

MINUTES OF 65th MEETING OF EXPERT APPRAISAL COMMITTEE (INFRASTRUCTURE-2) HELD DURING 27-28 MAY, 2021

VENUE: Through Video Conferencing

PROCEEDINGS

65.1 Opening Remarks of the Chairman: The newly appointed interim Chairman, Dr. N. P. Shukla, and members extended warm welcome with each other and participants of the meeting. The Committee kept two minutes' silence in fond remembrance of the previous Chairman, late Dr. Tajamul Haque, who passed away recently due to COVID-19. Thereafter, the meeting was opened to start proceeding as per the agenda adopted for this meeting.

65.2 Confirmation of Minutes of 64th Meeting of Expert Appraisal Committee (Infrastructure-2) held during 12-13 April, 2021.

The Expert Appraisal Committee (Infrastructure-2), hereinafter called the EAC, was informed that no representation has been received regarding projects considered in 64th meeting. Minutes of 64th Meeting of EAC were confirmed. The typo errors, if any noticed during processing of these cases may be corrected in the light of facts and figures provided by the respective Project Proponent.

65.3 Consideration of Proposals on Day-I (27th May, 2021): The EAC considered proposals as per the agenda adopted for Day-I of 65th meeting. The details of deliberations held and decisions taken in the meeting are as follows:

AGENDA ITEM NO. 65.3.1

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

(IA/AN/MIS/124311/2019; F. No. 21-37/2021-IA-III)

1. The Project Proponent (M/s. Andaman and Nicobar Administration) along with his consultant 'M/s Enviro Resources', made a presentation on the key parameters and salient features of the project to the EAC (Infra-2). The EAC took note of following key parameters and salient features of the project, as presented during the meeting; provided in the brief and application for this project:

- i. The project is located at Shaheed Dweep (erstwhile Neil Island), Village – Bharatpur, Taluka – Port Blair, District - South Andaman, Andaman & Nicobar with coordinates 11°50'11.40"N Latitude and 93° 2'17.05"E Longitude.
- ii. The project is new.

- iii. The project was issued Terms of Reference by MoEF&CC vide F. No. 10-54/2019-IA-III dated 16.12.2019.
- iv. The project consists of the following main components:
 - a. Onshore facilities - On shore facilities such as Passenger Terminal Building (PTB), Utility Building, Parking Area, Walkway towards Floating Jetty.
 - b. Offshore facilities - Floating Jetty, Access Gangway, Floating walkway, Fire and Rescue Boat, Sea Planes and a suitable water operating area including identified approach and departure paths.
 - c. Connectivity to the site: The project location viz. Shaheed Dweep is connected to surrounding Islands by ferries, further a 5-6 m wide road is proposed which will ultimately connect the project site to Bharatpur Road
- v. The total plot area is 3,750.00 sqm and the total built-up area is 741.00 sqm. The proposed land use of water aerodrome site is given as follows:

S. No.	Description	Area (sqm)	Percentage area (%)
1	Green Belt	1,255	33.46%
2	PTB plinth area	600	16.0%
3	Road	1,400	37.33%
4	Utility/Services	141	3.76%
5	Parking	86	2.29%
6	Hard Paving	268	7.01%
	Total Plot Area	3750	100%

- vi. Project components in CRZ area are given as follows. ANCZMA has recommended the project for approval during its meeting dated 17.02.2021:

S. No.	Description	CRZ Classification	Area in Sqm	Total Area in Sqm
1	Floating walkway	CRZ- IB	736.4	1380.9
		CRZ- III (NDZ)	160.8	
		CRZ- IV	483.7	
2	Jetty	CRZ- IV	500.3	500.3
3	Runway	CRZ- IV	54024.4	54024.4
4	Terminal Building ¹	CRZ- III (NDZ)	3749.5	3749.5*

Note:1 – The Terminal Building here mentioned is for the Total Project Site Area (including PTB Area as well as associated facilities)

* - The total project site area is 3,750 sqm.

- vii. Total water requirement during construction phase will be 4.35cu.m per day, which will be sourced through tankers. Mobile sanitation facilities will be provided to workers, which will be periodically cleaned by night soil tankers.
- viii. During operational phase, initial water requirement for proposed project activities will be 19.5 KLD & in later stage the net freshwater requirement will be 11.7 KLD (through reuse of 7.1 KLD treated sewage). Fresh water shall be sourced through municipal supply. Total wastewater generation during operation phase will be 8.5 KLD. STP of 10 KLD capacity using MBBR technology will be provided for treatment of Sewage. Total 7.1 KLD of treated sewage will be reused within the project.
- ix. The total waste generated on-site will be approximately 0.2kg/capita/day $\sim 440 \times 0.2 \sim 88$ kg/day. The organic waste will be approximately 40% (~ 35.2 kg/day) and inorganic/inert waste shall be approximately 60% (~ 52.8 kg/day). Food/beverages will not be served for short duration flights as envisaged in proposed project. However; minimal trash such as paper, etc. if any will be collected by the airline's ground support team and placed at a waste transfer station. Subsequently, all the wastes will be transported to the Centralized Waste Processing Facility within the PTB. Here, the waste will be segregated and handed over to the recyclers as per the as per MSW Rules, 2016.
- x. No maintenance facility will be provided at the proposed project site but at Port Blair Airport. Maintenance, workshop wastes (used grease, used oil and cotton wastes) shall be collected, stored in the workshop and disposed to authorized vendor by Port Blair Airport Authority as per the Hazardous Waste and other Waste (Management and Transboundary Movement) Rules, 2016.
- xi. Power supply will be sourced from Electricity Department, Andaman and Nicobar. The anticipated connected load is ~ 143 KW. DG sets of 2 x 50 kVA are proposed for backup power.
- xii. Around 150 numbers of solar modules each having capacity of 400 watts thus a total of 60 KW (DC) capacity will be installed.
- xiii. Rooftop rainwater will be harvested in a tank of 20 KL that will be further used for gardening purpose.
- xiv. Parking is proposed on ground floor and shall have capacity of 10 vehicles in Phase I and during Phase II additional 10 vehicles parking will be provided via mechanical parking.
- xv. Public Hearing has been conducted for the proposed Water Aerodrome Project at Shaheed Island dated 25th September, 2020 at the Panchayat Bhavan, Neil Kendra Panchayat, Shaheed Dweep, South Andaman District. Apart from welcoming the project, the issues raised during consultation were on: impact of the project on local boat operators, approach road to Bharatpur, employment opportunities to local people and protection of corals and vegetation in the area. The project proponent assured that the project will serve job opportunities to local people in terms of direct and indirect employment and that there will not be any disturbance to boat operators due to operation of

the sea plane. A budgetary allocation of ₹1.46 Crore has been made for road development. Project Proponent further informed that the that all necessary precautions will be taken during the development of the project for the protection of environment including marine ecosystem of the area through the Environment Management System based on ISO-14000, Quality Management and Occupational Health and Safety Management System.

- xvi. Green belt will be developed in 1255 sqm area accounting to 33% of project plot area. 53 trees are existing at site of which 30 trees are proposed to be felled. Plantation of 108 trees is proposed.
- xvii. Sir Hugh Ross Island Wildlife Sanctuary is present towards Southeast of project site at an approximate aerial distance of 7 km. Since the proposed project site is outside the notified eco-sensitive zone of the Sir Hugh Ross Island Wildlife Sanctuary, NBWL Clearance is not envisaged.
- xviii. Forest Clearance is not required.
- xix. No Court Case is pending against the project.
- xx. Project is not located in a Critically Polluted area.
- xxi. Expected timeline for completion of proposed project is within 8-10 months, after obtaining Environment Clearance & necessary permissions from Andaman and Nicobar Pollution Control Committee (ANPCC) and other statutory approvals as required.
- xxii. Estimated project cost is ₹38.45 Crores.
- xxiii. The total manpower envisaged is approximately 50 Nos. for the project.
- xxiv. Benefits of the project: This project will connect remote areas of island to Port Blair to promote tourism, resulting into growth in economic condition. Job opportunities to local people in terms of direct and indirect employment. Demands of community services and commercial development also create additional employment. Connecting to main or developed land will result into infrastructural development of these islands. Considering clean ecosystem of this island, foreign tourists are assumed to be attracted at these places, resulting into good foreign exchange amount. Install Solar panels for generation of electricity, which will reduce the additional load on electricity department. It will be ZLD project; entire treated sewage will get used for gardening. Prefabricated materials are preferred for construction of building, will reduce on site waste generation from conventional construction practices. Greenbelt with mandatory area will be provided, ultimately increasing aesthetic value of project site

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

3. *The EAC (Infra-2), based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, recommended granting environmental clearance to the project subject*

to the following specific conditions and other Standard EC Conditions as specified by the Ministry vide OM dated 4th January, 2019 for the said project/activity while considering for accord of environmental clearance:

- i. The project proponent shall prepare a Conservation and Management Plan for corals and other marine ecosystems in the project area considering both construction phase and operation phase, which shall be duly validated and certified by reputed organization such as Earth System Science Organization – Indian National Centre for Ocean Informative Services (ESSO-INCOIS) and/or the National Institute of Ocean Technology (NIOT)/CSIR-National Institute of Oceanography (Goa) and submitted to the regional office of this ministry before starting construction work. The Conservation and Management Plan shall also specify adequate buffer zone to be provided for conserving the corals.
- ii. Solar power installation of at-least 60 KW capacity shall be achieved as proposed.
- iii. PP shall also explore the utilisation of wind energy for the project.
- iv. Seaplane operations shall not be carried out during night time as committed.
- v. Hazard Identification and Risk Assessment for the project shall be carried out and adequate mitigation measures shall be adopted to ensure that all safety issues are addressed. The documentation shall be reviewed periodically and shall be submitted to the regional office along with six-monthly compliance report.
- vi. 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.
- vii. PP shall explore the use of non-ozone depleting substances in air conditioning systems.
- viii. Construction site should be adequately barricaded before the construction begins.
- ix. Where construction activity is likely to cause noise nuisance to nearby residents, restrict operation hours between 7 am to 6 pm.
- x. Rainwater harvesting shall be done from roof top area and the harvested rainwater shall be stored to be re-used in the airport as proposed. Rain water harvesting structures shall conform to CGWA designs. Before recharging the surface run off, pre-treatment must be done to remove suspended matter, oil and grease.

- xi. A certificate from the competent authority/agency handling municipal solid wastes should be obtained, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project.
- xii. Fresh water requirement from local authority shall not exceed 11.7 KLD during operational phase. As committed, no groundwater abstraction shall be done during construction as well as operation phase of the project.
- xiii. As proposed, waste water shall be treated in an onsite STP of total 10 KLD capacity. At-least 7.1 KLD treated water from the STP shall be recycled and re-used for gardening, road washing etc. There shall be no discharge of treated water from the project as proposed.
- xiv. 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.
- xv. Area for greenery shall be provided as per the details provided in the project document i.e., area under plantation/greenery will be 1255 sqm. The landscape planning should include plantation of at-least 108 trees of native species as committed. No tree can be felled/transplant unless exigencies demand. Where absolutely necessary, tree felling shall be with prior permission from the concerned regulatory authority. Plantations to be ensured species (cut) to species (planted).
- xvi. The PP shall also provide electric charging points in the parking areas for e-vehicles as committed.
- xvii. The Environmental Clearance to the project is primarily under provisions of EIA Notification, 2006. The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/ Regulations or Statutes as applicable to the project.

AGENDA ITEM NO. 65.3.2

Extension of Runway with Blast Pad, RESA, Taxiway, Apron, GSE Area, Isolation Bay, New Domestic Terminal Building& Miscellaneous Works at Tuticorin Airport, Tamil Nadu by M/s. Airports Authority of India, Tuticorin Airport - Environmental Clearance

(IA/TN/MIS/208339/2020; F. No. 21-36/2021-IA-III)

1. The PP (M/s. Airports Authority of India, Tuticorin Airport) along with his consultant 'M/s ABC Techno Labs India Private Limited' made a presentation on the key parameters and salient features of the project to the EAC (Infra-2). The Committee took note of the following key parameters and

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

- i. The Project is located at S.F. No. 4, 6,7,9-33, 35, 37, 38, 41, 57-65, 134-147, 152-156 of Kumaragiri Village, S.F. No. 2-6, 8-11 of Servaikaranmadam Village, S.F. No. 4 - 10 of Mudivaithanandal, S.F. No. 1, 10, 11, 20, 21, 30, 31, 40, 41, 42, 49, 50, 51, 60, 61, 62 of Kattalankulam Village, Thoothukudi Taluk & District, Tamil Nadu with coordinates 08°43'11.9" to 8°44'09.03" N Latitude and 78°00'30.9 to 78°02'50.1" E Longitude.
- ii. The proposal is for 'Expansion'.
- iii. Tuticorin Airport is an operational airport having total land area of 188.56 acres and existing facilities: Terminal: 1000 sqm. (capable to handle 78 arriving and 78 departure passengers at any point of time); Runway length: 1350 M x 30 M; and Apron: 75 x 45 m (suitable for parking of 2 No of ATR 72/Q400 aircrafts). The instant proposal involves extension of runway with blast pad, RESA, taxiway, apron, GSE area, isolation bay, new domestic terminal building & miscellaneous works at Tuticorin Airport.
- iv. No EC is available for existing airport as Tuticorin Airport was established in 1992 as an Allied Air Force base during World War II in Tuticorin. The existing terminal building is old building renovated time to time to cope with increasing numbers of air passengers.
- v. TOR for proposed works at the Tuticorin Airport was issued by MoEF&CC vide letter F. No. 10-41/2020-IA-III dated 13.08.2020.
- vi. Public Hearing was conducted by Tamil Nadu Pollution Control Board on 23.02.2021 at Sathya Mahal, Pudukottai by Tamil Nadu Pollution Control Board. The project was mostly welcomed but concerns were raised on clarity in the land acquisition and compensation process, future expansion, benefits and employment opportunities to local community particularly those from whom land has been acquired, increase in cargo operations, dust and noise pollution, road development and connectivity to railway station etc. The airport director committed to address the concerns raised during the public hearing.
- vii. The reconnaissance survey of the area around the airport site has been carried out during last week of November 2019 and the field studies were carried out for one season during winter season (01.12. 2019 to 28.02.2020) for the EIA studies to collect baseline primary and secondary data for the present environmental scenario in the study area.
- viii. The proposed expansion involves the following:
 - a. Extension of Runway in the beginning of RWY 10 by total 1000 M x 45 M and extension of runway in the beginning of runway 28 by 765M x 45M to make total runway length from 1350 M x 30 M to 3115 M x 45 and strengthening of existing runway to cater for the strength of Code 'C' critical aircraft A-321.
 - b. Existing Runway width to be increased from 30m to 45 m by constructing 7.5m wide pavement on either side of centre line of runway.

- c. Provision of 60 M x 60 M Blast Pad at Runway 10 and Runway 28. Construction of 90 M x 240 M RESA at both the ends of Runway strip of Runway 10/28.
- d. Construction of centrally air-conditioned Domestic Terminal Building having an area of 10,800 sqm capable of handling 600 PAX (300 ARR PAX.+300 DEP PAX) peak hour passengers with all modern facilities and amenities (with provision of three number aerobridges). The building provided with aesthetically appealing and soothing interior decoration matching the modern structure. Adoption of GRIHA measures in the design and consideration of the project to achieve the 4-star rating under GRIHA V-2015.
- e. Provision of 23m wide Link Taxi Track of length 344 m (195+149) with 3.5 m shoulder at both sides as well as required fillets, from Runway to Apron to cater for Code-C aircraft (A-321)
- f. Provision of 23 m wide and 1573 m long part Parallel Taxi Track with 3.5 m shoulder at both sides as well as required fillets to cater for Code-C aircraft (A-321)
- g. Provision of 23 m wide and 149 m long Link Taxi Track from Runway to Parallel Taxi-Track with 3.5 m shoulder on both sides as well as required fillets to cater for Code - C aircraft (A- 321).
- h. Provision of Apron of size 191m X 89m for parking aircraft 5 nos. Code-C aircraft (A-321) aircraft in power-in and power-out configuration with 20m wide GSE Area.
- i. New Isolation Bay of 76 m X 91 m with 3.5 m wide shoulder and provision of 23 m wide link taxi track of length 244.5 m long Link Taxi Track to Isolation Bay with 3.5m shoulder on both sides as well as required fillets to cater for Code - C aircraft (A- 321).
- j. Construction of 6 Nos of Security hut/Watch Tower-along the perimeter Boundary Wall at newly acquired land.
- k. Other allied Works including Electrical Work, CNS Works, IT & Airports Systems Works, etc.
- ix. Land available for the operation of existing airport is about 188.56 acres (76.31 ha). About 600.97 acres (243.21 ha) of additional land free from all encumbrances has already been handed over by State Govt. for the proposed development activities. The site for the proposed development activities and allied works is free from vegetation and buildings.
- x. Existing Tuticorin Airport falls in Orange Category and has valid Consent to Operate vide order No.2105129311466 dated 11.01.2021 under Water (Prevention and Control of Pollution) Act 1974 and Consent to Operate No.2105229311466 dated 11.01.2021 under Air (Prevention and Control of Pollution) Act, 1981 from Tamil Nadu Pollution Control Board. Consent to Operate is valid till 31.03.2022.
- xi. The existing airport has fire safety certificate from Fire Department.
- xii. During the construction phase of the expansion project, approx. 30-40 KLD water will be required depending upon the type of construction activities. The water requirement will be met through private tanker suppliers by contractors.

- xiii. Total water requirement for domestic use, HVAC, Toilet flushing and green belt development will be approx. 465 KLD and same shall be met through 235 KLD fresh water from Tamil Nadu Water Supply and Drainage Board (TWAD) water supply. About 243 KLD of wastewater will be generated from Tuticorin Airport after proposed development, which will be treated in Moving Bed Bio film Reactor (MBBR) type Sewage Treatment Plant (STP) of capacity 250 KLD and 230 KLD of treated water generated will be reused for greenery development, toilet flushing and HVAC make-up. No wastewater will be discharged outside the Tuticorin Airport premises. Toilet wastes and sewage collected from aircrafts will also be treated in the STP.
- xiv. About 500 kg per day municipal solid waste will be generated during operation of the airport including waste generated from shops/eateries / office of airport premises and deplane waste generated from aircraft. The same will be collected, segregated and managed by external agency for disposal as per Solid Waste Management Rules, 2016.
- xv. Total power requirement for the proposed development of Tuticorin Airport will be 3000 KVA. There will be power backup through 3 No of DG sets of capacity of 1250 KVA & 2 No of DG sets of 625 KVA to be used in case of power cut or failure.
- xvi. Renewable source of energy in the form of solar is proposed as per ECBC, 2017 as 5% of connected load of 3000 KVA i.e. 500 KW solar PV power plant will be established to generate solar power.
- xvii. Car parking will be provided for 135 cars, VIP parking for 10 cars, taxi parking and coach parking.
- xviii. 140 rainwater recharge pits will be constructed during expansion.
- xix. Green belt/plantation is proposed on 18211 sqm area at the Tuticorin Airport and open area will be covered with landscaping and grasses. It is proposed to plant 1500 trees sapling at the Tuticorin airport. In addition, shrubs will also be planted as part of landscaping. Tree cutting is not envisaged for the project.
- xx. Project is not located in a Critically Polluted area.
- xxi. The project is not located within 10 km of Eco Sensitive Zone. NBWL Clearance is not required.
- xxii. Forest Clearance is not required.
- xxiii. No Court Case is pending against the project.
- xxiv. The cost of proposed development of Tuticorin Airport is estimated as ₹380.87 Crores.
- xxv. Expected timeline for completion of the project: The construction will be completed in approximately approx. 24–36 months' time.
- xxvi. Employment potential: It is expected to generate about 200 direct and 500 indirect employment during construction phase and 200 direct and 1000 indirect employment during operational phase of the proposed project. Local workers will be hired from the nearby areas by the contractors.
- xxvii. Benefits of the project: Better infrastructure facilities to the passenger at new terminal building; More parking facilities for aircrafts and safe taxiing; Increase in regional economy as it will boost tourism and commercial activities in the region; Generation of more revenue to the

state, hence more development of the region; Boost in tourism and more people to travel in the state; Employment opportunity to people; More business and industrial opportunities.

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

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

- i. Construction site should be adequately barricaded before the construction begins.
- ii. Where construction activity is likely to cause noise nuisance to nearby residents, restrict operation hours between 7 am to 6 pm.
- iii. Hazard Identification and Risk Assessment for the project shall be carried out and adequate mitigation measures shall be adopted to ensure that all safety issues are addressed. The documentation shall be reviewed periodically and shall be submitted to the regional office along with six-monthly compliance report.
- iv. 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.
- v. 500 KW solar PV power plant shall be established as proposed.
- vi. Rainwater harvesting shall be done from roof top area and 140 rainwater recharge pits shall be constructed during expansion as proposed. Rain water harvesting structures shall conform to CGWA designs. Before recharging the surface run off, pre-treatment must be done to remove suspended matter, oil and grease.
- vii. A certificate from the competent authority/agency handling municipal solid wastes should be obtained, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project.
- viii. Fresh water requirement from local authority shall not exceed 235 KLD during operational phase. As committed, no groundwater

abstraction shall be done during construction as well as operation phase of the project.

- ix. As proposed, waste water shall be treated in an onsite STP of total 250 KLD capacity. At-least 230 KLD treated water from the STP shall be recycled and re-used for gardening, flushing etc. There shall be no discharge of treated water from the project as proposed.
- x. 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.
- xi. Area for greenery shall be provided as per the details provided in the project document i.e., area under plantation/greenery will be 18211 sqm. The landscape planning should include plantation of atleast 1500 tree saplings of native species as committed.
- xii. PP shall explore the use of non-ozone depleting substances in air conditioning systems.
- xiii. The PP shall also provide electric charging points in the parking areas for e-vehicles as committed.
- xiv. The Environmental Clearance to the project is primarily under provisions of EIA Notification, 2006. The Project Proponent is under obligation to obtain approvals/clearances under any other Acts/Regulations or Statutes as applicable to the project.

AGENDA ITEM No. 65.3.3

Development of Warehouse Complex with built up area of 37849.339 sqm at Khera Kalan Road, Village- Nangli Puna, Zone-P-1, Tehsil Narela (Sub-city), District - Northwest Delhi, Delhi by M/s Anant Raj Limited- Environmental Clearance.

(IA/DL/MIS/209183/2021; F. No. 21-41/2021-IA-III)

1. The PP (M/s. Anant Raj Limited) along with his consultant 'M/s. Perfect Enviro Solutions Pvt. Ltd.' made a presentation before EAC (Infra-2) on the key parameters and salient features of the project. The Committee took note of the following key parameters and salient features of the project presented during the meeting and as provided in the brief and application for this project:

- i. The project is located at Khasra nos. 22//3/3, 4, 5/2, 6/1, 8/1, 14, 15/1, 16/2, 17, 24, 26, 27//3, 4/2, 7/2, 22//6/2, 7, Khera Kalan Road, Village- Nangli Puna, Zone-P-1, Tehsil Narela (Sub-city), Northwest District, Delhi with coordinates- 28°46'24.01" N Latitude & - 77° 8'12.15" E Longitude.

- ii. The project is new.
- iii. The proposed Warehouse complex will have offices and storage activities for Consumable household goods. There will be no chemical storage (hazardous as per MSIHC rules) within the proposed warehouse complex.
- iv. The total plot area of the project is 32374.88 sqm. Ground Coverage of the project will be 12,949.57sqm. The total FAR Area proposed for the project will be 25,899.146 sqm. The proposed office area will be 4214.66 sqm and the Non Far area will be 11,950.193sqm. Hence the total built-up area of the project will be 37849.339 sqm. The maximum no. of floors will be G+1. The maximum height of the building will be 15 m. The details of the building are as follows:

PARTICULARS	UNIT	DETAILS
Total Plot Area	sqm	32374.88 (8 Acres)
Net Plot Area	sqm	31902.561
Cost of Project	Crore	29
GROUND COVERAGE		
Ground Coverage Permissible	sqm	12,949.95
Ground Coverage Proposed	sqm	12,949.57
FAR AREA		
FAR permissible	sqm	25,899.904
Permissible office area (25% of Permissible FAR)	sqm	6,474.98
FAR Proposed Area	sqm	25,899.146
Proposed office area	sqm	4,214.66
NON-FAR AREA	sqm	11950.193
Built-up Area	sqm	37849.339
Green Area	sqm	6,539.000
Other Open and Road Areas	sqm	1,229.008
No. of Floors	No.	G+1
No. of buildings/Blocks	No.	2
Basement levels	No.	1
Height of building	m	15
Population		
Warehouse area		
Warehouse Head	No.	1
QC inspector	No.	3
Staff	No.	600
Office area		
Staff	No.	337
Visitors	No.	84
Total population	No.	1025
Source of Electricity	-	TPDDL

Total Power Load	KW	1893
No. of DG Sets	kVA	1x 500 & 1x 750
Rainwater Harvesting Pits	No.	8
Parking Required	ECS	738
Parking proposed	ECS	742
Source of Water	-	Delhi Jal Board
Total water Requirement	KLD	76
Fresh water Requirement	KLD	24
Treated water Requirement	KLD	52 (38 KLD In house treated & 14 KLD outsourced from nearby STP)
Waste water Generation	KLD	42
STP Capacity	KLD	50
Total Solid waste generation	kg/day	154

- v. Total water requirement during construction phase is 15 KLD. For domestic use, 5 KLD water will be sourced through tankers.
- vi. Total water requirement for the warehouse during operational phase will be 76 KLD out of which the freshwater requirement will be 24 KLD and source of water will be Delhi Jal Board. Total wastewater generated from the warehouse building will be 42 KLD which will be treated in a well-designed STP of capacity 50 KLD using MBBR technology. Total treated water from onsite STP i.e. 38 KLD and 14 KLD treated water outsourced from nearby STP will be reused in flushing, gardening, cooling & misc. purposes within the project premises. It will be a zero-discharge unit.
- vii. 154 kg/day of solid waste shall be generated out of which biodegradable waste will be 62 kg/day, which will be treated in Organic Waste Convertor and converted to manure and rest recyclable waste of 92 kg/day will be given to the approved vendor. 15 lit/month used oil generated from diesel generators will be carefully stored in HDPE drums in isolated covered facilities and will be sold to the authorized recycler. About 0.1-1.0 kg/month E-waste will be generated. It will be given to the approved recycler of SPCB. Battery waste shall be generated from inverters & UPS which shall be disposed off as per the Batteries (Management & Handling) Rules, 2001.
- viii. The proposed land has two godowns with built up area 668.883 sqm, which will be demolished for construction of a new warehouse. Construction and Demolition (C&D) waste generated will be used for flooring & backfilling in roads.
- ix. The total power requirement of the project will be 1893 KW which will be met by the Tata Power Delhi Distribution Limited (TPDDL). DG sets of capacity 1 x 500 KVA & 1 x 750 KVA will be installed as power backup for common utilities during power failure. Adequate stack height of 19.5 m & 20.5m from roof level respectively will be maintained which will help in reducing the air pollution.

- x. 8 no. of Rain Water harvesting pits will be provided in the project site.
- xi. The total parking provision will be 742 ECS. 20% of parking provision i.e. 150 ECS will be provided for electric vehicles.
- xii. 189.3 KW i.e. 10% of the total power requirement shall be met through solar power.
- xiii. The project falls in a critically polluted area (Wazirpur Industrial Area 8.54 Km SSE).
- xiv. The project is not located with 10 km of Eco Sensitive Zone. NBWL Clearance is not required.
- xv. Forest Clearance is not required.
- xvi. No Court Case is pending against the project.
- xvii. Total capital cost towards EMP will be ₹178 lakhs and recurring cost will be ₹10 lakhs per year.
- xviii. Green area of 6,539 sqm will be developed within the project site and 425 trees are proposed to be planted. No tree cutting is envisaged for the project.
- xix. Expected timeline for completion of the project: 2 years
- xx. Investment/Cost of the project: Total cost of the project will be ₹29 crores.
- xxi. Employment potential: Approx. 100 labourers will be hired during the construction phase and during the operation phase about 941 employment opportunities will be generated.
- xxii. Benefits of the project: The proposed project is a Warehouse Complex and local people will work in the warehouse. The employment will have a positive impact on the status of income.

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

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

- i. Fresh water requirement from local authority shall not exceed 24 KLD during operational phase. As committed, no groundwater abstraction shall be done during construction as well as operation phase of the project.
- ii. As proposed, waste water shall be treated in onsite STP of 50 KLD capacity. Atleast 38 KLD of treated water from onsite STP shall be recycled and reused along with 14 KLD treated water from nearby STP for flushing, gardening cooling and misc. purposes. There shall be no discharge of treated water from the project as proposed.

- iii. Adequate pre-treatment shall be provided before use of treated water outsourced from nearby STP.
- iv. The project proponents would commission a third-party study on the implementation of conditions related to quality and quantity of recycle and reuse of treated water, efficiency of treatment systems, quality of treated water being supplied for flushing (specially the bacterial counts), comparative bacteriological studies from toilet seats using recycled treated waters and fresh waters for flushing, and quality of water being supplied through spray faucets attached to toilet seats.
- v. Area for greenery shall be provided as per the details provided in the project document i.e., area under plantation/greenery will be 6,539 sqm. The landscape planning should include plantation of native species. As proposed, at least 425 trees to be maintained within the premises during the operation phase of the project. A minimum of 01 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.
- vi. The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. As proposed, 8 RWH pits shall be provided for harvesting after filtration.
- vii. The solid waste shall be duly segregated into biodegradable and non-biodegradable components and handled in separate area earmarked for segregation of solid waste. As committed, biodegradable waste shall be composted by use of Composter. Inert waste shall be dumped to authorized site. The recyclable waste shall be sold to resellers. Construction & Demolition waste shall be segregated and managed as per C&D Waste Management Rules, 2016.
- viii. A detailed traffic management and traffic decongestion plan shall be drawn and implemented to ensure that the service of the roads near project site may not get adversely impacted after the implementation of the project. The plan should stipulate, inter-alia, the path and appropriate time for the movement of vehicles to and from site. The Plan shall be vetted by concerned agency in the State Govt.
- ix. No honking zone shall be maintained as committed.
- x. Anti-Smog gun shall be provided to curb air pollution during construction phase.
- xi. The PP shall also provide electric charging points in the parking areas for 150 e-vehicles as committed.
- xii. Atleast 189.3 KW i.e. 10% of the total power requirement shall be met through solar power as committed.
- xiii. The Environmental Clearance to the project is primarily under provisions of EIA Notification, 2006. The Project Proponent is under obligation to obtain approvals/clearances under any other Acts/Regulations or Statutes as applicable to the project.

AGENDA ITEM NO. 65.3.4**Development of Warehouse Complex with built up area of 105250.375 sqm at Khera Kalan Road, Village Nangli Puna, Tehsil- Narela (Sub-city), District- Northwest Delhi, Delhi by M/s GoodLuck Buildtech Private Limited& Others - Environmental Clearance****(IA/DL/MIS/209733/2021; F. No. 21-42/2021-IA-III)**

1. The PP (M/s GoodLuck Buildtech Private Limited & Others) along with his consultant 'M/s. Perfect Enviro Solutions Pvt. Ltd.' made a presentation before EAC (Infra-2) on the key parameters and salient features of the project. The Committee took note of the following key parameters and salient features of the project presented during the meeting and as provided in the brief and application for this project:

- i. The project is located at khasra nos.28//23 Min.,42//3 Min.,28//16,17,18,23 Min.,24, 42//3 Min.,4,7,14,17,28//3,4 10//25/2, 23//11/1,11/2, 12, 19, 20, 21, 22, 23, 24//4, 5/1,6 Min.,7, 15, 16,25, 25//5/1,at village Nangli Puna, Khera Kalan, North West District, Delhi with coordinates 28°46'24.03"N Latitude and 77° 7'50.86"E Longitude.
- ii. The project is new.
- iii. The total plot area of the project is 89,150.819 sqm. Ground Coverage of the project will be 33,660.298 sqm. The total FAR Area proposed for the project will be 70,812.828 sqm. The Proposed office area will be 17,314.19 sqm and the Non-FAR area will be 34,437.547 sqm. Hence the total built-up area of the project will be 1,05,250.375 sqm. The maximum no. of floors will be G+2. The maximum height of the building will be 15 m. The details of the building are as follows:

PARTICULARS	UNIT	DETAILS
Total Plot Area	sqm	89,150.819 (22Acres)
Net Plot Area	sqm	88624.819
Cost of Project	Crore	60
GROUND COVERAGE		
Ground Coverage Permissible	sqm	35,449.93
Ground Coverage Proposed	sqm	33,660.298
FAR AREA		
FAR permissible	sqm	25,899.904
Permissible office area (25% of Permissible FAR)	sqm	17,724.96
FAR Proposed Area	sqm	70,812.828
Proposed office area	sqm	17,314.19
NON-FAR AREA	sqm	34,437.547
Built-up Area	sqm	105,250.375
Green Area	sqm	13,763.434

Other Open and Road Areas	sqm	11,070.808
No. of Floors	No.	G+2
No. of buildings/ Blocks	No.	2
Basement Levels	No.	1
Height of building	m	15
Total Population		
Warehouse area		
Warehouse Head	No.	1
QC inspector	No.	3
Staff	No.	1800
Office area		
Staff	No.	1385
Visitors	No.	346
Total population	No.	3535
Source of Electricity	-	TPDDL
Total Power Load	KW	3541
No. of DG Sets	kVA	1 x 500, 3 x 750
Rainwater Harvesting Pits	No.	20
Parking Required	ECS	1967
Parking proposed	ECS	2131
Source of Water	-	Delhi Jal Board
Total water Requirement	KLD	203
Fresh water Requirement	KLD	46
Treated water Requirement	KLD	157 KLD (136 KLD from onsite STP and 21 KLD from nearby STP)
Waste water Generation	KLD	143
STP Capacity	KLD	165
Total Solid waste generation	kg/day	530

- iv. Nearby STP treated water will be used during the construction phase and tanker water for drinking purposes.
- v. During operational phase, total water requirement for the warehouse will be 203 KLD out of which the freshwater requirement will be 46 KLD. The ultimate source of water will be Delhi Jal Board. Total wastewater generated from the warehouse building will be 143 KLD which will be treated in a well-designed STP of capacity 165 KLD. Total 157 KLD treated water (136 KLD treated water from onsite STP and 21 KLD treated water outsourced from nearby STP) will be reused in flushing, gardening, cooling & misc. purposes within the project premises. It will be a zero-discharge unit.
- vi. 530 kg/day of solid waste shall be generated out of which biodegradable waste will be 212 kg/day, which will be treated in Organic Waste Converter and converted to manure and rest recyclable waste of 318 kg/day will be given to the approved vendor. 31 lit./month used oil generated from diesel generators will be carefully stored in HDPE drums in isolated covered facilities and will be sold to

the authorized recycler. About 4-5 kg/month E-waste will be generated. It will be given to the approved recycler of CPCB. Battery waste shall be generated from inverters & UPS which shall be disposed off as per the Batteries (Management & Handling) Rules, 2001.

- vii. The proposed land has 4 no. of godowns with built-up area of 1086.95sqm which will be demolished. The debris of construction material will be used in backfilling; roads etc. & rest will be disposed off as per C&D Waste Management Rules, 2016.
- viii. The total power requirement of the project will be 3541 KW which will be met by the Tata Power Delhi Distribution limited (TPDDL). DG sets of capacity 1 x 500 KVA & 3 x 750 KVA will be installed as power backup for common utilities during power failure. Adequate stack height of 30 m from roof level respectively will be maintained which will help in reducing the air pollution.
- ix. 20 no. of Rain Water harvesting pits will be provided in the project site.
- x. The total parking provision will be 2131 ECS. Atleast 20% of parking provision i.e. 430 ECS will be provided for electric vehicles.
- xi. 10% (354.1KW) of the total power requirement shall be met through solar power.
- xii. The project falls in a critically polluted area (Wazirpur Industrial Area 8.54 Km SSE).
- xiii. The project is not located with 10 km of Eco Sensitive Zone. NBWL Clearance is not required.
- xiv. Forest Clearance is not required.
- xv. No Court Case is pending against the project.
- xvi. Total capital cost towards EMP will be ₹188 lakhs and recurring cost will be ₹13.7 lakhs per year.
- xvii. Total Green area 13,763.434sqmand 1115 no. of trees proposed to be developed in green belt within the project site.
- xviii. Expected timeline for completion of the project: 2 years.
- xix. Investment/Cost of the project: Total cost of the project will be ₹60 crores.
- xx. Employment potential: Approx. 150 labourers will be hired during the construction phase and during the operation phase about 1800 employment opportunities will be generated.
- xxi. Benefits of the project: There will be increased revenue generation in the project area and hence, it shall increase socio-economic conditions in the area. It will provide employment to the people during the construction and operation phase directly & indirectly. Energy efficient building material during the construction stage and operation stage shall be maintained which ultimately leads to lesser demands and reducing carbon footprints of the project.

2. The EAC also noted that the project/activity is covered under category 'B' of item 8(a) 'Building and Construction projects' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires

appraisal at State level. However, due to non-existence of SEIAA in Delhi, the proposal required appraisal at Central level by sectoral EAC.

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

- i. Fresh water requirement from local authority shall not exceed 46 KLD during operational phase. As committed, no groundwater abstraction shall be done during construction as well as operation phase of the project.
- ii. As proposed, waste water shall be treated in onsite STP of 165 KLD capacity. Atleast 136 KLD of treated water from onsite STP shall be recycled and reused along with 21 KLD treated water from nearby STP for flushing, gardening cooling and misc. purposes. There shall be no discharge of treated water from the project as proposed.
- iii. Adequate pre-treatment shall be provided before use of treated water outsourced from nearby STP.
- iv. The project proponents would commission a third-party study on the implementation of conditions related to quality and quantity of recycle and reuse of treated water, efficiency of treatment systems, quality of treated water being supplied for flushing (specially the bacterial counts), comparative bacteriological studies from toilet seats using recycled treated waters and fresh waters for flushing, and quality of water being supplied through spray faucets attached to toilet seats.
- v. Area for greenery shall be provided as per the details provided in the project document i.e. area under plantation/greenery will be 13,763.434sqm. The landscape planning should include plantation of native species. As proposed, at least 1115 trees to be maintained within the premises during the operation phase of the project. A minimum of 01 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.
- vi. The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. As proposed, 20 RWH pits shall be provided for harvesting after filtration.
- vii. The solid waste shall be duly segregated into biodegradable and non-biodegradable components and handled in separate area earmarked for segregation of solid waste. As committed, biodegradable waste shall be composted by use of Composter. Inert waste shall be dumped to authorized site. The recyclable waste shall be sold to resellers.

- Construction & Demolition waste shall be segregated and managed as per C&D Waste Management Rules, 2016.
- viii. A detailed traffic management and traffic decongestion plan shall be drawn and implemented to ensure that the service of the roads near project site may not get adversely impacted after the implementation of the project. The plan should stipulate, inter-alia, the path and appropriate time for the movement of vehicles to and from site. The Plan shall be vetted by concerned agency in the State Govt.
 - ix. No honking zone shall be maintained as committed.
 - x. Anti-Smog gun shall be provided to curb air pollution during construction phase.
 - xi. The PP shall also provide electric charging points in the parking areas for 430 e-vehicles as committed.
 - xii. Atleast 354.1 KW i.e. 10% of the total power requirement shall be met through solar power as committed.
 - xiii. The Environmental Clearance to the project is primarily under provisions of EIA Notification, 2006. The Project Proponent is under obligation to obtain approvals/clearances under any other Acts/Regulations or Statutes as applicable to the project.

AGENDA ITEM 65.3.5

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

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

1. The EAC noted that the proposal was earlier examined in its 62nd meeting held on 1st March, 2021. The PP was asked for following additional information:

- i. Status of existing facility in terms of operating capacity of compost plant and sanitary landfill on which EC was granted.
- ii. Distribution of MSW in existing compost plant with proposed RDF based waste to energy plant.

2. The proposal was deferred during the 64th meeting of EAC Infra 2 held during 12-13 April, 2021 as the Project Proponent expressed inability to attend the meeting due to being affected by COVID-19 vide letter dated 08.04.2021.

3. The PP (M/s. Dehradun Waste Management Private Limited (DWMPL)) along with his consultant 'M/s. Ramky Enviro Services Pvt. Ltd.' made a presentation and provided the following information:

- i. Information with regard to Auxiliary Fuel to Boiler- LDO/HSD will be used only during first ever commissioning for refractory dry out and

- alkali boil cleansing of the boiler only. Thereafter, there will no usage of any auxiliary fossil fuel during operation.
- ii. Status of Existing facility in terms of operating capacity of Compost plant and sanitary landfill for which EC is granted - EC (F.No.10-62/2011-IA.III) was granted by MoEF&CC on 8th December 2014 to Nagar Nigam for setting up 290 TPD of MSW Processing plant with 50 TPD of SLF and 150 TPD of Compost processing. Presently, the plant is operating at 340 TPD (Average) of MSW giving rise to 150 TPD of RDF, 18 TPD of Compost and 22 TPD to SLF as per the average operating data of last 12 months.
 - iii. Distribution of MSW in existing compost plant with Proposed RDF based WTE plant - The capacity of RDF based WTE plant will make use of all the RDF being generated currently namely 150 TPD which will give rise to 25 TPD of bottom ash that can be recycled and 3 TPD of Fly ash which will be disposed to SLF.
 - iv. CPCB Industry categorization 2016 is not applicable in Doon valley. As per CPCB directions dated April 30th, 2020, this activity classified as special category project as these are parts of pollution control facility.
 - v. As per the Doon valley Notification 1989, these activity falls under the Orange category, that can be permitted in the Doon valley.
 - vi. The proposed RDF based Waste to Energy with the capacity of 6 MW and it is proposed at the existing landfill site and it is standalone activities the stand alone activities which are proposed at existing facility, they do not attract the provisions of the EIA notification, 2006, which is also confirmed by MoEF&CC through its letter no. DO.22-19/2017/IA-III dated 3rd July, 2017 regardless to its category.
 - vii. The proposed RDF Based Waste to Energy Plant capacity is below 15 MW only. As per notification dated, 25th June 2014 by MOEF&CC, projects with capacity of < 15 MW are exempt from the Environmental Clearance.

4. The EAC noted that the project/activity under consideration i.e., RDF based Waste to Energy Plant of 6MW capacity, is exempted from the EC process as per the condition (i) specified in item 1(d) 'Thermal Power Plants' of the Schedule to the EIA Notification, 2006 and its subsequent amendments. However, the project/activity under consideration is proposed to be situated within the premises of an existing facility which is covered under Category B of item 7(i) Common Municipal Solid Waste Management Facility (CMSWMF) of the Schedule to the EIA Notification, 2006 and its subsequent amendments. Also, due to the project being located at a distance of less than 5 km from the boundaries of Doon Valley Eco Sensitive Area, General Condition is applicable.

5. Taking above factors into consideration, the EAC was of the opinion that due to eco sensitive nature of the project location, it is necessary to appraise the environmental impacts of the project and therefore exemption from Environmental Clearance is not applicable in this case. As such, the project may be considered for appraisal under Expansion/Modernization of

existing facility which is covered under item 7(i) Common Municipal Solid Waste Management Facility (CMSWMF) of the Schedule to the EIA Notification, 2006 and its subsequent amendments. As General Condition is applicable, the project comes under Category 'A' and requires appraisal at the central level by sectoral EAC.

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

- i. Details of characterization of municipal solid waste, waste management plan specifying its segregation process and disposal shall be submitted along with EIA.
- ii. Layout plan indicating break-up of plant area, ash pond, green belt, infrastructure, roads etc. shall be provided.
- iii. Latest compliance report duly certified by the Regional Office of MoEF&CC for the conditions stipulated in the environmental clearances of the previous phase(s) for the expansion projects shall be submitted.
- iv. Executive summary of the project indicating relevant details along with recent photographs of the proposed site (s) shall be provided. Response to the issues raised during Public Hearing and the written representations (if any), along with a time bound Action Plan and budgetary allocations to address the same, shall be provided in a tabular form, against each action proposed.
- v. The geographical coordinates (WGS 84) of the proposed site (plant boundary), including location of ash pond along with topo sheet (1:50,000 scale) and IRS satellite map of the area, shall be submitted. Elevation of plant site and ash pond with respect to HFL of water body/nallah/River and high tide level from the sea shall be specified, if the site is located in proximity to them.
- vi. Satellite imagery and authenticated topo sheet indicating drainage, cropping pattern, water bodies (wetland, river system, stream, nallahs, ponds etc.), location of nearest habitations (villages), creeks, mangroves, rivers, reservoirs etc. in the study area shall be provided.
- vii. Location of any National Park, Sanctuary, Elephant/Tiger Reserve (existing as well as proposed), migratory routes/wildlife corridor, if any, within 10 km of the project site shall be specified and marked on the map duly authenticated by the Chief Wildlife Warden of the State or an officer authorized by them.
- viii. Topography of the study area supported by toposheet on 1:50,000 scale of Survey of India, along with a large scale map preferably of 1:25,000 scale and the specific information whether the site requires any filling shall be provided. In that case, details of filling, quantity of required fill material; its source, transportation etc. shall be submitted.

- ix. It shall also be ensured that a minimum of 500 m distance of plant boundary is kept from the HFL of river system/streams etc. and the boundary of site should also be located 500 m away from railway track and National Highways.
- x. Detailed Studies on the impacts of the ecology including fisheries of the River due to the proposed withdrawal of water/discharge of treated wastewater into the River shall be carried out and submitted along with the EIA Report.
- xi. Hydro-geological study of the area shall be carried out through an institute/organization of repute to assess the impact on ground and surface water regimes. Specific mitigation measures shall be spelt out and time bound Action Plan for its implementation shall be submitted.
- xii. Assessment of occupational health and endemic diseases of environmental origin in the study area shall be carried out and Action Plan to mitigate the same shall be prepared.
- xiii. Occupational health and safety measures for the workers including identification of work related health hazards shall be formulated. The company shall engage full time qualified doctors who are trained in occupational health. Health monitoring of the workers shall be conducted at periodic intervals and health records maintained. Awareness programme for workers due to likely adverse impact on their health due to working in non-conductive environment shall be carried out and precautionary measures like use of personal equipments etc. shall be provided. Review of impact of various health measures undertaken at intervals of two to three years shall be conducted with an excellent follow up plan of action wherever required.
- xiv. One complete season site specific meteorological and AAQ data (except monsoon season) as per latest MoEF&CC Notification shall be collected and the dates of monitoring shall be recorded. The parameters to be covered for AAQ shall include PM₁₀, PM_{2.5}, SO₂, NO_x, CO and Hg. The location of the monitoring stations should be so decided so as to take into consideration the upwind direction, pre-dominant downwind direction, other dominant directions, habitation and sensitive receptors. There should be at least one monitoring station each in the upwind and in the pre - dominant downwind direction at a location where maximum ground level concentration is likely to occur.
- xv. Cumulative impacts of all sources of emissions including handling and transportation of existing and proposed projects on the environment of the area shall be assessed in detail. Details of the Model used and the input data used for modelling shall also be provided. The air quality contours should be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any. The wind rose and isopleths should also be shown on the location map. The cumulative study should also include impacts on water, soil and socio-economics.

- xvi. Fuel analysis shall be provided. Details of auxiliary fuel, if any, including its quantity, quality, storage etc should also be furnished.
- xvii. Details regarding infrastructure facilities such as sanitation, fuel, restrooms, medical facilities, safety during construction phase etc. to be provided to the labour force during construction as well as to the casual workers including truck drivers during operation phase should be adequately catered for and details furnished
- xviii. EMP to mitigate the adverse impacts due to the project along with item - wise cost of its implementation in a time bound manner shall be specified.
- xix. A Disaster Management Plan (DMP) along with risk assessment study including fire and explosion issues due to storage and use of fuel should be carried out. It should take into account the maximum inventory of storage at site at any point of time. The risk contours should be plotted on the plant layout map clearly showing which of the proposed activities would be affected in case of an accident taking place. Based on the same, proposed safeguard measures should be provided. Measures to guard against fire hazards should also be invariably provided. Mock drills shall be suitably carried out from time to time to check the efficiency of the plans drawn.
- xx. The DMP so formulated shall include measures against likely Fires/Tsunami/Cyclones/Storm Surges/Earthquakes etc., as applicable. It shall be ensured that DMP consists of both On-site and Off-site plans, complete with details of containing likely disaster and shall specifically mention personnel identified for the task. Smaller version of the plan for different possible disasters shall be prepared both in English and local languages and circulated widely.
- xxi. Detailed scheme for raising green belt of native species of appropriate width (50-100 m) and consisting of at least 3 tiers around plant boundary with tree density of 2000 to 2500 trees per ha with a good survival rate of around 80% shall be submitted. Photographic evidence must be created and submitted periodically including NRSA reports in case of expansion projects. A shrub layer beneath tree layer would serve as an effective sieve for dust and sink for CO₂ and other gaseous pollutants and hence a stratified green belt should be developed.
- xxii. Details of litigation pending or otherwise with respect to project in any Court, Tribunal etc. shall invariably be furnished.

AGENDA ITEM NO. 65.3.6

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 - Reconsideration for Environmental Clearance.

(IA/DL/MIS/193020/2020; F.No. 21-47/2020-IA-III)

1. The EAC noted that the proposal was earlier examined in its 63rd Meeting held on 19th March, 2021. The PP was asked for following additional information:

- i. To revise the EIA report w.r.t errors/inconsistencies and also in terms of proper assessment of air pollution modelling w.r.t incremental impact.
- ii. To prepare the site-specific action plan for air pollution control synchronized with graded action plan of air pollution in NCR.
- iii. To prepare water management plan to follow the best conservation practices during construction and post construction stages.

2. The EAC asked PP to provide the aforesaid information. The PP (M/s. Dr. B. R. Ambedkar University Delhi) along with his consultant 'M/s. Atmos Sustainable Solutions Pvt. Ltd.' made a presentation and provided the following information:

- i. All the corrections have been incorporated in EIA Report. Assessment of air pollution modelling w.r.t. incremental impact is as follows. For the proposed project, DG sets of capacity 2500kVA provides back up of electricity supply during power failure for ESS-1 and similar capacity of 2500 kVA will be used for ESS-2. The DG sets causes emission of HC + NO_x, CO, PM₁₀ & PM_{2.5} in the Ambient Air Quality which has wide health impact. Low Sulphur diesel will be used as fuel to minimize SO₂ emission. An adequate stack height of 108m is fitted with D.G. sets supplying backup for the proposed project as per the stipulated guidelines of Central Pollution Control Board (CPCB)/National Building Code Manual to facilitate proper dispersion of pollutants at longer distance and to minimize the impact on Ambient Air Quality under the influence of local meteorology.
- ii. Site-specific action plan for air pollution control synchronized with graded action plan of air pollution in NCR has been prepared and submitted.
- iii. Water management plan to follow the best conservation practices during construction and post construction stages involving awareness programs, use of water saving devices, dual plumbing system, rain water harvesting etc. has been prepared and submitted.

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

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

- i. Fresh water requirement from local authority shall not exceed 732 KLD during operational phase. As committed, no groundwater abstraction shall be done during construction as well as operation phase of the project.
- ii. Adequate pre-treatment shall be provided before use of treated water outsourced from nearby STP during construction phase.
- iii. As proposed, waste water shall be treated in onsite STP of 850 KLD capacity. Atleast 560 KLD of treated water from onsite STP shall be recycled and reused for flushing, gardening, DG and HVAC cooling and filter backwash. There shall be no discharge of treated water from the project as proposed.
- iv. The project proponents would commission a third-party study on the implementation of conditions related to quality and quantity of recycle and reuse of treated water, efficiency of treatment systems, quality of treated water being supplied for flushing (specially the bacterial counts), comparative bacteriological studies from toilet seats using recycled treated waters and fresh waters for flushing, and quality of water being supplied through spray faucets attached to toilet seats.
- v. Area for greenery shall be provided as per the details provided in the project document i.e., area under plantation/greenery will be 90,000 sqm. The landscape planning should include plantation of native species. As proposed, at least 1180 trees to be maintained within the premises during the operation phase of the project. A minimum of 01 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.
- vi. 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).
- vii. 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, 34 RWH pits shall be provided for harvesting after filtration.
- viii. The solid waste shall be duly segregated into biodegradable and non-biodegradable components and handled in separate area earmarked for segregation of solid waste. As committed, biodegradable waste

shall be composted by use of Composter. Inert waste shall be dumped to authorized site. The recyclable waste shall be sold to resellers. Construction & Demolition waste shall be segregated and managed as per C&D Waste Management Rules, 2016.

- ix. A detailed traffic management and traffic decongestion plan shall be drawn and implemented to ensure that the service of the roads near project site may not get adversely impacted after the implementation of the project. The plan should stipulate, inter-alia, the path and appropriate time for the movement of vehicles to and from site. The Plan shall be vetted by concerned agency in the State Govt.
- x. Project Proponent should install continuous online AAQ Monitoring station in the project area in consultation with Delhi Pollution Control Committee (DPCC) before the start of construction and demolition work. Online Monitoring should cover parameters e.g. PM₁₀, PM_{2.5} along with NO_x, SO_x, covering upwind and downwind directions during the construction period. Periodical monitoring of AAQ shall also be carried out through certified laboratory in order to validate the data. Data so generated should be displayed digitally on site for public display.
- xi. Noise barriers/acoustics of adequate efficiency shall be provided at each construction site during construction phase.
- xii. As committed, anti-smog guns shall be provided to curb air pollution during construction phase. Anti-smog towers/carbon towers shall be installed during operation phase as proposed.
- xiii. The workmen shall be provided with adequate PPE such as Safety shoes, helmets, masks, ear plugs etc. depending on the nature of the work.
- xiv. Air pollution management plan in the context of Graded Action Plan for Delhi & NCR shall be implemented as committed.
- xv. Project Proponent shall implement the use of non-ozone depleting substances in central air conditioning systems.
- xvi. Paints and coatings with low or no VOC content shall be used for interior wall and ceiling surface area to reduce adverse health impacts on building occupants.
- xvii. The PP shall provide electric charging points in the parking areas (preferably more than 5 at each building parking area) for e-vehicles as committed.
- xviii. Atleast 10% of the total power requirement shall be met through solar power as committed.
- xix. The Environmental Clearance to the project is primarily under provisions of EIA Notification, 2006. The Project Proponent is under obligation to obtain approvals/clearances under any other Acts/ Regulations or Statutes as applicable to the project.

AGENDA ITEM NO. 65.3.7

Expansion of Common Effluent Treatment plant (CETP) of capacity 9 MLD with addition of 100 KLD Spent Acid Neutralization Plant

(Existing) & 6 MLD Effluent Recycling and Reject Management System located at Bhiwadi, Rajasthan by M/s. Bhiwadi Jal Pradushan Nivaran Trust - Environmental Clearance

(IA/RJ/MIS/203733/2020; F. No. 21-35/2021-IA-III)

1. The PP (M/s. Bhiwadi Jal Pradushan Nivaran Trust) along with his consultant 'Grass Roots Research and Creation (P) Ltd.' made a presentation before EAC (Infra-2) on the key parameters and salient features of the project. The Committee took note of the following key parameters and salient features of the project presented during the meeting and as provided in the brief and application for this project:

- i. The project is located at Village-Bhiwadi Tehsil-Tijara District-Alwar, Rajasthan with coordinates 28°12'31.02" N Latitude and 76°49'45.65" E Longitude.
- ii. The proposal is an Expansion Project under Violation Category.
- iii. CETP of 6 MLD capacity was constructed by Rajasthan State Industrial Development and Investment Corporation (RIICO) in the year 2003-04 and therefore did not attract the requirement of prior EC as per EIA Notification, 2006. the present proposal is for the "Expansion of Common Effluent Treatment plant (CETP) to 9 MLD, with addition of 100 KLD Common Acid Treatment Plant and 6 MLD Reject Management System".
- iv. The project has been granted ToR Vide File No-10-67/2016-IA-III, dated 28.11.2016 and Draft EIA Report was submitted to SPCB on 01.11.2017 for conducting Public Hearing. Public Hearing was conducted on 22.03.2018 at Village Biwadi and Violation was identified during PH as it was found that the CETP was expanded to 9 MLD capacity with addition of 100 KLD Spent Acid Neutralization Plant (Existing) without the grant of EC from competent authority in 2016. Proposal was submitted under Violation Category to MoEF&CC Vide Proposal No-IA/RJ/MIS/74517/2018 on 13.04.2018 and subsequently, ToR was granted by MoEF&CC under Violation Vide File No-23-22/2019-IA-III on 29.10.2019.
- v. Final EIA/EMP report Submitted to MoEF&CC Vide Proposal No-IA/RJ/MIS/136726/2018 on 13.01.2020. Project was considered in 30th Expert Appraisal Committee Meeting (Violation) on 03.02.2020 and EAC returned the proposal in present form to seek amendment in ToR because in earlier granted ToR 6 MLD Effluent Recycling and Reject Management System was missing. Later, Amendment in Terms of Reference was issued vide no F. No. 23-22/2019-IA.III (V) dated 01.02.2021.
- vi. The project consists of Common Effluent Treatment plant (CETP) of capacity 9 MLD & 100 KLD Spent Acid Neutralization Plant & 6 MLD Effluent Recycling Plant (ERP). 9 MLD CETP and 100 KLD Spent Acid Neutralization Plant already exists at site and 6 MLD Effluent Recycling and Reject Management System has been proposed. Area provided for expansion of the project site is 11,600 sqm.

- vii. The total waste water discharged from RIICO Industrial Area Bhiwadi is being treated and pumped to the final destination by CETP Bhiwadi which is being operated by M/s. Bhiwadi Jal Pradushan Niwaran Association (BJPNA) and the cost for treatment is finally born by the Industrial units.
- viii. The industrial waste water is being treated up-to the tertiary level (PSF & ACF only) to meet the discharge standard stipulated by Rajasthan Pollution Control Board (RPCB). Bhiwadi Jal Pradushan Niwaran Association is proposing the expansion of existing CETP to recycle back the treated water to industrial units. The recycling of treated effluent can resolve the problem of water scarcity. Presently ground water is being supplied to the industrial units by tube wells for their industrial processes.
- ix. It is proposed to treat the treated effluent further in Ultra Filtration (UF) plant and RO Plant to achieve the quality equivalent to the water quality required in the industrial processes. The existing project of CETP has been upgraded by advance treatment technology by the application of Reactor Clarifier, Rapid Gravity sand filter & ultra-filtration followed by Reverse Osmosis Technology to be installed. The advanced treatment technology has been applied to improve the wastewater characteristics of mainly TDS to below 500 ppm. This finally treated water shall be recycled back to the industrial member units as raw water (Industrial grade water).
- x. 100 KLD water will be required during construction phase which will be met through private Tankers/STP treated water. Domestic water sourced is from private vendors and RO facility is provided at project. fresh water demand will be 200 KLD during operation phase. The total sewage generated during the operation phase of proposed project will be treated in soak pit followed by the septic tank. Treated water from the site will be recycled for landscaping, flushing and to water body.
- xi. Negligible amount of municipal solid waste will be generated which will be disposed as per the norms. ETP Sludge of approx 25,000 kg/day will be sent for land fill to Shree cement Beawar and Ultratech Kotputli. Spent oil of 500 litre per year will be generated a part will be used inside plant in oiling of machineries etc. and remaining will be send to authorized vendors of CPCB/SPCB.
- xii. Power requirement would be approx. 1000 KVA which will be supplied by Rajasthan State Electricity Board. In case of power failure D.G. Set will be used (2 X 500 KVA).
- xiii. Proposed to install 0.3 MW solar power plants at available space in existing CETP premises for captive use.
- xiv. Proposed storm water system consists of pipe drain, catch basins and seepage pits at regular intervals for rain water harvesting and ground water recharging.
- xv. 50 m wide greenbelt of approx. 3828 sqm area (33% of the 11600 sq m) will be maintained; considering 1 tree per 4 sqm and survival rate of 80%, approx. 700 trees and 500 shrubs are proposed to be planted in 5 years.
- xvi. The Public hearing had been conducted for the expansion of common

Effluent Treatment Plant (CETP) on 22nd March 2018 at 11:00 am, venue-U.I.T. meeting hall Bhiwadi, District- Alwar, State- Rajasthan.

xvii. Baseline data collection and analysis has been done for the study period March-May 2019.

xviii. Remediation Plan, Natural Resource Augmentation Plan and Community Resource Augmentation Plan with financial liabilities have been prepared corresponding to the ecological damage assessment and economic benefits derived due to violation. The budget allocated for the same are given as follows:

S. No.	Aspects	Budget (₹)
1	Total cost on remediation measures	10,75,000
2	Natural Resource Augmentation	2,25,000
3	Community Resource Augmentation	6,00,000
	Total	19,00,000

xix. As per the Ministry's Office Memorandum F. No. 22-65/2017-IA.III dated 1st May 2018, an amount of ₹159.62 Lakhs of the total project cost i.e. 15,962 Lakhs i.e. 1% of the total project cost, shall be earmarked under Corporate Environment Responsibility (CER).

xx. The project is not located in critically polluted area.

xxi. The project is not located with 10 km of Eco Sensitive Zone. NBWL Clearance is not required.

xxii. Forest Clearance is not required.

xxiii. No Court Case is pending against the project.

xxiv. Expected timeline for completion of the project is 12 Months.

xxv. Investment/Cost of the project is ₹159.62 crore.

xxvi. Employment potential is 50 persons.

xxvii. Benefits of the project: Proposed project will provide the direct and indirect employment to nearby area also solve the water pollution problem in the nearby area. CER budget will be spend for social activities in nearby areas.

2. The EAC noted that the project/activity is covered under category 'B' of item 7(h) 'Common Effluent Treatment Plants (CETPs)' of the Schedule to the EIA Notification, 2006 and its subsequent amendments. However, the project/activity comes under category 'A' as General Condition is applicable due to presence of Haryana-Rajasthan State Boundary at a distance of approx. 1Km from the project site. Therefore, the project requires appraisal at Central level by sectoral EAC.

3. The EAC informed the PP that OM regarding CER dated 1st May, 2018 has been superseded by recent OM of 30th September, 2020 which states that Social activities & budget to be included in EMP. Accordingly, the amount of ₹159.62 Lakhs earmarked for activities for CER may be implemented as part of EMP.

4. *The EAC (Infra-2), based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, recommended granting environmental clearance to the project subject to the following specific conditions and other Standard EC Conditions as*

specified by the Ministry vide OM dated 4th January, 2019 for the said project/activity, while considering for accord of environmental clearance:

- i. Remediation Plan, Natural Resource Augmentation Plan and Community Resource Augmentation Plan with financial liabilities corresponding to the ecological damage assessment and economic benefits derived due to violation shall be implemented as proposed and shall be reported to the regional office of the ministry along with six monthly compliance report.
- ii. Fresh water requirement from shall not exceed 200 KLD during operational phase. Groundwater abstraction to meet the fresh water requirement shall be considered only in absence of water supply from local authority. Abstraction of ground water shall be subject to the permission of Central Ground Water Authority (CGWA).
- iii. The PP shall explore the option to treat the domestic waste water generated on-site in the CETP itself.
- iv. As committed, there shall be no discharge of treated wastewater from the CETP. The treated wastewater shall be recycled and reused for industrial uses by member industries through dedicated pipe networks.
- v. A continuous 24x7 online monitoring system for influent and effluent characteristics shall be installed at CETP and its value be displayed at entry gate for public.
- vi. Area for greenery shall be provided as per the details provided in the project document i.e. area under plantation/greenery will be 3828 Sqm at 33% of plot area. As proposed, at least 700 trees shall be maintained during the operation phase of the project. The landscape planning should include plantation of native species. A minimum of 01 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. Plantations to be ensured species (cut) to species (planted). The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.
- vii. 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.
- viii. The solid waste shall be duly segregated into biodegradable and non-biodegradable components and handled in separate area earmarked for segregation of solid waste. As committed, biodegradable and non-biodegradable wastes shall be segregated at site and sent for disposal through authorized vendors.
- ix. The Environmental Clearance to the project is primarily under provisions of EIA Notification, 2006. The Project Proponent is under obligation to obtain approvals/clearances under any other Acts/Regulations or Statutes as applicable to the project.

AGENDA ITEM NO. 65.3.8**Expansion of Group Housing Project with increase in built up area from 21,231.22 Sqm to 32,133.765 Sqm at Plot No.1, Canal Road, Vijay Nagar Delhi by M/s Northern India Paint Colour and Varnish Co. LLP – Environmental Clearance****(IA/DL/MIS/210654/2017; F. No. 21-39/2021-IA-III)**

1. The PP (M/s. Northern India Paint Colour and Varnish Co. LLP) along with his consultant 'ATMOS Sustainable Solutions Pvt. Ltd.' made a presentation before EAC (Infra-2) on the key parameters and salient features of the project. The Committee took note of the following key parameters and salient features of the project presented during the meeting and as provided in the brief and application for this project:

- i. The project is located at Plot No.1, Canal Road, Vijay Nagar, Delhi with coordinates 28°41'21.01"N Latitude and 77°12'4.69"E Longitude.
- ii. The project is an 'Expansion'.
- iii. Earlier, the project has obtained the Environment Clearance from DPCC vide F. No. DPCC/SEIAA-III/C-357/DL/2018/6920-6931 dated 23.03.2018. Satisfactory certified compliance has also been obtained vide file No. IV/ENV/NDL/1373/2018/ SPL 30 to 31 dated 22.03.2021.
- iv. The total plot area is 5,288.50 sqm (1.30 Acres); Total FSI area is 10,571.180 sqm; Total Non- FSI area is 21,562.585 sqm [Existing - 10,660.04 sqm & Expansion -10,902.545 sqm]; and total construction Built-up area of 32,133.765 sqm (Expansion-10,902.545 sqm + Existing- 21,231.22 sqm). Maximum height of the building is 81.10 m (terrace). Details of the expansion are as follows:

S. No.	Details	Existing as per EC dated 23.03.2018	Proposed Expansion/ Revision	Total after Expansion
1.	Total Site Area	5288.50 sqm	-	5,288.50sqm
2.	Built Up Area	21,231.22 sqm	10,902.545sqm	32,133.765 sqm
3.	Non-FSI/FAR Area	10,660.04sqm	10,902.545sqm	21,562.585sqm
4.	FSI/FAR Area	10,571.18sqm	-	10,571.180 sqm
5.	Main Dwelling Units	48Nos	16Nos	64Nos
6.	EWS Units	30Nos	8Nos	38Nos
7.	Total Dwelling Units	78Nos	24Nos	102Nos
8.	No. of Floors	G+15+2	4	G+21
9.	No. of Basements	1	-	1
10.	Population	435Nos	105Nos	540Nos

11.	Total Water Requirement	81 KLD	(-)24 KLD	57 KLD
12.	Fresh water Requirement & Source of water	50 KLD DJB	(-) 19 KLD	31 KLD DJB
13.	Waste water Generated	62 KLD	(-) 24 KLD	38 KLD
14.	STP Capacity & Technology	75 KLD & FAB	(-) 15 KLD	60 KLD & FAB
15.	Solid waste generation	200kg/day	59kg/day	259 kg/day
16.	Parking	212ECS	86ECS	298ECS
17.	Electrical Load & Source	653.4KW & TPDDL	-	653.4KW & TPDDL
18.	Power backup	Proposed DG Sets are 2 of capacity 750 kVA (1X500 kVA and 1X250 kVA).	-	Proposed DG Sets are 2 of capacity 750 kVA (1X500 kVA and 1X250 kVA).
19.	RWH Pits	2Nos	-	2Nos
20.	Max. Building Height	65.82m	15.28	81.10m

**Reduction in water requirement achieved due to change in calculation of per capita water demand considering 86 lpcd.*

- v. During construction phase, total water requirement is expected to be 887 ML which will be met by treated water from Delhi Jal Board (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 labour force.
- vi. During operational phase, total water demand of the project is expected to be approx. 57KLD and the same will be met by 31KLD fresh water sourced through DJB and 26 KLD treated water from onsite STP. Total 38 KLD of wastewater will be generated which will be treated in proposed Sewage Treatment Plant of 60 KLD capacity and approximately 30KLD of treated water will be obtained which will be used for gardening (9 KLD), Flushing (13 KLD), DG Set cooling purposes (4 KLD)etc. Surplus water (4 KLD) shall be used in nearby construction sites or horticultural use.
- vii. About 259 kg/day solid wastes will be generated in the project. The biodegradable waste (155.4Kg/day) will be processed in OWC and the non-biodegradable waste generated (103.6Kg/day) will be handed over to authorized local vendor.
- viii. Maximum Electrical load requirement after overall diversity factor works out to 653.4 KW. To meet the load, the power supply will be

supplied by TATA Power Delhi Distribution Limited. Backup power supply DG sets will be 1*500kVA& 1*250 kVA.

- ix. Roof top rainwater of buildings will be collected in 2 Rainwater harvesting storage pits after filtration.
- x. 7.65% of total electricity load i.e. 50 KW will be met through Solar energy.
- xi. Parking facility for 298ECS is proposed to be provided against the requirement of 211ECS respectively (according to local norms).
- xii. Total green area proposed for project is 1,533.62 sqm (28.999% Plot Area) with plantation of 80 trees.
- xiii. The project is not located with 10 km of Eco Sensitive Zone. NBWL Clearance is not required.
- xiv. Forest Clearance is not required.
- xv. No Court Case is pending against the project.
- xvi. Investment/Cost of the project is ₹94.52 Crores.
- xvii. Employment potential- During Construction phase approx. 80-100 persons shall get employment.
- xviii. Benefits of the project – landscape enhancement, parking management, rainwater harvesting –Environment; Group Housing-Social.

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

3. The EAC also noted that the PP has obtained certified compliance report from MoEF&CC's Integrated Regional Office, Jaipur vide file No. IV/ENV/NDL/1373/2018/SPL 30 to 31 dated 22.03.2021. As per the report based on site visit dated 02.03.2021, most of the conditions were observed complied and no major non-compliance was observed.

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

- i. Fresh water requirement from local authority shall not exceed 31 KLD during operational phase. As committed, no groundwater abstraction shall be done during construction as well as operation phase of the project.
- ii. As proposed, waste water shall be treated in onsite STP of 60 KLD capacity. Atleast 26 KLD of treated water from onsite STP shall be recycled and reused for flushing, gardening, DG cooling etc. Surplus treated water shall be supplied to nearby construction site or horticultural use as proposed.

- iii. The project proponents would commission a third-party study on the implementation of conditions related to quality and quantity of recycle and reuse of treated water, efficiency of treatment systems, quality of treated water being supplied for flushing (specially the bacterial counts), comparative bacteriological studies from toilet seats using recycled treated waters and fresh waters for flushing, and quality of water being supplied through spray faucets attached to toilet seats.
- iv. Area for greenery shall be provided as per the details provided in the project document i.e., area under plantation/greenery will be 1,533.62sqm. The landscape planning should include plantation of native species. As proposed, at least 80 trees to be maintained within the premises during the operation phase of the project. A minimum of 01 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.
- v. The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. As proposed, 2 Nos RWH pits shall be provided for harvesting after filtration.
- vi. The solid waste shall be duly segregated into biodegradable and non-biodegradable components and handled in separate area earmarked for segregation of solid waste. As committed, biodegradable waste shall be composted by use of Composter. Inert waste shall be dumped to authorized site. The recyclable waste shall be sold to resellers. Construction & Demolition waste shall be segregated and managed as per C&D Waste Management Rules, 2016.
- vii. A detailed traffic management and traffic decongestion plan shall be drawn and implemented to ensure that the service of the roads near project site may not get adversely impacted after the implementation of the project. The plan should stipulate, inter-alia, the path and appropriate time for the movement of vehicles to and from site. The Plan shall be vetted by concerned agency in the State Government.
- viii. Anti-Smog gun shall be provided to curb air pollution during construction phase.
- ix. The PP shall also provide electric charging points in the parking areas for e-vehicles as committed.
- x. Atleast 50 KW of the total power requirement shall be met through solar power as committed. PP should explore enhancing energy conservation up to at least 10% through use of solar energy.
- xi. The Environmental Clearance to the project is primarily under provisions of EIA Notification, 2006. The Project Proponent is under obligation to obtain approvals/clearances under any other Acts/Regulations or Statutes as applicable to the project.

AGENDA ITEM NO. 65.3.9

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

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

The EAC noted that the project/activity is covered under category ‘B’ of item 8(a) ‘Building and Construction projects’ of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at State level. As SEIAA, Punjab has been constituted on dated 03rd February, 2021 and is currently in existence, the committee was initially of the opinion that the proposal may accordingly be transferred to the SEIAA Punjab. However, taking the OM issued by the Ministry dated 23rd October, 2017 into consideration, it has been decided that after analysing of the additional information submitted by the PP, the proposal shall be considered during the forthcoming meeting of EAC (Infra-2).

AGENDA ITEM NO. 65.3.10

Integrated Common Hazardous Waste Treatment Storage and Disposal Facility (ICHWTSDF) at Mohna Industrial Area, District Gwalior, Madhya Pradesh by M/s Madhya Pradesh Industrial Development Corporation Limited (MPIDC) - Terms of Reference

(IA/MP/MIS/204177/2021; F. No. 21-44/2021-IA-III)

1. The PP [M/s Madhya Pradesh Industrial Development Corporation Limited (MPIDC)] along with his consultant ‘M/s Shivalik Solid Waste Management Ltd.’ made a presentation on the key parameters and salient features of the project to the EAC (Infra-2). The Committee took note of the following key parameters and salient features of the project presented during the meeting and as provided in the brief and application for this project:

- i. The project is located at Khasra Number - 2925 and some area of 2884, Mohna Industrial Area, Village Mohna Tehsil Gatigaon District Gwalior, MP.
- ii. 14.7 ha (i.e. 36.30 Acres) of Government Land has been allotted for the development of Integrated Common Hazardous Waste Treatment Storage and Disposal Facility(ICHWTSDF). The Site is located at Mohna Industrial Area, Gwalior, Madhya Pradesh and falls under jurisdiction of MPIDC, Bhopal.
- iii. Land use breakup is as follows:

S. No.	Description	Area in Hectare
1	Landfill Area	6.25
2	Building Area	0.93
3	Road /Paved Surface	2.00
4	Open Area	0.10
5	Green belt	5.48 (37%)
	Total	14.76

- iv. Proposed Integrated Common Hazardous Waste Treatment Storage and Disposal Facility(ICHWTSDF) shall have the following components:
- Secured Land Fill (SLF) Capacity: 33712 MTA for a period of 25 years.
 - Incinerator – 1TPD.
 - Electronic Waste Management Facility- 15000 MTA.
- v. The proposed project is designed on the basis of 25 years of projected waste generation. In order to develop the Landfill cell in Phases of 5-years, Phase wise waste generation has been forecasted and their area requirement calculation followed by SLF Area requirement calculation as per CPCB Guideline provided in the Hazardous waste Management Series: HAZWAMS/17/2000-01.

Phase-Wise Estimated Waste Generation (Projected for 25 Yrs.)						
S. No.	Year	Total Waste Generation (TPA)	Volume of Waste (Cum)	Daily Cover (Cum)	Volume including Daily Cover (Cum)	Cumulative Volume (Cum)
Phase-I @ (2020-2025)						
1	2023-2024	9955.00	8296	84	8380	8380
2	2024-2025	10976	9148	92	9240	17620
3	2025-2026	11525	9606	98	9704	27324
4	2026-2027	12101	10086	102	10188	37512
5	2027-2028	12706	10590	106	10696	48208
Phase-II @ (2025-2030)						
1	2028-2029	13341	11118	112	11230	59438
2	2029-2030	14008	11674	118	11792	71230
3	2030-2031	14709	12258	124	12382	83612
4	2031-2032	15444	12870	130	13000	96612
5	2032-2033	16216	13514	136	13650	110262
Phase-III @ (2030-2035)						
1	2033-2034	17027	14190	142	14332	124594
2	2034-2035	17878	14900	150	15050	139644
3	2035-2036	18772	15644	158	15802	155446
4	2036-2037	19711	16426	166	16592	172038
5	2037-2038	20696	17248	174	17422	189460

Phase-IV @ (2035-2040)						
1	2038-2039	21731	18110	182	18292	207752
2	2039-2040	22818	19016	192	19208	226960
3	2040-2041	23958	19966	200	20166	247126
4	2041-2042	25156	20964	210	21174	268300
5	2042-2043	26414	22012	222	22234	290534
Phase-V @ (2040-2045)						
1	2043-2044	27735	23114	232	23346	313880
2	2044-2045	29121	24268	244	24512	338392
3	2045-2046	30578	25482	256	25738	364130
4	2046-2047	32106	26756	268	27024	391154
5	2047-2048	33712	28094	282	28376	419530

- vi. Considering the operational aspect, SLF is divided into 5 cells, Cell-I, Cell-II and Cell-III will be developed below the ground with depth of 3 Meter. After fulfilment of cell-III upcoming cell will be prepared above those cell with height of 5 meter so that waste can be disposed of effectively in minimum area.
- vii. The Waste will be received from the member industries generating hazardous waste as per Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, located in Gwalior Zone. The waste will be collected in dedicated vehicles/closed containers authorized by the State Pollution Control Board.
- viii. Treatment: Based on the characteristics of the waste received appropriate treatment shall be provided as per CPCB norms before disposal in the landfill/Incinerator. Ash from the incinerator shall be disposed in secured landfill within the facility.
- ix. The minimum elevation 319 meters above MSL with general slope towards North. Land is almost flat. No tree cutting is envisaged as project site is barren land.
- x. Maximum water consumption will be total 91 KLD. The source of water will be groundwater. Permission for ground water abstraction falls under the purview of State authority shall be sought.
- xi. Detail of wastewater generation is given below:

Utility	Water Requirement (KLD)		Wastewater generation (KLD)		Method of wastewater treatment
	Fresh Water	Treated Water	Domestic Sewage	Effluent	
Domestic uses (68 nos @ 45 lpcd)	3	-	2.5	-	Septic tank and soak pit.
Vehicle wash /tyre wash (10 nos @ 0.5 KL	5	-	-	4	Disposal through MEE by forced evaporation and

per truck)					residual salts disposed off into landfill.
Incineration cooling (blowdown)	2	-	-	2	
Scrubber water	5	-	-	4.5	
Laboratory	1	-	-	0.5	
Leachate from SLF	-	-	-	30	
Green Belt	35	40	-	-	Gardening and landscaping.
Total	51	40	2.5	41	

- xii. In the proposed project the major source of solid waste generation shall from incineration of hazardous waste. Incineration ash and solid residue from MEE shall be disposed in Secured landfill within the site. Used oil from DG sets shall be disposed into the incinerator. Approximately, 20 kg Municipal Solid Waste will be generated every day that will be segregated and stored in containers and shall be disposed as per MSW Rules.
- xiii. The power requirement is 200 KW and shall be sourced from MP State Electricity Board.1 D.G. Set of 200 KVA is proposed as standby in case of power failure. Solar lights and Heat recovery from incinerator is proposed.
- xiv. Nearest settlement is located as given below:
- Village Ummedgarh - 1.5 Km in the ENE direction
 - Village Tikula - 1 Km in the NW direction
 - Village Mohna - 3 km in the NW direction.
 - District Headquarters Gwalior- 59 Km in NW Direction from project site.
- xv. Sultangarh waterfall situated at 1.3 km SE from proposed project site. No river within 100 m from the site. Parbati River is at 500 m in East from proposed project site.
- xvi. The project is not located within 10 km of Eco Sensitive Zone. NBWL Clearance is not required.
- xvii. Forest Clearance is not required.
- xviii. No Court Case is pending against the project.
- xix. Investment/Cost of the project is ₹7692.56 Lakhs.
- xx. Employment potential: Total manpower requirement for the proposed project will be around 68 personnel.
- xxi. Benefits of the project: Positive impact on environment in terms of scientific management of hazardous waste in the region in accordance to the Hazardous Waste Management Rules. More employment opportunities will be created. Quality of environment shall be improved in the area.

2. The EAC (Infra-2) noted that the project/activity is covered under category 'A' of item 7(d) 'Common hazardous waste treatment, storage and disposal facilities (TSDFs)' of the Schedule to the EIA Notification, 2006 and

its subsequent amendments, and requires appraisal at Central level by sectoral EAC.

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

- i. Importance and benefits of the project.
- ii. The E.I.A. would address to the conformity of site to the stipulations as made in the Hazardous and other Wastes (Management, handling and trans-boundary movement) Rules, 2016 and will have a complete chapter indicating conformity to the said rules.
- iii. 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 May 24, 2010.
- iv. Compliance to the provisions of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, and E-Waste Management Rules, 2016.
- v. Details of various waste management units with capacities for the proposed project.
- vi. List of waste to be handled and their source along with mode of transportation.
- vii. Details of estimated waste generation calculation projected for 25 years.
- viii. Other chemicals and materials required with quantities and storage capacities.
- ix. Details of temporary storage facility for storage of hazardous waste at project site.
- x. Details of pre-treatment facility of hazardous waste at TSDF.
- xi. Details of air emissions, effluents, hazardous/solid waste generation and their management.
- xii. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract).
- xiii. Process description along with major equipments and machineries, process flow sheet (quantitative) from waste material to disposal to be provided.
- xiv. Hazard identification and details of proposed safety systems.
- xv. 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.
- xvi. Ground water quality monitoring in and around the project site.
 - xvii. The Air Quality Index shall be calculated for base level air quality.
 - xviii. Status of acquisition of land. If acquisition is not complete, stage of the acquisition process and expected time of complete possession of the land. R&R details in respect of land in line with state Government policy.
 - xix. Details of effluent treatment and recycling process.
 - xx. Leachate study report and detailed leachate management plan to be incorporated.
 - xxi. Action plan for measures to be taken for excessive leachate generation during monsoon period.
 - xxii. Action plan for any pollution of ground water noticed during operation period or post closure monitoring period.
 - xxiii. Detailed Environmental Monitoring Plan as well as Post Closure Monitoring Plan.
 - xxiv. Submit details of E-Waste to be handled and the E-Waste recovery units to which it shall be sent to. MoU shall be provided in this regard.
 - xxv. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project.
 - xxvi. A detailed plan for green belt development.
 - xxvii. 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.
 - xxviii. 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.
 - xxix. A tabular chart with index for point wise compliance of above ToRs.

65.4 Consideration of Proposal on Day-2 (28th May, 2021): The EAC considered proposals as per the agenda adopted for Day-II of 65th meeting. The details of deliberations held and decisions taken in the meeting are as under:

AGENDA ITEM No. 65.4.1

Proposed “Integrated Development of East Delhi Hub” with built up area of 1,93,712 sqm at Karkardooma, East Delhi by M/s National Buildings Construction Corporation NBCC (India) Limited – Re-consideration for Environment Clearance

(IA/DL/MIS/146654/2020; F. No. 21-20/2020-IA-III)

1. The EAC noted that the proposal was earlier examined in its 62nd Meeting held on 1st March, 2021. The PP was asked for following additional information:

- i. Details of the proposed building configuration and detailed project layout.
- ii. Details of various components/towers vis-a-vis built up area/FAR/ground coverage needs to be tabulated.
- iii. Component wise detail of environment management plan within the proposed site.
- iv. Detailed green area plan.
- v. Air pollution mitigation plan with respect to Graded Action Plan for Delhi & NCR.
- vi. Resubmit the EIA report after making necessary changes to include the aforesaid details.

2. The EAC asked PP to provide the aforesaid information. The PP (M/s. National Buildings Construction Corporation NBCC (India) Limited) along with his consultant 'M/s. ATMOS Sustainable Solutions Pvt. Ltd.' made a presentation and provided the following information:

- i. The project is located at Karkardooma, East Delhi. Site co-ordinates of the project site are 28°38'56.25"N latitude and 77°18'30.51"E longitude.
- ii. The project is new.
- iii. "Integrated Development of East Delhi Hub" in Karkardooma, Delhi is conceptualized to be a new Transit Oriented Development that imbibes the core values of a sustainable "Smart City". The project will be developed around the existing two Delhi Metro routes, the Blue Line and the Pink Line. The project is planned to be developed on 25.89 hectares of land, of which approx. 70% of FAR is stated to be put for residential use, approx. 19.90% for commercial use, and 10% for common civic amenities. The instant proposal is for the Environmental Clearance for Phase-I of the proposed development.
- iv. The project was issued Terms of Reference by MoEF&CC vide F. No. 21-20/2020-IA-III dated 26.05.2020.
- v. The total plot area is 2,58,913.690sqm (25.89 Ha); Net area under development is 2,54,713.69 sqm (25.87 Ha); Total FSI/FAR area is 1,19,101.54 sqm; and total construction (Built-up) area of 1,93,712 sqm. Maximum height of the building is 161.00 metre. Project details are as follow.

S. No.	Particulars	Area (sqm)
1.	Total site area excluding metro station (A) Area under Vikramshila school (B)	2,58,913.690sqm [63.978 Acres] 4,200 sqm
2.	Net area for Development (C) [A-B]	2,54,713.69 sqm [62.941 Acres]
3.	Permissible Ground Coverage @40%	1,01,885.476 sqm
4.	Proposed Ground Coverage @ 3.6% for project	9,069.49 sqm

5.	Total permissible FAR @2.5 Permissible FAR@2.174 Additional (15%) FAR for EWS @ 0.326	6,36,784.225sqm 5,53,747.562 sqm 83,036.663 sqm
6.	Total FAR Proposed @ 0.47 (for Phase-01) FAR Proposed- Residential FAR (main + EWS) under phase-1 Social infrastructure FAR	1,19,101.54sqm 1,14,181.13 sqm 4,920.41 sqm
7.	Area for utility blocks	828.8 sqm
8.	Non-FAR Area	21,791.66sqm
9.	Basement area for Phase-1 Under Residential Under Civic amenities	51,990sqm 48,790 sqm 3,200 sqm
10.	Built Up Area For Phase 1	1,93,712 sqm
11.	Landscape area (@ 30.706%)	78,213 sqm
12.	Open & Paved area	1,02,633.72 sqm
13.	Components	1. Residential Block 2. Residential Tower 3. Civic Amenities 4. Total DU for Phase-I: 1,630 (Type A; Type B; EWS Units)
14.	Max. no. floor	2B+G+45 Floors &G+49Floors
15.	Cost of Project	₹1,000 Crores
16.	Maximum Height of Building (RT-01)	161.00 m (Mumty Terrace)
17.	Expected Population	Approx. 12,371
18.	Total Water Demand Fresh water Demand Recycled Water Generated	1,003 KLD 526 KLD 517 KLD
19.	Waste water Generation	646 KLD
20.	STP Capacity and Technology	1 Nos. STP- 750 KLD, MBR
21.	No. of RWH Pits	27
22.	Parking Proposed	1,620ECS
23.	Solid Waste Generation	6.18 TPD
24.	Total Power Requirement & source	6,119.92kVA, BSES
25.	Power Back up	4* 750kVA, 1*250, 1*500 each

- vi. Building configuration for proposed Phase – I development is as given below:

S. No.	Description	Storey	No. of Block	Height (in m)
PHASE-1				
1.	Residential Tower (RT-01)	2B+G+45+2 Fire Check floor	1	152.50&161.00 (terrace)
2.	Residential Hexagon (RH-02)	2 B+G+33+1 Fire Check floor	1	113.05
3.	EWS Block (EWS-01)	1 B+G+22 floors	1	69.25
4.	Civic Amenities (CV-01)	2 B+ G+3 floors	1	23.20
5.	Civic Amenities (CV-02)	2 B+ G+M+2 floors	1	14.95
6.	Civic Amenities (CV-13)	2 B+G+3 floors	1	23.80
7.	Basement under Residential Blocks RT-01 and RH-02	2 B floors	1	-9.45
8.	Basement under Residential EWS Block	1B floor	1	-4.2
9.	Services/Utility Buildings	Ground	1	5.6

- vii. During construction phase, total water requirement is expected to be 5,346 ML which will be met by treated water from Delhi Jal Board (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 labour force.
- viii. During operational phase, total water demand of the project is expected to be approx. 1003KLD of which daily fresh water demand will be 526 KLD and the same will be met by DJB. Domestic wastewater generation will be 646 KLD which will be treated in STP of 750KLD capacity. 517 KLD of treated wastewater will be generated and recycled as: 225KLD for flushing, 235KLD for gardening, 17KLD for DG cooling and 40KLD surplus treated water will be utilised for construction activities.
- ix. About 6.18TPD solid wastes will be generated in the project. The biodegradable waste (3.09TPD) will be processed in OWC and the non-biodegradable waste generated (1.392 TPD) will be handed over to authorized local vendor.
- x. Maximum Electrical load requirement after overall diversity factor works out to 6,119.92 kVA. The 33 KV power supply will be received from BSES in dual feeder to the complex and step-down to 11KV through 2 nos. power transformers. DG Sets will be of 4*750 kVA, 1*250 kVA, 1*500 kVA each.
- xi. Roof top rainwater of buildings will be collected in 27 rain water harvesting pits after filtration.

- xii. Parking facility for 1,620ECS is proposed to be provided against the requirement of 1,103ECS respectively (according to local norms).
- xiii. Proposed energy saving measures would save about 14% of power and 650 KW solar power system will be set up.
- xiv. Total green area proposed for project is 78,213 sqm (30.706% plot area). 462 trees area existing at site of which 123 trees shall be cut and 20 trees shall be transplanted. 3200 trees are proposed for plantation at site.
- xxii. Okhla Bird Sanctuary is at 9.14km, in direction SSW however the project is located outside the notified eco-sensitive zone of the sanctuary. NBWL Clearance is not required.
- xxiii. Forest Clearance is not required.
- xxiv. No Court Case is pending against the project.
- xv. The project is not located in critically polluted area.
- xvi. Investment/Cost of the project is ₹1,000 Crores.
- xvii. Employment potential- During Construction phase approx. 200-250 persons shall get employment.
- xviii. Benefits of the project: Due to the proposed project the revenue of the local municipal will increase because of permission and municipal taxes, sales taxes etc. The business like super markets, provisional stores, medical shops, hotels, etc. will come up to cater the needs of the customers which will benefit existing areas. Direct and indirect employment opportunities will be generated. Improvement in the social infrastructure like roads, railways, housing, water supply, electrical power, drainage etc. Development of total infrastructure with all the amenities with development. Environmental benefits – Use of renewable energy to reduce power consumption load of region, developing greenbelt to enhance aesthetic view as well as cater air pollution, provision of rainwater harvesting structure to recharge ground water, providing STP to treat wastewater and reuse and recycle within the premises.

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

4. The EAC observed that this is one of the biggest integrated mixed use development coming with the tallest towers in Delhi. Considering the large scale of the project and the population involved for all activities, it is therefore, desirable that the project demonstrates all sustainable development parameters and environmental concerns.

5. *The EAC found the response to the queries as satisfactory. The EAC (Infra-2), based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, recommended granting environmental clearance to the project subject to the following specific conditions and other Standard EC Conditions as specified*

by the Ministry vide OM dated 4th January, 2019 for the said project/activity, while considering for accord of environmental clearance:

- i. Fresh water requirement from local authority shall not exceed 526 KLD during operational phase. As committed, no groundwater abstraction shall be done during construction as well as operation phase of the project.
- ii. Adequate pre-treatment shall be provided before use of treated water outsourced from nearby STP during construction phase.
- iii. As proposed, waste water shall be treated in onsite STP of 750 KLD capacity. Atleast 477 KLD of treated water from onsite STP shall be recycled and reused for flushing, gardening, DG and HVAC cooling and filter backwash. Surplus treated water of 40 KLD shall be utilised for construction activities or horticultural use as proposed.
- iv. The project proponents would commission a third-party study on the implementation of conditions related to quality and quantity of recycle and reuse of treated water, efficiency of treatment systems, quality of treated water being supplied for flushing (specially the bacterial counts), comparative bacteriological studies from toilet seats using recycled treated waters and fresh waters for flushing, and quality of water being supplied through spray faucets attached to toilet seats.
- v. Area for greenery shall be provided as per the details provided in the project document i.e. area under plantation/greenery will be 78,213sqm. The landscape planning should include plantation of native species. As proposed, at least 3200 trees to be maintained within the premises during the operation phase of the project. A minimum of 01 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.
- vi. 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).
- vii. 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, 27 RWH pits shall be provided for harvesting after filtration.
- viii. The solid waste shall be duly segregated into biodegradable and non-biodegradable components and handled in separate area earmarked for segregation of solid waste. As committed, biodegradable waste shall be composted by use of Composter. Inert waste shall be dumped to authorized site. The recyclable waste shall be sold to resellers. Construction & Demolition waste shall be segregated and managed as per C&D Waste Management Rules, 2016.

- ix. A detailed traffic management and traffic decongestion plan shall be drawn and implemented to ensure that the service of the roads near project site may not get adversely impacted after the implementation of the project. The plan should stipulate, inter-alia, the path and appropriate time for the movement of vehicles to and from site. The Plan shall be vetted by concerned agency in the State Govt.
- x. Project Proponent should install continuous online AAQ Monitoring station in the project area in consultation with Delhi Pollution Control Committee (DPCC) before the start of construction work. Online Monitoring should cover parameters e.g. PM10, PM2.5 along with NOx, SOx, covering upwind and downwind directions during the construction period. Periodical monitoring of AAQ shall also be carried out through certified laboratory in order to validate the data. Data so generated should be displayed digitally on site for public display.
- xi. PP shall explore the option of installation of continuous online AAQ Monitoring station on the tallest tower in consultation with Delhi Pollution Control Committee (DPCC) during operation phase.
- xii. Noise barriers/acoustics of adequate efficiency shall be provided at each construction site during construction phase.
- xiii. As committed, anti-smog guns shall be provided to curb air pollution during construction phase. Anti-smog towers/carbon towers shall be installed during operation phase as proposed.
- xiv. The workmen shall be provided with adequate PPE such as Safety shoes, helmets, masks, ear plugs etc. depending on the nature of the work.
- xv. Air pollution management plan in the context of Graded Action Plan for Delhi & NCR shall be implemented as committed.
- xvi. Project Proponent shall implement the use of non-ozone depleting substances in central air conditioning systems.
- xvii. Paints and coatings with low or no VOC content shall be used for interior wall and ceiling surface area to reduce adverse health impacts on building occupants.
- xviii. The PP shall provide electric charging points in the parking areas (preferably more than 5 at each building parking area) for e-vehicles as committed.
- xix. 650 KW of solar power generation shall be set up and atleast 14% energy savings shall be achieved as committed.
- xx. 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.
- xxi. In view of the size and scale of the project, PP may consider green building certification, for ensuring sustainable development features during design, construction and operation phases of the integrated development project.
- xxii. Considering the magnitude of project, and population served, special health care facilities including for infectious disease treatment may be incorporated.

AGENDA ITEM No. 65.4.2**Expansion of Cooperative Group Housing Society with increase in built up area from 23,634.158 sqm to 28,627.253 sqm at Plot No. 10, Sector-22, Dwarka Phase-I, New Delhi By M/s Himalayan CGHS Ltd- Environmental Clearance****(IA/DL/MIS/210935/2021; F. No. 21-38/2021-IA-III)**

1. The PP (M/s Himalayan CGHS Ltd) along with his consultant 'M/s. ATMOS Sustainable Solutions Pvt. Ltd.' made a presentation before EAC (Infra-2) on the key parameters and salient features of the project. The Committee took note of the following key parameters and salient features of the project presented during the meeting and as provided in the brief and application for this project:

- i. The project is located at Plot No. 10, Sector-22, Dwarka, Phase-I, New Delhi with co-ordinates 28°33'40.56"N latitude and 77°3'26.71"E longitude.
- ii. The project is an 'Expansion'. However, application is for Fresh EC.
- iii. The project had started its construction prior to the publication of EIA Notification 2006. Therefore, the existing buildings did not attract applicability to obtain Environmental Clearance from SEIAA/MoEF&CC. Now, some architectural changes in buildings (i.e. addition of single room) have been planned which will enhance the built up area and therefore the project came under the purview of EIA notification 2006 and its amendments. Accordingly, application for Environmental Clearance has been submitted.
- iv. The total plot area is 10,500sqm (2.59 Acres); Total FSI area is 20,817.695 sqm [Existing-18,403.70sqm & Expansion - 2,413.995sqm]; and total construction built-up area of 28,627.253sqm (Expansion-4,993.095sqm + Existing- 23,634.158 sqm). Maximum height of the building is 31.65 metre (S+9). Details are as follows:

S. No.	Description	Existing (sqm)	Expansion (sqm)	Total area after Expansion (sqm)
1.	Total site/plot area (PA)	10,500	-	10,500
2.	Permissible Ground Coverage (40% of PA)	-	-	4,200
3.	Permissible FAR @2	-	-	21,000
4.	Green Area required (@ 15% PA)	-	-	1,575
5.	Proposed Green area (@28.32% of PA)	-	-	2,973.994

6.	Ground Coverage (@ 27.86% of site area)	2,771.56	148.09	2,919.65
7.	Proposed FAR (@1.98)	18,403.70	2,413.995	20,817.695
8.	Community facility	309.809	-	309.809
9.	Guard Room	9	-	9
10.	ATM	-	9	9
11.	Toilet	-	9	9
12.	Balcony area (Free of FAR)	2280	1520	3,800
13.	Built Up Area	23,634.158	4,993.095	28,627.253
14.	Stilt area	1561.649	1041.099	2,602.749
15.	Podium area	950		950
16.	ESS area	120		120

- v. During construction phase, total water requirement is expected to be 138ML which will be met by treated water from Delhi Jal Board (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.
- vi. During operational phase, total water demand of the project is expected to be approx. 79KLD of which fresh water requirement will be 49KLD and the same will be met by DJB. At present, the wastewater from the existing blocks is discharged to the nearby CSTP. However, after expansion, quantity of sewage generated during operational phase shall be approx. 60 KLD and the domestic sewage will be treated through sewage treatment plant (STP) of 72 KLD capacity. The treated water from STP shall be recycle and reused for flushing (21 KLD) and greenbelt development (9 KLD) within premises and 18KLD surplus water shall be utilised for green belt on service road and road cleaning etc.
- vii. About 416 kg/day solid wastes will be generated in the project. The biodegradable waste (250Kg/day) will be processed in OWC and the non-biodegradable waste generated (167Kg/day) will be handed over to authorized local vendor.
- viii. Maximum electrical load requirement after overall diversity factor works out to 410 KW. To meet the load, the power supply will be supplied by BSES. Backup power supply DG sets will be 2*100kVA.
- ix. Rooftop rainwater of buildings will be collected in 3 rainwater harvesting storage pits after filtration.
- x. Parking facility for 321 ECS is proposed to be provided against the requirement of 298 ECS respectively (according to local norms).
- xi. Green area of 2,973.994 sqm (28.32% plot area) is proposed with plantation of 135 trees.
- xii. The project is not located in a Critically Polluted area.

- xiii. The project is not located with 10 km of Eco Sensitive Zone. NBWL Clearance is not required.
- xiv. Forest Clearance is not required.
- xv. No Court Case is pending against the project.
- xvi. Investment/Cost of the project is ₹45 Crores.
- xvii. Employment potential - During Construction phase approx. 30-50 persons shall get employment.
- xviii. Benefits of the project – landscape enhancement, parking management, rainwater harvesting, cooperative group housing.

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

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

- i. Fresh water requirement from local authority shall not exceed 49 KLD during operational phase. As committed, no groundwater abstraction shall be done during construction as well as operation phase of the project.
- ii. As proposed, waste water shall be treated in onsite STP of 72 KLD capacity. Atleast 30 KLD of treated water from onsite STP shall be recycled and reused for flushing (21 KLD) and gardening (9 KLD). Surplus treated water (18 KLD) shall be supplied for green belt development along service road/DDA park as proposed.
- iii. The project proponents would commission a third-party study on the implementation of conditions related to quality and quantity of recycle and reuse of treated water, efficiency of treatment systems, quality of treated water being supplied for flushing (specially the bacterial counts), comparative bacteriological studies from toilet seats using recycled treated waters and fresh waters for flushing, and quality of water being supplied through spray faucets attached to toilet seats.
- iv. Area for greenery shall be provided as per the details provided in the project document i.e. area under plantation/greenery will be 2,973.994 sqm. The landscape planning should include plantation of native species. As proposed, at least 135 trees to be maintained within the premises during the operation phase of the project. A minimum of 01 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.

- v. The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. As proposed, 3 Nos RWH pits shall be provided for harvesting after filtration.
- vi. The solid waste shall be duly segregated into biodegradable and non-biodegradable components and handled in separate area earmarked for segregation of solid waste. As committed, biodegradable waste shall be composted by use of Composter. Inert waste shall be dumped to authorized site. The recyclable waste shall be sold to resellers. Construction & Demolition waste shall be segregated and managed as per C&D Waste Management Rules, 2016.
- vii. A detailed traffic management and traffic decongestion plan shall be drawn and implemented to ensure that the service of the roads near project site may not get adversely impacted after the implementation of the project. The plan should stipulate, inter-alia, the path and appropriate time for the movement of vehicles to and from site. The Plan shall be vetted by concerned agency in the State Govt.
- viii. The PP shall also provide electric charging points in the parking areas for e-vehicles as committed.
- ix. PP should explore enhancing energy conservation up to at least 5% through use of solar energy.
- x. The Environmental Clearance to the project is primarily under provisions of EIA Notification, 2006. The Project Proponent is under obligation to obtain approvals/clearances under any other Acts/Regulations or Statutes as applicable to the project.

AGENDA ITEM No. 65.4.3

Development of A.M Pinnacle (Group Housing Project) with built up area of 40942.97 sqm at Thana No. 84, Khata No. 121 and 127, Plot No. 175 and 176, Mauza Akbarpur Chatna, Parsa, Dist. Patna, Bihar by M/s RD ECO Developers Pvt. Ltd.- Environmental Clearance

(IA/BR/MIS/211746/2021; F. No. 21-43/2021-IA-III)

1. The PP (M/s RD ECO Developers Pvt. Ltd.) along with his consultant 'M/s. Paramarsh (Servicing Environment & Development)' made a presentation before EAC (Infra-2) on the key parameters and salient features of the project. The Committee took note of the following key parameters and salient features of the project presented during the meeting and as provided in the brief and application for this project:

- i. The project is located at Thana No. 84, Khata No. 121 and 127, Plot No. 175 and 176, Mauza Akbarpur Chatna, Parsa, Dist. Patna, Bihar with coordinates 25.539792° Latitude and 85.126342° Longitude.
- ii. The project is new.
- iii. The total plot area is 7895.56 sqm, and total construction (Built-up) area of 40,942.97 sqm. The project will comprise of 5 Buildings. It is a group housing building project. Total 301 residential flats will be developed (236 Flats in Group Housing & 65 for EWS+LIG). Maximum height of the building will be 57.1 m AGL. The project details are as follows:

Particulars	Details	
Total Plot Area	7895.56 Sqm	
Total Built up Area	1. Tower 01 (LB+UB+S+17)	8581.86 sqm
	2. Tower 02 (LB+UB+S+18)	8944.25 sqm
	3. Tower 03 (B+S+6)	4080.96 sqm
	4. Tower 04 (B+S+6)	4050.96 sqm
	5. Tower (LIG+EWS) (B+S+13)	3845.60 sqm
	Total residential built up area	29503.63 sqm
	Covered parking area(basement + stilt)	10999.12 sqm
	Parking for EWS+LIG	440.22 sqm
	Total built up area including parking	40942.97 sqm
	Total No. of Flats in Group Housing	236 Nos
	Total No. of Flats in LIG & EWS	65 Nos
Provided Green Belt/space & Landscape Area	1211.35 SqM. (15.34%)	
Max. Height of Buildings	57.1 m.	

- iv. During construction phase, total water requirement is expected to be 15 KLD which will be met by water tankers or municipal water supply. During the construction phase, soak pits and septic tanks will be provided for disposal of waste water. Temporary sanitary toilets will be provided during peak labour force.
- v. During operational phase, total water requirement of the project is expected to be 269 KLD and the same will be met by 132 KLD fresh water from bore wells and 137 KLD Recycled Water. Wastewater generated (179 KLD) will be treated in MBBR STP of total 200 KLD capacity. 137 KLD of treated wastewater will be recycled and reused

- (67 KLD for flushing, 5 KLD for gardening, 20 KLD for Car Washing and 45 KL for fire water tanks). About 24 KLD of surplus treated waste water will be disposed in to municipal drains.
- vi. About 739 kg/day solid wastes will be generated in the project. The biodegradable waste (583 kg/day) will be processed in Bio-composting pits/OWC and the non-biodegradable waste generated (156 kg/day) will be handed over to authorized local vendor.
 - vii. The total power requirement during construction phase is 1000 KVA and will be met from South Bihar Power Distribution Co. Ltd. (SBPDCL) and total power requirement during operation phase is 2970 KVA and will be met from SBPDCL. 1X 1000 KVA and 2 X 500 KVA DG sets will be installed for power backup.
 - viii. Rooftop rainwater of buildings will be recharged to ground water aquifer through 2 Nos. recharge pits within premises.
 - ix. Parking facility for 366 four wheelers and 200 two wheelers is proposed to be provided against the requirement of 236 and 100 respectively, (according to local norms).
 - x. Installation of 60 KW solar power system is proposed to achieve energy saving of about 2% of power through use of solar energy.
 - xi. An area of 1211.35 sqm area (15.34% against 10% as per Bihar Building Byelaws) will be developed and maintained for green belt within the project premises. Approx. 99 nos. of trees will be planted within and outside the proposed group housing project premises in consultation with Forest Dept. Govt. of Bihar. No tree felling/transplantation is envisaged for the project.
 - xii. The project is not located in a Critically Polluted area.
 - xiii. The project is not located with 10 km of Eco Sensitive Zone. NBWL Clearance is not required.
 - xiv. Forest Clearance is not required.
 - xv. No Court Case is pending against the project.
 - xvi. Expected timeline for completion of the project– Maximum 12-15 months after grant of EC.
 - xvii. Investment/Cost of the project is ₹66.5 Crores.
 - xviii. Employment potential – 100 persons
 - xix. Benefits of the project – Residential Flats with all modern amenities will be available for residents and LIG/EWS residents will get good housing facilities at affordable cost. New employment opportunities will be generated in direct as well as indirect mode.

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

3. *The EAC (Infra-2), based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, recommended granting environmental clearance to the project subject to the following specific conditions and other Standard EC Conditions as*

specified by the Ministry vide OM dated 4th January, 2019 for the said project/activity, while considering for accord of environmental clearance:

- i. Fresh water requirement shall not exceed 132 KLD during operational phase. Groundwater abstraction to meet the fresh water requirement shall be considered only in absence of water supply from local authority. Abstraction of ground water shall be subject to the permission of Central Ground Water Authority (CGWA).
- ii. As proposed, waste water shall be treated in onsite STP of 200 KLD capacity. At-least 137 KLD of treated water from onsite STP shall be recycled and reused for flushing, gardening, car washing, fire water tanks etc. PP shall explore options for reuse of excess treated water for dust suppression, horticultural use, construction use etc. in nearby areas.
- iii. The project proponents would commission a third-party study on the implementation of conditions related to quality and quantity of recycle and reuse of treated water, efficiency of treatment systems, quality of treated water being supplied for flushing (specially the bacterial counts), comparative bacteriological studies from toilet seats using recycled treated waters and fresh waters for flushing, and quality of water being supplied through spray faucets attached to toilet seats.
- iv. Area for greenery shall be provided as per the details provided in the project document i.e., area under plantation/greenery will be 1211.35sqm. The landscape planning should include plantation of native species. As proposed, at least 99 trees to be maintained within the premises during the operation phase of the project. A minimum of 01 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.
- v. The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. As proposed, 2 Nos RWH pits shall be provided for harvesting after filtration.
- vi. The solid waste shall be duly segregated into biodegradable and non-biodegradable components and handled in separate area earmarked for segregation of solid waste. As committed, biodegradable waste shall be composted by use of Composter. Inert waste shall be dumped to authorized site. The recyclable waste shall be sold to resellers. Construction & Demolition waste shall be segregated and managed as per C&D Waste Management Rules, 2016.
- vii. A detailed traffic management and traffic decongestion plan shall be drawn and implemented to ensure that the service of the roads near project site may not get adversely impacted after the implementation of the project. The plan should stipulate, inter-alia, the path and appropriate time for the movement of vehicles to and from site. The Plan shall be vetted by concerned agency in the State Government.

- viii. The PP shall also provide electric charging points in the parking areas for e-vehicles as committed.
- ix. At-least 60 KW of the total power requirement shall be met through solar power as committed. PP should explore enhancing energy conservation up to at least 10% through use of solar energy.
- x. The Environmental Clearance to the project is primarily under provisions of EIA Notification, 2006. The Project Proponent is under obligation to obtain approvals/clearances under any other Acts/Regulations or Statutes as applicable to the project.

AGENDA ITEM No. 65.4.4

Development of Commercial Complex with built up area of 37,050 sqm at Plot No. 1 & 2 Najafgarh Road/Shivaji Marg, New Delhi by M/s DLF Home Developers Ltd –Environmental Clearance

(IA/DL/MIS/211868/2021; F. No. 21-34/2021-IA-III)

1. The PP (M/s DLF Home Developers Ltd) along with his consultant 'M/s. Perfact Enviro Solutions Pvt. Ltd.' made a presentation before EAC (Infra-2) on the key parameters and salient features of the project. The Committee took note of the following key parameters and salient features of the project presented during the meeting and as provided in the brief and application for this project:

- i. The project is located at Plot No. 1 & 2 Najafgarh Road/Shivaji Marg, New Delhi with coordinates 28°39'46.26"N Latitude and 77°09'13.27"E Longitude.
- ii. The project is new.
- iii. The proposed project site had already been granted Environmental Clearance for the construction of Group Housing dated 15.04.2014 to M/s DLF Universal Ltd.(now known as DLF Home Developers Ltd.) but the construction has not yet started. However, now it is proposed to develop a commercial complex at the site instead of group housing. Accordingly, new application for EC has been submitted.
- iv. The proposed complex will have shops, offices, Cineplex with food & beverage. The total plot area of the project is 8119.64 sqm. Ground Coverage of the project will be 4059.82 sqm. The total FAR Area proposed for the project will be 16239.28 sqm. The Proposed Office Area will be 4214.66 sqm and the Non Far area will be 20,810.72sqm. Hence the total built-up area of the project will be 37,050 sqm. The maximum no. of floors will be 3B+LG+G floor+5 floor. The maximum height of the building will be 39 m. The details of the building are as follows:

Description	Unit	Details proposed
Cost of Project	₹ Crore	175
Plot Area	sqm	8119.64
Area under (Road widening)	sqm	1737
Net Plot Area	sqm	6382.64
Ground Coverage (Ach)	sqm	4059.82
FAR (Permissible)	sqm	16239.28
FAR Proposed	sqm	16239.28
Basement area	sqm	12,636.00
Other Non FAR areas	sqm	8174.72
Total Non FAR area	sqm	20,810.72
Total Built-up Area (FAR+Basement Area +NON FAR)	sqm	37,050.00
Green Area	sqm	638
Total Parking Space	ECS	512

Service Details:

Description	Unit	Details proposed
Total Water Requirement	KLD	177
No. of Rainwater Harvesting Pits	Nos.	2
STP Capacity	KLD	150
Solid Waste Generation	kg/day	837
Total Power Demand	kW	2400
DG sets	kVA	2X1010, 1X500
Population	nos.	5583
No. of Floors & Basement	Nos.	3B+LG+G floor+5 floor
No. of tower	Nos.	1
Height of building	m	39

- v. During Construction Phase: For domestic use, 5 KLD and nearby STP treated water will be used during the construction phase.
- vi. During Operational Phase: The ultimate source of water will be Delhi Jal Board. Total water requirement for the complex will be 177 KLD out of which the freshwater requirement will be 66 KLD. Total wastewater generated from the complex building will be 127 KLD which will be treated in a well-designed STP of capacity 150 KLD. 111 KLD of STP treated water will be reused in flushing, gardening, & cooling purpose within the project premises. It will be a zero liquid discharge unit.

- vii. 837 kg/day of solid waste shall be generated out of which biodegradable waste will be 335 kg/day, which will be treated in Organic Waste Converter and converted to manure and rest recyclable waste of 502 kg/day will be given to the approved vendor. 30 lit/month used oil generated from diesel generators will be carefully stored in HDPE drums in isolated covered facilities and will be sold to the authorized recycler. About 2-4 kg/month E-waste will be generated. It will be given to the approved recycler of CPCB. Battery waste shall be generated from inverters & UPS which shall be disposed off as per the Batteries (Management & Handling) Rules, 2001.
- viii. The total power requirement of the project will be 2400 KW which will be met by the BSES Rajdhani Power Ltd. DG sets of capacity 1 x 500 KVA & 2 x 1010 KVA will be installed as power backup for common utilities during power failure. Adequate stack height of 45 m will be maintained which will help in reducing the air pollution.
- ix. 2 no. of Rain Water Harvesting pits will be provided in the project site.
- x. The total parking provision will be 512 ECS.
- xi. 1% of solar energy will be installed within the complex. Solar power will also be sourced from solar parks.
- xii. The project falls in a critically polluted area (Anand Parbat Industrial area (1.74 Km ESE), Naraina Industrial area (3.89 Km SSW) and Wazirpur Industrial area (4.14 Km NNE) are Critically Polluted area).
- xiii. The project is not located with 10 km of Eco Sensitive Zone. NBWL Clearance is not required.
- xiv. Forest Clearance is not required.
- xv. No Court Case is pending against the project.
- xvi. Total capital cost towards EMP will be ₹255 lakhs and recurring cost will be ₹45.5 lakhs per year.
- xvii. Green area of 638 sqm will be developed within the project site and 80 trees are proposed for plantation.
- xviii. Expected timeline for completion of the project: 2 years
- xix. Investment/Cost of the project: Total cost of the project will be ₹175 crores.
- xx. Employment potential: Approx. 500 labourers will be hired during the construction phase and during the operation phase about 550 employment opportunities will be generated.
- xxi. Benefits of the project: The project will provide good quality, eco friendly, safe and secured working space. Generation of employment. It will lead to an increase in the infrastructure of the area and encourage others to develop planned commercial complexes. Social infrastructure improvement by the project to uplift the skill levels of the local population.

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

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

- i. Fresh water requirement from local authority shall not exceed 66 KLD during operational phase. As committed, no groundwater abstraction shall be done during construction as well as operation phase of the project.
- ii. As proposed, waste water shall be treated in onsite STP of 150 KLD capacity. Atleast 111 KLD of treated water from onsite STP shall be recycled and reused for flushing, gardening cooling and misc. purposes. There shall be no discharge of treated water from the project as proposed.
- iii. The project proponents would commission a third-party study on the implementation of conditions related to quality and quantity of recycle and reuse of treated water, efficiency of treatment systems, quality of treated water being supplied for flushing (specially the bacterial counts), comparative bacteriological studies from toilet seats using recycled treated waters and fresh waters for flushing, and quality of water being supplied through spray faucets attached to toilet seats.
- iv. Area for greenery shall be provided as per the details provided in the project document i.e., area under plantation/greenery will be 638 sqm. The landscape planning should include plantation of native species. As proposed, at least 80 trees to be maintained within the premises during the operation phase of the project. 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 species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.
- v. The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. As proposed, 2 RWH pits shall be provided for harvesting after filtration.
- vi. The solid waste shall be duly segregated into biodegradable and non-biodegradable components and handled in separate area earmarked for segregation of solid waste. As committed, biodegradable waste shall be composted by use of Composter. Inert waste shall be dumped to authorized site. The recyclable waste shall be sold to resellers. Construction & Demolition waste shall be segregated and managed as per C&D Waste Management Rules, 2016.
- vii. A detailed traffic management and traffic decongestion plan shall be drawn and implemented to ensure that the service of the roads near project site may not get adversely impacted after the implementation of the project. The plan should stipulate, inter-alia, the path and

- appropriate time for the movement of vehicles to and from site. The Plan shall be vetted by concerned agency in the State Govt.
- viii. Anti-Smog gun shall be provided to curb air pollution during construction phase.
 - ix. The PP shall also provide electric charging points in the parking areas for e-vehicles as committed.
 - x. Solar power installation of at-least 1% of total power requirement shall be done within the premises as committed. PP should explore options to achieve at-least 10% of the total power requirement through solar power by outsourcing from solar parks, installation of solar powered lights, water heating systems etc.
 - xi. Project Proponent shall explore the use of non-ozone depleting substances in central air conditioning systems.
 - xii. The Environmental Clearance to the project is primarily under provisions of EIA Notification, 2006. The Project Proponent is under obligation to obtain approvals/clearances under any other Acts/Regulations or Statutes as applicable to the project.

AGENDA ITEM No. 65.4.5

Proposed construction of New Integrated Terminal Building at Veer Savarkar Airport, Port Blair by M/s Airports Authority of India – Amendment in Terms of Reference.

(IA/AN/MIS/206012/2021; F. No. 21-45/2021-IA-III)

1. The PP (M/s. Airports Authority of India) along with his consultant 'M/s. Gaurang Environmental Solutions Pvt. Ltd.' made a presentation before EAC (Infra-2) on the key parameters and salient features of the project. The Committee took note of the following key parameters and salient features of the project presented during the meeting and as provided in the brief and application for this project:

- i. The project is located at Port Blair, Andaman & Nicobar Island with coordinates 22° 38' 45" N Latitude and 92° 44' 06" E Longitude.
- ii. The proposal is for 'Amendment' in Terms of Reference.
- iii. Environmental Clearance (EC) was obtained for the proposed construction of New Integrated Terminal Building at Veer Savarkar International Airport, Port Blair, Andaman & Nicobar Island vide letter No. 10-39/2010-IA.III dated 27.05.2011. Subsequent to which about 80% of the construction works for the proposal have been completed.
- iv. The project was issued Terms of Reference by MoEF&CC vide F. No. 10-39/2010-IA-III dated 28.12.2020 for the completion of balance construction work. The land is a part of existing Airport & belongs to Airport Authority of India and there will be no creation of new land use. The balance works include less than 20% of the RCC work, finishing works such as block work, finishing works such as flooring, glazing, electrical works, MEP works, etc. and commissioning of the

new terminal building. There is no change/deviation of this project as per earlier EC and present proposal of completion of balance works.

- v. TOR Amendment is sought for carrying out EIA/EMP studies to complete the balance construction work for New Integrated Terminal Building at VSI Airport, Port Blair. The details of the amendment requested are given as follows:

S. No.	TOR S. No.	Condition	Amendment Request
1	<i>Point 6 (vii)</i>	Submit a copy of layout superimposed on the HTL/LTL map demarcated by an authorized agency on 1:4000 scale.	Our project is for completion of balance construction work of New Integrated Terminal Building at Veer Savarkar Airport and major structure work has been nearly completed, only finishing works (including glazing, electrical, air conditioning and other integration works) are remaining. Further, Since Our project is beyond 800 m from HTL which is clearly mentioned in the Previous EC Letter granted to the project, therefore, we request to kindly exempt this condition.
2	<i>Point 6 (viii)</i>	Submit superimposing of latest IIMP/ ICZMP (as per IPZ Notification, 2011) on the ICRZ map.	Our project is for completion of balance construction work of New Integrated Terminal Building at Veer Savarkar Airport and we have completed entire structure work, majorly finishing works (including glazing, electrical, air conditioning and other integration works) are remaining & Since Our project is beyond 800 m from HTL which is clearly mentioned in the Previous EC Letter granted to the project. Therefore, the project does not attract IPZ Notification, 2011, therefore the condition may kindly be exempted
3	<i>Point 6 (ix)</i>	Noise monitoring and impact assessment shall be done for each	Since our project is for completion of balance construction work of New

		representative area (as per the Noise Rules of MoEF&CC). Noise monitoring shall be carried out in the funnel area of flight path including the impact of noise on the nearby human settlements, sensitive environment specially the fauna around the project site, wildlife sanctuaries and national parks. A noise management plan shall be submitted to conform to the guidelines of the MoEF&CC and the DGCA.	Integrated Terminal Building at VSI Airport and we have completed entire structure work, majorly finishing works (including glazing, electrical, air conditioning and other integration works) are remaining and there will not be any additional incremental noise during above said activity which has not been taken into consideration during previous EIA appraisal. Since it is an existing airport, noise control measures are already in place as per the guidelines of the MoEF&CC and the DGCA.
4	<i>Point 6 (xiv)</i>	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 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.	Our project is for completion of balance construction work of New Integrated Terminal Building at Veer Savarkar Airport Port Blair. There is essentially no change in the proposal w.r.t plot size, built-up area, project amenities and/or requirements, etc. Thus, there is no additional impact on the environment due to the balance work which has not been covered during the previous EIA studies.

- vi. There is essentially no change in the proposal w.r.t plot size, built-up area, project amenities and/or requirements, etc. Thus, there is no additional impact on the environment due to the balance work which has not been covered during the previous EIA appraisal.
- vii. There is no increase in air traffic movements (flight movements) envisaged during the next 10 years from the previous projections, since traffic forecast predicted earlier has not been achieved yet.

viii. Therefore, it is requested to kindly exempt the aforementioned ToR conditions since the project does not involve any additional land and the Environmental Clearance for the existing configuration of the project including land and other environmental components has been appraised & EC was granted by erstwhile MoEF&CC.

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

3. *The EAC deliberated upon the information provided by the project proponent. After detailed deliberation, EAC recommended for grant of amendment in Terms of Reference granted vide F. No. 10-39/2010-IA-III dated 28.12.2020 by providing exemption to the extent of parameters as mentioned in table under para 1(v). All other Terms of References for preparation of EIA-EMP report for this project/activity, as specified in the aforesaid ToR letter shall remain unchanged.*

AGENDA ITEM No. 65.4.6

Construction of "Group Housing Colony" with built up area of 3,47,102 sqm at Ashok Vihar, Plot-B, District-North West Delhi, by M/s Godrej Green Woods Private Limited - Terms of Reference

(IA/DL/MIS/211916/2021; F. No. 21-33/2021-IA-III)

1. The PP (M/s. Godrej Green Woods Private Limited) along with his consultant 'M/s. Perfect Enviro Solutions Pvt. Ltd.' made a presentation before EAC (Infra-2) on the key parameters and salient features of the project. The Committee took note of the following key parameters and salient features of the project presented during the meeting and as provided in the brief and application for this project:

- i. The project is located at Ashok Vihar, Plot-B, District-North West Delhi with coordinates 28°41'14.29"N Latitude and 77°10'47.55"E Longitude.
- ii. The project is new.
- iii. The land parcel belongs to Rail Land Development Authority (RLDA). The land has been given to M/s Godrej Green Woods private limited for the development of a group housing colony under the lease agreement No. RLDA/2020/LA/45 dated 1st October 2020. The letter of acceptance (LOA) No. RLDA/2018/Coml./BD/AshokVihar/Vol. V/1848 dated 28.02.2020 has been received from RLDA by M/s Godrej Green Woods Pvt. Ltd.
- iv. Now, group housing project has been proposed to be developed. The total plot area of the project is 78,710 sqm and the total built-up area of the project will be 347102 sqm. Since the built-up area

of the project is more than 1,50,000 sqm, the project falls under Activity 8(b), Category 'B' as per the Schedule of the EIA Notification, 2006 and its subsequent amendments.

v. The details of the project are as given below:

Details	Unit	Proposed Expansion
Plot Area	sqm	78710
Cost of Project	Rs in crores	2339.31
G.C (Per)	sqm	26210.43
G.C (Ach) (Residential +Clubhouse)	sqm	26100
F.A.R (Per)	sqm	157420
Permissible FAR for EWS 15% of FAR	sqm	23613
Additional Permissible FAR for community	sqm	944
Additional Permissible FAR for community	sqm	25
Addl. 100 Sqm for Sports activity	sqm	100
Total available FAR	sqm	182102
FAR proposed residential	sqm	149222
FAR proposed for EWS	sqm	23613
FAR proposed commercial	sqm	1050
FAR proposed community facility and Amenities	sqm	8192
FAR proposed for Milk booth	sqm	25
Total FAR(Proposed)- I	sqm	182102
1 st level Basement Area	sqm	65000
2 nd level Basement Area	sqm	35000
Basement area-II	sqm	100000
Non FAR AREA(stilt area _ balcony + Other Non FAR)-III	sqm	65000
Built Up Area (I+II+III)	sqm	347102
Green Area	sqm	19677.5
Road Area & Open Area	sqm	25432.5
Surface Parking Area	sqm	7500
No. of Floors	No	2B+G+36
No. of tower	No	8 Residential Towers + 3 clubs in tower ground floor and 1 Separate club block + 26 Villas + 4 Retail Block + 1 Milk Booth + 1 ATM + Watch ward cabin
No. of Basement	No	2
Height of building	m	100

Population		
No. of DU	No	1200
EWS unit	No	622
Resident in DU	No	5400
Resident in EWS	No	1400
Total resident	No	6800
Staff	No	100
visitors	No	300
Total Population	No	7200

- vi. 52 No. of RLDA vacated Staff quarters exists at site, which will be demolished once the construction exists at site.
- vii. Proposed project is a development of Group Housing Colony. Activities of the project are as follows:
 - a) 8 Residential Towers (Dwelling units & EWS unit)
 - b) 3 clubs in tower ground floor and 1 Separate club block
 - c) 26 Villas
 - d) 4 Retail Block
 - e) 1 Milk Booth
 - f) 1 ATM
 - g) Watch ward cabin
- viii. One season baseline will be collected Baseline data collection is under process for the Season December 2020- February2021.
- ix. Total water Requirement will be 1228 KLD. Fresh water requirement will be 757 KLD. Source of water will be Delhi Jal Board. Ground water extraction will not be done Wastewater generation will be 842 KLD which will be treated in STP of total capacity 1220 KLD based on MBBR Technology. Total 758 KLD of treated water will be generated from STP. Out of which 471 KLD will be utilized in domestic, flushing, gardening and cooling purposes. 287 KLD of excess treated water will be given to nearby areas for irrigation purposes.
- x. Approx. 3120 kg/day of solid waste will be generated from the project. Out of which 1872 kg/day of biodegradable waste generated will be treated in Organic Waste Converter and converted to manure. 780 kg/day of non-biodegradable waste will be given to approved recycler & 468 kg/day of Plastic waste will be given to approved recycler.
- xi. Green belt/greenery has been developed along most of the periphery of the project area as well as along roads. Area under plantation/greenery after expansion will be 19677.5 sqm (25% of total plot area). 1178 no. of trees existing at the site, out of which 580 no of trees will be retained/transplanted & 598 no of trees will be cut/trimmed. However, 984 no of trees will be planted at the site. Compensatory afforestation will be done in the ratio of 1:20 i.e. for every one tree falling 20 will be planted.
- xii. Power requirement will be 12508 KW which will be supplied by Tata Power-DDL. DG sets of capacities 5 x 1500 kVA, 1 x 600 kVA & 2 x 500 kVA will be provided for backup power.

- xiii. Parking provision of 4467 ECS is proposed against requirement of 3287 ECS (as per local norms).
- xiv. 29 Nos of rain water harvesting pits will be provided.
- xv. Proposed energy-saving measure would save about 5% due to the use of LED and solar provision.
- xvi. The project is not located with 10 km of Eco Sensitive Zone. NBWL Clearance is not required.
- xvii. Forest Clearance is not required.
- xviii. No Court Case is pending against the project.
- xix. The project is not located in critically polluted area.
- xx. Investment/Cost of the project is ₹2339.31 Crores.
- xxi. Employment potential: Group Housing Colony will provide employment to around 250 labour during the construction phase. Approx. 100 no. of staff will be required as workers, security staff and for other miscellaneous purposes.
- xxii. Benefits of the project: Well connected with the network of public transport, local railways and cabs. Pollution free environment with proper drainage and sewage system. Easy access to the airport and local Railway Station. Full authority to provide services such as water, electricity, security, and recreational facilities within the zone on purely commercial basis. Abundant supply of technically skilled manpower

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

3. *The EAC deliberated upon the information provided by the project proponent. After detailed deliberation, EAC recommended for grant of Terms of Reference as specified by the Ministry as Standard ToR in April, 2015 for the said project/activity and the following ToR in addition to Standard ToR for preparation of EIA-EMP report:*

- i. Construction & Demolition Waste Management Plan shall be prepared as part of EMP providing details of demolition activities involved along with quantification and disposal mechanism.
- ii. PP shall explore the provision for achieving atleast 10% of total power requirement through generation of solar power.
- iii. Air pollution modelling shall be included w.r.t incremental impact due to proposed development.
- iv. Site-specific action plan for air pollution control synchronized with graded action plan of air pollution in NCR shall be submitted.
- v. 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.

- vi. 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.
- vii. Details of tree cutting/transplantation, if any, along with approval from concerned authority.
- viii. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project.
- ix. 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.
- 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.

AGENDA ITEM No. 65.4.7

Integrated Common Hazardous Waste Treatment, Storage and Disposal Facility (TSDF & Incineration) at Survey No. 283, Village Surai, Tehsil Chotila, Dist. Surendranagar, Gujarat by M/s Varni Enviro Care Pvt. Ltd. - Environmental Clearance.

(IA/GJ/MIS/147896/2020; F. No. 21-40/2021-IA-III)

1. The PP (M/s. Varni Enviro Care Pvt.Ltd.) along with his consultant 'M/s. Kadam Environmental Consultants' made a presentation before EAC (Infra-2) on the key parameters and salient features of the project. The Committee took note of the following key parameters and salient features of the project presented during the meeting and as provided in the brief and application for this project:

- i. The project is located at Survey No.283, Village. Surai, Tehsil Chotila, Dist. Surendranagar, Gujarat.
- ii. The project is new (Greenfield Project).
- iii. The proposed project is an Integrated Common Hazardous Waste Treatment, Storage and Disposal Facility along with Incineration. The site has been selected based on Site Evaluation Criteria as per CPCB Guidelines for TSDF siting. The project details are as follows:

S.No.	Description/ Facility	Capacity
1.	Secured Landfill (Direct Landfill and Landfill with	3,30,750 MT Capacity (47,250 MTPA) , 270 Days of operation, Daily Waste Receipt: 175 MT per Day

	treatment)	capacity, Monthly Land fillable Capacity: 5250 MT per Month.
2.	Hazardous Waste Incineration	Total- 1500 kgs per Hr. (Liquid + Solid Incinerable Waste) 5.5-6.0 Million K Cal/hr. (10,850 MTPA), 310 Days of operation, Daily Waste Receipt- 35 Tonnes per day capacity, Monthly Incineration Capacity- 1050 MT per month, High TDS Water for quenching in Incinerator- 80 KLD.

- iv. The EIA Report has been prepared as per the Terms of References (TORs) issued by MoEF&CC, vide their Letter Ref: No. F.No. 10-30/2020-IA-III dated 26.05.2020 and ToR Amendment issued vide letter F. No. 10-30/2020-IA-III dated 12.03.2021. Baseline study was carried out during December 2019- March 2020.
- v. The total plot area is 64,750 sqm. The area statement is given as follows:

Area Statement of the site			
S.No.	Description	Area (sqm)	Area (%)
1	Total Area for incineration	5187	8
2	Total area for TSDF	25840	40
3	Green belt	21405	33
4	Roads	9660	14.8
5	Storm Water Drain	2236	3.5
6	Open Space	422	0.7
Grand Total of Plot Area		64750	100.0

- vi. Total 158 KLD of fresh water will be required for domestic purpose, use in Incineration Plant including TSDF Site. Fresh water will be sourced from bore-well for which ground water withdrawal approval has been obtained from CGWA. The total waste water generation (domestic sewage, scrubber, other washings and leachates) from the proposed project is 55 KLD, which will be treated in proposed ETP (design capacity of 100 KLD) followed by reuse for quenching in incinerator. Leachate generation from TSDF is estimated ~ 45 KLD which will also be treated in the same ETP and reused for quenching in incinerator. The waste water treatment system is a Zero Liquid Discharge system and treated water will be completely reused back for plant purposes. Water consumption and wastewater generation details are given as follows:

S. No.	Description	Water Consumption in KLD	Wastewater Generation in KLD	Remarks
1.	Domestic	5	4	To ETP for treatment along with other industrial waste water.
2.	Inlet Head and Jacket Cooling	18	0	18KLD is the makeup water in the recirculation system of Jacket Cooling to make up the evaporation loss.
3.	Ash cooling	6	0	Evaporation due to cooling of ash.
4.	Forced Evaporation System – Quenching in Incineration plant	9	0	Total water evaporation in quenching is estimated to 144 KLD; which is make up with 55 KLD of recycled water from ETP and 80 KLD of High TDS water taken from member units and 9 KLD of fresh water makeup.
5.	Scrubber blowdown	60	36	To ETP for treatment
6.	Truck / Floor Washing	15	15	To ETP for treatment
7.	Gardening	40	0	Utilized in green belt
8.	Reagent Preparation	5	0	-
Total		158	55	55 KLD to ETP (design capacity of 100 KLD) followed by Forced Evaporation System.

- vii. Domestic solid waste such as paper & food waste will be sent to approved MSW Facility/recycler. Small amount of E-waste and scrap will be sent to approved recycler. ETP sludge will be disposed within the site (own TSDF facility). The details of Hazardous waste types, their quantity of generation and methods of storage, treatment and disposal is tabulated as below:

S. No.	Type of Waste	Category of Waste	Generation (Quantity)	Method of storage	Method of Treatment	Handling and Mode of Disposal
1	Used/ Waste/ Spent Oil	5.1	3 TPA	Drum	Treatment in Incinerator	Will be disposed of within the premises

2	Bags/Drums/Barrels	33.1	500 Nos/Day	In Impervious Storage Area	De-contamination at site	Sale to Authorized Recyclers
3	Incineration Ash	37.2	450 kg per hr * 24 * 310 days operation = 3348. Say 3400 MTPA	-	Ash cooling	Will be disposed in own Secured Landfill
4	ETP Sludge	35.3	50 kgs per day * 360 days = 18 MTPA	HDPE Bags	Dewatering	Will be disposed in own Secured Landfill

- viii. The incineration facility will be equipped with an adequate Air pollution control system (Quenching/Spray Dryer/Forced Evaporation System) to control release of pollutants in the environment. Regular monitoring of Dioxin and Furans shall be done to limit its emissions.
- ix. Power requirement of 1000 KVA will be sourced through Paschim Gujarat Vij Company Limited (PGVCL).
- x. Approx. 15% energy savings is envisaged through use of LED Bulbs, high efficient motors, solar street light (quantity - 850 Nos.).
- xi. Peripheral storm water drainage system will be provided covering entire periphery of the landfill cell and also along one side/both sides of the road in the entire site premises. All the storm water drainages are well connected ultimately passing through two storm water interceptors and into a Storm Water Pond. The pond acts as guard pond before final disposal to outside of the site area. The capacity of storm water pond is planned for 800 cu.m. Overflow of this pond will be drained out to natural drainage. Rain water will be harvested in this pond and reused within site premises during non-monsoon period.
- xii. At the incineration plant area, 80 sqm area has been allotted for vehicle parking area and 250 sqm for truck parking area. At the TSDF site also, 80 sqm area has been allotted for admin parking area and 250 sqm for truck parking area.
- xiii. Public hearing was conducted on 10.03.2021 at 12:30 P.M. at proposed site, Survey No.283, Village: Surai, Taluka: Chotila, District: Surendranagar. Major issues raised during PH and response of PP in the form of implementable action plan is given as follows:

S. No.	Environmental Concerns	Response from VECPL	Allotted fund ₹ in Lacs	Schedule / Responsibility
1	Greenbelt Development	Greenbelt area will be developed within the project site boundary to a level of 33% of the plot area.	10	M/s. Varni Enviro Care Private Limited, in 3 years
2	Waste Water Management	Wastewater from entire site premises will be collected and treated in proposed ETP and treated wastewater will be reused in quenching in the incinerator hence leading to Zero Liquid Discharge (ZLD).	120	M/s. Varni Enviro Care Private Limited
3	Air Emissions and Management	The operative area will be daily covered. Proper landfill gas management, Fugitive Emission Control, odour control measures will be taken during the operations of Incinerator and TSDF site. There will also be continuous online monitoring system will be installed for continuous monitoring of outlet air quality, installation of sufficient stack for DG Set as well as Incinerator.	200	M/s. Varni Enviro Care Private Limited
4	Odour Management	Deodorant Spraying System and Sprinklers.	5	M/s. Varni Enviro Care Private Limited
5	Ground Water Monitoring - Piezometric Wells	Piezometric Well construction, Sampling and Monitoring of Wells.	3	M/s. Varni Enviro Care Private Limited
6	Health & Safety	Occupational Health Centre, PPE Kit, Fire & Safety equipment including fire fighting.	25	M/s. Varni Enviro Care Private Limited
7	Storm Water Management	Construction of Storm Water Drain, Storm Water Interceptor at the outlet, Temporary pond for storage of storm water.	50	M/s. Varni Enviro Care Private Limited

8	Transportation & Movement of the people	Up gradation of existing approach road to site.	10	M/s. Varni Enviro Care Private Limited, in 5 years
9	Post Closure Capping, monitoring and management	Landfill capping with green area development, gas vent wells construction and post closure monitoring of ground water wells and air from gas wells and leachate generation for period of 15 Years.	525	M/s. Varni Enviro Care Private Limited for a period of 15 years

- xiv. Project will have a total green area of 21,405 sqm (33% of total plot area) in which approximately 3150 trees will be planted in the site premises. There will be no tree felling and/or transplantation as it is a barren land.
- xv. The project does not fall under Critically Polluted Area.
- xvi. The project is not located with 10 km of Eco Sensitive Zone. NBWL Clearance is not required.
- xvii. Forest Clearance is not required.
- xviii. No Court Case is pending against the project.
- xix. Investment/Cost of the project is: ₹50 Crores
- xx. Employment potential- 100 persons during construction phase and 50 skilled and semi-skilled persons during operational phase.
- xxi. Benefits of the project: Facilitating better management of hazardous wastes by Incineration; Secured Landfills minimize the impact of solid waste disposal on land; Upon completion, the landfill site can be reclaimed and used as green space. Local skilled and semi-skilled workers will be engaged during both construction and operation phases. Indirect benefits during Construction phase for construction equipment & transport rentals (e.g. JCBs etc.), Excavation work etc. Indirect benefits during operation phase for transport vehicle operators. The project will help in the development of facilities like education, infrastructure, communication, health etc. viz., Up gradation of School infrastructure (Renovation, shed, toilet, rooms, paver blocks, Water Tank, Fan, furniture, compound wall etc.), Drinking Water Facility, etc.

2. The EAC noted that the project/activity is covered under category 'A' of item 7(d) 'Common Hazardous Waste Treatment & Disposal Facilities (TSDFs)' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at Central level by sectoral EAC.

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

- i. The proponent should ensure that the project fulfills all the provisions of Hazardous and other Wastes (Management and Transboundary Movement) Rules, 2016 and the 'Protocol for Performance Evaluation and Monitoring' for the same as published by the CPCB including collection, transportation, design etc.
- ii. Guidelines for Common Hazardous Waste Incineration and Secured Landfill issued by CPCB shall be followed.
- iii. MoU shall be made with authorized recycler for disposal of spent/used oil.
- iv. The proponent shall comply with the Environmental standards notified by Ministry of Environment & Forest for incinerators along with the technology/guidelines.
- v. Necessary provision shall be made for firefighting facilities within the complex.
- vi. Project proponent should prepare and implement an on-site Emergency Management Plan.
- vii. Employees shall be provided work specific PPE such as helmets, safety shoes, masks etc.
- viii. Air pollution control systems such as Quenching, Spray Dryer, Forced Evaporation System, shall be implemented as proposed. Incinerator & DG Set shall be provided with a stack height meeting MOEF&CC Guidelines for proper dispersion of cleaned gases in atmosphere.
- ix. Ambient air quality monitoring shall be carried out at upwind and downwind locations. The parameters shall include Dioxins and Furan. Online real-time continuous monitoring facilities shall be provided as per the CPCB or State Board directions.
- x. Project proponent should develop green belt all along the periphery of the TSDF with plant species that are significant and used for the pollution abatement. Total green area of 21,405sqm (@33% of plot area) and 3150 trees shall be maintained as proposed. The tree species shall be selected as suited to site conditions in consultation with concerned forest department.
- xi. Fresh water requirement shall not exceed 158.0 KLD during operational phase. Abstraction of ground water shall be subject to the permission of Central Ground Water Authority (CGWA).
- xii. Gas generated in the Landfill should be properly collected, monitored and flared.
- xiii. 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.
- xiv. The depth of the landfill site shall be decided based on the ground water table at the site.
- xv. PP shall ensure proper handling of all spillages by introducing spill control procedures for various chemicals.
- xvi. Effluent Treatment Plant of 100 KLD capacity shall be provided as committed to treat the wastewater generated from the project. Treated

water shall be reused within the project. 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. Scrubber water, leachate water or wheel wash effluent shall be treated in the effluent treatment plant followed by RO to achieve zero liquid discharge.

- xvii. Rain water runoff from the landfill area and other hazardous waste management area shall be collected and treated in the effluent treatment plant.
- xviii. The project proponent shall install continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- xix. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016.
- xx. No non-hazardous wastes, as defined under the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, shall be handled in the premises. The solid wastes shall be segregated, managed and disposed as per the norms of the Solid Waste Management Rules, 2016. A certificate from the competent authority handling municipal solid wastes should be obtained, indicating the existing civic capacities of handling and their adequacy to cater to the MSW generated from project.
- xxi. 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.
- xxii. 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.
- xxiii. A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 2 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 2 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the PWD/Competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.
- xxiv. The Environmental Clearance to the project is primarily under

provisions of EIA Notification, 2006. The Project Proponent is under obligation to obtain approvals/clearances under any other Acts/Regulations or Statutes as applicable to the project.

AGENDA ITEM No. 65.4.8

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

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

The EAC noted that the project/activity is covered under category ‘B’ of item 8(a) ‘Building and Construction projects’ of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at State level. As SEIAA, Punjab has been constituted on dated 03rd February, 2021 and is currently in existence, the committee was initially of the opinion that the proposal may accordingly be transferred to the SEIAA Punjab. However, taking the OM issued by the Ministry dated 23rd October, 2017 into consideration, it has been decided that after analysing of the additional information submitted by the PP, the proposal shall be considered during the forthcoming meeting of EAC (Infra-2).

AGENDA ITEM No. 65.4.9

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

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

The EAC noted that the project/activity is covered under category ‘B’ of item 8(a) ‘Building and Construction projects’ of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at State level. As SEIAA, Punjab has been constituted on dated 03rd February, 2021 and is currently in existence, the committee was initially of the opinion that the proposal may accordingly be transferred to the SEIAA Punjab. However, taking the OM issued by the Ministry dated 23rd October, 2017 into consideration, it has been decided that after analysing of the additional information submitted by the PP, the proposal shall be considered during the forthcoming meeting of EAC (Infra-2).

AGENDA ITEM No. 65.4.10

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

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

The EAC noted that the project/activity is covered under category ‘B’ of item 8(a) ‘Building and Construction projects’ of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at State level. As SEIAA, Punjab has been constituted on dated 03rd February, 2021 and is currently in existence, the committee was initially of the opinion that the proposal may accordingly be transferred to the SEIAA Punjab. However, taking the OM issued by the Ministry dated 23rd October, 2017 into consideration, it has been decided that after analysing of the additional information submitted by the PP, the proposal shall be considered during the forthcoming meeting of EAC (Infra-2).

AGENDA ITEM No. 65.4.11

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

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

1. The PP (M/s. Modest Ketki Corp. Group Housing Society Ltd.) along with his consultant ‘ATMOS Sustainable Solutions Pvt. Ltd.’ made a presentation before EAC (Infra-2) on the key parameters and salient features of the project. The Committee took note of the following key parameters and salient features of the project presented during the meeting and as provided in the brief and application for this project:

- i. The project is located at Plot No. 8B, Sector-11, Dwarka, New Delhi with coordinates 28°35'17.58"N Latitude and 77° 2'55.65"E Longitude.
- ii. The proposal is for ‘Amendment in Environmental clearance’.
- iii. The project had started its construction on 04.07.2005 prior to the publication of EIA Notification 2006. Therefore, the existing buildings did not attract applicability of to obtain Environmental Clearance (EC) from SEIAA/MoEF&CC. Construction was done as per the approved plan and was completed in 2008. Functioning of the buildings was started after obtaining the occupational certificate from the concerned department.

- iv. In year 2020, the project has undergone some architectural changes in buildings (to convert 2 BHK flats to 3BHK flats with the revised built-up area) due to which project came under the purview of EIA notification 2006 and its amendments. Therefore, application was submitted to obtain the Environment Clearance from MoEF&CC (Due to non-existence of SEIAA in Delhi) and project was granted EC vide F. No. 21-48/2020-IA-III dated 18.11.2020. However, built-up area mentioned in EC letter i.e. 32,624.75 sqm did not include the balcony area of 11,188.352 sqm. Since the balcony area is included in approved master plan, and as the addition of the balcony area in built up area is not altering any of the other components of the project, application has been submitted for amendment in the EC.
- v. The total plot area is 13,000.00 sqm (3.21 Acres); Total FSI area is 25,965.17 sqm (No Change in FAR Area for Expansion); and total construction Built-up area of 43,999.885 sqm (11,375.135 sqm (Proposed) + 32,624.75 sqm (Existing)). Maximum height of the building is 33.350 m (terrace). Details are as follows:

S. No.	Description	Built Up Area (BUA) (sqm)	Non-FSI/FAR Area (sqm)	FSI/FAR Area (sqm)	Remarks
1.	As per Existing EC dated 18.11.2020	32,624.75	-	25,965.17	
2.	Proposed Amendment	11,375.135	11,375.135	No change of FAR Area	Inclusion of Balcony area (Free of FAR).
3.	Total after amendment	43,999.885	11,375.135	25,965.17	

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

3. The EAC observed that the balcony area specified by the PP and consultant in their presentation, conceptual plan and as per layout plan submitted was only 11,188.352 sqm whereas the amendment has been requested for inclusion of 11,375.135 sqm. Also, the total built-up area as per the submitted layout plan comes to only 43,883.189 sqm which does not match with the total built-up area submitted in conceptual plan and presentation i.e. 43,999.885 sqm. The EAC also noted that the submitted layout plan does not have approval seal. The maximum height of the building as submitted (33.350 m) was also found to be inconsistent with the

maximum height mentioned in the existing EC (25m) (F. No. 21-48/2020-IA-III dated 18.11.2020.).

4. The PP has later submitted clarification for the above-mentioned discrepancies vide letter dated 01.06.2021 wherein it has been stated that the maximum height of the building was incorrectly given as 25m in the previous EC and is actually 33.35 m. Also, the built-up area for which amendment has been requested comprises of the left out areas of non-FAR which were not mentioned in the earlier EC. This includes balcony area (11,188.35 sqm), guard room (9.95 sqm), common toilet (8.75 sqm), ATM (9 sqm) and ESS (160 sqm) which adds up to 11,376.05 sqm. Subtracting 0.92 sqm (which is the round off error in community hall area as mentioned in existing EC) from the total of 11,376.05 sqm gives the value of 11,375.13 sqm.

5. *The EAC (Infra-2), based on the above-mentioned observations on information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, felt that the PP and consultant have not given clear information during the presentation. Also, as the clarifications submitted later refers to errors in the previous EC which were not discussed during the instant meeting, the committee was of the opinion that further discussion is required before arriving at a decision. Therefore, the EAC decided to defer the proposal and asked the project proponent to provide the following additional information during the forthcoming meeting of EAC:*

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

LIST OF PARTICIPANTS OF EAC (INFRA-2) IN 65th MEETING OF EAC (INFRA-2) HELD DURING 27-28 MAY, 2021 THROUGH VIDEO CONFERENCING

S. No.	Name	Designation	Attendance	Attendance	Sign
			27.05.2021	28.05.2021	Thro VC
1.	Dr. N. P. Shukla	Chairman	P	P	-
2.	Dr. H. C. Sharatchandra	Member	P	P	-
3.	Shri V. Suresh	Member	P	P	-
4.	Dr. V. S. Naidu	Member	P	P	-
5.	Shri B. C. Nigam	Member	P	P	-
6.	Dr. Manoranjan Hota	Member	P	P	-
7.	Dr. Dipankar Saha	Member	P	P	-
8.	Dr. Jayesh Ruparelia	Member	P	P	-
9.	Dr. (Mrs.) Mayuri H. Pandya	Member	P	A	-
10.	Dr. M. V. Ramana Murthy	Member	P	P	-
11.	Prof. Dr. P.S.N. Rao	Member	A	A	-
12.	Dr. Dharmendra Kumar Gupta	Scientist F & Member Secretary	P	P	-

ANNEXURE-1

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

I. Statutory compliance:

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

II. Air quality monitoring and preservation:

- (i) The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g., PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NO_x in reference to SO₂ and NO_x emissions) within and outside the airport area at least at four locations (one within and three outside the plant area at an angle of 120°each), covering upwind and downwind directions.
- (ii) Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.
- (iii) A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.
- (iv) Soil and other construction materials should be sprayed with water prior to any loading, unloading or transfer operation so as to maintain the dusty material wet
- (v) The excavation working area should be sprayed with water after operation so as to maintain the entire surface wet.
- (vi) Excavated materials shall be handled and transported in a manner that they do not cause any problems of air pollution.
- (vii) The soil/construction materials carried by the vehicle should be covered by impervious sheeting to ensure that the dusty materials do not leak from the vehicle.

III. Water quality monitoring and preservation:

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

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

IV. Noise monitoring and prevention:

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

ANNEXURE-2

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

I. Statutory compliance:

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

II. Air quality monitoring and preservation:

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986.
- iii. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g., PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NO_x in reference to SO₂ and NO_x emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions.
- iv. Sampling facility at process stacks and at quenching towers shall be provided as per CPCB guidelines for manual monitoring of emissions.
- v. The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- vi. Appropriate Air Pollution Control (As proposed, air pollution control device viz. gas quencher; treatment with mixture of hydrated lime and activated powder for adsorption of partial acidity and VOCs (if any); bag filter/ESP for removal of particulate matter; venturi scrubber followed by packed bed scrubber with caustic circulation to neutralize the acidic vapours in flue gas; and demister column for arresting water carry over will be provided to the incinerator) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
- vii. The periodical monitoring of Dioxins and Furans in the Stack emissions shall be carried out. Analysis of Dioxins and Furans shall be done through CSIR-National Institute for Interdisciplinary Science and Technology (NIIST), Thiruvananthapuram or equivalent NABL Accredited laboratory
- viii. Gas generated in the Land fill should be properly collected, monitored and flared

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

III. Water quality monitoring and preservation:

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

IV. Noise monitoring and prevention:

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

V. Energy Conservation measures:

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

VI. Waste management:

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

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

VII. Green Belt:

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

VIII. Public hearing and Human health issues:

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

IX. Corporate Environment Responsibility:

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

X. Miscellaneous:

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

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

ANNEXURE-3

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

I. Statutory compliance:

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

II. Air quality monitoring and preservation:

- i. The project proponent shall install emission monitoring system including Dioxin and furans to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. Periodical air quality monitoring in and around the site including VOC, HC shall be carried out.
- iii. Incineration plants shall be operated (combustion chambers) with such temperature, retention time and turbulence, so as to achieve Total Organic Carbon (TOC) content in the slag and bottom ashes less than 3%, or their loss on ignition is less than 5% of the dry weight of the material.
- iv. Venturi scrubber (alkaline) should be provided with the incinerator with stack of adequate height (Minimum 30 meters) to control particulate emission within 50mg/Nm³.
- v. Appropriate Air Pollution Control (APC) system shall be provided for fugitive dust from all vulnerable sources, so as to comply prescribed standards. All necessary air pollution control devices (quenching, Venturi scrubber, mist eliminator) should be provided for compliance of emission standards.
- vi. Masking agents should be used for odour control.

III. Water quality monitoring and preservation:

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

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

IV. Noise monitoring and prevention:

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

V. Energy Conservation measures:

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

VI. Waste management:

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

VII. Green Belt:

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

VIII. Public hearing and Human health issues:

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

IX. Corporate Environment Responsibility:

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 01.05.2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly 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_{2.5}, PM₁₀, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
- vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- viii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- x. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- xi. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts/NGT and any other Court of Law relating to the subject matter.
- xvi. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

ANNEXURE-4

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

I. Statutory compliance:

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

II. Air quality monitoring and preservation:

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

III. Water quality monitoring and preservation:

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

IV. Noise monitoring and prevention:

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

V. Energy Conservation measures:

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

VII. Waste management

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

VIII. Public hearing and Human health/safety issues:

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

IX Corporate Environment Responsibility:

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

ANNEXURE-5

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

I. Statutory compliance:

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

II. Air quality monitoring and preservation:

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

III. Water quality monitoring and preservation:

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

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

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

IV. Noise monitoring and prevention:

- i. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
- ii. Noise from vehicles, power machinery and equipment on-site should not exceed the prescribed limit. Equipment should be regularly serviced. Attention should also be given to muffler maintenance and enclosure of noisy 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.

ANNEXURE-6

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

I. Statutory compliance:

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

II. Air quality monitoring and preservation:

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories. (for projects involving incineration).
- ii. As proposed, air pollution control device viz. gas quencher; treatment with mixture of hydrated lime and activated powder for adsorption of partial acidity and VOCs (if any); bag filter/ESP for removal of particulate matter; venturi scrubber followed by packed bed scrubber with caustic circulation to neutralize the acidic vapours in flue gas; and demister column for arresting water carry over will be provided to the incinerator. Online pollutant monitoring shall be provided as per CPCB guidelines for monitoring particulate matter, SO₂, NO_x and CO from the incinerator stack. The periodical monitoring of Dioxins and Furans in the Stack emissions shall be carried out.
- iii. Analysis of Dioxins and Furans shall be done through CSIR-National Institute for Interdisciplinary Science and Technology (NIIST), Thiruvananthapuram or equivalent NABL Accredited laboratory.
- iv. Incinerator shall be designed as per CPCB guidelines. Energy shall be recovered from incinerator.
- v. Gas generated in the Land fill should be properly collected, monitored and flared.
- vi. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g., PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NO_x in reference to SO₂ and NO_x emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions.

III. Water quality monitoring and preservation:

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

collected and treated in the effluent treatment plant.

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

IV. Waste management:

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

V. Transportation:

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

VI. Green belt:

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

VII. Public hearing and Human health/safety issues:

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

VIII. Corporate Environment Responsibility:

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

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

IX. Miscellaneous:

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

ANNEXURE-7

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

I. Statutory compliance:

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

II. Air quality monitoring and preservation:

- i. Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.
- ii. A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.
- iii. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g., PM₁₀ and PM_{2.5}) covering upwind and downwind directions during the construction period.
- iv. Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.
- v. Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
- vi. Sand, murram, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.
- vii. Wet jet shall be provided for grinding and stone cutting.
- viii. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
- ix. All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Management Rules 2016.
- x. The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.
- xi. The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise

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

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

III. Water quality monitoring and preservation:

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

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

IV. Noise monitoring and prevention:

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

V. Energy Conservation measures:

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

VI. Waste Management:

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

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

VII. Green Cover:

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

VIII. Transport

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

IX. Human health issues:

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

X. Corporate Environment Responsibility:

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