

**MINUTES OF 55<sup>th</sup> MEETING OF EXPERT APPRAISAL COMMITTEE (INFRASTRUCTURE-2) HELD DURING 24-25<sup>TH</sup> SEPTEMBER, 2020.**

**VENUE:** Through Video Conferencing

**DATE:** 24-25<sup>th</sup> September, 2020

**DAY 1- Thursday, 24<sup>th</sup> September, 2020**

**55.1 Opening Remarks of the Chairman:** The Chairman extended welcome to members and other participants and requested to start the proceeding as per the agenda adopted for this meeting.

**55.2 Confirmation of the Minutes of 54<sup>th</sup> Meeting of the EAC (Infra-2) held on 27-28<sup>th</sup> August.**

There were no comments and the minutes of 54<sup>th</sup> Meeting of the EAC (Infra-2) that held during 27-28 August, 2020 were confirmed.

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

**Agenda item No. 55.3.1.**

**Expansion of Existing Airport at Hisar (Development of Phase II) at village Bir, district Hisar by M/s Department of Civil Aviation, Haryana– Environmental Clearance**

**(IA/HR/MIS/170656/1965; F. No. 10-31/2019-IA-III)**

The Project Proponent (PP) along with his accredited consultant M/s EQMS Global Pvt. Ltd. made a presentation and presented following parameters and salient features of the project to the Committee:

- (i) The proposed project is “Expansion of Existing Airport at Hisar (Development of Phase II)”. The project site is in western periphery of State of Haryana in Hisar District, Haryana. ARP coordinates of the proposed projects are Latitude- 29°11'25.16"N & Longitude- 75°43'45.28"E. The project site is located in western periphery of State of Haryana in Hisar District. Site is located close to the Hisar City and well connected with NH-9.
- (ii) This is an Expansion project having total plot area of 7200 acres (2913.7 Ha). There are allocations of various types of land use to different regions within the proposed project site in accordance to Master Plan of Hisar, 2021. The existing land use of the site is Airport, Residential, Commercial and Special Economic Zone (SEZ) as per Master Plan of the area. The entire land belongs to the Government of Haryana, which will be used for the airport. After development of airport, land use of 7200 acres land will change to airport. Also, as per the Draft Master Plan of 2041, the entire land has been considered as Airport.
- (iii) The proposed expansion of the airport will cater passenger air traffic and cargo demand of Hisar and nearby areas in the state of Haryana. The existing airport (Phase-I) consists of 1220m x 45m runway for Code ‘B’ aircraft, terminal building, hanger and an apron to connect runway with terminal building and hangers.
- (iv) The facilities planned in the airport includes passenger and cargo terminal buildings, runway, taxiways and aprons system, airfield lighting system, air traffic control tower, NAVAIDs, airport support facilities, utilities and infrastructure including roads, staff

accommodation, car parking, power supply system, storm water drainage system, sewage treatment plant, etc., and aircraft support facilities like refuelling, repairs and overhaul, ground support, and catering etc. Built-up Area of Terminal Building and other allied Structures/Ancillary Building is 90,000 Sqm

- (v) During operation phase, total water requirement in phase II development is 860 KLD out of which freshwater requirement is 418 KLD and rest 442 KLD will be met through recycled water from in-house STP. Fresh water will be met through Irrigation & Water Resource Department, Haryana supply.
- (vi) It is estimated that wastewater generation is 465 KLD which will be treated in proposed in-house STP (based on SBR Technology) of 550 KLD till Ultra-filtration (UF) treatment. 442 KLD of treated water from STP will be completely reused within the premises for purposes like flushing, landscaping & HVAC Cooling. The proposed project will be a Zero-liquid Discharge Unit. Also, there will be generation of specific category of liquid waste from the aircrafts i.e. Lavatory waste. The lavatory waste removed from the aircraft will be transported in truck to the STP for treatment. 2 Ha of land have been demarcated for installation of STP.
- (vii) It is estimated that 5156 kg/day of municipal waste will be generated at airport including 576 kg/day of deplane waste. Proper municipal solid waste collection, management, treatment and disposal system shall be followed for management of solid waste. Municipal waste shall be segregated at source into compostable waste, recyclable waste and inert waste by provision of three colour bins. A waste storage room for municipal waste shall be provided at site with storage capacity of 2-3 days. Compostable waste shall be treated within the site in organic waste convertor, recyclable waste shall be sold to the vendors and the inert fraction shall be disposed through the local agencies in area on daily basis. Deplane waste will be collected in HDPE bags and sent to the in-house solid waste management area for treatment/disposal. Airport Council International's (ACI) policy and recommended practices Handbook will be followed for waste management at airport which promotes to avoid, to reduce, re reuse, to recycle and finally to dispose the waste.
- (viii) 10 MVA of power will be required during operation phase which will be sourced through Dakshin Haryana Bijli Vitran Nigam (DHBVN). Electric sub-station will be provided within the site for receiving and distribution of power. Power backup will be provided by DG sets of capacity 5x750 KVA and 3x500 KVA which will operate during power failure only. 5x750 KVA DG set will feed the demand of terminal building and car parking area and 3x500 KVA will be used for ATC complex, AGL and Apron lighting etc.
- (ix) To minimize the electrical load requirement of the project, entire electrical system will be designed as per ECBC and GRIHA. It is planned to achieve 3-star rating of GRIHA rating.
- (x) As per studies of design of the proposed expansion, the total area to be considered for rainwater harvesting will be 379.45 Ha that will include airside and landside. The total volume of harvested water per year works out 506953 KL and the same is proposed to be utilized for recharging ground by providing 60 recharging chambers, each capable of 8500 KL during the monsoon season. It is also proposed to installed Rainwater storage tanks of 10,000 KL. The stored water will be used in landscaping (Green belt proposed along the boundary wall) thought the year.
- (xi) A Car Parking area of 12000 Sqm is proposed to be provided opposite to the terminal building for accommodating 250 Cars. 112 Parking Slots would have electric charging facility. Ample Four/ two wheelers parking spaces will be provided to staff members of the airport near the respective work department area.

- (xii) Airport has valid consent to operate granted by HSPCB vide order no. HSPCB/Consent/: 329986719HISCTO7039555. As the existing airport was established in year 1965, thus Environmental clearance for existing airport is not available. Certified report on CTO has been received from HSPCB.
- (xiii) Project is not in Critically Polluted Area.
- (xiv) Terms of Reference was accorded by MoEFCC vide letter F.No. 10-31/2019-IA.III dated 2<sup>nd</sup> September 2019.
- (xv) Public Hearing for the Phase-II development of Integrated Aviation Hub at the existing Hisar Airport was conducted on 10<sup>th</sup> June 2020 by the Haryana State Pollution Control Board (HSPCB) in coordination with the District Administration, Hisar. The public hearing was conducted at the existing Airport.
- (xvi) The predicted noise levels based on the above analysis at the project boundary and surrounding areas considering that there is no attenuation on account of barriers, will be as follows

Locations	Existing Baseline (Leq)		Maximum Predicted Incremental Level (Leq)	Resultant (Max.) (Leq)	
	Day	Night		Day	Night
Project Site (Nearest Boundary SE)	50.3	38.2	72.5	72.5	72.5
Project Site (Entrance Boundary, S)	50.3	38.2	66.5	66.6	66.5
Dhardoor Village	52.2	39.7	49.6	54.1	50.0
Guru Jambeshwar	50.8	39.6	58.0	58.7	58.0
Bir Hisar	53.5	41.9	57.1	58.7	57.2
Tawandi Rana	52.6	40.8	49.6	54.3	50.1

All Values are in dB (A)

- (xvii) Landscaping has been planned to be developed along the airside, landside, roads and parking area as per Guidelines on Landscaping and Tree Plantation (IRC: SP-21-2009). Development of landscape area is bifurcated in six areas as follows Grass lawn in Airside, Landside greenbelt around Parking Spaces, Landside garden & lawn, Avenue trees along roads in landside area, Building setbacks and 100 m wide green belt around the airport boundary. As per the survey carried out, it is required to cut 3658 no. of existing trees. Compensatory plantation shall also be carried out for each tree cut in ratio of 1:10 or as per the NOC issued by the Forest Department, NPV will also be paid to forest department so that they will make the plantation on CA land so, that ecology of the area will get balanced in future.
- (xviii) The estimated timeline for operation of Phase II is year 2024.
- (xix) As per MoEF&CC OM F.No. 22-65/2017-IA.III dated 1st May, 2018 regarding contribution towards Corporate Environment Responsibility, the Project proponent will invest 0.5% of project cost i.e., Rs. 4.74 Crores under CER activities. Khand Vikas Panchayat Adhikari, Hisar has provided the list of infrastructure requirements in nearby villages. CER funds will be spent on the same taking into consideration the list provided by Panchayat Adhikari.
- (xx) Cost of the Project is Rs. 946 Crores.
- (xxi) Employment Potential: 3640 (Operation Phase) + 500 (Construction Phase)
- (xxii) Benefits of the project: Civil Aviation industry in India has come up as fast-growing industries during last three years. India has become the third largest domestic aviation market in the world. The proposed project will cater the rising air traffic. Air aviation is

the key of GDP growth, project will help in increasing GDP of the country. It will also help in decongestion of IGI airport in Delhi. Airport is directly or indirectly key to the development and revenue generation. It expected boost of industrialization, multi-model-connectivity, and infrastructure development in the hinterland. Up liftmen of nearby people due to development.

*The EAC took note of the above information provided by the PP and enquired about the status of previous Environmental clearance, if any, the timeline for development, status of stage-I forest clearance, associated tree cutting, assessment of impact of noise on the wildlife in the deer park and consideration of possible risk from nearby bottling plan in to the disaster management plan.*

*In this context, PP informed to the EAC that existing airport was established in year 1965, thus Environmental clearance for existing airport was not required. The Airport has valid consent to operate granted by HSPCB vide order no. HSPCB/Consent/: 329986719HISCTO7039555.*

*PP further submitted that proposed expansion of existing domestic airport Hisar will be done in different phases. At present, only Phase II will be developed having passenger handling capacity of 3.5 MPPA (Million passengers per annum) and cargo capacity of 20,000 MT with one runway of 3000m x 60m (with 7.5 m shoulders either side) for Code '4E' aircraft. Existing airport is spread over an area of approximate 180 acres and for the purpose of development of Integrated Aviation Hub at Hisar, Government of Haryana identified adjoining 7200 acre of Haryana Govt. land for transfer to Civil Aviation Department, Haryana. Presently, 4200 acres of land has been transferred in which Phase II development is proposed and the process for transfer of additional 3000 acres is in progress.*

*Stage-I forest clearance for diversion of 4.71 ha of forest land in favour of Consultant Planning, Civil Aviation Department, Haryana for expansion of Hisar Airport along Hisar-Barwala-Chandigarh Road and Hisar Dhansu road, under forest division and District Hisar, Haryana has been granted by Northern Regional Office of MOEFCC at Chandigarh vide letter File No.9-HRB046/2020-CHA dated 15.09.2020. Regarding details of tree cutting, it was informed by the project proponent that a Survey has been done by the Forest department for counting of Trees present near the airstrip. As per survey, approx. 6224 no. of trees exists near the airstrip out of which 3658 no. of trees requires to be cut for phase II development. Application for tree cutting is already submitted to the Forest Department.*

*The project proponent also submitted proposed noise abatement measures, revised water balance including rainwater harvesting details, Solid Waste and C&D Waste Management and proposed green belt plan along with tree species. It was submitted that in addition to the total water used, stored rain water will be 27 KLD which will be used for periphery plantation. The PP also informed that it is proposed to shift the nearby LPG bottling plant to some other place. Hence, there will be not risk to the proposed development.*

*The Committee also deliberated, inter-alia, upon the issues raised during the Public Hearing/Public Consultation meeting. It was noted that the concerns were expressed primarily on Employment, diversion of village road, Corporate Environmental Responsibility (CER); shifting plan of Rana Minor (canal) and its impact. The Committee noted that the response of PP to the issues raised during Public hearing is satisfactory and has been incorporated in the final EIA-EMP report. It was also confirmed, inter-alia, by the PP that there is no plan to shift Rana Minor Canal during the current Phase of proposed expansion, for which EC has been requested.*

*The EAC, based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, recommended the project for grant of environmental clearance for the Phase-II expansion of the existing airport and stipulated the following specific conditions along with other Standard EC Conditions as specified by the*

Ministry vide OM dated 04.01.2019 for the said project/activity (specified at **Annexure-1** of the minutes), while considering for accord of environmental clearance:

- (i) Clearance from Directorate General of Civil Aviation (DGCA) and Airports Authority of India (AAI) for safety and project facilities shall be obtained.
- (ii) Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.
- (iii) Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities shall be complied with.
- (iv) Total water requirement is estimated as 887 KLD, while fresh water requirement will be 418 KLD. Water requirement will be met through Irrigation & Water Resource Department, Haryana. As proposed, no ground water shall be used in the project.
- (v) Aircraft maintenance, sensitivity of the location where activities are undertaken, and control of runoff of potential contaminants, chemicals etc shall be properly implemented and reported.
- (vi) Waste water generated from the Airport will be treated in MBBR/SBR based Sewage Treatment Plant of 550 KLD capacity. Treated waste water will be used for landscaping, flushing and HVAC. There will be zero discharge of treated waste water from airport.
- (vii) During construction and operational phase AAQ monitoring should include PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>x</sub>, NH<sub>3</sub>, CO, CH<sub>4</sub> and Benzene.
- (viii) 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. A monitoring station for ambient air and noise levels shall be provided in the village nearest to the airport.
- (ix) Traffic Management Plan as submitted shall be implemented in letter and spirit. Apart, 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. 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.
- (x) An onsite disaster management plan shall be drawn up to account for risks and accidents. This onsite plan shall be dovetailed with the onsite management plan for the district.
- (xi) As proposed, 3658 no. of trees shall be cut for phase II development with prior permission from concerned Department. The landscape planning should include plantation of native species. The plantation species should be carefully chosen to avoid bird nesting and to improve pollution control and noise control measures. Water intensive and/or invasive species should not be used for landscaping. As proposed, 98.92 Ha area shall be provided for landscaping. A greenbelt of 17.5 m width shall be provided all around the perimeter of the parking lot and along arrival/Departure roads. The total green belt area planned is 4.5 Ha.

- (xii) As per the Ministry's Office Memorandum F. No. 22-65/2017-IA.III dated 01.05.2018, and proposed by the project proponent, an amount of Rs. 4.74 Crores @0.5% of the project cost shall be earmarked under Corporate Environment Responsibility (CER) for the activities such as Construction of ITI, Construction of Gram Sachivalya, Computer Centre with Library, Construction of Ambedkar Bhawan, Bus for Girls, Redevelopment of School, Plantation of Trees, Animal Hospital, Stadium, Aganvadi, PHC in Village Mirzapur, Pana Maharana, Dhansu, Niryan, Pana Alampur, Talwandi Rana, Bir Baran. The activities proposed under CER shall be restricted to the affected area around the project. The entire activities proposed under the CER shall be treated as project and shall be monitored. The monitoring report shall be submitted to the regional office as a part of half yearly compliance report, and to the District Collector. It should be posted on the website of the project proponent.

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**Agenda item No. 55.3.2.**

**Construction of Affordable Housing Project at 48 Nos. of Plot, Khata No. 55, Ward No. 17, Birsanagar, Jamshedpur under Pradhan Mantri Awas Yojana by M/s Jharkhand Urban Infrastructure Development Company Limited – Environmental Clearance**

**(IA/JH/MIS/136341/2020; F.No. 21-6/2020-IA-III)**

***The project proponent did not attend the meeting and as such, the proposal was deferred.***

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**Agenda item No. 55.3.3.**

**Expansion of 'Netaji Subhas Institute of Technology' Azad Hind Fauz Marg, Sector 3, Dwarka, New Delhi by M/s Netaji Subhash Institute of Technology– Environmental Clearance**

**(IA/DL/NCP/166532/2018; F.No. 21-96/2018-IA-III)**

The Project Proponent (PP) along with his accredited consultant M/s Amaltas Enviro Industrial Consultants LLP (AEC) made a presentation and presented following parameters and salient features of the project to the Committee:

- (i) The project is located at 28° 36'49.11"N Latitude and 77°1'59.54"E. Longitude.
- (ii) Terms of Reference was accorded to the project by MoEFCC vide Letter F. No. 21-96/2018-IA-III dated 30.11.2018.
- (iii) The total plot area is 5,87,400 sqm, FSI area is 193,527.87 sqm and total construction (Built-up) area of 207,647.48 sqm. The project will comprise of 6 new academic blocks and residential Buildings. Maximum height of the building is 27 m. The details of building are as follows:

<b>Expansion Details (Built-up Area)</b>			
Blocks	Existing Area	Proposed Expansion	Total After Expansion
Academic	45258.246	69591.96	114850.206
Residential	45268.9	33162.764	78431.664
Sports	246	-	246
Basement	0	14119.61	14119.61
<b>Total Built-up Area</b>			<b>207647.48</b>

- (iv) During construction phase, total water requirement is expected to be 303 ML which will be met by treated water from Common STP of Dwarka sector 16. 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 941 KLD and the same will be met by 572 KLD fresh water from DJB and 369 KLD Recycled Water. Wastewater generated (499 KLD) will be treated in the inhouse STP of 550 KLD. Treated wastewater will be 450 KLD out of which 369 KLD will be recycled and re-used (52.2 for flushing, 65 KLD for cooling, 40 KLD for road washing and cleaning and 212 KLD for gardening etc.) Excess treated water shall be discharged to Sewer line.
- (vi) About 2.35 TPD solid wastes will be generated in the project. The biodegradable waste (1.410 TPD) will be processed in OWC and the non-biodegradable waste generated (.0.705 + 0.235 = 0.940 TPD) will be handed over to authorized local vendor.
- (vii) The total power requirement during construction phase is 200 KVA and will be met from BSES and total power requirement during operation phase is 3707.25 KVA and will be met from electrical supply via transformers of total capacity of 4000 KVA
- (viii) Rooftop rainwater of buildings will be collected in 26 RWH tanks of total 677 CUM capacity for harvesting after filtration.
- (ix) Parking facility for 2800 four wheelers is proposed to be provided against the requirement of 2740 (according to local norms).
- (x) NBWL Clearance is not required.
- (xi) Forest Clearance is not required.
- (xii) No Court case is pending against the project.
- (xiii) Expected timeline for completion of the project 4 Years from date of EC granted.
- (xiv) Investment/Cost of the project is Rs. 202 Crore.
- (xv) Employment potential: 1500.
- (xvi) Benefits of the project: Better education and facilities to the students and staff. Institute is already running with 25% addition load. This proposed expansion will provide better opportunities and future for the students.

*The project proponent informed the EAC that the Project involves development of 6 New Blocks and other support buildings and infrastructure. Under the expansion project building block of academic and residential purposes will be constructed. It was also noted that a total of 373 trees will be felled for the proposed development. The PP informed the EAC that a Sewage Treatment plant of 550 KLD has been proposed for the project, considering the existing and proposed water demand and waste water generation. The treated water from the onsite STP shall be utilized for horticulture, flushing and cooling. Efforts shall be put to maximize the reuse of treated wastewater into the site. If required, treated wastewater from DJB will continue to be procured and used via existing dedicated Pipeline (already laid by DJB, amount paid by NSUT) or reuse of treated waste water.*

*Use of Electric vehicles in the campus shall be promoted and encouraged in full spirit. Charging stations shall be provided for charging of two wheelers and four wheelers, along with the parking. These charging stations will be increased from time to time as the usage of electric vehicles is increased. The charging facility shall be provided at both Basement and Surface Parking.*

*The university campus has the 324 KWp of Solar power generation capacity at the existing stage, which used to fulfill the part of day time power Demand, Considering the available Rooftop area under Expansion Buildings, the solar power generation capacity of the campus will be enhanced to a total of 500 KWp. 175 KWp of new solar power plant will be installed on the roof top of the Buildings under the expansion project.*

*The EAC, 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 (specified at Annexure-7of the minutes), 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) As proposed, fresh water requirement from DJB shall not exceed 572 KLD for operation of facility and necessary permission shall be obtained.
- (iii) The wastewater will be treated in house in STP of advance treatment technology having 550 KLD capacity. The treated water shall be used within the campus for flushing, cooling, road washing & cleaning and gardening etc. Only excess treated wastewater shall be considered for discharge after meeting the standard. Proper flow measuring devices are to be installed at outlet points.
- (iv) In order to mitigate the emission load from traffic and to promote cleaner fuel options, Electric Car Charging Points shall be provided at the Parking and provision of Electric vehicles and vehicles based on green fuel like CNG shall be facilitated.
- (v) 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.
- (vi) As proposed, 26 Nos. of rain water harvesting recharge pits shall be provided for rain water harvesting after filtration as per CGWB guidelines.
- (vii) Segregated bio-degradable waste shall be compost in Organic Waste Converter. Adequate area shall be provided for solid waste management within the premises which will include area for segregation, composting. The inert waste from project will be sent to designated/authorized landfill site.
- (viii) A total of 373 trees will be felled/cut for which the permission from Tree Authority constituted as per the Delhi Preservation of Trees Act, 1994 (Delhi Act No. 11 of 1994) shall be obtained. However, tree cutting/transplantation should be taken where absolutely necessary. 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). In case of cut/non-survival of any transplanted tree, compensatory plantation in the ratio of 1:10 (i.e. planting of 10 trees for every 1 tree) shall be done and maintained.
- (ix) A minimum of one 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. As proposed 84,890 sqm (15% of total area) area shall be provided for green area development.
- (x) As per the Ministry's Office Memorandum F. No. 22-65/2017-IA.III dated 1<sup>st</sup> May, 2018, the project proponent has proposed that an amount of Rs. 1.515 Crore (@ 0.75% of project Cost) shall be earmarked under Corporate Environment Responsibility (CER) for the activities such as Tree plantation drive, Solar street and park lights, Environmental awareness programs, health and medical check-up, water sprinkling



guns/ cannons to control Air pollution, solar power plants and educational programmes etc. The entire activities proposed under the CER shall be treated as project and shall be monitored. The monitoring report shall be submitted to the Regional Office of the MoEFCC as a part of half yearly compliance report, and to the District Collector. It should be posted on the website of the project proponent.

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#### Agenda item No. 55.3.4.

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

(IA/DL/NCP/167565/2020; F.No. 21-48/2020-IA-III)

The Project Proponent (PP) along with his accredited consultant M/s Shivalik Solid Waste Management Ltd. made a presentation and presented following parameters and salient features of the project to the Committee:

- (i) The project is located at 28°35'19.32"N Latitude and 77° 2'58.77"E Longitude.
- (ii) The project is for Expansion/modification. Existing Built-up area is 22,761.58 sqm. As Per the EIA Notification 1994 and its amendment vide notification dated 07.07.2004, in case of Building construction if occupancy is more than 1000 persons or project cost more than 50 Cr. or Water discharge more than 50 KLD then the project shall fall under purview of Environment Clearance. But this project not attracting any above condition.
- (iii) The total plot area is 13,000 sqm, FSI area will be 25,965.17 sqm. Total construction (Built-up) area after expansion will be 32624.75 sqm. The project will comprise of 5 Blocks, 1 Community Hall & 1 Guard room. Total 226 flats shall be developed. Maximum height of the building is 25m. The area statement is as follows:

Area Statement (All details in sqm)				
Particular	As per Existing plan		As per proposed plan	
	Total Plot Area	13000.00 Sq.m.		13000.00 Sq.m.
No. of Blocks	5 Nos.		5 Nos.	
No. of Dwelling Units	226 Nos.		226 Nos.	
Basement Area	4513.656 (34.720%)		4513.656 (34.720%)	
ECS Provided	473		387	
	Permissible	Proposed	Permissible	Proposed
Ground Coverage	4332.90 (33.33%)	2811.99 (21.630%)	5200 (40%)	2725.34 (20.965%)
FAR	21710.00 (167%)	22761.53 (175.088%)	26000 (200%)	25965.17 (199.74 %)
Green Area	1950.00 (15%)	3484.165 (18.33%)	1950.00 (15%)	2100.93 (16.161%)

Ground Coverage (All details in sqm)						
Particular	As per Existing plan			As per proposed plan		
	Area/Unit	No. of Unit	Coverage	Area/Unit	No. of Unit	Coverage
Unit Type 'A'	102.447	16	1639.15	121.62	16	1945.92
Unit Type 'B'	59.041	6	354.246	81.96	6	491.76
Circulation A	50.387	4	201.548	17.39	4	69.56
Circulation B	71.362	1	71.362	40.101	1	40.101
ESS (Electric Sub Station)	160	1	160	160	1	160

STP Room (200 KLD)				18	1	18
Type A	8.844	32	283.008			
Type B	8.556	12	102.672			
Total			2811.99 (21.630%)			2725.34 (20.965%)

Other Area Details As per proposed Plan	
Total Built Up Area	32624.75 sqm (F.A.R 25965.17 sqm + Stilt 1945.92 sqm + Community 200 sqm + Basement 4513.656 sqm)
Community Hall	22.12X9 = 199.08 sqm. No. of Floor = 2 (Ground + First Floor)
Guard Room	9.957 sqm
Common Toilet	8.75 sqm
ATM	9 Sqm

- (iv) During construction phase, total water requirement is expected to be 5 KLD which will be met from treated water from Papankalan STP Dwarka through DJB. During the construction phase, soak pits and septic tanks will be provided for disposal of wastewater. Temporary sanitary toilets will be provided during peak labor force.
- (v) During operational phase, total water requirement of the project is expected to be 179.75 KLD and the same will be met by 110.29 KLD fresh water from Delhi Jal Board and 69.46 KLD Recycled Water. Wastewater generated (135.49 KLD) will be treated in 1 MBBR STPs of total 150 KLD capacity 121.94 KLD of treated waste water will be recycled and re-used (47.26 KLD for flushing 22.2 KLD for gardening etc.). About 52.48 KLD will be disposed into municipal drain.
- (vi) About 0.62 TPD solid wastes will be generated in the project. The biodegradable waste (0.37 TPD) will be processed in OWC and the non-biodegradable waste generated (0.18 TPD) will be handed over to authorized local vendor.
- (vii) The total power requirement during construction phase is 50 KVA and will be met from BSES Rajdhani Power Limited and total power requirement during cooperation phase is 650 KVA and will be met from BSES Rajdhani Power Limited
- (viii) Rooftop rainwater of buildings will be collected in 1 Nos. RWH tanks of total 91.72 KLD capacity for harvesting after filtration.
- (ix) Parking facility for 387 ECS for 4-wheeler/2 Wheeler are proposed to be provided against the requirement of 260 ECS for 4-wheeler/2 Wheeler (according to local norms).
- (x) Proposed energy saving measures would save about 24.61% of power.
- (xi) Comparative analysis of existing /envision pollution load (in case of expansion/modernization)

Pollution load	Existing	Proposed
Water	30.5 (During Non – Monsoon) 47.92 (During Monsoon)	52.48 (During Non – Monsoon) 62.48 (During Monsoon)
Solid Waste	540.42	622.54

- (xii) It is not located within 10 km of Eco Sensitive Zone. NBWL Clearance is required.
- (xiii) Forest Clearance is not required. No Court case is pending against the project.
- (xiv) Expected timeline for completion of the project will be 1 year after getting of EC.
- (xv) Investment/Cost of the project is Rs 48.77 Crore. (Estimated project cost was 40.77 Crore and cost of expansion shall be 8 Crore).

- (xvi) Employment potential: 30 (25 During Construction & 5 During Operation)
- (xvii) Benefits of the project: Employment Generation & Social life of living standard will improve.

*The project proponent informed the EAC that the land measuring 13,000 sqm was allotted to Modest Ketki Coop. Group Housing Society Ltd, New Delhi by DDA and possession of plot no 8B, Setor-11 Dwara was given on 11.10.2000. NOC for construction of 226 DU/flats was issued by DDA vide letter dated 03.01.2001. Initial construction started in 2001. Completion certificate was issued by DDA for 226 no of dwelling units vide letter no F23(03)2005/Bldg/12 dated 27.03.2009. The Modest Ketki Coop. Group Housing Society Ltd, started its construction before the EIA Notification 2006, does not attract the provisions of EIA Notification 1994 and its amendment till 07.07.2004. The project proponent has also submitted an affidavit in this regard. In the affidavit, it is inter-alia stated that the construction work was started in 2001. Due to pending Writ Petition in the Delhi High Court in respect of CGHS, completion certificate was delayed. The Modest Ketki Coop. Group Housing Society Ltd, now proposes for the expansion/modernization to Convert the existing 2BHK flats to 3BHK flats with the revised built-up area of 32,624.75 sqm.*

The EAC, 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 Conditions as specified by the Ministry vide OM dated 4<sup>th</sup> January, 2019 for the said project/activity (specified at **Annexure-7** of the minutes):

- (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) As proposed, fresh water requirement from DJB shall not exceed 110.29 KLD during operational phase and necessary permission shall be obtained. Only treated wastewater shall be used for construction works at site from Papankalan STP Dwarka. No groundwater shall be extracted.
- (iii) Sewage shall be treated in onsite STP of 150 KLD and treated effluent from STP shall be recycled/re-used for flushing, road cleaning and horticulture.
- (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 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, 01 no. of rain water harvesting recharge pit (already existing) shall be provided for rain water harvesting after filtration as per CGWB guidelines.
- (vi) Bio-degradable shall be composted in Organic Waste Converter. As proposed, 150 sqm area shall be provided for solid waste management within the premises which will include area for segregation, composting. The inert waste from project will be sent to designated/authorized landfill site.
- (vii) As proposed, total area of 2,100.93 sqm (16.16% of plot area) shall be developed as green area. No tree cutting/transplantation has been proposed in the instant project. A minimum of one tree for every 80 sqm of land should be planted and maintained. The existing trees should 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.

- (viii) As per the Ministry's Office Memorandum F. No. 22-65/2017-IA.III dated 1<sup>st</sup> May, 2018, project proponent has proposed that an amount of Rs. 0.08 Crores (@ 1.0% of the project expansion Cost) shall be earmarked under Corporate Environment Responsibility (CER) for the activities such as Providing water purifier and water cooler at Venkateshwar International School sector 10 and Solar Light and Dust bins behind Sector 11 Gurudwara. The activities proposed under CER shall be restricted to the affected area around the project. The entire activities proposed under the CER shall be treated as project and shall be monitored. The monitoring report shall be submitted to the Regional Office of the MoEFCC as a part of half yearly compliance report, and to the District Collector. It should be posted on the website of the project proponent.

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#### **Agenda item No. 55.3.5.**

**Building Construction for 12<sup>th</sup> BN NDRF with built up area 29612.40 sqm at village Hollongi Chariali, District Papum Pare, Arunachal Pradesh by 12<sup>th</sup> BN National Disaster Response Force (NDRF) – Environmental Clearance**

**(IA/AR/NCP/170461/2020; F. No. 21-49/2020-IA-III)**

***The project proponent did not attend the meeting and as such, the proposal was deferred.***

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#### **Agenda item No. 55.3.6.**

**Treatment Storage Disposal Facility' at Plot No. N1, Sector 5 Bawana Industrial Area, Narela, Delhi (adjacent to Waste to Energy Plant and Pragati Power Plant) by M/s Tamil Nadu Waste Management Limited – Reconsideration for Environmental Clearance**

**(IA/DL/MIS/127887/2019; F. No. 10- 60/2019-IA-III)**

The EAC noted the following: -

- (i) The proposal is for granting Environmental Clearance to the project 'Treatment Storage Disposal Facility' at Plot No. N1, Sector 5 Bawana Industrial Area, Narela, Delhi (adjacent to Waste to Energy Plant and Pragati Power Plant) by M/s Tamil Nadu Waste Management Limited.
- (ii) 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.
- (iii) ToR for the project was granted by MoEFCC vide letter F. No. 10-60/2019-IA-III dated 16.12.2019 followed by amendment in ToR dated 19.03.2020.
- (iv) Public hearing was conducted by Delhi Pollution Control Committee on 14.07.2020 at TSDF site, adjacent to waste to energy plant and Pragati power plant, Bawana Delhi.
- (v) The proposal was considered by EAC in its 53<sup>rd</sup> meeting held during 23-24 July, 2020. Wherein, the EAC preferred to convey to project proponent the deficiencies in the EIA/EMP report submitted for the proposed:

- (vi) Project Proponent has submitted the additional information on Parivesh Portal on 20.08.2020 and 24.08.2020.

*The EAC asked PP to present their response to the issues raised in the previous meeting. The PP presented the point-wise reply to EAC which is provided in the table below:*

S. No	Query raised	Responses
1	<p>Baseline data generated is said to be between September 2019 November 2019. There is no clarity on what primary data was collected during this period and how much of data included in the report is from secondary sources. This needs to be clarified. Micro-met station, data logged to be provided/exhibited. Impression one gets after reading the report is that it is prepared substantially on secondary data and Text book prescriptions.</p>	<p>The Primary data/baseline data was collected for air, noise, water (surface &amp; ground) and soil. The analysis of the same has been presented in the EIA report.</p> <p>The Ecology, Bio-diversity and Land Use Land Covering (LULC) has been prepared using both the Primary and secondary data. The references of the secondary data have been included. The micro-met station data has been submitted over the portal.</p>
2	<p>The EIA mentions the quantity of Hazardous waste readily available for treatment &amp; Disposal. But no information on characterization of these wastes. This is required to be included in EIA.</p>	<p>The broad type of industries in Delhi, as per CPCB inventory and as per secondary sources collected, has been submitted. Mainly the ETP sludges coming out of CETPs and ETPs are hazardous in nature. Apart from domestic hazardous waste, industries like electroplating, automobile garages and small-scale sector also contributes in considerable hazardous waste. The characteristics of ETP sludge or waste hazardous any industry varies based on the process and raw materials used by the industries. The comprehensive analysis of the ETP sludge is done before the collection of the waste from the generator for treatment and disposal at the TSDF.</p> <p>Further, based on hazardous waste quantity and characteristics, separate technology from time to time for treatment of various types of hazardous waste will be used along with incineration and development of secured landfill. The facilities for Hazardous and domestic hazardous waste will be developed by selecting combination of technologies / systems having processes such as recycling and stabilization of waste, etc. which would maximize waste recycling/ treatment and would lead to minimum rejects going to Landfill facility. The facility will be developed as per the rules, guidelines and SoPs issued by MoEFCC,</p>

		CPCB, or any statutory bodies from time to time.
3	Hazardous Waste generated by 1123 industries and 13 CETPs as reported is 4197.76 TPA. Accumulated waste in CETPs is 25000 Tonnes and industries are 20000 Tonnes. So design capacity should have been for 150000 Tonnes (4197.76x25+45000=149944). Why the capacity is only for 65000 Tonnes.	For direct landfill and landfill after treatment, we are going to accommodate 65000 MTA. The design of the landfill plays an important role in accommodating the quantity of the waste. The landfill is generally designed on volume in cubic meters basis. In present case it is being designed in manner so as to accommodate tons of waste. Using new methods like strengthening / reinforcement of the bund by raising walls (vertical landfills can also be constructed based on approvals of experts at later date for optimum waste intake).
4	Secure landfill capacity is for 25 years and is not based on TPA processed. It should be designed on TPA processed and not on years	Landfill is made on the basis of area and volume to accommodate the waste. In this case also it is based on area & volume to accommodate the maximum optimal waste in the said land.
5	Report mentions 65000 TPA will go through treatment/stabilization? Nothing is indicated for stabilization capacity. This needs a mention in the report.	The comprehensive analysis of the waste is the deciding factor as to whether the waste requires land fill directly or needs treatment before landfill.  Based on the industries located in Delhi around 80% of the waste would require pre-treatment and stabilization.
6	Incinerator facility is said to be 300 Kg/hr scalable to 1.5 T/hour. Processing capacity in terms of TPA is required as on-site storage is decided on this basis.	Common Hazardous Waste Incinerator proposed is scalable up to 1.5 tonnes per hour. The incinerator will be in the range from 300 kg/hr to 1.5 tonnes per hour with back up as per CPCB guideline.  It is planned to be established/enhanced in modular form with back up for each unit.  The storage and processing facility/capacity will be kept accordingly to ensure that wastes are not stored beyond the prescribed time lines as per CPCB guidelines.
7	EIA also mentions used oil contaminated with hazardous wastes. Possible source and type of industry?	The used oil is mainly expected from various mechanical, fabrication and other related industries as most of the high capacity motors, pumps use lubricating oils and garages during their unit operations.
8	Facility is to include a spent solvent recycling facility. What is the end use	The purified solvents after distillation will be sent to manufacturing industries like Paints and Coatings, Pharmaceutical, chemical industries inks, Personal Care products

	of the recovered solvent? Where and how it will be disposed of?	(Cosmetic Products), Cleaning products etc. The solvents are critical to the effectiveness of many products of everyday usage.  The process waste like distillation residue and process sludge will be collected and sent for Disposal through TSDFs.
9	Paper recycling: Report mentions that contaminated paper waste will be decontaminated and later recycled? What is the probable type of contamination?  What is the methodology for decontamination? Where will it be used as part of recycling?	The contaminated paper waste will be decontaminated using dry process as per CPCB guidelines with best industrial practice.  The decontamination would be done using bleaching powder (Dry) and the treated paper would be sorted, shredded, bailed and shall be handed over to authorized recyclers.
10	In the water requirement considerable quantity is mentioned for the incinerator? Why for an incinerator? Where will it be used?	In incinerator, the water would be used in scrubber system as well as in spray dryer for quenching and cooling of hot flue gases.
11	Is not water required for firefighting? If required why it is not taken into consideration while computing water requirement?	Yes, the water is required for firefighting and 50% of total water required for the project will be always maintained in static firefighting water tank all the time, as per 'Indian Standard: Provision and maintenance of water supplies for firefighting-code of practice'.  The water storage tank is designed in such a way that the tank will have a baffle separating storage waters for firefighting system and other processes in the facility in 50:50 ratios. The water received from PPCL will first fill into the fire safety water tank and the overflow water will be used for different processes. Thus, the entire fire safety water tank is full and always available for any emergency purpose. Hence separate fire water storage is not considered due to the inbuilt design of raw water storage tank.
12	Autoclaving is an essential part of the facility? What is the quantity of water required for this facility and the basis for the same?	The autoclave generally used for treatment of such waste has a capacity of 1000L to 1500L. Such autoclave has a water requirement of around 40L per batch or per cycle when used in full scale with around 8L wastewater generations. Based on this, the Total Water requirement per day for autoclave is expected to be around 100 to 200 L with around 20L to 40L of waste water per day, depending on the number of cycles,

		<p>which in turn depends on the quantity of waste received. The equipment may be provided with a steam generation unit or the required steam for autoclave may be generated from the boiler proposed as common for autoclave and distillation unit of solvent recovery plant</p>
13	<p>Page 1.5 last Para-report mentions BMW &amp; E-Waste recycling facility for handling LED/Tube lights. Please clarify how it will be managed and disposed of? How will mercury be recovered from CFL/Tube lights?</p>	<p>The BMW, E waste and LED/tube lights have components which are hazardous in nature. Such waste received post authorization by PCB will be treated as per SOP prepared by CPCB and/or as per best industry practices.</p> <p>The tubes have mercury received at site are treated under closed atmosphere by breaking the materials to specific size fractions. The closed system is connected to a suction blower through which the dust generated is passed through specific bag filters to control any dust emissions from these operations. The mercury shall be collected in the HDPE drum/carboy and sulphur powder will be sprinkled. 1 % diluted nitric acid shall be added for soaking in waste overnight to bring the pH to 6.</p> <p>Then sodium sulphide (50 % purity) @34% of weight of mercury is mixed thoroughly and kept for 3-4 hours for reaction. Subsequently 1% Sodium Hydroxide solution double the quantity of nitric acid is added @ 11 % to increase the pH to around 10-11 for stability of formed HgS .</p> <p>Sand and cement mixed in the ration of 3:1 for the quantity arrived by lab trials is mixed with the waste to make it homogenous and is kept for 5-6 hours. A sample is taken thereafter for analysis and if it passes the test, additional sand and cement in the ratio of 3:1 is mixed in the drum and is kept for 48 hours for curing.</p> <p>Finally, the container/drum is sealed and is disposed off in the SLF</p>
14	<p>Table 3.5: Particulate matter PM 10 &amp; PM 2.5: How and why only at the site it is within the standards while the values are exceeding in other sites?</p>	<p>The baseline AAQ sampling was conducted during September to November 2019 and the values have been presented as per the analysis results obtained. The AAQ at the proposed site is less than the other surrounding sampling locations as the Bawana industrial area is housing number of small &amp; medium scale industries with</p>



		various types of industrial operations which include transport of raw material & finished products and industrial unit operations with poor or no control measures. The proposed TSDF site is very adjacent to the existing WTE plant which is well equipped with inbuilt APCD (Air pollution control devices) along with continuous monitoring systems to control the air emissions to the minimal levels. However, the higher PM from other locations may be attributed to the under maintained roads, transport vehicular movement and emissions from existing industries contributing to the higher ambient PM concentrations. As per the suggestion of EAC, the log details of air quality monitoring are being attached in the revised EIA report.
15	Table 3.20: It is mentioned as other authenticated data? What are they? Please refer to the sources.	The authenticated data in table 3.20 (List of Fauna in the Study Area) represents the research articles and other data extracted from various relevant sources. The sources of details/ references for the same have been included in the Revised EIA reports which are - <i>Ref: Fauna of Delhi, state fauna series 6 by Zoological survey of India 1997. Avibase- The world bird database, website.</i>
16	Emission load from vehicular pollution and DG sets not included while computing GLCs. This needs revision.	DG set emission details have been given in Table 4.1(b) & are considered in the prediction of incremental values for the air pollutants from stack emissions & dispersion calculations
17	The report is silent of dimensions including depth and number of cells to be developed. This needs to be added.	The landfill will be designed to the depth of 2 m above the ground water and 15 m or more height based on stability and type of waste. However, the same can be converted to vertical landfill with bund reinforcement in future to enhance the capacities
18	Risk & Hazard study. Very sketch and only text book prescriptions. VOC emissions not included. No "incidence analysis"/probability of occurrence carried out. In the light of the recent incidence at vizag, this is essential. EIA needs to be revised. Further EMP does not mention any description of measures for R & H including the budget. This needs to be included.	The contaminated solvents received from the industries are stored in storage drums/tanks, treated for recovery and are sent to the authorized dealers. The risk assessment studies were carried out for fire & explosion scenarios for estimating the damage distances & proper DMP and EPP is prepared for the safety of these chemicals. Budget details to be included. The budget required for handling the R & H is a part of EMP budget.

19	As per report EC is sought for Waste to Energy facility. But the report does not have any description on the capacity and type of facility. EIA needs to be revised if W2E is to be considered or EC cannot be approved to include W2E project.	Waste to energy facility is not proposed in the project and not covered in the EIA report. During the description of benefits of AFRF (alternate fuel and raw material facility) proposed in the present project a mention of efficiency comparisons was made with WTE efficiency. AFR products obtained from TSDF operations will be utilised for energy recovery by captive usage in incinerators or to the waste to energy plants or cement plants in nearby area.
20	Closure plan is an essential component of TSDF. Only a passing remark is mentioned. Detailed closure plan with budgetary provision needs to be included in the EIA. How this is incorporated in the agreement and responsibility also needs to be spelled out in the EIA as part of EMP.	<p>The post operational monitoring details are provided in Table 6.3. However, as per the suggestion of EAC, the EIA report is being strengthened by inclusion of more details like inspection, monitoring and record keeping criteria during and post closure period</p> <p>Budgetary provision for closure plan will be done i.e. 5% of the annual turnover of the landfillable waste will be deposited in the Escrow Account as per the office memorandum of Ministry of Environment &amp; Forest vide no. 23-1/2008-HSMD, dated 16<sup>th</sup> April 2009</p>

PP also submitted to the EAC that DSIIDC, Delhi Government has awarded the project to TNWML for the Development, Operation & Maintenance of Facilities for Hazardous Waste as per Hazardous & Other Waste Management Rules 2016 and Domestic Hazardous Waste as per SWM Rules 2016. The facilities for treatment of Hazardous Waste and Domestic Hazardous Waste as envisaged as per rules are only presented in the EIA report. The Draft EIA report with all facilities was presented to the public and the Public Hearing was conducted. Observations were recorded and sent by DPCC. These observations have been included in final EIA submitted to MoEFCC for EC consideration. PP also submitted that they will also ensure that only those wastes which are generated and authorized by regulatory bodies in the States under both rules (HWM and SWM Rules, 2016) will only be treated at the facilities to be developed. No other wastes, which are not authorized by Government of NCT of Delhi will be collected for treatment and disposal at the facility in question for grant of EC.

*The EAC deliberated upon the information provided by the project proponent. The EAC also noted that the project proponent has submitted revised EIA/EMP Report after incorporating all the observation raised by the EAC in its earlier meeting. The EAC was of the view that the proposal can be considered for grant of EC under the EIA Notification, 2006. However, while granting EC, MoEFCC should clarify in the EC letter that the EC is being granting for the Development, Operation & Maintenance of facility as per Hazardous & Other Waste Management Rules 2016 for Hazardous Waste and Domestic Hazardous Waste (as defined under SWM Rules 2016). at Plot No. N1, Sector-5, Bawana Industrial Area, Narela, Delhi.*

*The EAC, based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, **recommended the** project for grant of environmental clearance and stipulated the following specific conditions along with other*

*Standard EC Conditions as specified by the Ministry vide OM dated 04.01.2019 for the said project/activity (specified at **Annexure-2** of the minutes):*

- (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) The facility is for treatment, storage and disposal of hazardous and domestic hazardous waste. As proposed, only these two types of wastes shall be collected and treated at the facilities to be developed subject to the authorisation by the concerned State Authorities. No other wastes, which are not authorized by Government of NCT of Delhi shall be collected for treatment and disposal at the facility.
- (iii) As proposed, the gases coming out of the incinerator stack shall be passed through scrubber, multi cyclone and bag filter for the removal of particulates. For proper dispersion of SO<sub>2</sub> and NO<sub>x</sub> emissions into atmosphere, incinerator stack height meeting MoEF&CC/CPCB guidelines will be provided.
- (iv) To prevent the formation of dioxins, the flue gas temperature shall be rapidly lowered from 500°C to less than 200 °C by adopting rapid quench/catalyst/adsorption by activated carbon.
- (v) The domestic wastewater generated shall be treated in septic tank. The wastewater generated from floor washings, recycling activity, etc., shall be collected in collection sump, and treated for removal of contaminated oil in skimmers so as to neutralize the same and settled in settling tank to remove suspended matter. The wastewater generated from boiler and cooling tower shall be used in ash quenching. There will not be any wastewater discharge to any nearby water body and adopts the zero-wastewater discharge concept.
- (vi) The ash coming from the incinerator and power plant will be used as a daily cover for landfill along with soil and mud. The municipal solid waste generated inside the facility may be transferred to the nearest municipal facility.
- (vii) Noise level specification of various equipment as per the Occupational Safety and Health Association (OSHA) standards.
- (viii) Employees will be provided with PPE like ear plugs, helmets, safety shoes etc.
- (ix) Sufficient green belt will be developed to form a surface capable of sorbing and forming sinks for odorous gases.
- (x) It shall be ensured that all the project operations/activities shall be carried out under the best management practices
- (xi) All possible measures shall be adopted for odour control shall be controlled by providing proper ventilation in the site, spraying ecosorb (organic and biodegradable chemical) around odour generation areas at regular intervals and by developing greenbelt with odour control species.
- (xii) Fresh water of 02 KLD will be met from DMSWL facility/tanker water supply. No ground water abstraction shall be done at site.
- (xiii) Waste water generation is expected from landfill as leachate, discharges from operating equipment like incinerator, which will be treated in waste water treatment plant and recycled to facility. No wastewater/ treated water shall be discharged from the facility.
- (xiv) The Project proponent should ensure that the facility fulfils all the provisions of Hazardous and other Wastes (Management and Transboundary Movement) Rules, 2016 & the Protocol for 'Performance Evaluation and Monitoring for the same as published by the CPCB.

- (xv) 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. Periodical ground water/soil monitoring to check the contamination in and around the site shall be carried out.
- (xvi) 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.
- (xvii) Ambient air quality monitoring shall be carried out in and around the landfill site at up wind and downwind locations. On-line real time continuous monitoring facilities shall be provided as per the CPCB or State Board Directions
- (xviii) As proposed, sufficient Greenbelt shall be developed in area of the proposed facility with native species (as per CPCB guidelines). It shall be ensured that all the trees and other plantation within facility do not in any way encourage the incorporation of toxic materials in the food chain
- (xix) As proposed, onsite and off-site disaster management plan shall be operationalised in consultation with district level authority in order to minimize the hazards to human health or environment from fires, explosion or any unplanned sudden or continuous release of hazardous waste or hazardous waste constituents to air, soil or surface water.
- (xx) As per the Ministry's Office Memorandum F. No. 22-65/2017-IA.III dated 01.05.2018, and as proposed, a fund of Rs. 0.48 Crores (@ 2% of project Cost) shall be earmarked under Corporate Environment Responsibility (CER) for the activities such as Health check-up for communities in the nearby localities and distribution of medicines to the needy, Donation of computers, note books, other need based education materials, provision of potable drinking water and improving sanitation in local schools, Avenue Plantation and other Plantation drives during World Environment Day in the nearby localities, Women empowerment initiative for SHGs, Skill Development Training and Installation of Solar Lights. The activities proposed under CER shall be restricted to the affected area around the project. The entire activities proposed under the CER shall be treated as project and monitored strictly. The monitoring report shall be submitted to the regional office as a part of half yearly compliance report, and to the District Collector. It should be posted on the website of the project proponent.

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#### **Agenda item No. 55.3.7.**

#### **Setting up of Common hazardous waste treatment, storage and disposal facilities (TSDFs) at Plot Nos: 1004 to 1022, 1027 & 1028 of, Kesda Village, Simga Tehsil, Baloda Bazar District, Chhattisgarh by Ramky Enviro Engineers Ltd. - Terms of Reference**

#### **(IA/CG/MIS/171901/2020; F.No.10-54/2020- IA-III)**

The Project Proponent (PP) made a presentation and presented following parameters and salient features of the project to the Committee:

- (i) The Chhattisgarh State Industrial Development Corporation Limited (CSIDCL) has allotted around 20.42 Ha. (50 Acres) of land to M/s Ramky Enviro Engineers Limited for establishment of Hazardous Waste Treatment Storage and Disposal Facility (HWTSDF) at Plot numbers 1004 to 1022, 1027 & 1028 Kesda Village, Simga tehsil, Baloda Bazar District, Chhattisgarh. Accordingly,
- (ii) M/s. REEL has proposed the HWTSDF facility with Secure landfill, Incineration (Hazardous, BMW & other wastes), Biomedical Waste, E-waste Recycling, AFRF, Plastic Recycling, Paper Recycling, Solvent Recovery and Aluminum Dross, Used/spent oil Recycling, Renewable energy and SPL (Carbon/Refractory) Hazardous waste in nature

and Contaminated elements, Drum / Decontamination Recycling Plant as project operations.

- (iii) The details of project capacities proposed to be developed are given below.

**Details of the proposed project capacities**

	Type of Wastes/Unit	Capacity Scalable Up to
1	Secured landfill (Direct to Landfill)	4,50,000 MTA
2	Landfill After Treatment	
3	Hazardous Waste Incineration (Common for Hazardous waste, Biomedical & Other incinerable waste)	incinerator scalable up to 1.5 Tons/hr In modular form
4	Bio Medical Waste (BMW)	15 TPD
5	E Waste Recycling	100 TPD
6	Alternative Fuel and Raw Material Facility (AFRF)	100 TPD
7	Plastic Recycling (hazardous in nature / contaminated elements)	20 TPD
8	Paper Recycling (hazardous in nature /contaminated elements)	50 TPD
9	Solvent Recovery (hazardous in nature/contaminated elements)	18 KLD
10	Aluminum Dross	100 TPD
11	Used / Spent Oil Recycling	15 KLD
12	Renewable Energy	2 MW
13	SPL (Carbon Portion)-Hazardous in nature and contaminated elements	100 TPD
14	SPL (Refractory Portion)-Hazardous in Nature/Contaminated elements	100 TPD
15	Drum / Decontamination Recycling Plant	200 Drum / day

- (iv) As per the EIA notification issued by the Ministry of Environment, Forests and Climate Change (MoEF&CC) S.O.1533, dated 14.09.2006 and its subsequent amendments, the proposed project falls under Project Activity 7(d) - Treatment, Storage and Disposal Facilities (TSDFs), Category 'A'
- (v) The total land allotted for the proposed project is around 20.42 Ha. (50 Acres) of site, a sufficient greenbelt will be developed all around and within the proposed project site following all applicable guidelines and statutory regulations, and rest of the area will be used for the project utilities and amenities.
- (vi) Water required for the project is 100 KLD will be sourced from bore well after obtaining permission from CGWB and District Collector, Baloda Bazar, Chhattisgarh.
- (vii) The power required for operations is 320 kVA, which will be taken from Chhattisgarh State Power Distribution Company Limited. 320 kVA (standby) of DG set will be used as backup power during emergency requirement. The fuel required in emergency for DG set is 150 Lit/Day (HSD).
- (viii) The estimated capital cost for the proposed project is around Rs. 36 Crores. The capital cost allotted for EMP is around Rs. 3.2 Crores with recurring cost of Rs. 32 Lakhs/annum.

*The project proponent informed the EAC that Chhattisgarh holds around 376 hazardous waste generating industries. Approximately 314903 MT of Hazardous waste generated annually in Chhattisgarh with around 31594 MT landfillable waste, 23488 MT incinerable wastes, and 259821 MT Recyclable waste. Presently there are no existing hazardous waste TSDFs in Chhattisgarh State. Hazardous wastes generated from various industries in and around Baloda Bazar & Raipur, the prime generators of hazardous wastes, need to be disposed in an environmentally safe manner. To meet this requirement, Chhattisgarh State Industrial Development Corporation Limited (CSIDCL) has allotted land for*

*the establishment of HWTSDF at Khasra No. 1004 to 1022, 1027 & 1028 Kesda Village, Simga Tehsil, Baloda Bazar District, Chhattisgarh in an area of around 20.42 Ha. (50 Acres).*

*After detailed deliberations on the proposal, the Committee 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 for the above-mentioned project:*

- (i) Collect baseline data for river within 10 kilometres of the project site.
- (ii) Indicate the farthest point for intended waste collection and the associated mode of transportation of waste to the project site. Study feasibility of waste collection with available transportation facility from the farthest point.
- (iii) Work out the possibility of GPS based waste tracking system.
- (iv) Explore the possibility of energy recovery from the hazardous waste incinerators.
- (v) The EIA would address to the conformity of site to the stipulations as made in the Hazardous and Other Wastes (Management and Trans-boundary Movement) Rules, 2016 and will have a complete chapter indicating conformity to the said rules.
- (vi) Project proponents would also submit a write up on how their project proposal conform to the stipulations made in the "Protocol for Performance evolution and monitoring of the Common Hazardous Waste Treatment Storage and Disposal facilities including common Hazardous Waste incinerators", published by the CPCB on 24<sup>th</sup> May, 2010.
- (vii) Status of compliance to the provisions of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.
- (viii) Details of various waste management units with capacities for the proposed project.
- (ix) List of waste to be handled and their source along with mode of transportation.
- (x) Other chemicals and materials required with quantities and storage capacities.
- (xi) Details of temporary storage facility for storage of hazardous waste at project site.
- (xii) Details of pre-treatment facility of hazardous waste at TSDF.
- (xiii) Details of air emissions, effluents, hazardous/solid waste generation and their management.
- (xiv) Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract).
- (xv) Process description along with major equipment and machineries, process flow sheet (quantitative) from waste material to disposal to be provided.
- (xvi) Hazard identification and details of proposed safety systems.
- (xvii) Details of Drainage of the project up to 5 km radius of study area. If the site is within 1 km radius of any major river, peak and lean season river discharge as well as flood occurrence frequency based on peak rainfall data of the past 30 years. Details of Flood Level of the project site and maximum Flood Level of the river shall also be provided.
- (xviii) Ground water quality monitoring in and around the project site.
- (xix) The Air Quality Index shall be calculated for base level air quality.
- (xx) Status of the land purchases in terms of land acquisition Act. If acquisition is not complete, stage of the acquisition process and expected time of complete possession of the land.
- (xxi) Rehabilitation & Resettlement details in respect of land in line with state Government policy, if any.

- (xxii) Details of effluent treatment and recycling process, stagewise reduction in all relevant parameters with hydraulic load.
- (xxiii) Leachate study report and detailed leachate management plan to be incorporated.
- (xxiv) Action plan for measures to be taken for excessive leachate generation during monsoon period.
- (xxv) Action plan for any pollution of ground water is noticed during operation period or post closure monitoring period.
- (xxvi) Detailed Environmental Monitoring Plan as well as Post Closure Monitoring Plan.
- (xxvii) A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project.
- (xxviii) A detailed Plan for green belt development.
- (xxix) A certificate from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.
- (xxx) Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof shall also be included.
- (xxxi) The project proponents shall satisfactorily address to all the complaints/suggestions that have been received against the project till the date of submission of proposals for Appraisal.
- (xxxii) Plan for Corporate Environment Responsibility (CER) as specified under Ministry's Office Memorandum vide F.No. 22-65/2017-IA.III dated 1<sup>st</sup> May, 2018 shall be prepared and submitted along with EIA Report.
- (xxxiii) Public hearing to be conducted 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.
- (xxxiv) A tabular chart with index for point-wise compliance of above ToRs.

*The specific ToRs with public hearing as recommended above are in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006.*

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#### **Agenda item No. 55.3.8.**

#### **Environmental and CRZ Clearance of on-going Project for establishment of Navi Mumbai International Airport (NMIA) at Panvel Tehsil, Raigad district by Navi Mumbai International Airport Limited. - Terms of Reference**

**(IA/MH/MIS/154209/2020; F.No. 10-53/2020-IA-III)**

The Project Proponent (PP) made a presentation and presented following parameters and salient features of the project to the Committee:

- (i) The proposal is for grant of Terms of Reference to the On-going Project namely Environmental and CRZ Clearance for establishment of Navi Mumbai International Airport (NMIA) Project at Villages Vadghar (Chinchpada), Kopar, Pargaon (Kohli), Pargaon-Dungi, Owale (Upper and Lower Owale+ Waghivali Wada), Ulwe (Ulwe + Ganeshpuri), Targhar (Targhar + Kombhadbuje), Waghivali-KharTaluka Panvel, District Raigad, Maharashtra.

- (ii) The airport site is of 1160 Ha. The Government of Maharashtra vide Notification No TPS 1711/2495/CR-202/11/UD-12 dated 21<sup>st</sup> March 2012 has incorporated "International Airport & Allied Activities / Service Zone" in the Navi Mumbai Development Plan (NMDP) and changed the land use in surrounding area. As per approved NMDP, the site area of 1160 Ha is designated as Airport and Allied Activities /Services Zone.
- (iii) Stage I and Stage II Forest clearance for 250.0635 Ha land has been obtained from MoEFCC vide F. No. 8-95/2012-FC dated 17<sup>th</sup> December, 2013 and 24<sup>th</sup> April, 2017 respectively.
- (iv) Project has received Environmental and CRZ Clearance Letter F. No. 10-53/2009-IA.III dated 22<sup>nd</sup> November, 2010, the validity of which has been extended up to 21<sup>st</sup> November 2020 vide letter dated 20<sup>th</sup> December 2017. Transfer of Environmental and CRZ Clearance from CIDCO to NMIAL has been granted vide Letter No. F. No. 10-53/2009-IA.III dated 17<sup>th</sup> August 2020. Since the extended validity of the EC is expiring on 21<sup>st</sup> November 2020, the present application is for fresh EC for the same project without any change in location, scope, area or capacity.
- (v) The project involves Construction and Development of Greenfield airport at Navi Mumbai having passenger capacity 60 MPPA and Cargo capacity 1.5 MTPA over site area of 1160 Ha.
- (vi) Total water demand will be 22 MLD (Potable 10.8 MLD + Recycled water from STPs 11.2 MLD). CIDCO will provide potable water for the project. No ground water withdrawal envisaged.
- (vii) Domestic Wastewater generation will be 13.3 MLD and will be treated in separate STP's (in different zones within the site). Total STP capacity will be 14.25 MLD and shall comprise SBR followed by UF- RO. Treated sewage water will be fully reused in the site for flushing, green belt development, floor washing and cooling (HVAC)
- (viii) MSW (Construction Phase 150 TPD, Operation Phase 72 TPD) generated will be segregated - recyclable waste will be sold to MPCB authorized parties, biodegradable waste will be composted and compost will be used for landscaping. Inert waste will be disposed off to CIDCO authorized site at Chal, Talaja. Hazardous waste (2.5 TPD (Nature: Oily sludge, Empty drums, paint cans, e-waste etc.) generated will be disposed off to Common Hazardous Waste Treatment. Storage and Disposal Facility (CHWTSDf), Talaja or as authorized by MPCB. Biomedical Waste (0.05 TPD) Disposal to Common Biomedical Waste Treatment. Storage and Disposal Facility (CBMWTSDf), Talaja
- (ix) Based on EC granted in 2010, clearance of land, vegetation/trees and existing structures on Site is being carried out by CIDCO since April 2017 with due permission by Tree authority. Removal of about 439 trees and transplantation of about 1826 trees is in progress.
- (x) The land for the project (of area 1160 Ha) has been acquired by City and Industrial Development Corporation of Maharashtra Ltd. For the 10 settlements (nine settlements within airport site and Waghivali village outside site), R&R has been undertaken by CIDCO, as per the Environmental and CRZ Clearance dated 22 November 2010.
- (xi) Diversion of tidally influenced water body of Ulwe River has been completed & commissioned by CIDCO as permitted in the Environmental and CRZ Clearance dated 22 November 2010
- (xii) Power (96 MVA) for the project will be supplied by MSEDCL. Emergency DG sets of 35 MVA will provide backup power for airport operations.



- (xiii) PIL No. 57 of 2019 is pending in respect of the project before the Hon'ble High Court of Judicature at Bombay, however, the same is yet to be admitted and there have been no Orders passed yet.
- (xiv) Investment/Cost of the project is Rs. Rs.36,538 Crores (for all four phases)
- (xv) Employment potential: Temporary - 15,000 (Approx.) Permanent - 90,000 (Approx.)
- (xvi) Benefits of the project: Social Benefits (Providing alternate air transport facility to unserved population in Navi Mumbai and MMR Region, Socio-economic opportunities for business and employment population in Navi Mumbai and MMR Region, Skill development and technical expertise enhancement possibilities due to influx of aviation related institutions in Navi Mumbai due to NMIA), Financial Benefits (Over 50,000 Direct & Indirect employment due to aviation business, leading to Stimulation of economic growth in MMR outside Mumbai city, Stimulating Local Economy due to direct & indirect impact of aviation and related business, Large investment around proposed airport by other parties due to NMIA development) and Environmental Benefits (Reducing Congestion in Mumbai city, Creation of environmentally friendly and sustainable infrastructure in and around NMIA like metro, new STPs, large garden and parks and well planned drainage, Decongestion and enhancement of environmental conditions around CSMIA).

*The EAC noted that Project has been granted Environmental and CRZ Clearance vide letter F. No. 10-53/2009-IA.III dated 22<sup>nd</sup> November, 2010, the validity of which has been extended up to 21<sup>st</sup> November 2020 vide letter dated 20<sup>th</sup> December 2017. Transfer of Environmental and CRZ Clearance from CIDCO to NMIAL has been granted vide Letter dated 17<sup>th</sup> August 2020. Since the extended validity of the EC is expiring on 22<sup>nd</sup> November 2020 and there is no provision for extending validity beyond 10 years, the present application has been made for accord of Terms of Reference for the same project without any change in location, scope, area or capacity. As of now, 20% of the work has been completed. The status of work completed is as follows:*

S. No.	Particulars	Status	Remarks
1.	Project Site / Land	99 % Land Available	Required Land: 1160 Ha Available Land: 1156 Ha
2.	R & R	96% Completed	89 PAP Structures on Site
3.	Project Master Plan	Completed	Approved by CIDCO, DGCA, BCAS, CWPRS & AAI
4.	Project Designs for Construction	Completed	Submitted to CIDCO
5.	Project Approvals Required	Approvals Received	List of Approvals Provided. EC & CRZ Clearance expires in Nov 2020, CTE expires in Oct 2020
6.	Appointment of Contractor	Appointed	EPC Contract awarded to L&T
7.	Pre-Development Works		
A	Cutting of Ulwe Hill & Filling Up to +5.5 M AMSL	Completed	
B	Construction of Ulwe Recourse Channel	Completed	
C	Shifting of EHVT Lines by Tata Power	Completed	
D	Shifting of EHVT Lines by MSETCL	In Progress	Completion by Dec 2020
8.	Total Project Cost	Rs 36,538 Crores	Inclusive of all Costs
9.	Project Cost of Phase I & II	Rs 16250 Crores	Inclusive of Pre-Dev Work Cost

10.	Cost Incurred till Dec 2019	Rs 3,368 Crores	CIDCO has additionally incurred cost of Rs 1813 Crores towards R&R
11.	Percentage Work Achieved	21 % of Phase I & II Cost	
12.	Compliance to EC Conditions	Critical Conditions Complied, others In Progress	Compliance Status Provided

*The EAC noted that there may be some changes in the internal configurations of the facilities to be developed. However, the project proponent has confirmed that there is no change in location, scope, area or capacity. The Environmental and CRZ Clearance is still valid up to 21<sup>st</sup> November, 2020. However, Considering the same and Construction status/physical progress of the work, the EAC exempted the project from requirement of Public Hearing as per para 7(ii) of EIA Notification, 2006 and its subsequent amendments for preparation of EIA/EMP report.*

*After detailed deliberations on the proposal, the Committee prescribed the following Additional Terms of Reference (TOR) in addition to Standard ToR as specified by MoEF&CC in April, 2015 for the said project/activity for preparation of EIA-EMP report:*

- (i) The EIA shall cover justification for land requirements along with a comparison to the guidelines established by the Airport Authority of India/Ministry of Civil Aviation in this regard.
- (ii) Study impact, including risk of flooding in and around the project site, due to diversion work on Ulwe creek along with other creeks which are modified.
- (iii) A toposheet of the study area of radius of 10 km and site location on 1:50,000/1:25,000 scale on an A3/A2 sheet (including all eco-sensitive areas and environmentally sensitive places).
- (iv) Submit a copy of layout superimposed on the HTL/LTL map demarcated by an authorized agency on 1:4000 scale.
- (v) Submit superimposing of latest CZMP as per CRZ (2011) on the CRZ map.
- (vi) Layout maps of proposed project indicating runway, airport building, parking, greenbelt area, utilities etc.
- (vii) Submit the actual site photograph including the aerial photograph of the present construction.
- (viii) Cost of project and time of completion.
- (ix) The report shall examine the details of excavations, its impacts and the impacts of transport of excavated material. A detailed Management Plan shall be suggested.
- (x) Detail plan for 'deplane waste' and impact of noise on the sensitive environment specially the wildlife sanctuaries and national parks.
- (xi) An assessment of the cumulative impact of all development and increased inhabitation being carried out or proposed to be carried out by the project or other agencies in the core area, shall be made for traffic densities and parking capabilities in a 05 kms radius from the site. A detailed traffic management and a traffic decongestion plan drawn up through an organization of repute and specializing in Transport Planning shall be submitted with the EIA. The Plan to be implemented to the satisfaction of the State Urban Development and Transport Departments shall also include the consent of all the concerned implementing agencies.

- (xii) The EIA should specifically address to vehicular traffic management as well as estimation of vehicular parking area inside the Airport premises.
- (xiii) An onsite disaster management plan shall be drawn up to account for risks and accidents. This onsite plan shall be dovetailed with the onsite management plan for the district.
- (xiv) 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) 2017 of the Bureau of Energy Efficiency, Government of India. The energy system includes air conditioning systems, indoor lighting systems, water heaters, air heaters and air circulation devices.
- (xv) Details shall be provided regarding the solar generation proposed and the extent of substitution, along with compliance to the ECBC rules.
- (xvi) Details of emission, effluents, solid waste and hazardous waste generation and their management. Air quality modelling and noise modelling shall be carried out for the emissions from various types of aircraft.
- (xvii) The impact of aircraft emissions in different scenarios of idling, taxiing, take off and touchdown shall be examined and a management plan suggested.
- (xviii) The impact of air emissions from speed controlled and other vehicles plying within the Airport shall be examined and management plan drawn up.
- (xix) The management plan will include compliance to the provisions of the MSW Rules, 2016.
- (xx) A detailed management plan, drawn up in consultation with the competent District Authorities, shall be submitted for the regulation of unauthorized development and encroachments within 05 Km radians of the Airport.
- (xxi) The E.I.A. will also examine the impacts of construction and operation of the proposed STP and draw up a detailed plan for management including that for odour control.
- (xxii) Classify all Cargo handled as perishable, explosive, solid, petroleum products, Hazardous Waste, Hazardous Chemical, Potential Air Pollutant, Potential Water Pollutant etc. and put up a handling and disposal management plan.
- (xxiii) Noise monitoring and impact assessment shall be done for each representative area (as per the Noise Rules of MoEF&CC). A noise management plan shall be submitted to conform to the guidelines of the MoEF&CC and the DGCA.
- (xxiv) Noise monitoring shall be carried out in the funnel area of flight path.
- (xxv) Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract).
- (xxvi) Ground water abstraction and rain water recharge shall be as prescribed by the CGWA. A clearance/permission of the CGWA shall be obtained in this regard.
- (xxvii) Details of fuel tank farm and its risk assessment.
- (xxviii) The E.I.A. should present details on the compliance of the project to the Fly Ash notification issued under the E.P. Act of 1986.
- (xxix) EIA should contain the status of present mangrove cover and mangrove afforestation plans. Water quality of the modified creeks should be presented in the EIA.

- (xxx) Impact of the proposed project on Elephanta island which is a tourist destination.
- (xxxi) The report should give a detailed impact analysis and management plan for handling of the following wastes for the existing and proposed scenarios.
  - (a) Trash collected in flight and disposed at the Airport including the segregation mechanism.
  - (b) Toilet wastes and sewage collected from aircrafts and disposed at the Airport.
  - (c) Maintenance and workshop wastes.
  - (d) Wastes arising out of eateries and shops situated within the airport.
- (xxxii) Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof shall also be included. Has the unit received any notice under the Section 5 of Environment (Protection) Act, 1986 or relevant Sections of Air and Water Acts? If so, details thereof and compliance/ATR to the notice(s) and present status of the case.
- (xxxiii) Submit an affidavit signed by the Board of Directors, that there is no violation and no part of the project has been implemented without Environmental Clearance.
- (xxxiv) Plan for Corporate Environment Responsibility (CER) as specified under Ministry's Office Memorandum vide F.No. 22-65/2017-IA.III dated 1<sup>st</sup> May, 2018 shall be prepared and submitted along with EIA Report.
- (xxxv) A tabular chart with index for point-wise compliance of above ToR.

*It was recommended that 'ToR' prescribed by the Expert Appraisal Committee (Infrastructure- 2) should be considered for preparation of EIA / EMP report for the above-mentioned project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. The EAC exempted Public hearing as per para 7(ii) of EIA Notification, 2006 for preparation of EIA/EMP report for this project.*

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**Agenda item No. 55.3.9.**

**Expansion of Common Hazardous Waste Treatment, Storage & Disposal Facility at Plot No. C-187, UPSIDC, Industrial Area, Bulandshahar Road, Ghaziabad, Uttar Pradesh by M/s Steam Oil & General Industries (SOGI) - Terms of Reference**

**(IA/UP/MIS/154232/2020; F.No. 10-34/2019-IA -III)**

***The project proponent did not attend the meeting and as such, the proposal was deferred.***

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**Agenda item No. 55.3.10.**

**Development of Dhalbhumgarh Airport in the State of Jharkhand for Fair Weather Operations of ATR-72 Types Aircraft at Deosol, Kokpara Narsingharh, Ruasol, Burudih and Charchaka by Airports Authority of India. – Reconsideration of Terms of Reference**

**(IA/JH/MIS/127782/2019; F.No. 10-58/2019 IA-III)**

The EAC noted the following: -

- (i) The proposal is for grant of Terms of Reference to the project "Development of Dhalbhumgarh Airport in the State of Jharkhand for Fair Weather Operations of ATR-72 Types Aircraft by M/s Airport Authority of India.
- (ii) The project/activity is covered under category A of item 7(a) 'Air Ports' of the Schedule to the EIA Notification, 2006 and its amendments, and requires appraisal at Central level by sectoral EAC.
- (iii) The proposal was considered by EAC in its 47<sup>th</sup> meeting held during 26-27 December, 2019. Wherein, the EAC after detailed deliberation upon the proposal asked the project proponent to submit revised Pre-feasibility study along with the other information.
- (iv) Project Proponent has submitted the additional information on Parivesh Portal on 31.08.2020.

In this context, project proponent informed the EAC that efforts were already taken to identify a suitable site near Jamshedpur even though the selection of site suitable for development of New Greenfield Airport is a time-consuming process involving fulfillment of technical/ operational requirement like huge area of land with scarce habitation and ease of acquisition, which should be free of permanent obstacle in and around it to avoid operational limitations of the airport and proper connectivity and limitation of existing Jamshedpur Airport and unsuitability of sites identified near Jamshedpur have been brought out as under.

Sonari Airport, Jamshedpur is licensed for Code 2C IFR non-precision operations. The existing Runway (08/26) dimensions are 1193 m x 30 m. However, after provision of Runway Strip and RESA on both the ends the usable length of runway is 1029 m only. Threshold of runways are displaced due to obstacles in the approach path. Accordingly, the Landing Distance Available (LDA) for runway is modified. The available runway distances are suitable for operating aircraft up to Code 2B only. Extension of runway does not appear feasible due to habitation around the airport. Earlier 19-seater (Code 2B) flights used to operate from Jamshedpur however operations were not found viable due to the applicable load penalty. Under UDAN Round 1 Air Odisha was awarded routes for RCS Flights to Kolkata with BCH1900D type of aircraft. However, the same was cancelled due to non-compliance of Agreement by Air Odisha. A trail run was conducted by DGCA in May 2018 with BCH1900D for RCS flights and it was found that full load operations are not feasible due to inadequate runway length.

A site for Greenfield Airport was identified by GoJ near Jamshedpur at Kandra Town in Saraikela - Kharswan District, Jharkhand. On request of GoJ, pre-feasibility study of the site was conducted by a multidisciplinary team from AAI in July 2016. The identified site had the land parcel of 665 acres and was located 15 km (aerial distance) NW of Sonari Airport. The site was not found suitable due presence of high hills in and around the identified site.

A proposal for setting up of a new Greenfield Domestic Airport for IFR operations of Code 4C category aircraft for public use near Jamshedpur was submitted by TATA Steel Ltd. to MoCA in the year 2011. The site was 5 km (aerial distance) NW of Sonari Airport. Site pre-feasibility study was conducted by AAI in July 2011. The site was within the Protected Forest. It was found to be suitable on prima facie technical assessment subject to OLS clearance as hills and removal of obstacles like factory chimney which were observed around the site. Site clearance to the proposal was granted by MoCA in July 2012 and M/s TATA Steel was asked to submit the application along with Detailed Project Report (DPR)/TEFS for 'in-principle' approval. M/s TATA Steel Ltd. informed that the preparation of TEFS / DPR is delayed due to pending forest clearances and land issues.

Dhalbhumgarh being an existing airport site, has an advantage from ease of development & operations point of view. OLS survey of the airport has also not identified any major obstacle. The airport is abutting NH-33 providing high speed connectivity to

Jamshedpur with reachability with an hours' time which now-a-days is pretty common for developing cities. Further, other than Jamshedpur the site is also well connected with nearby towns with sound road and rail network. It would also be able to cater to the passengers not only from Jamshedpur, but from the neighboring towns of West Bengal & Odisha too as the selected area is an industrial belt. Dhalbhumgarh itself is located in the Mineral rich Singhbhum district of Jharkhand & has potential for commercial traffic serving the important industrial & mining of the region. Considering the above aspect, Dhalbhumgarh appears to be the most suitable site as compared to sites identified near Jamshedpur as assessed from technical & operational point of view. Moreover, no other suitable alternate site is found available nearer to Jamshedpur.

*The EAC noted that the proposed site for the airport has more than 96 hectare of forest land. All around the proposed site the only land available is reserved forest. Any kind of ancillary development which is bound to come and further phase-2 development will also require land which will be only for forest land. The proposed site falls in the forests which are habitat of large number of elephants. Dalma Wildlife sanctuary is very near to the site. Elephants travel from Dalma to West Bengal through this forest. Every year there are number of man elephant conflict cases in these areas. The compensation paid to the people of these areas is an authentic evidence of the presence of large-scale elephant population in this area. The disturbance to the elephant habitat by way of building an airport on their habitat in particular in the elephant corridor and also by the sound of aeroplanes in the area and traffic movements will result in disturbance in the behavior of elephants resulting in increased human elephant conflict.*

*After detailed deliberation the EAC opined that the proposed site is not suitable for the development of Airport. The Committee did not agree with the current site selection and asked the project proponent to explore an alternative site. However, they may consult Chief Wildlife Warden of the State and obtain their consent for further consideration of the extent proposal.*

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#### Day 2- Friday, 24<sup>th</sup> September, 2020

##### Agenda item No. 55.4.1.

**Setting up of Integrated Treatment, Storage & Disposal Facility of Hazardous waste with incineration and landfill facility at Plot no. 667 to 689, Karnataka Industrial Area Development Board's (KIADB) Harohalli Industrial Area Phase III, District Ramanagara, Karnataka by M/s Mother Earth Environ Tech Private Limited – Environmental Clearance**

**(IA/KA/MIS/170915/2020; F.No. 10-39/2020-IA-III)**

The Project Proponent (PP) along with his accredited consultant M/s Samrakshan made a presentation and presented following parameters and salient features of the project to the Committee:

- (i) The proposal is for Setting up of Integrated Common Hazardous waste treatment, storage & disposal facility with incineration and landfill facility at Plot no.667 to 689, KIADB, Harohalli Industrial area Phase III, Kanakapura Taluk, Ramanagara District, Karnataka.
- (ii) The proposal is new. Area details are as follows:

S. No.	Particulars	Area (sqm)	Area in percentage
1	Total plot area	35752.72	100
2	Land fillable area	14296	40

3	Landscape/Green-belt area	11800	33
4	Other Infrastructures including storage and incinerator facility	9675	27

- (iii) The project components are land filling & Incineration of the hazardous waste, Two landfill cells of each area 10,854 sqm & 3,442 sqm, Incinerator of capacity 400 kg/h & its configuration, A leachate collection system, A surface water drainage system, Providing test borewells/piezometers around the land fill site, Rain water harvesting, Laboratory and Storage Area. The total holding capacity of both the cells is 3,54,340 MT. The facility is expected to last for 10 years at the rate of about 35000 MT per year.
- (iv) Waste water generation will be 25.75 KLD from floor washings, scrubber bleed, tyre washings, laboratory wastes, leachate 5kld. Sewage will be treated in 5 KLD Modular STP. Other waste water will send to CETP. Municipal solid waste generated will be 6kg/day during operation phase. The solid Wastes generated will be collected and disposed to the local municipality.
- (v) Power requirement will be 150 KVA sourced from BESCO. 150 KVA DG set will be provided in case of power failure.
- (vi) Solar panel and led bulbs altogether 50 Nos will be implemented (about 10% of energy cost savings is estimated).
- (vii) Rain water from roof top and paved area will be collected in a collection tank of 300 m<sup>3</sup>. The rain water will be analyzed and collected in the main water reservoir from there it will be used for scrubbing in incinerator and for greenbelt.
- (viii) Terms of Reference to the project was accorded by MoEFCC vide letter F. No. 10-39/2020-IA-III dated 07.08.2020.
- (ix) Public hearing was exempted as the site is located in Notified Industrial Area.
- (x) Baseline study was done in winter season from December 2019 to February 2020.
- (xi) Ambient air, noise, soil & water monitoring was done at eight locations. the maximum and minimum values of PM10 are in the range of 65 to 42, PM<sub>2.5</sub> are in the range of 35 to 14.4µg/m<sup>3</sup> SO<sub>2</sub> concentrations within the study area are in the range of 13.32 to 5.41µg/m<sup>3</sup> and NOx in the range of 21 to 11.47µg/m<sup>3</sup> and CO are in the range of 0.9 to 0.3 mg/m<sup>3</sup>. The observed pollutant levels were compared with CPCB National Ambient Air Quality Standards and found to be within limits.
- (xii) Green belt development: 33 % of the total land area i.e, 11,800 sqm (2.92 acres out of 8.83 acres) is reserved for green belt development. There are 136 trees in the periphery of the site and all these species are native. No trees will be cut.
- (xiii) Investment /cost of the project Rs. 43 Crores.
- (xiv) Employment potential: 30-50 during construction phase, 30 during operation phase
- (xv) Benefits of the project: Helps in scientific secured disposal of Hazardous waste generated in industries present in Karnataka and other states, Helps industries for timely disposal of the Hazardous waste in a common facility and Generation of organized employment.

*The EAC took note of the above-mentioned project parameters and enquired about the possibility of inhouse treatment of effluent generated from the proposed facility, options for installation of heat recovery system to concentrate the leachate and modes of hazardous waste transportation to the project site from the various parts of the state.*

*In this context, PP informed that the site for proposed project is in the industrial area. CETP is part of approval obtained by the KAIDB in the environmental clearance granted to the aforesaid industrial area. CETP will be established by the December, 2021. However, the*

proposed TSDf will be commissioned by June/July 2021. Till the CETP is ready, it has been proposed to dispose off the effluent generated from the proposed facility to the KSPCB authorised CETP with the approval of KSPCB. The PP assured that they will maintain the manifestation and details will be submitted to the concerned regulatory authority. It was also submitted that scrubbed liquid will be reuse only when required to top up the scrubbed liquid to make up the evaporation loss. Effluent generated from the project site will be pre-treated and the pre-treated effluent will be sent to CETP. Accordingly, the installation of onsite ETP is not proposed as it is not economically viable.

PP further informed that they will be incinerating the incinerable waste as and when the quantity accumulates to operate the incinerator continuously for four to five days. The off-gas from the incinerator will not be having sufficient heat to produce steam and generate power. The calorific value of the off-gas will be less than two million Kcal, while any heat recovery system will run efficiently only if the calorific value of four million Kcal. Therefore, it is not feasible to produce captive power from the proposed facility. However, PP will be making use of off-gas to pre-heat the incinerable waste before the feeding it in to the furnace chamber.

PP also submitted that the mode of transportation would be road. The PP would use their own vehicles, (presently seven) exclusively used for transportation of hazardous waste will be deployed for the transportation of the waste to the site. All the vehicles are fitted with GPS tracking system. Manifestation, as per the Hazardous and other Wastes (Management and Transboundary Movement) Rules, 2016 will be followed.

The EAC, based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, **recommended the project** for grant of environmental clearance and stipulated the following specific conditions along with other Standard EC Conditions as specified by the Ministry vide OM dated 04.01.2019 for the said project/activity (specified at **Annexure-2** of the minutes):

- (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) The Project proponent should ensure that the facility fulfils all the provisions of Hazardous and other Wastes (Management and Transboundary Movement) Rules, 2016 & the Protocol for 'Performance Evaluation and Monitoring for the same as published by the CPCB and Bio-Medical Waste Management Rules, 2016.
- (iii) It shall be ensured that all the project operations/activities shall be carried out under the best management practices.
- (iv) All possible measures shall be adopted for odour control shall be controlled by providing proper ventilation in the site, spraying ecosorb (organic and biodegradable chemical) around odour generation areas at regular intervals and by developing greenbelt with odour control species.
- (v) Fresh water of 63 KLD will be met from KIADB supply. No ground water abstraction shall be done at site.
- (vi) Waste water generation from landfill as leachate, discharges from operating equipment like incinerator, washing etc, should be treated in ETP within the site only. No wastewater/ treated water shall be carried or discharged from the facility.
- (vii) 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. Periodical ground water/soil monitoring to check the contamination in and around the site shall be carried out.



- (viii) 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.
- (ix) Ambient air quality monitoring shall be carried out in and around the landfill site at up wind and downwind locations. On-line real time continuous monitoring facilities shall be provided as per the CPCB or State Board Directions
- (x) As proposed, sufficient Greenbelt shall be developed in area of the proposed facility with native species (as per CPCB guidelines). It shall be ensured that all the trees and other plantation within facility do not in any way encourage the incorporation of toxic materials in the food chain
- (xi) As proposed, onsite and off-site disaster management plan shall be operationalised in consultation with district level authority in order to minimize the hazards to human health or environment from fires, explosion or any unplanned sudden or continuous release of hazardous waste or hazardous waste constituents to air, soil or surface water.
- (xii) As per the Ministry's Office Memorandum F. No. 22-65/2017-IA.III dated 01.05.2018, and as proposed, a fund of Rs. 0.86 Crores (@ 2% of project Cost) shall be earmarked under Corporate Environment Responsibility (CER) for the activities such as Avenue plantation in community areas, Education and skill development programs, Infrastructure development programs in nearby schools, Public welfare (Swachh Bharat Abhiyan), Participation and support to KSPCB for conducting Parisaramitra/green nurturing programme in schools and Providing drinking water facility to nearby villages. The activities proposed under CER shall be restricted to the affected area around the project. The entire activities proposed under the CER shall be treated as project and monitored strictly. The monitoring report shall be submitted to the regional office as a part of half yearly compliance report, and to the District Collector. It should be posted on the website of the project proponent.

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**Agenda item No. 55.4.2.**

**Construction of 217 Bedded Hospital with built up area of 29,222.305 sqm at plot no FC-53, Sarasvati Vihar, (Near Netaji Subhash Place Metro Station), Delhi by Bharat Prakritik Chikitsa Mission (Regd.) – Environmental Clearance**

**(IA/DL/MIS/169589/2020; F.No. 21-50/2020-IA-III)**

***The project proponent did not attend the meeting and as such, the proposal was deferred.***

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**Agenda item No. 55.4.3.**

**Proposed Recreational Park 'Bharat Vandana Park' at Khasra number 5/1 (0-18), 6/1(0-14), 7/1(0-10), 8/1(0-8), 9/1(0-9), 10/1(0-4), 11/1(0-16), 12/1(0-16),13/1(0-14), 15/1(0-6), 16/1(0-4), 17/1(1-0), 18/1(1-02), 19/1/1(0-02), 19/2/1(0-01) & 58/1/1(1-04)Sector-20 Dwarka, South West Delhi Developed by M/s Delhi Development Authority- Environmental Clearance**

**(IA/DL/NCP/168943/2020; F.No. 21-5/2020-IA-III)**

The Project Proponent (PP) along with his accredited consultant M/s Amaltas Enviro Industrial Consultants LLP (AEC) made a presentation and presented following parameters and salient features of the project to the Committee:

- (i) The project Proposed Recreational Park “Bharat Vandana Park” is located at Khasra number 5/1 (0-18), 6/1(0-14), 7/1(0-10), 8/1(0-8), 9/1(0 9), 10/1(0-4), 11/1(0-16), 12/1(0-16),13/1(0-14), 15/1(0-6), 16/1(0- 4), 17/1(1-0), 18/1(1-02), 19/1/1(0-02), 19/2/1(0-01) & 58/1/1(1- 04), Sector-20, Dwarka, South West Delhi. Site co-ordinates of the project site is 28°34'35.84"N77°3'27.87"E.
- (ii) The total plot area is 8,09,371.28 sqm; FSI area is 7,895.5 sqm; proposed Built-up area of 13,310.5 sqm. Recreational Park is proposed to be constructed in lines with green building principles and LEED-IGBC (Indian Green Building Council) platinum rating standards. The park shall serve as a landmark to the city and one of its kind in Delhi and NCR. The park visions to integrate various experiences and activities that would engage people of all ages and cultures. The Amusement park up to 10 Ha is permitted in District park as per MPD-2021, (Permissible FAR @7.5) and would span over 7,500 sqm. The Restaurant area permissible is 0.8 ha, with permissible FAR of 5 and would span over 400sqm. Land scape area (@ 54.34%) will be 3,97,307 sqm and Area under lakes and water bodies will be 1,04,535 sqm.
- (iii) Design of the Park is a derivative from the form of Lotus Flower, with the outline footprint of lotus. Each petal of the flower be a zone for a specific activity. The Zone demarcation of the site will be as follow:
  - a. Congregational Zone
  - b. Cultural Zone
  - c. Pushpa Kriti Sarovar Zone
  - d. Eco sensitive zone
  - e. Meditation garden zone
  - f. Fun park zone
  - g. Adventure park zone
  - h. Lake view restaurant zone
  - i. Mini India zone
  - j. Vandana Sarovar Zone
- (iv) During construction phase, total water requirement is expected to be 450ML. which will be met by treated water from DJB during the construction phase, soak pits and septic tanks will be provided for disposal of waste water. Temporary sanitary toilets will be provided to labor force.
- (v) During operational phase, total water demand of the project is expected to be approx. 2,131 KLD and the same will be met by Delhi Jal Board. Daily fresh water will be 270 KLD however Recycled water will be 654KLD. The domestic sewage will be treated through sewage treatment plant of capacity 200 KLD each (4 Nos.), the treated domestic wastewater shall be recycled and re use within premises. The treated sewage will be re used for flushing (510 KLD) greenbelt development (730 KLD), surplus treated water requirement shall be met by CSTP located in sector- 16 Dwarka. For the treatment of the water from Dwarka CSTP will be installing an STP of 2000 KLD to meet the needs of water bodies and green areas.
- (vi) About 7.6 TPD solid wastes will be generated in the project. The biodegradable waste (4.57 TPD) will be processed in OWC and the non-biodegradable waste generated (2.285 TPD) will be handed over to authorized local vendor.
- (vii) Total power requirement during operation phase is 2.55 MVA and will be met from BSES. Transformer selected total max. Demand load 2298.27KW & Proposed PSS- 4Nos. 800kVA. In case of power failure, total max. Demand load 1166.27KW DG

Selection- 4 Nos. DG sets of - 380kVA capacities will be provided as power back-up for building.

- (viii) Roof top rainwater of buildings will be collected in 30 Rainwater harvesting storage pits after filtration.
- (ix) Parking facility for 1,900 [4 Wheelers]; 500 [2 Wheeler]; 70 [Bus Parking] is proposed to be provided
- (x) Proposed energy saving measures would save about 18-20 % of power.
- (xi) No Eco-sensitive/Wildlife sanctuary is located within 10 km of project site. Site does not fall in Forest land.
- (xii) No court case is pending against the project.
- (xiii) The EIA report has been prepared based on the base-line data generated during winter season (1<sup>st</sup> December, 2019 – 10<sup>th</sup> March, 2020).
- (xiv) Investment/Cost of the project is Rs. 530 Crores.
- (xv) Employment potential- During Construction phase approx. 600 persons shall get employment.
- (xvi) Benefits of the project - Wastewater treatment, Landscape enhancement, energy conservation, parking management, rainwater harvesting – Environment.

*The project proponent informed the EAC that the Delhi Development Authority envisaged planning, design & construction of BHARAT VANDANA PARK in sector 20, Dwarka South West District of Delhi near Dwarka Sector-9 metro station. The park has been thought about on the lines of a destination park unlike the conventional parks, already existing in the state. This is being planned to include multiple activities in order to make it a vibrant and dynamic park which would also be self-contained and self-sustaining.*

*The EAC, 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 (specified at Annexure-7 of the minutes), 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) As proposed, fresh water shall be sourced from DJB, which shall not exceed 270 KLD for operation of facility and necessary permission shall be obtained.
- (iii) As proposed, wastewater will be treated in the inhouse 04 STPs of Capacity 200 KLD each. All the treated water will be used within the proposed campus for flushing, landscape and water bodies. No treated/untreated effluent shall be discharged outside the premises.
- (iv) During construction stage, treated wastewater shall be used from nearest STP with dedicated pipeline and arrangement for further treatment can be exercised for construction purposes, if treated wastewater from STP is not meeting the desired quality.
- (v) In order to mitigate the emission load from traffic and to promote cleaner fuel options, Electric Car Charging Points shall be provided at the Parking and provision of vehicles based on green fuel like CNG shall be facilitated.

- (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) As proposed, 30 Nos. of rain water harvesting recharge pits shall be provided for rain water harvesting after filtration as per CGWB guidelines.
- (viii) Segregated bio-degradable waste shall be compost in Organic Waste Converter. Adequate area shall be provided for solid waste management within the premises which will include area for segregation, composting. The inert waste from project will be sent to designated/authorized landfill site.
- (ix) No tree cutting/transplantation has been proposed in the instant project. A minimum of one 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. As proposed 3,97,307 sqm (55.34% of total area) area shall be provided for green area development.
- (x) As per the Ministry's Office Memorandum F. No. 22-65/2017-IA.III dated 1<sup>st</sup> May, 2018, the project proponent has proposed that an amount of Rs. 5.3 Crore (@ 1.0% of project Cost) shall be earmarked under Corporate Environment Responsibility (CER) for the activities such as Tree plantation drive, Drinking water facilities, Installation of solar lights in village common areas, Solid waste management facilities (Provision of waste bins) and Construction of Public toilets under total sanitation campaign. The entire activities proposed under the CER shall be treated as project and shall be monitored. The monitoring report shall be submitted to the Regional Office of the MoEFCC as a part of half yearly compliance report, and to the District Collector. It should be posted on the website of the project proponent.

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#### **Agenda item No. 55.4.4.**

#### **Construction of New Campus of Dr. B.R. Ambedkar University Delhi with built area of 2,83,690 sqm at Dheerpur Campus, New Delhi developed by M/s Dr.B.R. Ambedkar University Delhi- Terms of Reference**

**(IA/DL/MIS/171907/2020; F.No. 21-47/2020-IA-III)**

The Project Proponent (PP) along with his accredited consultant M/s Amaltas Enviro Industrial Consultants LLP (AEC) made a presentation and presented following parameters and salient features of the project to the Committee:

- (i) The project is located at Dheerpur Campus, New Delhi. Site co-ordinates of the project site is 28°43'17.80"N 77°12'30.92"E. This is a Proposed New Campus of Dr. B.R. Ambedkar University Delhi.
- (ii) The total plot area is 2,00,000.00 sqm; FSI area is 1,76,987.00 sqm; and total construction (Built-up) area of 2, 83,690.00Sqm. Ambedkar University Delhi (AUD) established by Government of NCT of Delhi in 2008 for providing higher education in the Social Sciences, Liberal Arts and Humanities. Maximum height of the building is 108.00 metre.
- (iii) During construction phase, total water requirement is expected to be 7,830.97ML. Which will be met by treated water from DJB 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.

- (iv) During operational phase, total water demand of the project is expected to be approx. 1,292 KLD and the same will be met by 732 KLD fresh water from Delhi Jal Board however Recycled water will be 560KLD. The domestic wastewater generation will be 700KLD will be treated through sewage treatment plant of capacity 850 KLD, the treated domestic wastewater shall be recycle and re use within premises. The treated sewage will be reused for flushing (384 KLD), greenbelt development (139 KLD) and makeup fresh water would be needed for greenbelt development (131 KLD), DG cooling (27KLD) and For Filter back wash (10KLD) and For Swimming Pool (18KLD). Surplus treated water generate at site shall be reused within the premises.
- (v) About 3.38 TPD solid wastes will be generated in the project. The biodegradable waste (2.029 TPD) will be processed in OWC and the non-biodegradable waste generated (1.014 TPD) will be handed over to authorized local vendor.
- (vi) Total power requirement during operation phase is 6,251 KW and will be met from TATA Power. Transformers selected total max. Demand load 3,806KW (ESS-1) - 3\*2,000kVA (2W+1S) & 2,445KW (ESS-2) -3\*1,600 kVA (2W+1S). In case of power failure, For the ESS-1 - max. Demand load 1,854KW is DG sets of -2\*1250kVA & For the ESS-2 - max. Demand load 1,899 KW is DG sets of -2\*1250 kVA capacities for each will be provided as power back-up for building; Roof top rainwater of buildings will be collected in 34 Rainwater harvesting storage Pits after filtration.
- (vii) Parking facility for 2,782 ECS [Proposed]; 2,779ECS [Required] to be provided.
- (viii) Proposed energy saving measures would save about 18-20 % of power.
- (ix) No Court case pending against the project.
- (x) Investment/Cost of the project is Rs. 1,200 Crores.
- (xi) Employment potential- During Construction phase approx. 300 -350 persons shall get employment.
- (xii) Benefits of the project - Wastewater treatment, Landscape enhancement, energy conservation, parking management, rainwater harvesting.

*The EAC deliberated upon the information provided by the project proponent. After detailed deliberation, EAC recommended granting 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) Possibility for use of treated STP water for construction purposes with the pre-treatment arrangements at site.
- (ii) An assessment of the cumulative impact of all development and increased inhabitation being carried out or proposed to be carried out by the project or other agencies in the core area, shall be made for traffic densities and parking capabilities in 5 kms radius from the site. A detailed traffic management and a traffic decongestion plan drawn up through an organization of repute and specializing in Transport Planning shall be submitted with the EIA. The Plan shall also include the consent of all the concerned implementing agencies.
- (iii) CGWA for abstraction of ground water, if any, for basement/excavation dewatering.
- (iv) Details of tree cutting/transplantation, if any.
- (v) A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project.

- (vi) Option analysis of onsite and off-site wastewater treatment generated during operational stage.
- (vii) 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.
- (viii) Plan for Corporate Environment Responsibility (CER) as specified under Ministry's Office Memorandum vide F.No.22-65/2017-IA.III dated 1<sup>st</sup> May 2018 shall be prepared and submitted along with EIA Report.

*It was recommended that 'ToR' prescribed by the Expert Appraisal Committee (Infrastructure-2) should be considered for preparation of EIA/ EMP report for the above-mentioned project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006.*

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#### Agenda item No. 55.4.5.

**Expansion of existing Bio-medical Waste Management facility at Plot No. 56, Kudumalagunta KIADB Industrial Area, Gauribidanur Taluk, Chikkaballapura District, Karnataka by M/s. Prajwal BMW Management Systems. - Terms of Reference**

**(IA/KA/MIS/165749/2020; F.No.10-55/2020- IA-III)**

The Project Proponent (PP) along with his accredited consultant M/s Samrakshan made a presentation and presented following parameters and salient features of the project to the Committee:

- (i) The Proposal is expansion of existing Bio-medical Waste Management facility at Plot No. 56, Kudumalagunta KIADB Industrial Area, Gauribidanur Taluk, Chikkaballapura District by M/s. Prajwal BMW Management Systems. Proposed project is expansion of existing Bio-medical waste treatment facility. Proposed expansion will be within the existing industry premises.
- (ii) Expansion of common bio-medical waste treatment facility (CBWTF) capacity from 200 kg/h to 1100 kg/h. Existing and Proposed capacities of components of the facility.

Equipment	Capacity		Number of equipment after expansion
	Existing	Proposed	
Incinerator	200 kg/h	500 kg/hr & 2 X 200 kg/h	4
Autoclave	400 l/cycle	600 l/cycle	2
Shredder	150 kg/h	200 kg/h	2
Sharp pit	2 cum	5cum	2
Effluent Treatment Plant	1 KL	10 KL	1

- (iii) The Bio-medical Waste Treatment Facility consists of Administrative Block with Restroom, Store Room, Main shed for treatment of Bio-medical waste, Security Room near the entrance, Vehicles/containers washing area, ETP and Other utility services area. An additional shed of dimensions 12.5 m X 32 m will be constructed for the proposed expansion within the existing project site premises.
- (iv) Land use details of proposed project site are as follows:

S. No.	Description	Area in sqm	%
1.	Total plot area	4047	100

2.	Ground Coverage area	1400	34.59
3.	Hard paved area including roads	800	19.76
4.	Greenbelt area	1647	40.69
5.	Future Development	200	4.94

- (v) No eco-sensitive zone/Wildlife Sanctuary falls within 10 km from the project site.
- (vi) No forest land involved in the proposed project. Project site is located within the KIADB industrial area.
- (vii) Baseline data collection will be taken up for non-monsoon period i.e. October, November and December 2020. Monitoring parameters and location details will be submitted in the EIA report.
- (viii) Water requirement for the project is 8 KLD which will be sourced from KIADB supply
- (ix) Expected Waste Generation (Liquid and Solid) from the proposed project is as follows:

S. No.	Purpose	Wastewater generation KLD	Mode of Treatment
1.	Domestic	0.8	The total amount of wastewater generated will be treated in ETP of 10 KLD and reused for scrubber. Hence, following Zero Liquid Discharge system.
2.	Industrial Purpose like autoclaving, washing equipment, floors etc.,	4.8	
3.	Gardening	-	
<b>TOTAL</b>		<b>5.6 KLD</b>	

- (x) Power of 22.37 kW is supplied from BESCO for existing operation. Additional Power of 22.37 kW will be procured for proposed expansion.
- (xi) Investment/Cost of the project is Rs. 2 Crore.
- (xii) Employment potential: Existing- 7 numbers, Proposed-12 numbers. Total manpower will be 19 numbers.
- (xiii) Benefits of the project- Social benefit provides employment to local people. By expanding the facility, it will be able to cover about 4,500 numbers of HCEs with bed strength of 12,500 generating bio-medical waste of 12,540 kg/day. It is also planned to collect sanitary napkins and household bio-medical waste from BBMP. Because of the Covid-19 situation, the CPCB has issued guidelines for handling, collection, storage, transportation and disposal of additional bio medical waste generated. By issue of these guidelines, there is already increase in the generation of bio-medical waste and sanitary waste.

*The EAC noticed that M/s. Prajwal BMW Management Systems (A unit of M/s. V V Incin Solution Private Limited Common treatment facility) is a common bio-medical waste treatment facility (CBMWTF) located at Plot no. 56, Kudumalagunta KIADB Industrial Area, Gauribidanur Taluk, Chikkaballpura District, catering to the management of bio-medical waste. The present capacity is 200 kg/h. Facility has obtained Consent for Establishment from KSPCB during 2012 and the erection was completed in 2015. Facility is in operation since 2016 with valid consent from KSPCB vide consent no. AW-300652 which is valid up to 30.06.2021. The facility is in the designated industrial area of Karnataka Industrial Area Development Board. Now, M/s. Prajwal BMW Management Systems proposes for expansion of the treatment facility from 200 kg/h to 1100 kg/h within the existing premises. Standard ToR has already been accorded by MoEFCC vide letter F.No. 10-55/2020-IA-III dated 09.09.2020.*

*After detailed deliberations on the proposal, the Committee recommended granting Terms of Reference as specified by the Ministry as Standard ToR dated 09.09.2020 and the following specific ToR in addition to Standard ToR for preparation of EIA-EMP report:*

- (i) Current/latest monitored data for Dioxins and Furan gases to be incorporated in the EIA. To carry out a sensitivity analysis of alternative sites as per the “Guidelines for conducting Environmental Impact Assessment: site selection for common Hazardous waste management facility published by the CPCB in 2003.”
- (ii) Project proponents would also submit a write up on how their project proposals conform to the stipulations made in the “Protocol for Performance evolution and monitoring of the Common Hazardous Waste Treatment Storage and Disposal facilities including common Hazardous Waste incinerators”, published by the CPCB on May 24, 2010.
- (iii) Status of compliance to the provisions of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.
- (iv) Compliance to the conditions of the consent to operate and authorization. A separate chapter on status of compliance of conditions given in consent to operate to be provided in EIA-EMP report.
- (v) The project proponents would submit a certificate that no expansion, modernization or capacity enhancement has been undertaken after the introduction of the EIA notification.
- (vi) The project proponents would submit a para wise certified compliance report to the consent to operate and the authorization received from the State Pollution Control Board for the existing facilities.
- (vii) Details of various waste management units with capacities for the proposed project.
- (viii) List of waste to be handled and their source along with mode of transportation.
- (ix) Other chemicals and materials required with quantities and storage capacities.
- (x) Details of temporary storage facility for storage of hazardous waste at project site.
- (xi) Details of pre-treatment facility of hazardous waste at TSDF.
- (xii) Details of air emissions, effluents, hazardous/solid waste generation and their management.
- (xiii) Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract).
- (xiv) Process description along with major equipment and machineries, process flow sheet (quantitative) from waste material to disposal to be provided.
- (xv) Hazard identification and details of proposed safety systems.
- (xvi) Layout maps of proposed Solid Waste Management Facilities indicating storage area, plant area, greenbelt area, utilities etc.
- (xvii) Details of Drainage of the project up to 5 km radius of study area. If the site is within 1 km radius of any major river, peak and lean season river discharge as well as flood occurrence frequency based on peak rainfall data of the past 30 years. Details of Flood Level of the project site and maximum Flood Level of the river shall also be provided.
- (xviii) Ground water quality monitoring in and around the project site.
- (xix) Status of the land purchases in terms of land acquisition Act and study the impact.
- (xx) Status of acquisition of land. If acquisition is not complete, stage of the acquisition process and expected time of complete possession of the land.
- (xxi) R&R details in respect of land in line with state Government policy.
- (xxii) Details of effluent treatment and recycling process.



- (xxiii) Leachate study report and detailed leachate management plan to be incorporated.
- (xxiv) Action plan for measures to be taken for excessive leachate generation during monsoon period.
- (xxv) Action plan for any pollution of ground water is noticed during operation period or post closure monitoring period.
- (xxvi) Detailed Environmental Monitoring Plan as well as Post Closure Monitoring Plan.
- (xxvii) Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof shall also be included. Has the unit received any notice under the Section 5 of Environment (Protection) Act, 1986 or relevant Sections of Air and Water Acts? If so, details thereof and compliance/ATR to the notice(s) and present status of the case.
- (xxviii) A tabular chart with index for point-wise compliance of above ToR.

*It was recommended that 'ToR' prescribed by the Expert Appraisal Committee (Infrastructure- 2) should be considered for preparation of EIA/ EMP report for the above-mentioned project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. The Project/ Activity has been exempted from requirement of conduct of Public Hearing/ Consultation under para 7 (i). III (b) of the EIA Notification, 2006.*

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#### **Agenda item No. 55.4.6.**

**Environmental Clearance for proposed Integrated common hazardous waste management facility including incineration at Industrial Growth Centre, Phase-II, Samba, Mandhera Village, Jammu & Kashmir by M/s Ramasetu Infrastructure Private Limited (Earlier name M/s APR Projects Private Limited) – Extension of validity of Environmental Clearance**

**(IA/JK/MIS/170159/2020; F. No. 10-43/2012-IA-III)**

- (i) The present proposal is for “Extension of Validity of Environmental Clearance for the Project “Integrated Common Hazardous Waste Management Facility including Incineration at Industrial Growth Centre, Phase-II, Samba, Mandhera Village, Jammu& Kashmir”.
- (ii) Environmental Clearance has been granted by the Ministry of Environment & Forests vide F. No. 10-43/2012-IA.III dated 2<sup>nd</sup> September, 2013 for the proposed “Integrated Common Hazardous Waste Management Facility including Incineration at Industrial Growth Centre, Phase – II, Samba, Mandhera Village, Jammu & Kashmir”, in 8.15 acres (3.298 hectares), with total project cost of Rs. 149.58 Crores with the following components:

#### **Phase - I**

- Hazardous Waste Secured Landfill – 68 TPD
- Alternate Fuel & Raw material facility – 14 TPD
- Treatment/ Stabilization – 41 TPD
- Bio Medical Waste – 2 TPD
- E- Waste – 55 TPD

#### **Phase – II Recycling Facility**

- Secondary Lead Recycling – 11 TPD
- Used Oil Recycling – 6 KLD

- Spent Solvent Recycling – 9 KLD
  - Incinerator – 27 TPD
- (iii) Later, name of the company has been changed from 'APR Project Pvt Ltd' to 'Ramasethu Infrastructure Private Limited'. MoEF&CC has amended the Environmental Clearance vide F. No. 10-43/2012-IA.III (Pt.) dated 20<sup>th</sup> May, 2019, with change in the name of Project Proponent.
- (iv) Consent to Establish (*Renewal*) has been granted in favor of Ramasethu Infrastructure Private Limited by Jammu & Kashmir Pollution Control Board vide Consent No. PCB/digital/20031364973 of 2020 dated March 16, 2020 for a period of one year from the date of issue.
- (v) Construction work at the site got delayed due to market conditions and financial conditions. Subsequently, management decided to proceed further for execution of the work in 2018 and accordingly got the required permissions renewed and have initiated the construction work in 2020. Till date, the progress of implementation of the project has only been confined to - topographical survey and complete demarcation of the land. Land profiling and grading works are still underway. The expected date of completion of construction (including inspection, trial run etc.) of the project is September 2021.
- (vi) In view of the above, the application for extension of validity of environmental clearance has been submitted.

*In response the query by EAC, project proponent further informed the EAC that Environmental Clearance has been granted by the MoEF for the proposed project on 2<sup>nd</sup> September, 2013. The construction work at site was delayed due to the administrative reasons, market conditions and financial conditions. Subsequently the management decided to proceed further for execution of the work in 2018. Accordingly, all the required permissions have been renewed and have initiated the construction work in 2020. Consent to Establish (*Renewal*) has been obtained from J&K Pollution Control Board on March 16, 2020 (with one-year validity). The expected date of completion of construction (including inspection, trial run etc.) of the project is September 2021.*

*The EAC deliberated upon the information provided by the project proponent. After detailed deliberation, the EAC recommended for extension of validity of the Environmental Clearance issued vide F.No. 10-43/2012-IA-III dated 2<sup>nd</sup> September, 2013 for a further period of three years i.e. up to 01.09.2023.*

*All other conditions stipulated in the Environmental Clearance issued vide F.No. 10-43/2012-IA-III dated 2<sup>nd</sup> September, 2013 and subsequent change in the name of the project proponent issued vide letter dated 20<sup>th</sup> May, 2019 shall remain unchanged.*

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#### **Agenda item No. 55.4.7.**

**Integrated Common Hazardous Waste Treatment Storage and Disposal Facility (ICHWTSDF) of Gwalior Zone in Madhya Pradesh at Mohna Industrial Area Village Mohna, Tehsil Gatigaon District Gwalior, Madhya Pradesh by M/s Madhya Pradesh Industrial Development Corporation Limited – Reconsideration for Terms of reference (IA/MP/MIS/159478/2020; F.No. 10-42/2020-IA-III)**

The EAC noted the following: -

- (i) The proposal is for grant of Terms of Reference to the project 'Integrated Common Hazardous Waste Treatment Storage and Disposal Facility (ICHWTSDF) of Gwalior

Zone in Madhya Pradesh at Mohna Industrial Area Village Mohna, Tehsil Gatigaon District Gwalior, Madhya Pradesh by M/s Madhya Pradesh Industrial Development Corporation Limited.

- (ii) 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.
- (iii) The proposal was considered by EAC in its 53<sup>rd</sup> meeting held during 23-24 July, 2020. Wherein, the EAC noted that PP has not presented any comparative site analysis details for three sites referred to in the presentation. Pending the availability of the information the EAC could not examine suitability of the site selected for the proposed facility by the project proponent. It was also noticed during presentation that Parbati River is about 300 m from project site and there exists other ecological sensitive areas and waterbodies within 10 km of the project site. However, no details of river, water bodies and Reserve/Protected Forest have been provided in the Form-1 and Pre-feasibility Report. The Committee opined that the project proponent should remove all these discrepancies and submit Revised Form-1 and Pre-feasibility Report.
- (iv) Project Proponent has submitted the additional information on Ministry's website vide letter dated 21.08.2020.

In this context, project proponent informed the EAC that the three sites namely Sitapur Pahadi Industrial area, Morena (SIM), Mohna Industrial area, Gwalior (MOG) and Malanpur Industrial area, Bhind (MAB) were identified and based on preliminary assessment for selection of sites as per Criteria provided by CPCB, prima-facie suitable site was identified. As per the score obtained with respect to their weightage, the site of Malanpur industrial area, Bhind ranked as 1<sup>st</sup> with 30.25 marks, Mohna industrial area, Gwalior site ranked 2<sup>nd</sup> with 27.75 marks and the Sitapur Pahadi industrial Area, Morena ranked last with 24.5 marks. Although, the Malanpur Industrial area site was found more suitable based on evaluation criteria for establishing the ICHWTSDF at Gwalior Zone but there was a constraint of Military Airbase which is situated 8 km away from the site. According to Aircraft (Amendment) Act 1988, waste disposal site within 10 km zone is prohibited. Thus, the Mohna industrial area, Gwalior has been selected as preferred site for establishing the ICHWTSDF for Gwalior Zone, which meets the Sitting Criteria published by the Central Pollution Control Board (CPCB) New Delhi.

*The EAC deliberated the information provided by the project proponent and opined that the proposed site at Mohana is at bank of the Parbati River, therefore, it is not suitable for the proposed TSDF, being itself hazardous waste management. The Committee, therefore, did not agree with the proposal and asked the project proponent to apply afresh with an alternative site.*

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#### **Agenda item No. 55.4.8.**

**Expansion of Group Housing 'Nav Sansad Vihar' at Plot No. 4, Sector 22, Dwarka, New Delhi by M/s Nav Sansad Vihar C.G.H.S. Ltd. - Reconsideration for Environmental Clearance**

**(IA/DL/MIS/153256/2020; F.No. 21-39/2020-IA-III)**

The EAC noted the following: -

- (i) The proposal is for grant of Environmental Clearance to the project 'Expansion of Group Housing 'Nav Sansad Vihar' at Plot No. 4, Sector 22, Dwarka, New Delhi by M/s Nav Sansad Vihar C.G.H.S. Ltd. The total plot area is 21,501 sqm. The total built-up area after expansion will be 46,967.388 sqm.

- (ii) 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 absence of SEIAA/SEAC in Delhi, the proposal has been appraised at Central level by sectoral EAC.
- (iii) The proposal was earlier considered by the EAC (Infra-2) in its 52<sup>nd</sup> meeting held during 18-19 June, 2020, wherein the EAC sought some additional information. The project proponent submitted/uploaded the additional information on 6<sup>th</sup> July, 2020 on Ministry's website (Parivesh Portal).
- (iv) Accordingly, the proposal was considered by EAC in its 53<sup>rd</sup> meeting held during 23-24 July, 2020. Wherein, the EAC after detailed deliberation asked the project proponent to submit additional details/documents for further deliberation on the proposal
- (v) Project Proponent has submitted the additional information on Ministry's website vide letter dated 04.09.2020.

*The EAC deliberated upon the information provided by the project proponent and noted that the Society has 9 Blocks (A1, A2, A3, B1, B2, B3, B4, C1 & C2) in which 256 dwelling units are located out of which 254 are occupied. The expansion of building has been proposed in Block No. - A1, B1, B2, B3 & B4 only. In these Blocks, 134 dwelling units are located out of which 132 are occupied. Majority members residing in these Blocks have already deposited the advance amount in Society office in order to show their financial commitments. In rest of the Blocks i.e., Block - A2, A3, C1 & C2 expansion is not proposed and repair work in Block No. A3 is already in progress. DDA scrutinized the proposal in detail and forwarded the same to Delhi Fire Service and Delhi Urban Art Commission after scrutiny. The Director of Delhi Fire Service approved the proposal vide their letter no. F6/DFS/MS/BR/CGHS/2020/181 dated 27.05.2020 and Delhi Urban Art Commission also approved the proposal vide their letter no. OL-13082022041 dated 19.08.2020.*

*Regarding the reasons for delay in obtaining Occupancy certificate for the existing building after a long gap of 14 years, the project proponent submitted that the Building plans initially were sanctioned by DDA vide File No.23(47)95/Bldg dated 08/05/1997. Construction work was started in Feb1999 and completed in the year 2004. The draw of lots were held in four stages i.e., 11.08.2002, 06.06.2003, 14.03.2004 & 05.09.2004. Six members were enrolled after cancellation of memberships of defaulters vides RCS Office order dated 14/01/2005. Draw of lots for these members were held on 16.04.2008 after clearance of their memberships vide RCS Office order No. F47/CND/965/GH/COOP/RCS/05-06 dated 01/01/2008. Thus, Society applied for Completion Certificate from DDA in 2008. There were lot of formalities to be complied in DDA like deposition of Compounding Fee/Penalties, deposition of labour Cess etc. Finally, Society got the Completion Certificate on 26.11.2014. These were the main reasons for delay in obtaining the Completion Certificate. PP further informed that the expansion proposal submitted in DDA has been considered only after the removal of coverage (which were of minor nature) as mentioned in DDA's sealing cum demolition order. DDA officials had also inspected the site and checked the same before processing the proposal of expansion in our Society. The committee also discussed the representation against the expansion of project and found its irrelevancy with environmental concerns.*

The EAC, 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 Conditions as specified by the Ministry vide OM dated 4<sup>th</sup> January, 2019 for the said project/activity (specified at **Annexure-7** of the minutes):

- (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) As proposed, fresh water requirement from DJB shall not exceed 115 KLD during operational phase and necessary permission shall be obtained. Only treated wastewater shall be used for construction works at site from Papankalan STP Dwarka. No groundwater shall be extracted.
- (iii) Sewage shall be treated in Dwarika CSTP. 31 KLD for landscape and 1.5 KLD for DG cooling will be suffice from Dwarka CSTP.
- (iv) 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, 05 no. of rain water harvesting recharge pit (already existing) shall be provided for rain water harvesting after filtration as per CGWB guidelines.
- (v) Bio-degradable shall be composted in Organic Waste Converter. Adequate area shall be provided for solid waste management within the premises which will include area for segregation, composting. The inert waste from project will be sent to designated/authorized landfill site.
- (vi) As proposed, total area of 10,230.373 sqm (47.58% of plot area) shall be developed as green area. No tree cutting/transplantation has been proposed in the instant project. A minimum of one 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.
- (vii) As per the Ministry's Office Memorandum F. No. 22-65/2017-IA.III dated 1<sup>st</sup> May, 2018, project proponent has proposed that an amount of Rs. 0.20 Crores (@ 1.0% of the project expansion Cost) shall be earmarked under Corporate Environment Responsibility (CER) for the activities such as tree plantation drive, drinking water facilities, installation of solar light in village common area, solid waste management facilities and construction of public toilet under total sanitation Campaign. The activities proposed under CER shall be restricted to the affected area around the project. The entire activities proposed under the CER shall be treated as project and shall be monitored. The monitoring report shall be submitted to the Regional Office of the MoEFCC as a part of half yearly compliance report, and to the District Collector. It should be posted on the website of the project proponent.

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**55.5 Any other item with the permission of Chair- Nil**

**The meeting ended with vote of thanks to the Chair.**

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**LIST OF PARTICIPANTS OF EAC (INFRASTRUCTURE-2) IN 55<sup>th</sup> MEETING OF EAC (INFRASTRUCTURE-2) HELD DURING 24-25 SEPTEMBER, 2020 THROUGH VIDEO CONFERENCING**

S. No.	Name	Designation	Attendance		Sign
			24.09.2020	25.09.2020	
1.	Prof. T. Haque	Chairman	P	P	
2.	Dr. N. P. Shukla	Member	P	P	
3.	Dr. H. C. Sharatchandra	Member	P	P	
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. Manoranjan Hota	Member	P	P	
8.	Dr. Dipankar Saha	Member	P	P	
9.	Dr. Jayesh Ruparelia	Member	P	P	
10.	Dr. (Mrs.) Mayuri H. Pandya	Member	P	P	
11.	Dr. M. V. Ramana Murthy	Member	P	A	
12.	Prof. Dr. P.S.N. Rao	Member	A	A	
13.	Shri Lalit Bokolia	Scientist F & Member Secretary	P	P	
14.	Shri Shard	Scientist E	P	P	

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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 NO<sub>x</sub> in reference to SO<sub>2</sub> and NO<sub>x</sub> 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.
- (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 make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.



- (ii) The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- (iii) The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- (iv) The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- (v) The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- (vi) The criteria pollutant levels namely; PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>x</sub> (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 NO<sub>x</sub> in reference to SO<sub>2</sub> and NO<sub>x</sub> 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); bagfilter/ESP for removal of particulate matter; venturi scrubber followed by packed bed scrubber with caustic circulation to neutralize the acidic vapours in flue gas; and demister column for arresting water carry over will be provided to the incinerator) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
- vii. The periodical monitoring of Dioxins and Furans in the Stack emissions shall be carried out. Analysis of Dioxins and Furans shall be done through CSIR-National Institute for Interdisciplinary Science and Technology (NIIST), Thiruvananthapuram or equivalent NABL Accredited laboratory
- viii. Gas generated in the Land fill should be properly collected, monitored and flared
- ix. A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 02 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 02 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.

**III. Water quality monitoring and preservation:**

- i. The project proponent shall install continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. Sufficient number of Piezometer wells shall be installed in and around the project site to monitor the ground water quality in consultation with the State Pollution Control Board / CPCB. Trend analysis of ground water quality shall be carried out each season and information shall be submitted to the SPCB and the Regional Office of MoEF&CC.
- iii. The project proponent shall submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- iv. No discharge in nearby river(s)/pond(s).

- v. The depth of the land fill site shall be decided based on the ground water table at the site.
  - vi. The Company shall ensure proper handling of all spillages by introducing spill control procedures for various chemicals.
  - vii. All leachates arising from premises should be collected and treated in the ETP followed by RO. RO rejects shall be evaporated in MEE. Toxicity Characteristic Leaching Procedure (TCLP) test to be performed on leachates.
  - viii. The Company shall review the unit operations provided for the treatment of effluents, specially the sequencing of MEE after tertiary treatment, the source of permeate when no R.O. is recommended and the treatment of MEE condensate. The scheme for treatment of effluents shall be as permitted by the Pollution Control Board/Committee under the provisions of consent to establish.
  - ix. Scrubber water, leachate water or wheel wash effluent shall be treated in the effluent treatment plant followed by RO to achieve zero liquid discharge.
  - x. Total fresh water use shall not exceed the proposed requirement as provided in the project details. Prior permission from competent authority shall be obtained for use of fresh water.
  - xi. Sewage Treatment Plant shall be provided to treat the wastewater generated from the project. Treated water shall be reused within the project.
  - xii. A certificate from the competent authority for discharging treated effluent/ untreated effluents into the Public sewer/ disposal/drainage systems along with the final disposal point should be obtained.
  - xiii. Rain water runoff from hazardous waste storage area shall be collected and treated in the effluent treatment plant.
- IV. Noise monitoring and prevention:**
- i. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
  - ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.
  - iii. Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.
- V. Energy Conservation measures:**
- i. Energy conservation measures like installation of LED/CFLs/TFLs for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning.
- VI. Waste management:**
- i. The TSDF should only handle the waste generated from the member units.
  - ii. Periodical soil monitoring to check the contamination in and around the site shall be carried out.
  - iii. No non-hazardous wastes, as defined under the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, shall be handled in the premises.
  - iv. The Project proponent shall not store the Hazardous Wastes more than the quantity that has been permitted by the CPCB/SPCB.
  - v. The solid wastes shall be segregated, managed and disposed as per the norms of the Solid Waste Management Rules, 2016.
  - vi. A certificate from the competent authority handling municipal solid wastes should be obtained, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project.
  - vii. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Rules, 2016.
- VII. Green Belt:**
- i. Green belt shall be developed in an area as provided in project details, with native tree species in accordance with Forest Department. The greenbelt shall inter alia cover the entire periphery of the project site.
  - ii. Top soil shall be separately stored and used in the development of green belt.
- VIII. Public hearing and Human health issues:**
- i. Traffic congestion near the entry and exit points from the roads adjoining the project site shall be avoided. Parking should be fully internalized and no public space should be utilized.
  - ii. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
  - iii. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
  - iv. Occupational health surveillance of the workers shall be done on a regular basis.
- IX. Corporate Environment Responsibility:**
- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 01.05.2018, as applicable, regarding Corporate Environment Responsibility.
  - ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
  - iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
  - iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
  - v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
- X. Miscellaneous:**
- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of

- the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
  - iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
  - iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
  - v. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
  - vi. The criteria pollutant levels namely; PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub> (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.

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**ANNEXURE-3****Standard EC Conditions for Project/Activity 7(da): Bio-Medical Waste Treatment Facilities**

- I. Statutory compliance:**
  - i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1980, in case of the diversion of forest land for non-forest purpose involved in the project.
  - ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
  - iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report (incase of the presence of schedule-I species in the study area)
  - iv. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.
  - v. Transportation and handling of Bio-medical Wastes shall be as per the Bio-Medical Waste Management Rules, 2016 including the section 129 to 137 of Central Motor Vehicle Rules 1989.
  - vi. Project shall fulfill all the provisions of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 including collection and transportation design etc and also guidelines for Common Hazardous Waste Incineration - 2005, issued by CPCB Guidelines of CPCB/MPPCB for Bio-medical Waste Common Hazardous Wastes incinerators shall be followed.
  - vii. The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
  - viii. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
  - ix. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable by project proponents from the respective competent authorities
- II. Air quality monitoring and preservation:**
  - i. The project proponent shall install emission monitoring system including Dioxin and furans to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
  - ii. Periodical air quality monitoring in and around the site including VOC, HC shall be carried out.
  - iii. Incineration plants shall be operated (combustion chambers) with such temperature, retention time and turbulence, so as to achieve Total Organic Carbon (TOC) content in the slag and bottom ashes less than 3%, or their loss on ignition is less than 5% of the dry weight of the material.
  - iv. Venturi scrubber (alkaline) should be provided with the incinerator with stack of adequate height (Minimum 30 meters) to control particulate emission within 50mg/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.
- III. Water quality monitoring and preservation:**
  - i. The project proponent shall install effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
  - ii. Waste water generated from the facility shall be treated in the ETP and treated waste water shall be reused in the APCD connected to the incinerator. The water quality of treated effluent shall meet the norms prescribed by State Pollution Control Board. Zero discharge should be maintained.
  - iii. Process effluent/any waste water should not be allowed to mix with storm water.
  - iv. Total fresh water use shall not exceed the proposed requirement as provided in the project details. Prior permission from competent authority shall be obtained for use of fresh water.
  - v. Sewage Treatment Plant shall be provided to treat the wastewater generated from the project. Treated water shall be reused within the project.
  - vi. A certificate from the competent authority for discharging treated effluent/ untreated effluents into the Public sewer/ disposal/drainage systems along with the final disposal point should be obtained.
  - vii. The leachate from the facility shall be collected and treated to meet the prescribed standards before disposal.
  - viii. Magnetic flow meters shall be provided at the inlet and outlet of the ETP & all ground water abstraction points and records for the same shall be maintained regularly.
  - ix. Rain water runoff from hazardous waste storage area shall be collected and treated in the effluent treatment plant.
- IV. Noise monitoring and prevention:**
  - i. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.
- V. Energy Conservation measures:**
  - i. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;
  - ii. Provide LED lights in their offices and residential areas
- VI. Waste management:**
  - i. Incinerated ash shall be disposed at approved TSDF and MoU made in this regard shall be submitted to the Ministry prior to the commencement.
  - ii. The solid wastes shall be segregated as per the norms of the Solid Waste Management Rules, 2016.
  - iii. A certificate from the competent authority handling municipal solid wastes should be obtained, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project.

- iv. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016
- v. No landfill site is allowed within the CBWTF site
- vi. The Project proponent shall not store the Hazardous Wastes more than the quantity that has been permitted by the CPCB/SPCB.

**VII. Green Belt:**

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

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

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

**IX. Corporate Environment Responsibility:**

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 01.05.2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly 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 criteria pollutant levels namely; PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub> (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.

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**ANNEXURE-4****Standard EC Conditions for Project/Activity 7(g): Aerial ropeways****I. Statutory compliance:**

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

**II. Air quality monitoring and preservation:**

- i. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. 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:**

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



**IX Corporate Environment Responsibility:**

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

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**ANNEXURE-5****Standard EC Conditions for Project/Activity 7(h): Common Effluent Treatment plants (CETPs)****I. Statutory compliance:**

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

**II. Air quality monitoring and preservation:**

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

**III. Water quality monitoring and preservation:**

- i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system 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 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 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.

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**ANNEXURE-6****Standard EC Conditions for Project/Activity 7(i): Common Municipal Solid Waste Management Facility (CMSWMF)****I. Statutory compliance:**

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

**II. Air quality monitoring and preservation:**

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories. (for projects involving incineration).
- ii. As proposed, air pollution control device viz. gas quencher; treatment with mixture of hydrated lime and activated powder for adsorption of partial acidity and VOCs (if any); bagfilter/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>, NO<sub>x</sub> 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<sub>10</sub> and PM<sub>2.5</sub> in reference to PM emission, and SO<sub>2</sub> and NO<sub>x</sub> in reference to SO<sub>2</sub> and NO<sub>x</sub> emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions.

**III. Water quality monitoring and preservation:**

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

**IV. Waste management:**

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

**V. Transportation:**

- i. Project should ensure that the site is properly cordoned off from general movement and no unauthorized person or goods permitted to enter the premises. Necessary security provision should be made as a condition in the Authorization under the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 to prevent unwanted access.
  - ii. Traffic congestion near the entry and exit points from the roads adjoining the project site shall be avoided. Parking should be fully internalized and no public space should be utilized.
  - iii. A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 02 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 02 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.
- VI. Green belt:**
- i. Green belt shall be developed in an area as provided in project details, with native tree species in accordance with Forest Department. The greenbelt shall inter alia cover the entire periphery of the project site.
  - ii. Top soil shall be separately stored and used in the development of green belt.
- VII. Public hearing and Human health/safety issues:**
- i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
  - ii. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
  - iii. Occupational health surveillance of the workers shall be done on a regular basis.
- VIII. Corporate Environment Responsibility:**
- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 01.05.2018, as applicable, regarding Corporate Environment Responsibility.
  - ii. The company shall have a well laid down environmental policy duly 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.
- 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>, NO<sub>x</sub> (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.

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**ANNEXURE-7**

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

- I. Statutory compliance:**
  - i. The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.
  - ii. The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of fire fighting equipment etc as per National Building Code including protection measures from lightning etc.
  - iii. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1980, in case of the diversion of forest land for non-forest purpose involved in the project.
  - iv. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
  - v. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.
  - vi. The project proponent shall obtain the necessary permission for drawl of ground water / surface water required for the project from the competent authority.
  - vii. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
  - viii. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable, by project proponents from the respective competent authorities.
  - ix. The provisions of the Solid Waste Management Rules, 2016, e-Waste (Management) Rules, 2016, and the Plastics Waste Management Rules, 2016, shall be followed.
  - x. The project proponent shall follow the ECBC/ECBC-R prescribed by Bureau of Energy Efficiency, Ministry of Power strictly.
- II. Air quality monitoring and preservation:**
  - i. Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.
  - ii. A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.
  - iii. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM<sub>10</sub> and PM<sub>2.5</sub>) covering upwind and downwind directions during the construction period.
  - iv. Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.
  - v. Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murrum and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
  - vi. Sand, murrum, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.
  - vii. Wet jet shall be provided for grinding and stone cutting.
  - viii. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
  - ix. All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Management Rules 2016.
  - x. The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.
  - xi. The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.
  - xii. For indoor air quality the ventilation provisions as per National Building Code of India.
- III. Water quality monitoring and preservation:**
  - i. The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bio-swales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water.
  - ii. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.
  - iii. Total fresh water use shall not exceed the proposed requirement as provided in the project details.
  - iv. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.
  - v. A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.



- vi. At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.
  - vii. Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.
  - viii. Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.
  - ix. Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.
  - x. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
  - xi. The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rain water harvesting recharge pits/storage tanks shall be provided for ground water recharging as per the CGWB norms.
  - xii. A rain water harvesting plan needs to be designed where the recharge bores of minimum one recharge bore per 5,000 square meters of built up area and storage capacity of minimum one day of total fresh water requirement shall be provided. In areas where ground water recharge is not feasible, the rain water should be harvested and stored for reuse. The ground water shall not be withdrawn without approval from the Competent Authority.
  - xiii. All recharge should be limited to shallow aquifer.
  - xiv. No ground water shall be used during construction phase of the project.
  - xv. Any ground water dewatering should be properly managed and shall conform to the approvals and the guidelines of the CGWA in the matter. Formal approval shall be taken from the CGWA for any ground water abstraction or dewatering.
  - xvi. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.
  - xvii. Sewage shall be treated in the STP with tertiary treatment. The treated effluent from STP shall be recycled/re-used for flushing, AC make up water and gardening. As proposed, no treated water shall be disposed in to municipal drain.
  - xviii. No sewage or untreated effluent water would be discharged through storm water drains.
  - xix. Onsite sewage treatment of capacity of treating 100% waste water to be installed. The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Treated waste water shall be reused on site for landscape, flushing, cooling tower, and other end-uses. Excess treated water shall be discharged as per statutory norms notified by Ministry of Environment, Forest and Climate Change. Natural treatment systems shall be promoted.
  - xx. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.
  - xxi. Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.
- IV. Noise monitoring and prevention:**
- i. Ambient noise levels shall conform to residential area/commercial area/industrial area/silence zone both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental pollution loads on the ambient air and noise quality shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB.
  - ii. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
  - iii. Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.
- V. Energy Conservation measures:**
- i. Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC.
  - ii. Outdoor and common area lighting shall be LED.
  - iii. Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.
  - iv. Energy conservation measures like installation of CFLs/ LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning.
  - v. Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 1% of the demand load or as per the state level/ local building bye-laws requirement, whichever is higher.
  - vi. Solar power shall be used for lighting in the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. Solar water heating shall be provided to meet 20% of the hot water demand of the commercial and institutional building or as per the requirement of the local building bye-laws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.
- VI. Waste Management:**
- i. A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project shall be obtained.
  - ii. Disposal of muck during construction phase shall not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
  - iii. Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials.
  - iv. Organic waste compost/ Vermiculture pit/ Organic Waste Converter within the premises with a minimum capacity of 0.3 kg /person/day must be installed.

- v. All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.
  - vi. Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.
  - vii. Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials.
  - viii. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27<sup>th</sup> August, 2003 and 25<sup>th</sup> January, 2016. Ready mixed concrete must be used in building construction.
  - ix. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016.
  - x. Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination.
- VII. Green Cover:**
- i. No tree can be felled/transplant unless exigencies demand. Where absolutely necessary, tree felling shall be with prior permission from the concerned regulatory authority. Old trees should be retained based on girth and age regulations as may be prescribed by the Forest Department. Plantations to be ensured species (cut) to species (planted).
  - ii. A minimum of 1 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.
  - iii. Where the trees need to be cut with prior permission from the concerned local Authority, compensatory plantation in the ratio of 1:10 (i.e. planting of 10 trees for every 1 tree that is cut) shall be done and maintained. Plantations to be ensured species (cut) to species (planted). Area for green belt development shall be provided as per the details provided in the project document.
  - iv. Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.
- VIII. Transport**
- i. A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria.
    - a. Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
    - b. Traffic calming measures.
    - c. Proper design of entry and exit points.
    - d. Parking norms as per local regulation.
  - ii. Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours.
  - iii. A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.
- IX. Human health issues:**
- i. All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.
  - ii. For indoor air quality the ventilation provisions as per National Building Code of India.
  - iii. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
  - iv. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
  - v. Occupational health surveillance of the workers shall be done on a regular basis.
  - vi. A First Aid Room shall be provided in the project both during construction and operations of the project.
- X. Corporate Environment Responsibility:**
- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 01.05.2018, as applicable, regarding Corporate Environment Responsibility.
  - ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or 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.

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