthly report as required to be submitted by PP to respective IRO, MoEF&CC.
- v. Project Proponent should install a continuous online AAQ Monitoring stations in the project area in consultation with Delhi Pollution Control Committee (DPCC) before the start of demolition work. Online Monitoring should cover parameters e.g. PM10, PM2.5 along with Nox, Sox. during the construction period. Periodical monitoring of AAQ shall also be carried out through certified laboratory in order to validate the data. Data so generated should be displayed digitally on site for public display.
- vi. 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.
- vii. The solid waste shall be duly segregated into biodegradable and non-biodegradable components and handled in separate area earmarked for segregation of solid waste. As committed, biodegradable waste shall be composted by use of OWC. Inert waste shall be dumped to authorized site. The recyclable waste shall be sold to resellers.
- viii. Area for greenery shall be provided as per the details provided in the project document i.e., area under plantation/greenery will be 6113 sqm. As proposed, at least 286 trees and green belt of 02 meters along the boundary to be maintained during the operation phase of the project. The landscape planning should include plantation of native species. A minimum of 01 tree for every 80 sqm of land should be

- planted and maintained. The existing trees will be counted for this purpose. 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.
- ix. 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, 6 nos. of RWH pits shall be maintained for rainwater harvesting after filtration.
- x. A detailed traffic management and traffic decongestion plan shall be drawn and implemented to ensure that the service of the roads near project site may not get adversely impacted after the implementation of the project. The plan should stipulate, inter-alia, the path and appropriate time for the movement of vehicles to and from site. The Plan shall be vetted by concerned agency in the State Govt.
- xi. Noise barriers of adequate efficiency shall be provided during construction phase.
- xii. Anti-Smog gun (2 nos ) shall be provided to curb air pollution during construction phase.
- xiii. Project Proponent shall obtain the necessary permission for dewatering of ground water from Central Ground Water Authority (CGWA).
- xiv. Project Proponent shall adopt suitable measures for controlling ground water backing up around the basements as committed.
- xv. Project Proponent shall explore the adoption of green building techniques to avoid the formation of heat island effect in the area.
- xvi. Project Proponent shall also provide electric charging points (6 nos.) in the parking areas for e-vehicles as committed.
- xvii. PP should implement for enhancing energy conservation up to at least 8% through use of solar energy.
- xviii. 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. 64.4.4

Development of Heliport at Khasara no. 72,74,75,76,77,78 in Village Kambakshpur, Sector 151A, Noida, Gautam Budh Nagar, Uttar Pradesh by M/s Noida Okhla Industrial Development Authority - Terms of Reference

# (IA/UP/MIS/203758/2021; F. No. 21-23/2021-IA.III)

**1.** The PP (M/s. Noida Okhla Industrial Development Authority) along with his consultant M/s. RITES Ltd. made a presentation before EAC (Infra-2) on

the key parameters and salient features of the project. The Committee took note of the following key parameters and salient features of the project presented during the meeting and as provided in the brief and application for this project:

- i. The project is located at Khasara no. 72,74,75,76,77,78 in Village Kambakshpur, Sector 151A, Noida, Gautam Budh Nagar, Uttar Pradesh with coordinates 28°26'49.77" N Latitude and 77°26'42.75" E Longitude.
- ii. The project is new.
- iii. Noida Okhla Industrial Development Authority proposes to develop Heliport at NOIDA. The Heliport facilities may provide a base for various helicopters operators to function from/to NOIDA and has the potential to generate revenue by providing parking and maintenance facilities for helicopters from the commercial point of view. Heliport shall also provide the facility to passengers to fly directly from IGI Airport and Jewar Airport to NOIDA and onward air travel to various places in the vicinity such as, Mathura, Dehradun, Vaishno Devi, etc.
- iv. The land identified by NOIDA Authority for development of NOIDA heliport is located near Kambakshpur Village in Sector 151A, NOIDA. The area of identified land is 9.35 acres for development of the proposed Heliport. The terrain is plain at 197 m AMSL. The elevation of the proposed heliport is about 200.0 M AMSL and involves filling of approx. 1.20 lakh Cu.m.
- v. The present land use of the area is Barren and Agricultural Land. No Rehabilitation is involved as the land is already in possession of NOIDA.
- vi. Predominant Land use within 10 km radius from the project site is Agricultural and Built-up Area. Habitation in and around, their location with respect to take off and landing funnel are as follows:

Landing and take-off directions	11-29
WNW Direction	Agricultural Land
ESE Direction	8 to 10 scattered Settlements at
	a distance of 400 m from project
	boundary and Kondali Bangar is
	situated at around 3000m

- vii. The parameters considered for selection of the proposed project site are:
  - a. Land use surrounding the proposed project site
  - b. Habitation present in the funnel area
  - c. Sensitive Receptors near to the project site
  - d. Obstacles in the Landing and Take-off Funnel
- viii. Connectivity to the site: The Proposed Heliport site is located about 17 Kms from NOIDA City, 10 kms from Greater NOIDA, 50 Kms from IGI Airport, New Delhi and 47 kms from NOIDA International Airport Jewar, Uttar Pradesh. NOIDA-Greater NOIDA Expressway is at 3km from site. Sector 147, NOIDA Metro Station is at 3km. Site is located

- at 7km from Yamuna Expressway. Metalled Approach Road to the heliport shall be developed in due time.
- ix. The heliport is to be planned for Day VFR operations and for commercial operations for Bell 412 helicopter and equivalent helicopters.
- x. The heliport is proposed in 9.35 acre of vacant land with the following facilities:
  - a. Terminal Building: 500 sq.m to cater 20 incoming and 20 outgoing passengers.
  - b. ATC Building
  - c. Touchdown and Lift off (TLOF) area: Circular with 22 m diameter.
  - d. Final approach and take-off (FATO) area: 26 m X 26 m
  - e. Safety Area: 52m X 52m
  - f. Parking Apron: 170m X 52m
  - g. Taxiway: 10 m X 10 m
  - h. Hanger: 35m X 35m
  - i. Refuelling Bay: 5m X 8m
  - j. Fire Station and Electric Substation: 22m X 8m
  - k. Parking Area for 50 cars
- xi. Water requirement during construction will be 6800 KL and during operation phase will be 82 KLD. The water shall be sourced from Noida Okhla Industrial Development Authority. Sewage will be treated through Septic Tank and Soak Pit during construction phase and STP during operation phase.
- xii. Solid waste of 12 kg/day will be generated during construction phase and 81 kg/day during operation phase of the project. The waste will be disposed through Noida Development Authority.
- xiii. Expected Power Requirement during operation phase is 315 KVA. Five Star rated Equipment and LED lights are proposed for energy conservation.
- xiv. No tree cutting is involved.
- xv. Yamuna River is located at a distance of 0.6 km from project site.
- xvi. Baseline data will be collected during pre-monsoon season ie (Apr-June 2021) and the primary monitoring will be carried out for Air Quality, Noise, Water, Soil and Meteorological. Secondary data will be collected from Authenticated Sources.
- xvii. General Condition is applicable as the Haryana State Boundary is at a distance of 600 m.
- xviii. The project is not located in Critically Polluted area.
  - xix. The project is not located within 10 km of eco-sensitive area. NBWL Clearance is not required.
  - xx. Forest Clearance is not required.
- xxi. No Court Case is pending against the project.
- xxii. Investment/Cost of the project is INR 39.8 Crores.
- xxiii. Employment potential 40 persons during construction phase and 50 persons during operation phase.
- xxiv. Benefits of the project Connectivity with inaccessible places, Medical Emergencies and Tourism.

- **2.** The EAC noted that the project/activity is covered under category 'A' of item 7(a) 'Airports' of the Schedule to the EIA Notification, 2006 and its subsequent amendments. Also, due to the presence of Haryana State Boundary at 600 m from the site, the General Condition is applicable. Therefore the project requires appraisal at central level by sectoral EAC.
- **3.** The EAC deliberated upon the information provided by the project proponent. After detailed deliberation, EAC recommended for grant of Terms of Reference as specified by the Ministry as Standard ToR in April, 2015 for the said project/activity and the following ToR in addition to Standard ToR for preparation of EIA-EMP report:
  - i. Importance and benefits of the project.
  - ii. Examine and submit details of water bodies including the seasonal ones within the corridor of impacts along with their status, volumetric capacity, quality, likely impacts on them due to the project. Check on flood plain of any river.
  - iii. Submit a copy of the contour plan with slopes, drainage pattern of the site and surrounding area, any obstruction of the same by the heliport.
  - iv. Submit details of environmentally sensitive places, land acquisition status, rehabilitation of communities/ villages and present status of such activities. Provide details on proximity to landfill site in the area.
  - v. A toposheet of the study area of radius of 10km and site location on 1:50,000/1:25,000 scale on an A3/A2 sheet. (including all ecosensitive areas and environmentally sensitive places)
  - vi. Status of DGCA approval for the project.
- vii. Layout maps of proposed project indicating the Touchdown and Liftoff (TLOF) area, the Final Approach and Takeoff (FATO) area, safety area, heliport building, parking, greenbelt area, utilities etc.
- viii. A note on appropriate process and materials to be used to encourage reduction in carbon foot print. Optimize use of energy systems in buildings that should maintain a specified indoor environment conducive to the functional requirements of the building by following mandatory compliance measures (for all applicable buildings) as recommended in the Energy conservation building code (ECBC) 2007 of the Bureau of Energy Efficiency, Government of India. The energy system include air conditioning systems, indoor lighting systems, water heaters, air heaters and air circulation devices.
  - ix. Details of air emissions, effluents, solid waste and hazardous waste generation and their management.
  - x. Noise monitoring shall be carried out in the funnel area of flight path.
  - xi. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract)
- xii. The E.I.A. should specifically address to vehicular traffic management as well as estimation of vehicular parking area.
- xiii. Fuel tank farm and its risk assessment.

- xiv. Public hearing to be conducted for the project in accordance with provisions of Environmental Impact Assessment Notification, 2006 and issues raised and commitments made by the project proponent on the same should be included in EIA/EMP Report in the form of tabular chart with financial budget for complying with the commitments made.
- xv. Cost of project and time of completion.
- xvi. A tabular chart with index for point wise compliance of above TORs.

# AGENDA ITEM No. 64.4.5

Expansion of Dabolim Airport, Goa in Respect of Extension of Existing Integrated Terminal Building & Existing Apron at Dabolim Village, South Goa District in Goa by M/s. Airports Authority of India Goa - Environmental Clearance

# (IA/GA/MIS/191999/2018; F. No. 10-54/2017-IA-III.)

- **1.** The PP (M/s. Airports Authority of India Goa) along with his consultant 'M/s. Greencindia Consulting Private Limited' made a presentation before EAC (Infra-2) on the key parameters and salient features of the project. The Committee took note of the following key parameters and salient features of the project presented during the meeting and as provided in the brief and application for this project:
  - i. The project is located at Dabolim Village, South Goa District, Goa with coordinates 15°22'58.74"N latitude and 73°50'32.67" E longitude.
  - ii. The proposal is for 'Expansion'.
- iii. The proposal was granted Terms of Reference (TOR) by MoEF&CC vide letter no. 10-54/2017-IA-III dated 10.05.2018. Further the TOR was amended for revision of area of terminal building and some minor changes vide letter of even no. dated 04.11.2019.
- iv. The proposed expansion is for extension of existing Integrated Terminal Building towards East by demolition of old terminal building, internal modification of existing integrated terminal building and extension of existing Apron towards East to facilitate 3 no. code C Aircraft (AB-321/B739-900) parking. The existing Dabolim Airport is spread over an area of 6.2ha of land which is under possession of Airports Authority of India (AAI) and expansion is planned within the existing land only. The proposed expansion includes expansion of existing terminal building by 18,300 sqm and the existing apron by 15,000 sqm.
- v. During the construction stage, water will be sourced primarily through tankers arranged by the contractors as per specifications. After expansion, the daily consumption of water during operation phase will be about 869 KLD of which 533.10 KLD will be fresh water requirement sourced from Public Works Department (PWD), Goa and 335.40 KLD will be recycled water requirement. The existing STP

Based on MBBR technology has capacity of 300 KLD. The total waste water generation will be 576 KLD and the excess modular design of 20% will be kept as standardized. Capacity of the existing STP has been enhanced from 300 KLD to 600 KLD with MMBR technology considering the additional requirement based on increased number of passengers and also based on directions of Goa PCB as per their stipulations of CTO dated 30.07.2020.

- vi. 40 kg/day (@0.2 kg/person/day for 200 labours) of solid waste will be generated during construction phase and will be collected and disposed as per established laws and procedures. About 0.01 Mt Construction and Demolition waste will be generated and efforts will be put to re-use the waste in the foundation and other road laying activities. The wet and dry solid waste is collected separately from the airport garbage bin area and both collection and disposal activity is handed over to assigned contractor M/S Mishra Trader's.
- vii. The present power requirement of the airport is 3.5 MVA which after expansion will be 6 MVA and sourced from Goa Electricity Department. For stand-by purpose the airport is having 4 nos. of DG sets in operation for power back up.
- viii. Multi-level car parking rooftop / terrace area has been proposed to accommodate solar panels.
- ix. Green belt development will be undertaken along the boundaries, away from the landing funnel and 45000 sqm of green area will be maintained. No tree felling is involved.
- x. It has been proposed that rainwater harvesting shall be done from roof top area of terminal building and the harvested rainwater shall be stored to be re-used in the airport.
- xi. All vehicles inside the airport will be parked in designated parking area only. Multi-level carpark is implemented in 4 floors with car parking space for 400 cars. Separate car parking around Admin Block for AAI/Airport staff & for operation of Cargo Movement which accommodates approx.75 cars & 10 Nos. Cargo Vehicles have been created. Development of PT-162 patch of Land to accommodate 65 Cars, 20 Coaches & 230 Two Wheelers is in progress.
- xii. Public hearing has been conducted by the Goa State Pollution Control Board at Community Centre, Airport Colony, Nr. NSD, Sanole Village, Dabolim Goa on 04/12/2020. Concerns were raised on issues such as privatisation of airport in future, incorrect procedure followed in conducting public hearing, deforestation involved and adverse effect on residents within 4 km radius of proposed project. Regarding the queries, the PP assured the following: the airport will be under Airport Authority of India and won't be handed over to private operators; the public hearing was conducted according to the guidelines prescribed by the Ministry Environment Forests & Climate Change; there will be no tree felling due to the project; and there will be no adverse impact at a distance of 4-km from the airport. A written representation was also received from Mr. Savio J.F. Correia which has been adequately responded by Airport Authority of India.

- xiii. Baseline data for environmental attributes like ambient air, meteorology, water, hydrology, land use, soil, geology, noise, socioeconomic, ecology and biodiversity data etc. was collected. The study was conducted during the pre-monsoon season, March to May, 2018.
- xiv. The project is not located in Critically Polluted area.
- xv. The project is not located within 10 km of eco-sensitive area. NBWL Clearance is not required.
- xvi. Forest Clearance is not required.
- xvii. No Court Case is pending against the project.
- xviii. Investment/Cost of the project: Total project cost for the proposed project is Rs. 255.69 Crores.
  - xix. Employment potential The direct employment during construction phase in proposed project will be 200 persons. During the project operation stage the existing staff of 1200 persons will be maintained.
  - xx. Benefits of the project The proposed Airport expansion will enhance the safety, security and environmental standards and passenger comfort at Airport and also will help in catering to forecast future air traffic and passenger growth and national civil aviation vision. Improvement in physical and social infrastructure and employment generation.
  - **2.** The EAC noted that the project/activity is covered under category 'A' of item 7(a) 'Airports' of the Schedule to the EIA Notification, 2006 and its subsequent amendments and requires appraisal at central level by sectoral EAC.
  - **3.** The EAC also noted that the PP has obtained certified compliance report from MOEFCC Integrated Regional Office, Bangalore vide File No. EP/12.1/2017-18/05/GOA/1451 dated 31.03.2021. As per the report based on site visit dated 30.03.2021, the status of compliance of the project is satisfactory.
  - **4.** The EAC (Infra-2), based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, 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. 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.
- ii. Construction site should be adequately barricaded before the construction begins.
- iii. Where construction activity is likely to cause noise nuisance to nearby residents, restrict operation hours between 7 am to 6 pm.
- iv. Rainwater harvesting shall be done from roof top area of terminal building and the harvested rainwater shall be stored to be re-used in the airport as proposed. Rain water harvesting structures shall conform to CGWA designs. Before recharging the surface run off, pre-treatment must be done to remove suspended matter, oil and grease.
- v. A certificate from the competent authority/agency handling municipal solid wastes should be obtained, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project.
- vi. Fresh water requirement from local authority shall not exceed 533.10 KLD during operational phase. As committed, no groundwater abstraction shall be done during construction as well as operation phase of the project.
- vii. As proposed, waste water shall be treated in an onsite STP of total 600 KLD capacity. Atleast 335.40 KLD treated water from the STP shall be recycled and re-used for flushing, HVAC, gardening etc.
- viii. 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.
- ix. Area for greenery shall be provided as per the details provided in the project document i.e., area under plantation/greenery will be 45000 sqm. Green belt development shall be undertaken along the boundaries, away from the landing funnel as proposed. The landscape planning should include plantation of native species.
- x. The PP shall also provide electric charging points in the parking areas for e-vehicles as committed.
- xi. PP should explore enhancing energy conservation up to at least 10% through use of solar energy.
- xii. The Environmental Clearance to the project is primarily under provisions of EIA Notification, 2006. The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/Regulations or Statutes as applicable to the project.

AGENDA ITEM No. 64.4.6

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

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

The Project Proponent requested to consider the proposal in the forthcoming meeting of EAC as his Consultant was unable to attend the meeting. The committee also noted that since SIEAA, Punjab is now operational, therefore project may be transferred to State Authority for appraisal at their end as original EC was granted by State.

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# LIST OF PARTICIPANTS OF EAC (INFRASTRUCTURE-2) IN 64th MEETING OF EAC (INFRA-2) HELD DURING 12-13APRIL, 2021THROUGH VIDEO CONFERENCING

S.	Name	Designation	Attendance	Attendance	Sign
No.			12.04.2021	13.04.2021	Thro
					VC
1.	Prof. T. Haque	Chairman	P	P	-
2.	Dr. N. P. Shukla	Member	P	P	-
3.	Dr. H. C.	Member	P	P	-
	Sharatchandra				
4.	Shri V. Suresh	Member	P	P	-
5.	Dr. V. S. Naidu	Member	P	P	=
6.	Shri B. C. Nigam	Member	P	P	=
7.	Dr. ManoranjanHota	Member	P	P	=
8.	Dr. DipankarSaha	Member	P	P	=
9.	Dr. JayeshRuparelia	Member	P	P	-
10.	Dr. (Mrs.) Mayuri H.	Member	P	A	-
	Pandya				
11.	Dr. M. V. Ramana	Member	A	A	-
	Murthy				
12.	Prof. Dr. P.S.N. Rao	Member	A	A	-
13.	Shri LalitBokolia	Scientist F &	P	P	-
		Member			
		Secretary			
14.	Shri Dharmendra	Scientist F &	P	P	-
	Kumar Gupta	Member			
		Secretary			

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#### **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., PM<sub>10</sub> and PM<sub>2.5</sub> in reference to PM emission, and SO<sub>2</sub> and NOx in reference to SO<sub>2</sub> and NOx emissions) within and outside the airport area at least at four locations (one within and three outside the plant area at an angle of 120°each), covering upwind and downwind directions.
- (ii) Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.
- (iii) A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.
- (iv) Soil and other construction materials should be sprayed with water prior to any loading, unloading or transfer operation so as to maintain the dusty material wet
- (v) The excavation working area should be sprayed with water after operation so as to maintain the entire surface wet.
- (vi) Excavated materials shall be handled and transported in a manner that they do not cause any problems of air pollution.
- (vii) The soil/construction materials carried by the vehicle should be covered by impervious sheeting to ensure that the dusty materials do not leak from the vehicle.

# III. Water quality monitoring and preservation:

- (i) Run off from chemicals and other contaminants from aircraft maintenance and other areas within the airport shall be suitably contained and treated before disposal. A spillage and contaminant containment plan shall be drawn up and implemented to the satisfaction of the State Pollution Control Board.
- (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 equipments.
- (iii) Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.
- (iv) During airport operation period, noise should be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.
- (v) Where construction activity is likely to cause noise nuisance to nearby residents, restrict operation hours between 7 am to 6 pm.

#### V. Energy Conservation measures:

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

# VI. Waste management:

- (i) Soil stockpile shall be managed in such a manner that dust emission and sediment runoff are minimized. Ensure that soil stockpiles are designed with no slope greater than 2:1 (horizontal/vertical).
- (ii) The project activity shall conform to the Fly Ash notification issued under the E.P. Act of 1986.
- (iii) Solid inert waste found on construction sites consists of building rubble, demolition material, concrete; bricks, timber, plastic, glass, metals, bitumen etc shall be reused/recycled or disposed off as per Solid Waste Management Rules, 2016 and Construction and Demolition Waste Management Rules, 2016.
- (iv) Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016.
- (v) The project proponents shall implement a management plan duly approved by the State Pollution Control Board and obtain its permissions for the safe handling and disposal of:
  - a. Trash collected in flight and disposed at the airport including segregation, collection and disposed.
  - b. Toilet wastes and sewage collected from aircrafts and disposed at the Airport.
  - c. Wastes arising out of maintenance and workshops
  - d. Wastes arising out of eateries and shops situated inside the airport complex.
  - e. Hazardous and other wastes
- (vi) The solid wastes shall be segregated as per the norms of the Solid Waste Management Rules, 2016. Recycling of wastes such as paper, glass (produced from terminals and aircraft caterers), metal (at aircraft maintenance site), plastics (from aircrafts, terminals and offices), wood, waste oil and solvents (from maintenance and engineering operations), kitchen wastes and vegetable oils (from caterers) shall be carried out. Solid wastes shall be disposed in accordance to the Solid Waste Management Rules, 2016 as amended.

- (vii) A certificate from the competent authority handling municipal solid wastes should be obtained, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project.
- (viii) Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination.

#### VII. Green Belt:

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

# VIII. Public hearing and Human health issues:

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

#### IX. Corporate Environment Responsibility:

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

#### X. Miscellaneous:

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

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

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#### **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., PM<sub>10</sub> and PM<sub>2.5</sub> in reference to PM emission, and SO<sub>2</sub> and NOx in reference to SO<sub>2</sub> and NOx emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120 each), covering upwind and downwind directions.
- iv. Sampling facility at process stacks and at quenching towers shall be provided as per CPCB guidelines for manual monitoring of emissions.
- v. The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- vi. Appropriate Air Pollution Control (As proposed, air pollution control device viz. gas quencher; treatment with mixture of hydrated lime and activated powder for adsorption of partial acidity and VOCs (if any); bag filter/ESP for removal of particulate matter; venturi scrubber followed by packed bed scrubber with caustic circulation to neutralize the acidic vapours in flue gas; and demister column for arresting water carry over will be provided to the incinerator) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
- vii. The periodical monitoring of Dioxins and Furans in the Stack emissions shall be carried out. Analysis of Dioxins and Furans shall be done through CSIR-National Institute for Interdisciplinary Science and Technology (NIIST), Thiruvananthapuram or equivalent NABL Accredited laboratory
- viii. Gas generated in the Land fill should be properly collected, monitored and flared

ix. A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 02 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 02 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.

# III. Water quality monitoring and preservation:

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

  Treated water shall be reused within the project.
- xii. A certificate from the competent authority for discharging treated effluent/ untreated effluents into the Public sewer/ disposal/drainage systems along with the final disposal point should be obtained.
- xiii. Rain water runoff from hazardous waste storage area shall be collected and treated in the effluent treatment plant.

# IV. Noise monitoring and prevention:

- i. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
- ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.
- iii. Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.

#### V. Energy Conservation measures:

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

#### VI. Waste management:

- i. The TSDF should only handle the waste generated from the member units.
- ii. Periodical soil monitoring to check the contamination in and around the site shall be carried out.
- iii. No non-hazardous wastes, as defined under the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, shall be handled in the premises.

- iv. The Project proponent shall not store the Hazardous Wastes more than the quantity that has been permitted by the CPCB/SPCB.
- v. The solid wastes shall be segregated, managed and disposed as per the norms of the Solid Waste Management Rules, 2016.
- vi. A certificate from the competent authority handling municipal solid wastes should be obtained, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project.
- vii. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Rules, 2016.

#### VII. Green Belt:

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

# VIII. Public hearing and Human health issues:

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

# IX. Corporate Environment Responsibility:

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

#### X. Miscellaneous:

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

- vi. The criteria pollutant levels namely; PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub>, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
- vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- viii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- x. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- xi. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts/NGT and any other Court of Law relating to the subject matter.
- xvi. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

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

# I. Statutory compliance:

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

# II. Air quality monitoring and preservation:

- i. The project proponent shall install emission monitoring system including Dioxin and furans to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. Periodical air quality monitoring in and around the site including VOC, HC shall be carried
- 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/Nm<sup>3</sup>.
- v. Appropriate Air Pollution Control (APC) system shall be provided for fugitive dust from all vulnerable sources, so as to comply prescribed standards. All necessary air pollution control devises (quenching, Venturi scrubber, mist eliminator) should be provided for compliance of emission standards.
- vi. Masking agents should be used for odour control.

- i. The project proponent shall install effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. Waste water generated from the facility shall be treated in the ETP and treated waste water shall be reused in the APCD connected to the incinerator. The water quality of treated effluent shall meet the norms prescribed by State Pollution Control Board. Zero discharge should be maintained
- iii. Process effluent/any waste water should not be allowed to mix with storm water.
- iv. Total fresh water use shall not exceed the proposed requirement as provided in the project details. Prior permission from competent authority shall be obtained for use of fresh water.
- v. Sewage Treatment Plant shall be provided to treat the wastewater generated from the project. Treated water shall be reused within the project.

- vi. A certificate from the competent authority for discharging treated effluent/ untreated effluents into the Public sewer/ disposal/drainage systems along with the final disposal point should be obtained.
- vii. The leachate from the facility shall be collected and treated to meet the prescribed standards before disposal.
- viii. Magnetic flow meters shall be provided at the inlet and outlet of the ETP & all ground water abstraction points and records for the same shall be maintained regularly.
- ix. Rain water runoff from hazardous waste storage area shall be collected and treated in the effluent treatment plant.

# IV. Noise monitoring and prevention:

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

# V. Energy Conservation measures:

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

# VI. Waste management:

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

# VII. Green Belt:

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

### VIII. Public hearing and Human health issues:

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

# IX. Corporate Environment Responsibility:

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

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

### X. Miscellaneous:

- i. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular languagewithin seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- v. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vi. The criteria pollutant levels namely; PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub>, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
- vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- viii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- x. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- xi. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts/NGT and any other Court of Law relating to the subject matter.
- xvi. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

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

### I. Statutory compliance:

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

# II. Air quality monitoring and preservation:

- i. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g., PM<sub>10</sub> and PM<sub>2.5</sub> in reference to PM emission) covering upwind and downwind directions.
- ii. Appropriate Air Pollution Control (APC) system (both during the construction and operation) shall be provided for all the dust generating points *inter alia* including loading, unloading, transfer points, fugitive dust from all vulnerable sources, so as to comply prescribed standards.
- iii. Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.
- iv. Adequate parking shall be constructed at upper terminal and lower terminal. PP shall ensure smooth traffic management.

### III. Water quality monitoring and preservation:

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

# IV. Noise monitoring and prevention:

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

# V. Energy Conservation measures:

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

### VII. Waste management

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

# VIII. Public hearing and Human health/safety issues:

- Comply with the safety procedures, norms and guidelines (as applicable) as outlined in IS 5228, IS 5229 and IS 5230, code of practice for construction of aerial ropeways, Bureau of Indian Standards.
- ii. Maintaining hoists and lifts, lifting machines, chains, ropes, and other lifting tackles in good condition.
- iii. Ensuring that walking surfaces or boards at height are of sound construction and are provided with safety rails or belts.
- iv. The project should conform to the norms prescribed by the Director General Mine safety. Necessary clearances in this regard shall be obtained.
- v. Adequate infrastructure, including power, shall be provided for emergency situations and disaster management.
- vi. Adequate first aid facility shall be provided during construction and operation phase of the project.
- vii. Regular safety inspection shall be carried out of the ropeway project and a copy of safety inspection report should be submitted to the Regional Office.
- viii. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.

### IX Corporate Environment Responsibility:

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

## X. Miscellaneous:

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

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

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

### I. Statutory compliance:

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

### II. Air quality monitoring and preservation:

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

- i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time and connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. Total fresh water use shall not exceed the proposed requirement as provided in the project details. Prior permission from competent authority shall be obtained for use of fresh water.
- iii. There shall be flow meters at inlet and outlet of CETP to monitor the flow. Suitable meters shall be provided to measure the quantity of effluent received, quantity of effluent recycled/reused and discharged.
- iv. The units and the CETP will maintain daily log book of the quantity and quality of discharge from the units, quantity of inflow into the CETP, details of the treatment at each stage of the CETP including the raw materials used, quantity of the treated water proposed to be recycled, reused within the Industrial park/units, quantity of the treated effluent discharged. All the above information shall be provided on- line of the web site exclusively prepared for the purpose by the CETP owner. The website shall be accessible by the public. The financial and energy details of the CETP will also be provided along with details of the workers of the CETP.
- v. The CETP operator will maintain an annual register of member units which will contain the details of products with installed capacities and quality and quantity of effluents accepted for discharge. This will form a part of the initial and renewal applications for consent to operate to be made before the State Pollution Control Board.
- vi. No changes in installed capacity, quality or quantity of effluents as agreed upon in the initial MOU between the operator and the member units, addition of any new member units shall be carried without prior approval of the ministry
- vii. The Unit shall inform the State Pollution Control Board at least a week prior to undertaking maintenance activities in the recycle system and store/dispose treated effluents under their advice in the matter.
- viii. The unit shall also immediately inform the Pollution Control Board of any breakdown in the recycling system, store the effluents in the interim period and dispose effluents only as advised by the Pollution Control Board.
- ix. The MoU between CETP and member units shall indicate the maximum quantity of effluent to be sent to the CETP along with the quality.
- x. The unit shall maintain a robust system of conveyance for primary treated effluents from the

member units and constantly monitor the influent quality to the CETP. The Management of the CETP and the individual member shall be jointly and severally responsible for conveyance and pre-treatment of effluents. Only those units will be authorized to send their effluents to the CETP which have a valid consent of the Pollution Control Board and which meet the primary treated standards as prescribed. The CETP operator shall with the consent of the State Pollution Control Board retain the powers to delink the defaulter unit from entering the conveyance system.

- xi. The effluent from member units shall be transported through pipeline. In case the effluent is transported thorough road, it shall be transported through CETP tankers only duly maintaining proper manifest system. The vehicles shall be fitted with proper GPS system.
- xii. Before accepting any effluent from member units, the same shall be as permitted by the SPCB in the consent order. No effluent from any unit shall be accepted without consent from SPCB under the Water Act, 1974 as amended.
- xiii. Treated water shall be disposed on land for irrigation. An irrigation management plan shall be drawn up in consultation with and to the satisfaction of the State Pollution Control Board.
- xiv. The Project proponents will build operate and maintain the collection and conveyance system to transport effluents from the industrial units in consultation with and to the satisfaction of the State Pollution Control Board and ensure that the industrial units meet the primary effluent standards prescribed by the State Pollution Control Board.
- xv. The State Pollution Control Board will also evaluate the treatment efficiency of the Effluent Treatment Plant (ETP) and its capability of meeting the prescribed standards. The final scheme of treatment would be such as is approved by the Pollution Control Board in the Consent to Establish.
- xvi. The project proponents will create an institutional arrangement for the involvement of individual members in the management of the CETP.

# IV. Noise monitoring and prevention:

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

### V. Waste management:

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

# VI. Energy Conservation measures:

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

### VII. Green Belt:

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

# VIII. Public hearing and Human health issues:

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

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

# IX. Corporate Environment Responsibility:

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

### X. Miscellaneous:

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

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

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

### I. Statutory compliance:

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

### II. Air quality monitoring and preservation:

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories. (for projects involving incineration).
- ii. As proposed, air pollution control device viz. gas quencher; treatment with mixture of hydrated lime and activated powder for adsorption of partial acidity and VOCs (if any); bag filter/ESP for removal of particulate matter; venturi scrubber followed by packed bed scrubber with caustic circulation to neutralize the acidic vapours in flue gas; and demister column for arresting water carry over will be provided to the incinerator. Online pollutant monitoring shall be provided as per CPCB guidelines for monitoring particulate matter, SO<sub>2</sub>, NOx and CO from the incinerator stack. The periodical monitoring of Dioxins and Furans in the Stack emissions shall be carried out.
- iii. Analysis of Dioxins and Furans shall be done through CSIR-National Institute for Interdisciplinary Science and Technology (NIIST), Thiruvananthapuram or equivalent NABL Accredited laboratory.
- iv. Incinerator shall be designed as per CPCB guidelines. Energy shall be recovered from incinerator.
- v. Gas generated in the Land fill should be properly collected, monitored and flared.
- vi. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g.,  $PM_{10}$  and  $PM_{2.5}$  in reference to PM emission, and  $SO_2$  and NOx in reference to  $SO_2$  and NOx emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of  $120^{\circ}$  each), covering upwind and downwind directions.

- i. The project proponent shall install continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. Sufficient number of Piezometer wells shall be installed in and around the project site to monitor the ground water quality in consultation with the State Pollution Control Board / CPCB. Trend analysis of ground water quality shall be carried out each season and information shall be submitted to the SPCB and the Regional Office of MoEF&CC.
- iii. The depth of the land fill site shall be decided based on the ground water table at the site.
- iv. Rain water runoff from the landfill area and other hazardous waste management area shall be

- collected and treated in the effluent treatment plant.
- v. Total fresh water use shall not exceed the proposed requirement as provided in the project details. Prior permission from competent authority shall be obtained for use of fresh water.
- vi. The Company shall ensure proper handling of all spillages by introducing spill control procedures for various chemicals.
- vii. All leachates arising from premises should be collected and treated in the ETP followed by RO. RO rejects shall be evaporated in MEE. Toxicity Characteristic Leaching Procedure (TCLP) test to be performed on leachates.
- viii. Scrubber water, leachate water or wheel wash effluent shall be treated in the effluent treatment plant followed by RO to achieve zero liquid discharge.
- ix. Sewage Treatment Plant shall be provided to treat the wastewater generated from the project.

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

### IV. Waste management:

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

# V. Transportation:

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

### VI. Green belt:

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

# VII. Public hearing and Human health/safety issues:

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

# VIII. Corporate Environment Responsibility:

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

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

#### IX. Miscellaneous:

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently. (for projects involving incineration)
- ii. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed (For projects involving only Landfill without incineration)
- iii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iv. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vii. The criteria pollutant levels namely; PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub>, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain (in case of incineration involved).
- viii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- ix. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- x. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- xi. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- xii. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xiii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiv. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xvi. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xvii. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

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

### I. Statutory compliance:

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

- i. Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.
- ii. A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.
- iii. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g.,  $PM_{10}$  and  $PM_{2.5}$ ) covering upwind and downwind directions during the construction period.
- iv. Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.
- v. Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
- vi. Sand, murram, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.
- vii. Wet jet shall be provided for grinding and stone cutting.
- viii. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
- ix. All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Management Rules 2016.
- x. The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards
- xi. The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise

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

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

- i. The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bio-swales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water.
- ii. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.
- iii. Total fresh water use shall not exceed the proposed requirement as provided in the project details.
- iv. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.
- v. A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.
- vi. At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.
- vii. Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.
- viii. Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.
- ix. Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.
- x. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- xi. The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rain water harvesting recharge pits/storage tanks shall be provided for ground water recharging as per the CGWB norms.
- xii. A rain water harvesting plan needs to be designed where the recharge bores of minimum one recharge bore per 5,000 square meters of built-up area and storage capacity of minimum one day of total fresh water requirement shall be provided. In areas where ground water recharge is not feasible, the rain water should be harvested and stored for reuse. The ground water shall not be withdrawn without approval from the Competent Authority.
- xiii. All recharge should be limited to shallow aquifer.
- xiv. No ground water shall be used during construction phase of the project.
- xv. Any ground water dewatering should be properly managed and shall conform to the approvals and the guidelines of the CGWA in the matter. Formal approval shall be taken from the CGWA for any ground water abstraction or dewatering.
- xvi. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.
- xvii. Sewage shall be treated in the STP with tertiary treatment. The treated effluent from STP shall be recycled/re-used for flushing, AC make up water and gardening. As proposed, no treated water shall be disposed in to municipal drain.
- xviii. No sewage or untreated effluent water would be discharged through storm water drains.
- xix. Onsite sewage treatment of capacity of treating 100% waste water to be installed. The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Treated waste water shall be reused on site for landscape, flushing, cooling tower, and other end-uses. Excess treated water shall be discharged as per statutory norms notified by Ministry of Environment, Forest and Climate Change. Natural treatment systems shall be promoted.
- xx. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.

xxi. Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.

# IV. Noise monitoring and prevention:

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

# V. Energy Conservation measures:

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

# VI. Waste Management:

- i. A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project shall be obtained.
- ii. Disposal of muck during construction phase shall not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
- iii. Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials.
- iv. Organic waste compost/ Vermiculture pit/ Organic Waste Converter within the premises with a minimum capacity of 0.3 kg/person/day must be installed.
- v. All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.
- vi. Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.
- vii. Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials.
- viii. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.
- ix. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016.

x. Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination.

### VII. Green Cover:

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

### VIII. Transport

- i. A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria.
  - a. Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
  - b. Traffic calming measures.
  - c. Proper design of entry and exit points.
  - d. Parking norms as per local regulation.
- ii. Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours.
- iii. A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.

# IX. Human health issues:

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

### X. Corporate Environment Responsibility:

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

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

#### XI. Miscellaneous:

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