# MINUTES OF 82<sup>nd</sup> MEETING OF EXPERT APPRAISAL COMMITTEE (INFRASTRUCTURE-2) HELD DURING 15-16<sup>th</sup> FEBRUARY, 2022.

#### VENUE: Through Video Conferencing

#### DATE: 15-16<sup>th</sup> February, 2022

#### PROCEEDINGS

**82.1. Opening Remarks of the Chairman:** The Chairman and Members extended warm welcome with each other and other participants of the meeting. Thereafter, the meeting was opened to start proceeding as per the agenda adopted for this meeting.

#### 82.2. Confirmation of Minutes of 81<sup>st</sup> Meeting of Expert Appraisal Committee (Infrastructure-2) held on 31<sup>st</sup> January, 2022.

The Expert Appraisal Committee (Infrastructure-2), hereinafter called the EAC, was informed that no representation has been received regarding projects considered in 81<sup>st</sup> meeting. Minutes of 81<sup>st</sup> 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.

**82.3. Consideration of Proposals (Day I):** The EAC considered proposals as per the agenda adopted for Day-I of 82<sup>nd</sup> meeting. The details of deliberations held and decisions taken in the meeting are as under:

#### AGENDA ITEM NO. 82.3.1.

Common Hazardous Waste Incineration Facility (CHWIF) of 20 TPD capacity and preparation of Alternate Fuel and Raw material (AFR) for co-processing (20 TPD capacity) at Plot No. 20 (Corner) of Sira Industrial Area, 1st Phase, Tumkur Dist., Karnataka by M/s Indian Eco Solutions – Reconsideration for Terms of Reference.

#### (IA/KA/MIS/239361/2021; F. No. 21-102/2021-IA-III)

The Project Proponent (M/s. Indian Eco Solutions) did not attend the meeting. Accordingly, the Committee decided to defer the project as absent case. The Committee also noted that, the project proponent had expressed inability to attend the meeting and requested for deferment of the proposal during the 80<sup>th</sup> meeting of EAC held during 20-21<sup>st</sup> January, 2022. The EAC took note of the repeated absence of the project proponent and was of the opinion to seek an explanation from the project proponent/consultant and place the proposal for consideration in the forthcoming meeting only after receiving the response from the project proponent.

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#### AGENDAITEM NO. 82.3.2

Proposed building construction project of Academy block of Medical College, Hostels & other Accommodations facility with total built-up area of 41,421 sqm. at Vengeri Village, Kozhikode Municipal Corporation, Kozhikode Taluk & District, Kerala to be jointly developed by M/s Amia Builders And Developers Private Limited represented by its Chairman, Ms. Asha Jose and M/s Neoscape Builders And Developers Private Limited represented by its Chairman, Ms. Rashmi Jose - Environmental Clearance

#### (IA/KL/MIS/251712/2022; F. No. 21-11/2022-IA-III)

**1.** The Project Proponent (M/s Amia Builders and Developers Private Limited represented by its Chairman, Ms. Asha Jose and M/s Neoscape Builders and Developers Private Limited represented by its Chairman, Ms. Rashmi Jose) along with his consultant 'M/s. Environmental Engineers & Consultants Pvt. Ltd.', made a presentation on the key parameters and salient features of the project to the EAC (Infra-2). The EAC took note of following key parameters and salient features of the project, as presented during the meeting; provided in the brief and application for this project:

- The project is located at Re-Survey No. 62/2, 62/,3, 62/5, 62/33, 71/3, 71/16, Vengeri Village, Kozhikode Municipal Corporation, Kozhikode Taluk & District, Kerala.
- ii. The project is new.
- iii. The total plot area is 17,938 sqm. FSI area is 36,450 sqm. and total construction (Built-up) area 41,421 sqm. The project will comprise of Academy block of Medical College, Hostels & other Accommodations facility. Maximum height of the building is 29.85m. The details of building are as follows:

Building block name	Max. no. of floors	Built-up area (sqm.)
Academic Block	LG-1+ LG-2+G+5 Floors	11596.87
Girls Hostel Block	G+ LG1+LG2+LG3+6 Floors	6952.00
Boys Hostel Block	G+8 Floors	5584.38
Apartment Block-1	G+9 Floors	4725.92
Apartment Block-2	G+9 Floors	4725.92
Apartment Block-3	G+9 Floors	3917.96
Apartment Block-4	G+9 Floors	3917.96
Total		41,421

- iv. The academy block building of Medical College will be attached with M/s IQRAA International Hospital & Research Centre at Vengeri and Chevayur Village, Kozhikode Municipal Corporation, Kozhikode Taluk, Kozhikode District, Kerala located at 2.5 km (SW).
- v. During construction phase, total water requirement is expected to be 38 KLD which will be met by recycled water from portable STP/stored

rain water (tank) for construction purposes and well water/Kerala Water Authority (KWA) supply for meeting the domestic water requirement expected to be 11 KLD. During the construction phase, portable STP will be provided for disposal of wastewater. Temporary sanitary toilets will be provided during peak labour force.

- vi. During operational phase, total water demand of the project is expected to be 269 KLD and the same will be met by 128 KLD fresh water from stored rain water tanks/KWA/well water and 141 KLD recycled water. Wastewater generated (157 KLD) will be treated in STP of total 190 KLD capacity. 141 KLD of treated wastewater will be generated which will be completely recycled and re-used for flushing (68 KLD), for gardening (10 KLD) and for cooling towers attached with the HVAC System (63 KLD).
- vii. About 600kg/day solid waste will be generated in the project. The biodegradable waste (about 300 kg/day) will be processed in bio-bin unit and the non-biodegradable waste generated (about 300 kg/day) will be handed over to authorized local vendor. An area equivalent of about 150 sqm. for about 15 days storage of non-biodegradable waste would be provided. The hazardous waste (used oil & discarded batteries attached to D.G. sets) will be stored in the designated services area and will be disposed to CPCB/SPCB authorized vendors.
- viii. The total power requirement during operation phase is 3,150 kW (connected load) and will be met from Kerala State Electricity Board (KSEB) & DG Sets (750 kVA x 3 nos.) as a standby power back up arrangement.
- ix. Rooftop rainwater of buildings will be collected in RWH tank of 250 KL capacity for harvesting after filtration.
- x. Parking facility for 253 Cars + 200 Two wheelers is proposed to be provided against the requirement of 253 Cars + 150 Two wheelers respectively (according to local norms).
- xi. The total excavated soil is about 22,000 cu.m. The excavated earth of 3,000cu.m. will be preserved for landscaping purposes, 2,800 cu.m. will be used for backfilling purposes and 200 cu.m. will be used for internal road construction purposes. The remaining excess excavated earth of about 15,000 cu.m. will be stored in land bank owned by the project proponent in the nearby vicinity.
- xii. Solar energy installation of 315 kWp capacity shall be provided to meet 10% of the connected load.
- xiii. Total area for landscaping proposed is 3,155 sqm. (about 16% of total plot area). 70 trees will be cut and it is proposed to plant about 924 tree species within the site & the project vicinity in consultation with the local self-government.
- xiv. The project is not located in Critically Polluted area.
- xv. The project is not located within 10 km of Eco Sensitive Zone. NBWL Clearance is not required.
- xvi. Vengeri Village is not included in the list of Villages in ESA of the Western Ghats as per Appendix 3 of the report of the High Level Working Group (HLWG) on Western Ghats.
- xvii. Forest Clearance is not required.
- xviii. No court case is pending against the project.

- xix. CRZ Clearance is not required.
- xx. Expected timeline for completion of the project About 36 months.
- xxi. Investment/Cost of the project is ₹ 120 Crores.
- xxii. Employment potential About 150 persons during construction phase and about 200 persons during operation phase.
- xxiii. Benefits of the project Employment opportunities &revenue to the State. This project will provide better medical education/treatment facilities with supporting infrastructure facilities and amenities to the people. Direct and indirect employment opportunities; The potential for employment and access to new services may draw people to the area around the project. There will be an increase in economic activity and employment for the local community, local skills development.

**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 Kerala, it 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, decided to defer the proposal and asked the project proponent to provide the following additional information:

- i. Submit a copy of the agreement with IQRAA International Hospital & Research Centre.
- Submit a copy of the Joint Venture agreement between the two project proponents, i.e. M/s Amia Builders and Developers Private Limited represented by its Chairman, Ms. Asha Jose and M/s Neoscape Builders and Developers Private Limited represented by its Chairman, Ms. Rashmi Jose.
- iii. Submit affidavit clarifying the discrepancy in the name of the project proponent (Ms. Rashmi Jose/Ms. Rashmi Binto).

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#### AGENDA ITEM No. 82.3.3

Capacity enhancement of Secured Landfill Facility (SLF) from 10 to 20 lacs MT at Common Hazardous Waste Treatment, Storage and Disposal Facilities (TSDF) at Survey No. 1244/1, 1437/1, 1430/1 & 1510/1, Village Majra, P.O. Dabhota, Tehsil Nalagarh, Solan District, Himachal Pradesh by M/s Shivalik Solid Waste Management Ltd - Reconsideration for Environmental Clearance

#### (IA/HP/MIS/239636/2018; F. No. 21-112/2021-IA-III)

**1.** The EAC noted that the proposal was deferred in its 80<sup>th</sup> meeting held during 20-21<sup>st</sup> January, 2022 and the project proponent was asked to submit

an affidavit specifying the correction in the details of solid waste management submitted in the ADS Reply.

**2.** The Project Proponent (M/s. Shivalik Solid Waste Management Ltd.) along with his consultant 'M/s. Perfact Enviro Solutions Pvt. Ltd.', made a presentation and submitted an affidavit with the following information:

- i. The details of solid waste during the operation phase are correct in Form 1.
- ii. The correct details of solid waste management during operation phase is as follows: Total 12 kg/day of Municipal Solid Waste is being generated from 80 no. of workers out of which 7 kg/day is treated in existing biogas plant and 5 kg/day is recyclable waste which is treated within the site.

**3.** The EAC noted that the project/activity is covered under category 'B' 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. However, General Condition is applicable and the project falls under Category "A" since the interstate boundary of Himachal Pradesh and Punjab falls within 2.47 km (Arial Distance) and 4.5 km (Road distance) from the proposed site. Therefore, it requires appraisal at Central level by sectoral EAC.

**4.** The EAC found that the response to the queries are 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. 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 Secured Landfill issued by CPCB shall be followed.
- iii. Necessary provision shall be made for firefighting facilities within the complex.
- iv. Project proponent should prepare and implement an on-site Emergency Management Plan.
- v. Employees shall be provided work specific PPE such as helmets, safety shoes, masks etc.
- vi. 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 50,032 sqm. (@ 35% of plot area) and 10,006 trees shall be maintained as proposed. The tree species shall be selected as suited to site conditions in consultation with concerned forest department.

- vii. Fresh water requirement shall not exceed 12 KLD during operational phase. Abstraction of ground water shall be subject to the permission of Central Ground Water Authority (CGWA).
- viii. Gas generated in the Landfill should be properly collected, monitored and flared.
- ix. 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.
- x. The depth of the landfill site shall be decided based on the ground water table at the site.
- xi. PP shall ensure proper handling of all spillages by introducing spill control procedures for various chemicals.
- xii. Wastewater generated from the process including leachates arising from premises shall be treated in MEE of 20 KLD capacity. Treated water shall be reused within the project. Toxicity Characteristic Leaching Procedure (TCLP) test to be performed on leachates.
- xiii. Rain water runoff from the landfill area and other hazardous waste management area shall be collected and treated in an effluent treatment plant.
- xiv. 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.
- xv. 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.
- xvi. 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.
- xvii. 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.
- xviii. 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.
- xix. 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.

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.

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#### AGENDA ITEM NO. 82.3.4

Proposed warehousing project with total built-up area of 1,47,973.55 Sqm. at Thirkkakara North Village, Kanayannur Taluk, Ernakulam District, Kerala by M/s Blue Star Realtors Limited- Environmental Clearance

#### (IA/KL/MIS/253369/2022; F. No. 21-8/2022-IA-III)

**1.** The Project Proponent (M/s Blue Star Realtors Limited) along with his consultant 'M/s. Environmental Engineers & Consultants Pvt. Ltd.', made a presentation on the key parameters and salient features of the project to the EAC (Infra-2). The EAC took note of following key parameters and salient features of the project, as presented during the meeting; provided in the brief and application for this project:

- i. The project is located at Old Survey No. 838, 882, 883, 886, 887, 888
  & 938 and Resurvey No. 717/5 in Block No 5 of Thirkkakara North Village, Kanayannur Taluk, Ernakulam District, Kerala.
- ii. The project is new.
- iii. The total plot area is 2,80,076 sqm., FSI area is 1,47,201.55 sqm. and total construction (Built-up) area is 1,47,973.55 sqm. The project will comprise of 6 nos. of Warehouse Blocks with Administration Office Block & Services Block. Maximum height of the building is 18.8 m. The details of building are as follows:

S. No.	Building Unit	Building Height (in m)	Built-Up Area (in sqm.)
1	Ware House- 1	15	19247.45
2	Ware House- 2	16	10489.85
3	Ware House- 3	16	8917.25

4	Ware House- 4	15	13065.45
5	Ware House- 5	18.8	72176.80
6	Ware House- 6	16.5	22775.60
7	Office Building	3.5	315.15
8	Service Block		986.0
	Total		1,47,973.55

- iv. During construction phase, total water requirement is expected to be 135 KLD which will be met by recycled water from portable STP/ stored rain water (tank) for construction purposes and well water/ Kerala Water Authority (KWA) supply for meeting the domestic water requirement expected to be 11 KLD. During the construction phase, portable STP will be provided for disposal of waste water. Temporary sanitary toilets will be provided during peak labour force.
- v. During operational phase, total water demand of the project is expected to be 209 KLD and the same will be met by 66 KLD fresh water from stored rainwater tanks/KWA/well water and 143 KLD recycled water. Wastewater generated (159 KLD) will be treated in STP of total 200 KLD capacity. 143 KLD of treated wastewater will be generated which will be completely recycled and re-used for flushing (132 KLD) and for gardening (11 KLD).
- vi. About 1,000kg/day solid waste will be generated in the project. The biodegradable waste (about 500 kg/day) will be processed in bio-bin unit and the non-biodegradable waste generated (about 500 kg/day) will be handed over to authorized local vendor. An area equivalent to 250 sqm. for about 15 days storage of non-biodegradable waste would be provided. As per Hazardous Waste (Management & Handling Rules), the hazardous waste i.e., the used oil from D.G. sets, discarded oil filters and discarded batteries and stored separately and will be disposed to CPCB/SPCB authorized vendors.
- vii. The total excavated soil will be fully used for backfilling, internal road development and for landscaping purposed within the site.
- viii. The total power requirement during operation phase is 2,767 kW and the same will be fully met with proposed Solar Power Panel to be installed within the project site. The project will make provision of DG Sets (125 kVA x 1 no.) as standby arrangement.
  - ix. Rooftop rainwater of buildings will be collected in RWH tank of 60 KL total capacity for harvesting after filtration.
  - Parking facility for 660 Cars + 149 Heavy Vehicles + 1,250 Two Wheelers is proposed to be provided against the requirement of 589 Cars + 147 Heavy Vehicles + 526 Two Wheelers respectively (according to local norms). Provision for charging for electrically operated vehicles (20%) is proposed in each parking zone.
- xi. Total area for landscaping area proposed is about 50,000 sqm. (about 20% of total plot area). 450 trees will be cut and it is proposed to plant 4,500 trees. About 1,000 trees are proposed to be planted around the periphery as green belt.
- xii. The project is not located in Critically Polluted area.

- xiii. The project is not located within 10 km of Eco Sensitive Zone. NBWL Clearance is not required.
- xiv. Thirkkakara North Village is not included in the list of Villages in ESA of the Western Ghats as per Appendix 3 of the report of the High Level Working Group (HLWG) on Western Ghats.
- xv. Forest Clearance is not required.
- xvi. CRZ Clearance is not required.
- xvii. There is a case in Hon'ble High Court of Kerala vide Case No. WP(C) 34135/2014 but the matter is still pending and no order has been passed in the matter. There is a prevailing Prohibitory Order issued by the Taluk Land Board on the project land.
- xviii. Expected timeline for completion of the project About 36 months.
  - xix. Investment/Cost of the project is ₹350 Crores.
  - xx. Employment potential About 4,400 persons.
  - xxi. Benefits of the project Employment opportunities & revenue to the State. The proposed warehouse project would provide better jobs facilities to the local population with supporting infrastructure facilities.

**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 Kerala, it 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. The Environmental Clearance (EC) shall be considered valid only after the prohibitory order is withdrawn by the Taluk Land Board. And also the copy of the same shall be submitted to the IRO-MoEF&CC.
- ii. The project proponent shall resolve all legal issues related to the land ownership before commencing the construction.
- iii. Abstraction of ground water shall be subject to the permission of Central Ground Water Authority (CGWA). Fresh water requirement shall not exceed 66 KLD during operational phase.
- As proposed, wastewater shall be treated in an onsite STP of total 200 KLD capacity. Atleast 143 KLD of treated water from the STP shall be recycled and re-used for flushing (132 KLD) and for gardening (11 KLD). There shall be no discharge of treated water from the project as proposed.
- v. The project proponents would commission a third-party study on the implementation of conditions related to quality and quantity of recycle and reuse of treated water, efficiency of treatment systems, quality of treated water being supplied for flushing (specially the bacterial

counts), comparative bacteriological studies from toilet seats using recycled treated waters and fresh waters for flushing, and quality of water being supplied through spray faucets attached to toilet seats.

- vi. Area for greenery shall be provided as per the details provided in the project document i.e., area under plantation/greenery will be 50,000 sqm. As proposed, at least 4,500 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. No tree can be felled/transplanted unless exigencies demand. Where absolutely necessary, tree felling shall be with prior permission from the concerned regulatory authority. Old trees should be retained based on girth and age regulations as may be prescribed by the Forest Department. Plantations to be ensured species (cut) to species (planted).
- viii. Where the trees need to be cut with prior permission from the concerned local Authority, compensatory plantation in the ratio of 1:10 (i.e., planting of 10 trees for every 1 tree that is cut) shall be done and maintained. Plantations to be ensured species (cut) to species (planted). Area for green belt development shall be provided as per the details provided in the project document.
  - ix. The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. As proposed, RWH tank of 60 KL capacity shall be provided by PP for rain water harvesting after filtration.
  - x. The solid waste shall be duly segregated into biodegradable and nonbiodegradable components and handled in separate area earmarked for segregation of solid waste, as per SWM Rules, 2016. As committed, biodegradable waste shall be utilized through the Bio-Gas generation plant/bio-bin unit to be installed within the site. Inert waste shall be disposed off as per norms at authorized site. The recyclable waste shall be sold to authorized vendors/recyclers. Construction & Demolition (C&D) waste shall be segregated and managed as per C&D Waste Management Rules, 2016.
  - A detailed traffic management and traffic decongestion plan shall be xi. 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 Urban Development department by the State 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.

- xii. The PP shall provide electric charging points in parking areas for e-vehicles as committed.
- xiii. As committed, solar energy installation of 2,767 kW capacity shall be implemented.
- 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.

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#### AGENDA ITEM NO. 82.3.5

Proposed Residential Building Project 'ArtechL' Attitude' with built-up area of 59878.50 sqm. At Sreekariyam, Ulloor Village, Thiruvananthapuram Taluk & District, Kerala by M/s Artech Realtors Private Limited -Reconsideration for Environmental Clearance

#### (IA/KL/MIS/238013/2021; F. No. 21-107/2021-IA-III)

**1.** The EAC noted that the proposal was deferred in its  $79^{\text{th}}$  meeting held on  $31^{\text{st}}$  December, 2021 and the project proponent was asked to provide the following additional information:

- i. Revised water calculations and water balance diagram by considering alternate use for the excess treated water generated in the project.
- ii. Revised tree cutting and compensatory plantation details.

**2.** The Project Proponent (M/s Artech Realtors Private Limited) along with his consultant 'M/s. ULTRA TECH', made a presentation and provided the following information:

- i. The water calculations have been revised by considering water requirement for the increased green area and reuse of excess treated wastewater for construction activities and landscape development at other project sites of the proponent.
- ii. During operational phase, total water requirement of the project will be 261 KLD during non-monsoon season and 251 KLD during monsoon season and the same will be met by 145 KLD freshwater from KWA supply/two existing bore wells & an open well/harvested rainwater and 116 KLD (non-monsoon season) & 106 KLD (monsoon season) recycled water. Wastewater generated (188 KLD) will be treated in a STP (MBBR technology followed by tertiary treatment including ultra-filtration) of total 200 KLD capacity. 170 KLD of treated wastewater will be generated which will be recycled and reused (72 KLD for flushing, 10 KLD for gardening and 34 KLD for car and floor washing) and about 54 KLD (non-monsoon) and 64KLD (Monsoon) will be reused for

construction activities and landscape development at other project sites of the proponent.

iii. Total green area of 1540sqm. (Ground- 1270 sqm. and Podium- 270 sqm.) is proposed. A total of 138 trees are present in the site, out of which, 103 trees will be cleared for the construction and remaining 35 trees will be retained within the site. A total of 1065 trees, which includes 1030 trees (compensatory plantation- 10 times the no. of cutting) and 35 trees (retained trees) will be maintained.

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

**4.** The EAC found that the response to the queries are 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. Abstraction of ground water shall be subject to the permission of Central Ground Water Authority (CGWA). Fresh water requirement shall not exceed 145 KLD during operational phase.
- ii. As proposed, wastewater shall be treated in Onsite STP of total 200 KLD capacity. Atleast 116 KLD (non-monsoon season) of treated water from the STP shall be recycled and re-used for flushing (72 KLD), gardening (10 KLD) and for car and floor washing (34 KLD). Excess treated water of about 54 KLD (non-monsoon) and 64 KLD (Monsoon) will be reused for construction activities and landscape development at other project sites of the proponent. PP shall submit MoU for the disposal of excess treated water (outside the site) to the Regional Office of MoEF&CC along with six-monthly compliance report.
- 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 1540 sqm. (Ground-1270 sqm. and Podium-270 sqm.). As proposed, at least 1065 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.

- v. No tree can be felled/transplanted 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).
- vi. 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.
- 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, RWH tank of 200 KL capacity shall be provided by PP for rain water harvesting after filtration.
- viii. The solid waste shall be duly segregated into biodegradable and nonbiodegradable components and handled in separate area earmarked for segregation of solid waste, as per SWM Rules, 2016. As committed, biodegradable waste shall be utilized through the Bio-Gas generation plant/bio-bin unit to be installed within the site. Inert waste shall be disposed off as per norms at authorized site. The recyclable waste shall be sold to authorized vendors/recyclers.Construction & Demolition (C&D) waste shall be segregated and managed as per C&D Waste Management Rules, 2016.
  - ix. The PP shall provide electric charging points in parking areas for e-vehicles as committed.
  - x. As committed, solar energy installation of 40 KW capacity shall be implemented.
  - 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.

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#### AGENDA ITEM NO. 82.3.6

Proposed Commercial Complex (J Category as per KPBR) cum Service Apartments Project with built-up area of 46,435 sqm. at Raroth Village, Kattipara Panchayat, Thamarassery Taluk, Kozhikode District, Kerala by M/s VIRSOURCE VENTURES PVT. LTD. –Environmental Clearance

### (IA/KL/MIS/254371/2022; F. No. 21-12/2022-IA-III)

**1.**The Project Proponent (M/s VIRSOURCE VENTURES PVT. LTD) along with his consultant 'M/s. Environmental Engineers & Consultants Pvt. Ltd.', made a presentation on the key parameters and salient features of the project to the EAC (Infra-2). The EAC took note of following key parameters and salient features of the project, as presented during the meeting; provided in the brief and application for this project:

- The project is located at New Survey Nos. 2/91, 2/80, 2/180 & 2/80 & Re-Survey No. 2/1 of Raroth Village, Kattipara Panchayat, Thamarassery Taluk, Kozhikode District, Kerala.
- ii. The project is new.
- iii. The total plot area is 19,404 sqm., FSI area is 29,584 sqm. and total construction (Built-up) area is 46,435 sqm. The project will comprise of Commercial Complex cum Service Apartments shall be developed. Maximum height of the building is 27.5 m. The details of building are as follows:

Name of	Max. no. of floors	Max.	Built-up
Building		Height	area
1 no. Building Block	3 Basements + Gr. + 4 floors	27.5 m	45,435 sqm.

- iv. During construction phase, total water requirement is expected to be 42 KLD which will be met by recycled water from portable STP/stored rain water (tank) for construction purposes and well water/Kerala Water Authority (KWA) supply for meeting the domestic water requirement expected to be 11 KLD. During the construction phase, portable STP will be provided for disposal of wastewater. Temporary sanitary toilets will be provided during peak labour force.
- v. During operational phase, total water demand of the project is expected to be 163 KLD and the same will be met by 63 KLD fresh water from stored rain water tanks/KWA/well water and 100 KLD recycled water. Wastewater generated (111 KLD) will be treated in STP of total 140 KLD capacity. 100 KLD of treated wastewater will be generated which will be completely recycled and re-used (76 KLD for flushing, 5 KLD for gardening, 19 KLD for cooling requirement etc.).
- vi. About 670 kg/day solid waste will be generated in the project. The biodegradable waste (335 kg/day) will be processed in Bio-bin unit and the non-biodegradable waste generated (335 kg/day) will be handed over to authorized local vendor. An area of about 400 sqm. is earmarked for storage of the non-biodegradable waste. The hazardous waste i.e., the used oil from D.G. sets, discarded oil filters and discarded batteries and stored separately and will be disposed to CPCB/SPCB authorized vendors.
- vii. The total power requirement during operation phase is 3,450 kW (connected load) and will be met from Kerala State Electricity Board & DG Sets (1,000 kVA x 2 nos.) as a standby power back up arrangement.

- viii. Rooftop rainwater of buildings will be collected in RWH tanks of 240 KL total capacity (120 KL X 2 Nos.) for harvesting after filtration.
  - ix. Parking facility for 600 Cars + 150 Two-wheelers is proposed to be provided against the requirement of 592 Cars + 148 Two-wheelers respectively (according to local norms). Provision for charging for electrically operated vehicles (20%)is proposed in each parking floor.
  - x. The project has provision for installation and generation of 350 KWp (10.15% of connected load) capacity of On-Grid Solar Power generation plant.
- xi. Total area for landscaping area proposed is 6,039 sqm. (about 31% of total plot area). 169 trees will be cut and it is proposed to plant 1950 trees within the site & the project vicinity in consultation with the local self-government.
- xii. The project is not located in Critically Polluted area.
- xiii. Malabar Wildlife Sanctuary is located at about 1.5 km (N) of the project site and application for obtaining NBWL Clearance has been submitted vide Proposal No. FP/KL/Others/6215/2022 dated 01.02.2022. The project site is not falling within ESZ of the Sanctuary as per the Draft Notification issued on 05.08.2020.
- xiv. Raroth Village is not included in the list of Villages in ESA of the Western Ghats as per Appendix 3 of the report of the High Level Working Group (HLWG) on Western Ghats.
- xv. Forest Clearance is not required.
- xvi. No court case is pending against the project.
- xvii. CRZ Clearance is not required.
- xviii. Expected timeline for completion of the project About 36 months.
- xix. Investment/Cost of the project is ₹ 150 Crores.
- xx. Employment potential About 150 persons during construction phase and about 150 persons during operation phase.
- xxi. Benefits of the project Employment opportunities & revenue to the State. The Proposed Commercial Complex cum Service Apartments Project would provide better commercial and residential facilities with some jobs facilities to the local population with supporting infrastructure facilities.

**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 Kerala, it required appraisal at Central level by sectoral EAC.

**3.** Several discrepancies and gaps were noted in the details provided in the Form I, Form IA and in the Presentation. Accordingly, the EAC (Infra-2), decided to defer the proposal and asked the project proponent to provide the following additional information:

i. Clarify the discrepancy in total built-up area as submitted in Form-1 and Form 1A.

- ii. Clarify the discrepancies in total water requirement and water balance diagram as submitted in Form 1 and Form 1A.
- iii. Clarify the discrepancy in solar power installation capacity as submitted in Form-1 and Form 1A.
- iv. Form 1 refers to old structures existing at site which will be demolished. Provide details of demolition and C&D waste management.
- v. Clarify the space allotted for storage of non -biodegradeable wastes at site.
- vi. Provide details of excavated earth in Form 1/Form 1A.
- vii. Resubmit Form–1 and Form 1A with correct details.

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## AGENDA ITEM NO. 82.3.7

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

#### (IA/DL/MIS/210804/2021; F. No. 21-46/2020-IA-III)

**1.** The EAC noted that the proposal was deferred in its 79<sup>th</sup> meeting held during 31<sup>st</sup> December, 2021 and the project proponent was asked to provide the following additional information:

i. Submit approved building plan for the project.

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

- i. Original Building duly approved plan by Delhi Development Authority (DDA) is again submitted hereby for reference.
- ii. Further, it is informed that approval from DDA for the expansion of building for which approval is sought will be granted after the Environmental clearance.
- iii. It is also informed that since 2019, Delhi Fire department has started giving online approvals and only letter for approval is provided. (Letter no. F.6/DFS/MS/2022/238 dated 28.01.2022 in this regard is submitted for reference).

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

**4.** Keeping in view, the project location is in Delhi NCR which is severely affected by poor air quality, the committee advised to the PP to consider the

development of dense plantation at the project site using appropriate techniques in consultation with the forest department/horticulture department/experts/consultants etc., to counter the air pollution in the area. An action plan for increasing the green cover needs to be submitted immediately with the copy marked separately to the Chairman EAC (Infra-2).

**5.** The EAC found that the response to the queries are 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. The PP shall obtain Delhi Development Authority (DDA) approval for the expansion before commencing the project.
- ii. Fresh water requirement from local authority shall not exceed 110.29 KLD during operational phase.
- iii. As proposed, wastewater shall be treated in the Onsite STP having total 150 KLD capacity. Atleast 69.46 KLD (non-monsoon season) of treated water from the STP shall be recycled and re-used for flushing (47.26 KLD), road cleaning (2.1 KLD), Filter backwash (7.5 KLD) and horticulture use (12.6 KLD). PP shall explore options for reuse and recycling of excess treated water.
- iv. The project proponents would commission a third-party study on the implementation of conditions related to quality and quantity of recycle and reuse of treated water, efficiency of treatment systems, quality of treated water being supplied for flushing (specially the bacterial counts), comparative bacteriological studies from toilet seats using recycled treated waters and fresh waters for flushing, and quality of water being supplied through spray faucets attached to toilet seats.
- v. The increase in greening should be followed in accordance with the direction at Sr. No. 4 above and also satisfying the commitments provided in the project document.
- vi. The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. As proposed,1 no. RWH pit shall be provided by PP for rain water harvesting after filtration.
- vii. The solid waste shall be duly segregated into biodegradable and nonbiodegradable components and handled in separate area earmarked for segregation of solid waste, as per SWM Rules, 2016. As committed, biodegradable waste shall be utilized through the Bio-Gas generation plant/bio-bin unit to be installed within the site. Inert waste shall be disposed off as per norms at authorized site. The recyclable waste shall be sold to authorized vendors/recyclers. Construction & Demolition (C&D) waste shall be segregated and managed as per C&D Waste Management Rules, 2016. Bio-medical wastes shall be disposed as per Bio-Medical Waste (Management & Handling) Rules, 2016.

- viii. The PP shall provide electric charging points in parking areas for e-vehicles as committed.
- ix. As committed, atleast 20% hot water requirement shall be met by solar water heating systems.
- 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.

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#### AGENDA ITEM NO. 82.3.8

Proposed expansion of existing Hospital complex project and a parking block with increase in built-up area from 14,029.23 sqm. to 27,327.10 sqm. at Pettah Village, Thiruvananthapuram Municipal Corporation, Taluk & District, Kerala by M/s Ananthapuri Hospitals & Research Institute - Environmental Clearance

#### (IA/KL/MIS/253827/2022; F. No. 21-9/2022-IA-III)

The Project Proponent (M/s. Ananthapuri Hospitals & Research Institute) along with his consultant 'M/s. Environmental Engineers & Consultants Pvt. Ltd.', made a presentation on the key parameters and salient features of the project to the EAC (Infra-2). The EAC observed that the project proposal has not taken into consideration the existing built-up area constructed before 2006, while applying for expansion. Accordingly, the EAC (Infra-2) decided to return the instant proposal and asked the project proponent to revise the proposal and apply for expansion accordingly.

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#### AGENDA ITEM NO. 82.3.9

Setting up of Common hazardous waste treatment, storage and disposal facilities (TSDFs) at Plot Nos: 1004 -1022, 1027 & 1028 of Kesda Village, Simga Tehsil, Baloda Bazar District, Chhattisgarh by M/s Ramky Enviro Engineers Ltd.-Reconsideration for Environmental Clearance

#### (IA/CG/MIS/171901/2020; F. No. 21-109/2021-IA-III)

**1.** The EAC noted that the proposal was deferred in its 78<sup>th</sup> meeting held during 14-15<sup>th</sup> December, 2021 and the project proponent was asked to provide additional information and resubmit the EIA Report in compliance to the following observations:

i. The public hearing proceedings mention disruption and that the meeting was ended after protest was launched by the public. Only 4 people have signed the attendance sheet whereas the comments of more people have been recorded. The PP explained that there was a law and

order issue and only few public representatives were allowed to come forward and speak. The EAC noted that the spirit of the public hearing seems to have been compromised. Accordingly, an explanation needs to be sought from the SPCB on the adequacy of the public hearing conducted and conformity to requirements under EIA Notification, 2006.

- ii. It is not specified whether the land has been leased or owned by the project proponent. The cost of the project considered for budgetary provisions is only ₹36 Crores, whereas the total cost of the project inclusive of land and other CSIDCL regulatory costs has been given as ₹75.10 Crores. Clarification is required in this regard. Detailed break-up of EMP capital budget and recurring budget needs to be provided.
- iii. There is no FAE mentioned for Soil Conservation involved in the preparation of EIA Report.
- iv. The water requirement and wastewater calculations needs to be reevaluated. The water balance diagram is incomplete and incorrect with the inflow quantities not matching the outflow quantities or the total water demand as stated. Also, the treatment methods adopted for different types of wastewater is not specified in the water balance diagram. The quantities of water requirement and wastewater generation for activities such as 2 KLD for landfill operation (1.4 KLD wastewater generation) and 4 KLD for plastic recycling (2.4 KLD wastewater generation) need to be justified. Also, manpower required is 50; sanitary water required @ 45 LPCD is 2,250 litres/day, whereas in water balance 4 KLD is considered which is equivalent to 80 LPCD. Therefore, detailed water requirement calculations along with revised water balance diagram needs to be provided.
- v. In solid waste management, ash coming from power plant is mentioned. Source of the ash generation in the project needs to be clarified.
- vi. The capacity of rainwater collection system has not been provided.
- vii. The details of parking and traffic management for need to be provided.
- viii. The width of greenbelt is mentioned as 10m and 15m and needs to be clarified. The number of trees proposed for plantation has not been specified. Does the green area allocated meet the requirement as per CPCB guidelines?
- ix. The renewable energy of 2MW solar power generation is proposed in the closed landfill after evaluating the recent developments in solar energy on closed landfill and other criteria. Why is it then mentioned as a project feature when the implementation is neither planned out nor confirmed?
- x. EIA Report Unique Identification Code is not revision controlled. Needs to be differentiated for draft and final report.
- xi. It is noted that most of the proposed activities (other than incinerator and landfill) are not covered under item 7(d) of EIA Notification. However, since integrated facility is proposed, detailed breakup of each proposed component with expected waste quantity (availability) and proposed capacity shall be provided. It shall also include the details of the source for each type of waste and rejects/products generated from each activity along with end use.

- xii. The detailed land use breakup shall also be provided specifying the area allotted for each activity and its adequacy (particularly space requirements) with respect to CPCB guidelines.
- xiii. The provisions for avoiding the intermixing of hazardous wastes and non-hazardous waste streams needs to be clarified in detail. Detailed layout plan shall be provided indicating the same.
- xiv. Clarification and detailed break-up of fuel requirement is required.
- xv. Fire potential from storage yard of waste paper, plastic waste and solvents are not addressed. Industrial accidents are listed but their critical relevance to TSDF is not captured.
- xvi. The land filling activity requires further clarification. Gas management system is proposed in secured landfill. How is gas production expected? It is also specified that salts are to be bagged and landfilled. How are water soluble ingredients to be sent to secured landfill?
- xvii. TCLP test requirement or its quantity is not stated in the EIA Report.
- xviii. Quantification of HW requiring chemical fixation/immobilization, solidification and encapsulation needs to be provided.
  - xix. The Terms of Reference included the provision for biomedical waste facility which has then been dropped from the proposal. Affidavit needs to be submitted in this regard.
  - xx. Based on operating experience of the project proponent in their other projects, is there operating data for extent of capacity utilization made for E-Waste recycling, Alternate Fuel and Raw-material Facility, Plastic recycling, Paper recycling, Solvent Recovery and Renewable Energy? Also, leachate characteristics and expected incinerator stack emission details including dioxin and furan levels shall be provided based on operating experience of the project proponent.

**2.** The Project Proponent (M/s. Ramky Enviro Engineers Ltd.) along with his consultant 'M/s. Ramky Enviro Services Pvt. Ltd.', made a presentation and provided the following information:

- i. Reply-ADS 1: The information sought from Chhattisgarh Environment Conservation Board (CECB) mentions that the procedure laid down in the EIA notification, 2006 (as amended) has been followed and the public hearing was conducted as per the notification in letter and spirit without any compromise. A copy of the letter has been submitted.
- Reply ADS 2: An area of around 50.0 acres of land in plot nos. 1004 to 1022, 1027, and 1028 in Simga Tehsil, Baloda Bazar District has been allotted to M/s. REEL by CSIDC wide letter no/CSIDC/TSDF/2020/3039, Dated: 06/06/2020 and incorporated in the final EIA report. The copy of Chhattisgarh JV agreement wherein on page no. 9 it is agreed upon between CSIDC and Ramky that the overall capital infusion in the project from Ramky end for the development of the project would be Rs. 75.10 crores.
- iii. Reply ADS 3: As per the NABET scheme version 3, following the Annexure-IIA, under sector no. 32, Soil Conservation (SC) does not fall under Significant functional area (In-house/empanelled). The same has been submitted.

- iv. Reply ADS 4: The water requirement and wastewater calculations are being re-evaluated and a modified water diagram is submitted in the final EIA report. The water requirement for landfill operation is 2KLD and wastewater generation is 1.4 KLD and the difference of 0.6 KLD is due to evaporation loss and consumption in the operation. The water requirement for plastic recycling, paper, and E-waste is 4 KLD, and wastewater expected from this is 2.4 KLD. The difference is of 0.6 KLD is due to evaporation loss and consumption in the operation. The direct manpower required is around 50 persons and indirect manpower required is around 40 (security guards, truck drivers, cleaners, etc). The water requirement was assumed to be 45@LPD. Hence, the domestic water requirement is proposed as 4 KLD. The wastewater from all the streams will be collected in a collection tank and sent to the wastewater treatment plant or ETP.
- v. Reply ADS 5: In section 4.8 of EIA Report, for solid waste generation it is mentioned that the incineration ash would be generated from the incineration of hazardous waste. The anticipated Ash generations from incinerator shall be around 13 TPD.
- vi. Reply ADS 6: The average annual rainfall is 1193.4 mm in 57 days. The Runoff calculation has been performed and the runoff water is around 3745.9 m<sup>3</sup>/day as given in Table 7.16 (final EIA report) which shall ultimately be proposed to make proper utilization of rainwater within the facility. A rainwater collection pond has been designed to hold rainwater as given in the Layout. The rainwater thus collected, after treatment as necessary, shall be used for various uses (dust suppression, floor washings, toiler flushing, greenbelt, etc.) On the whole, a zero liquid discharge system will be followed.
- vii. Reply ADS 7: In the final EIA report, Chapter 3, section 3.6 a detailed Traffic study was reported. The report suggests that traffic will not have a major impact due to the proposed project. The parking area proposed as per the given Layout in figure 2.3 is approx. 206 sqm.
- viii. Reply ADS 8: The width of the greenbelt is mentioned as 10m. The number of trees proposed for plantation has been provided under Table 9.1, the number of trees to be planted along the boundary is around 2700 and the number of trees to plant in landscapes/open spaces & roads are around 1380 trees.
  - ix. Reply ADS 9: The strategy adopted is to generate 2 MW renewable energy. Hence, as an additional component, it has been addressed in the EIA report after the landfill is closed.
  - x. Reply ADS 10: Unique Identification Code has been provided. For Draft EIA report the code shall be RESPL/REEL- KESDA/I/016/R00 and for the final EIA report the code shall be RESPL/REEL-KESDA/I/016/R01.
  - Reply ADS 11: Ramky Enviro Engineers Ltd proposed to set up an integrated Common Hazardous waste facility with a 3R (Reduce, Recycle and Reuse) concept as a part of circular economy to ensure the lesser load on the landfill. As per the provisions of Schedule I [see rule 3(1) (17) (i)] of HoWM Rules 2016, various type of hazardous is expected such as waste like oil sludge, spent catalyst and molecular sieves from

petrochemical processes, drill mud containing oils from crude oil & natural gas production, Oil sludge, spent catalysis from reprocessing of used oil or recycling of waste oil, Tar contains wastes from the production of primary and secondary aluminum, spent catalyst and carbon residues from nitrogenous complex fertilizer, process residues from plastic wastes, spent solvents and spent acid from the pharma and dye industries. Further Chhattisgarh being a Mineral-rich state with the presence of industries engaged in the production of aluminum, cement, power, etc., provision for infrastructure having minimum economic sizing have been considered for intake of waste for treatment and disposal at the proposed facility.

Reply – ADS 11 contd.: As per the Request for Proposal for Setting up xii. and Operating the Common Hazardous Waste Treatment, Storage and Disposal Facility (HWTSDF) in Chhattisgarh with RFP No.: CSIDC-HWTSDF-RFP-02-2019, the information provided referring CECB data, the total hazardous waste generation of Chhattisgarh State in the year 2018 is Approx. 3, 14,903 MT, to which Land fillable waste is 31594 MT and Incinerable Waste is 23488 MT. Considering a minimum period of 25 years as the operations phase for CHWTSDF, the projection of waste quantities has been made for the next 25 years, taking the present data as the basis, to arrive at the proposed capacities for different facilities. Based on the latest available data with CECB on the landfillable waste in the state (i.e., 31,594 TPA) and considering a 10 percent increase in waste quantity year-on-year, the estimated landfillable waste (direct landfill + landfill after stabilization) after 25 years turns out to be close to 4,20,000 TPA. Accordingly, the capacity of 4,50,000 TPA has been proposed for Landfilling. Similarly, based on the latest available data with CECB on the incinerable waste in the state of Chhattisgarh (i.e., 23,488 TPA) and considering a 10 percent increase in waste quantity year-on-year, the estimated incinerable waste after 25 years turns out to be close to 3 lakh TPA. However, the majority of the incinerable waste is expected to be utilized as AFRF, either directly transported from the waste generating industry to the cement industries or through the nearest available TSDF. Taking this trend of utilizing the suitable high-calorific waste streams as AFRF (instead of incineration), it has been proposed to establish the incineration facility scalable up to 1.5 TPH only, in modular form. Similarly, an AFRF facility (where different high-calorific wastes are processed through blending etc. to make the waste suitable for usage as alternate fuel), has been proposed with a capacity of 100 TPD.

S. No.	Description of Unit	Size	Qty.	МоС
1	Security room	3.46 x 3.46m	1	RCC
2	Underground sump	3.00 x 3.00m	1	RCC
3	Weigh bridge & room	3.46 x 3.46m	1	RCC

xiii. Reply – ADS 12: The detailed land use breakup is provided as follows:

4	Sample collection	4.25 x 1.76m	1	RCC
	platform			
5	Admin cum lab building	19.00 x 13.9m	1	RCC
6	Electrical panel room	10.23 x 6.23m	1	RCC
7	Canteen	8.46 x 10.46m	1	RCC
8	Vehicle tyre wash	24.00 x 6.66m	1	RCC
9	Leachate collection pond	41.00 x 59.00m	1	-
10	Rainwater collection pond	22.00 x 30.00m	1	-
11	Fire hydrant pump room	14.00 x 11.10m	1	RCC
12	Waste stabilisation shed, temporary waste store and incinerable waste store	42.90 x 21.90m	1	PEB
13	Drum storage	38.50 x 56.80m	1	PEB
14	AFRF shed	48.90 x 13.00m	1	PEB
15	Workers restrooms	3.50 x 11.50m	1	RCC
16	General stores and vehicles shed	21.60 x 12.00m	1	PEB
17	PCC/MCC/PLC Room	25.90 x 5.46m	1	RCC
18	Tank for Incinerator plant	19.98 x 6.84m	1	RCC
19	Incinerator plant	75.00 x 16.00m	1	PEB
20	Interactable stores	15.00 x 30.00m	1	PEB
21	Total Landfill	114035.42sqm	1	-

- xiv. Reply ADS 13: Only compatibility-based hazardous waste are intermixed during the stabilization and solidification process. There is no process where hazardous and non- hazardous wastes are mixed together. The process area for the above mentioned already provided in the layout.
- xv. Reply ADS 14: The major fuel used in TSDF is HSD (diesel) and the same is mainly used during start-up of incinerator and for operating DG sets during power failure. The quantity of HSD estimated is 150 L/hr and the same will be used for the above-mentioned activities as per the requirement.
- xvi. Reply ADS 15: The main hazards expected from the storage yard of paper, plastic, and solvents are mainly fires arising due to any available ignition source and oxidizing agents. However, proper precautions and mitigative measures will be taken in these storage areas to ensure no fire hazards will be expected from these facilities. The industrial activities proposed in the report are mainly of treatment, storage and disposal. Storage tank failures, which are similar to the storage of fuels, are expected in the TSDF. The similar nature of tank failures like overloading of tanks, overpressure, etc. are taken into consideration for estimating the hazards for TSDF facility. The past industrial accidents

analysis provides critical information regarding the causes of the accidents and their effects and consequences. The knowledge can be used to safeguard the facility and lower the probability of accidents caused by the same factor.

- xvii. Reply ADS 16: The section 9.2 of the final EIA report, Environmental management plan, sr.no. 7 briefs about the gas production. Landfill gas is generated from waste biodegradation. Heat is generated through these biochemical reactions with concomitant generation of gases like methane, carbon dioxide, nitrogen, oxygen, hydrogen sulphide etc. To manage the gas generated a venting system with flaring arrangement is proposed.
- xviii. Reply ADS 17: At present, this is a proposed facility. After obtaining the necessary clearances and once the operation starts, TCLP test for Hazardous waste will be performed.
  - xix. Reply ADS 18: Based on the characterization of the hazardous waste received at the TSDF site, detailed fingerprint analysis and other identification process will be adopted to segregate between direct landfill and landfill after treatment, quantities will be estimated accordingly. However, the quantity for hazardous waste requires chemical fixation and immobilization will be within the 4,50,000 MTA.
  - xx. Reply ADS 19: The submitted affidavit for the biomedical waste facility which has then been dropped from the proposal has been attached as Annexure XIV in the final EIA report.
  - xxi. Reply ADS 20: Ramky group operates around 17 TSDFs facilities. All the hazardous waste treatment facilities are mainly encompassing landfill, stabilisation, solidification, AFRF, plastic & plastic recycling, E-waste, solvent recovery etc. The capacities arrived for Kesdaare based on the working experience from all the existing TSDFs facilities. In addition, the minimum economic sizes for each treatment component is also based on the practical data from the existing TSDF facilities. The detailed leachate characteristics and emission data from stacks and incinerators are enclosed. The renewable energy component for the present project is based on the area accessible after the capping of the landfill. Information about leachate characteristics and expected incinerator stack emission details are attached in the EIA report as Annexure – XV.

**3.** The EAC noted that the project/activity is covered under category 'A' of item 7(d) 'Common hazardous waste treatment, storage and disposal facilities (TSDFs)' of the Schedule to the EIA Notification, 2006 and its subsequent amendments and requires appraisal at Central level by sectoral EAC.

**4.** The EAC was not completely satisfied with the response to the queries raised. Accordingly, the EAC (Infra-2), decided to defer the proposal and asked the project proponent to provide the following additional information:

i. ADS 4: The proposed leachate management system requires further clarification. The details of leachate management system do not give

any ETP design or components of ETP. The water balance diagram does not clarify the final disposal of leachate.

- ii. ADS 15: Fire potential and its critical relevance is not captured: The response is very vague and generic. It does not give any details of possible hazards/risks and specific mitigation measures. SOP to manage fire and other hazards need to be spelled out specifically.
- iii. ADS 16: Clarifications were sought on generation of landfill gas from TSDF facility. Any waste that goes into a secure landfill must be pretreated, stabilized and immobilized. The response maintains generation of landfill gas like methane, carbon dioxide, oxygen, hydrogen sulphide. There is no clarification how and why the gas is generated from stabilized/immobilized waste. This needs to be clarified.
- iv. ADS 17: ADS sought characteristics of possible waste coming to the facility from industries and anticipated quantities. This has not been provided.
- v. ADS 18: The response is vague. Needs clarification/explanation on the nature of pre-treatment and probable quantity of materials to be consumed and stored in the facility.
- vi. ADS 20: The response sought was regarding capacity utilization and estimated stack emissions including dioxin and furan level based on their experience of operating 17 TSDFs across the country. The response does not provide the details of Dioxin and Furan measurement.

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#### AGENDA ITEM NO. 82.3.10

#### Group Housing Project at Village - Gwal Pahari, Gurgaon, Haryana by M/S Venta Realtech Private Limited formally Known as Krrish Realty Nirman Private Limited– Extension of Validity of Environmental Clearance

#### (IA/HR/MIS/254095/2022; F. No. 21-21/2022-IA-III)

The EAC noted that the project proponent for the project has undergone insolvency and the instant application for extension has been submitted by an IRP (Insolvency Resolution Professional) while the process for finalization of the new project proponent is under process. Accordingly, the EAC was of the opinion to defer the proposal and obtain clarification from Policy division in the Ministry as to whether the proposal can be considered for extension of validity in the existing scenario, before appraising the proposal further.

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#### AGENDA ITEM NO. 82.3.11

Residential Group Housing Colony located at Village–Nangal Khurd, Sector-19, District-Sonipat, Haryana by M/s TDI Infrastructure Ltd -Extension of Validity of Environmental Clearance

#### (IA/HR/MIS/254458/2022; F. No. 21-22/2022-IA-III)

**1.**The Project Proponent (M/s TDI Infrastructure Ltd.) along with their consultant 'M/s. Perfact Enviro Solutions Pvt. Ltd.', made a presentation on the key parameters and salient features of the project to the EAC (Infra-2). The 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 Village Nangal Khurd, Sector-19, District Sonipat, Haryana.
- ii. The project was granted Environmental Clearance by SEIAA, Haryana vide letter F. No. SEIAA/HR/2013/1547 dated 24.12.2013 for plot area of 43,857.73 sqm. (10.8375 acre) and total built-up area of 88,942.33 sqm. The construction has not been completed as per the EC dated 24.12.2013. The latest construction status of the project is that the 97% work has been completed and the remaining is scheduled to be completed in next two years. Also there is some change in the built up area during sanctioning of building plan, hence there will be decrease from 88,942.33 sqm. to 88,060.39 sqm. on the same plot area. The total estimated cost of the project of ₹100 Crores has now been revised to ₹277.83 crores. Due to the poor market scenario the project could not be completed in stipulated time. Situation kept on worsening because of COVID-19, hoping to recover as and when COVID clears out.
- iii. The total plot area after amendment will be 43,857.73 sqm., FSI area after Amendment will be 67,895.75 sqm. and total Built-up area after Amendment will be 88,060.39 sqm. The project will comprise of 04 blocks. Total No. of Units after amendment will be 841 No. including dwelling units 658, servant units 66 & EWS 117 No. Maximum height of the building is 32 m. The details of the proposed amendment are as follows:

Particulars	Unit	As per EC granted 24.12.2013	As per proposed amendment	Impact
Plot Area	sqm.	43857.73	43857.73	No change
Area under Road	sqm.	4992.19	4992.19	No change
Net Plot Area	sqm.	38865.54	38865.54	No change
Cost of Project	Crores	100	277.83	Increase
G.C (Per)	sqm.	13602.94	13602.94	No change
G.C (Ach)	sqm.	10640.94	10689.53	Increase
F.A.R (Per)	sqm.	68014.7	68014.7	No change
F.A.R proposed	sqm.	67783.55	67706.687	Decrease

Residential				
F.A.R proposed Commercial	sqm.	189.07	189.063	No change
Total proposed FAR	sqm.	67972.62	67895.75	Decrease
Stilt area (included in FAR)	sqm.	2864.377	1354.866	Decrease
Basement area	sqm.	16090.61	16074.36	Decrease
School Area (free from FAR)	sqm.	840.925	800.62	Decrease
	NON	F.A.R		
Non FAR Area (Area for Mumty and Machine room)	sqm.	4038.175	3289.66	Decrease
Built Up Area (including FAR area + non FAR area + basement area)	sqm.	88942.33	88060.39	Decrease
Green Area	sqm.	11853.99	11853.99	No change
Road Area & Open Area (including surface parking area)	sqm.	16370.61	16322.02	Decrease
No. of Floors	No.	G + 14	G + 12	Decrease
No. of Block	No.	4	4	No change
No. of Basement	No.	1	1	No change
Building height	m	51	39.1	Decrease
	UN	ITS		
Number of dwelling units	No.	653	658	Increase
servant units	No	84	66	Decrease
EWS	No.	116	117	Increase
Total Units	No.	853	841	Decrease
Total Population	No.	4255	4239	Decrease
	S	ervice Details	1	
Total Power Load	kVA	8740	8740	No change
No. of DG sets	kVA	1 x 1000 kVA, 1 x 630 kVA	1 x 1000 kVA, 1 x 630 kVA	No change
No. of Rain harvesting pits	_	6	6	No change

Total Water Requirement	KLD	527	527	No change
Total fresh water	KLD	318	318	No change
Wastewater Generation	KLD	391	391	No change
Total treated water	KLD	313	351	Increase
STP Capacity	KLD	510	510	No change
Total solid waste generation	kg/day	2060	2055.59	Decrease
Parking Requirement	ECS	1028	1036	Increase
Parking Provision	ECS	1235	1442	Increase

iv. The construction status is given as follows:

Activity	Percentage of work
construction work completed (as on 29.10.2020)	97
construction work remaining (will commence after obtaining Extension in EC)	3 (Tower C1, C2 & EWS Block)
Total	100

The application for grant of Extension and Amendment in v. Environmental Clearance of Residential Group Housing Colony was uploaded online on 02.11.2020. The case was appraised in 207th Meeting of SEAC, Harvana dated 17.12.2020 and was recommended for Environmental Clearance by SEAC. Thereafter, the case was appraised in 127<sup>th</sup> Meeting of SEIAA, Harvana dated 17.03.2021. Few gueries & observations were raised by SEIAA & it has referred back the project to SEAC. The point wise reply was submitted to SEAC, Haryana on 09.04.2021. Thereafter, the case was again appraised in the 213th meeting of SEAC dated 20.04.2021 and recommended to SEIAA again with addition stipulated conditions. The recommendation of SEAC was considered in 128<sup>th</sup> meeting of SEIAA held on 26.05.2021 and authority decide to defer this case for the decision after obtaining clarification from MOEF&CC, GOI regarding amendment in Environment Clearance under 8(a) & 8(b) of EIA Notification dated 14.09.2006. Again, case was taken up in the 129<sup>th</sup> Meeting of SEIAA dated 14.10.2021. Authority has referred back the project to SEAC. Then, the case was again taken up in the 228th meeting of SEAC held on 03.12.2021. The committee decided that the reply should be submitted of the raised observations in 15 days and the case will be taken up accordingly. After submitting the reply, the case was enlisted in the 231<sup>st</sup> meeting of SEAC held on 29.12.2021 but the case was deferred by the SEAC, Haryana. Now, since the Haryana SEAC committee tenure has been completed on 29.01.2022, application has been submitted for the grant of Extension and Amendment in Environmental Clearance at MOEF&CC.

vi. Green belt/greenery will be developed along most of the periphery of the project area. Total area under plantation/greenery will be 11,853.99 sqm. (30.50% of the project area). Total 486 no. of plants will be planted in the complex. Although, few trees are present at the site which will be retained. No trees will be felled.

**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 Haryana, it required appraisal at Central level by sectoral EAC.

**3.** The EAC observed that treated water of about 142 KLD is proposed to be disposed into sewer line and asked the PP to explore alternate arrangements for reuse and recycling of the same.

**4**. Keeping in view the project location is in Delhi NCR which is severely affected by poor air quality, the committee and the Chairman EAC (Infra-2) particularly advised to the PP to consider the development of dense plantation at the project site using appropriate techniques in consultation with the forest department/horticulture department/experts/consultants etc., to counter the air pollution in the area. An action plan for increasing the green cover needs to be submitted immediately with copy marked separately to the Chairman EAC (Infra-2).

**5.** The EAC (Infra-2), based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, decided to defer the proposal and asked the project proponent to provide the following additional information:

- i. Submit a timeline for completion of the pending works.
- ii. Submit a copy of the minutes of meetings (MoM) of SEIAA and SEAC in which the proposal was considered for extension and amendment.
- iii. Explore alternative arrangements for reuse and recycling of excess treated water generated in the project.
- iv. Submit an action plan for increasing green cover in NCR region as discussed in the meeting and indicated at Sr. No. 4 above.

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**Consideration of Proposals on Day-II (16th February, 2022):** The EAC considered proposals as per the agenda adopted for Day-II of 82<sup>nd</sup>meeting.

The details of deliberations held and decisions taken in the meeting are as under:

#### AGENDA ITEM NO. 82.4.1

# Affordable Group Housing Colony Project with built-up area of 52,602.131 sqm. at Village Hayatpur, Sector 90, Gurugram, Haryana by M/s MRG Castle Reality LLP. -Environmental Clearance

#### (IA/HR/MIS/253986/2022; F. No. 21-13/2022-IA-III)

**1.** The Project Proponent (M/s. MRG Castle Reality LLP) along with his consultant 'M/s. Grass Roots Research & Creation (P) Ltd.', made a presentation on the key parameters and salient features of the project to the EAC (Infra-2). The EAC took note of following key parameters and salient features of the project, as presented during the meeting; provided in the brief and application for this project:

- i. The project is located at Rect No. 44 Killa No. 6/2 (4-0-0), 7 (7-8-0), 13 (2-8-0), 14 (8-0-0), 15 (7-11-0), 17/1/1 (1-2-0), 18/1/1/1 (0-5-0) Rect No. 47 Killa No. 11/1 (5-6-0), Village Hayatpur, Sector 90, Gurugram, Haryana.
- ii. The project is new.
- iii. The total plot area is 18,206.778 sqm; FSI area is 43,321.025 Sqm and total construction (Built-up) area of 52,602.131 sqm. Maximum height of the building is 60 m. The details of building are as follows:

S. No.	Particulars	Area
		(in sqm.)
1.	Plot Area	18,206.778
	Plot Area for Commercial (@ 4% of the plot area)	728.271
	Plot Area for Residential (@ 96% of the plot area)	17,478.51
2.	Permissible Ground Coverage (@ 50% of the plot area)	9,103.389
3.	Proposed Ground Coverage @ 24.23% of the plot area )	4,412.383
4.	Total Permissible FAR for Housing (@240% of Residential plot area)	41,948.42
	• Residential @ 225% of Residential plot area)	39,326.64
	• Additional FAR for IGBC Platinum Rating (@15% of Residential Plot Area)	2,621.78
5.	Total Permissible FAR for Commercial (@190% of permissible commercial area)	1383.71
	• Permissible FAR for Commercial (@ 175 % of permissible commercial area)	1,274.47
	• Extra FAR for Green Building (@ 15% of permissible commercial area)	109.24
6.	Total Proposed FAR	43,321.025
		41,948.417

	<ul> <li>Residential @ 239.928% of residential plot area)</li> <li>Commercial @ 188.51% of commercial plot area)</li> </ul>	1,372.608
7.	Total Proposed Non-FAR • OHT+ Mumty • Balcony • Stilt Area • Staircase + shaft	9,281.11 252.69 5,486.286 611.27 2,930.86
8.	Total Built-up area	52,602.131
9.	Landscape Area (@20.0% of the plot area)	3,641.355
10.	Maximum Height of the Building (m)	60.00 m

- iv. During construction phase, total water requirement will be met from recycled water through private water tankers. During the construction phase, soak pits and septic tanks will be provided for disposal of waste water. Temporary sanitary toilets will be provided during peak labor force.
- v. During operational phase, total water requirement of the project is expected to be 315 KLD and the same will be met by Gurugram Metropolitan Development Authority (GMDA). 224 KLD fresh water and 91 KLD recycled water. Wastewater generated is 259 KLD will be treated in STP of total 325 KLD capacity. 233 KLD of treated wastewater will be generated of which 91 KLD will be recycled and reused for flushing (80 KLD) and for gardening (11 KLD). Excess treated water (about 151 KLD during monsoon season and about 142 KLD during non-monsoon season) will be discharged to external sewer.
- vi. About 1,860 Kg/day solid wastes will be generated in the project. The biodegradable waste 1,116 kg/day will be processed in OWC and the non-biodegradable waste generated 744 kg/day will be handed over to authorized local vendor.
- vii. The total power requirement during operation phase is 3,200 kVA and will be met from Dakshin Haryana Bijli Vitran Nigam (DHBVN). There will be provision of 2 DG sets of total capacity 445 kVA (1\*320+1\*125 kVA) for power back up.
- viii. Rooftop rainwater of buildings will be harvested through5 RWH pits.
- ix. Parking area of 335 ECS and 880 two wheelers is provided against the requirement of 330 ECS and 660 two wheelers (According to local norms).
- x. Solar power generation system of the capacity minimum 40 Kilo Watt peak (KWp) shall be installed as per HAREDA guidelines. Solar energy will be utilized for street lighting, solar blinkers and signages to reduce electricity consumption.
- xi. The project is not located in Critically Polluted area.
- xii. The project is not located within 10 km of Eco Sensitive Zone. NBWL Clearance is not required.
- xiii. Forest Clearance is not required.
- xiv. No court case is pending against the project.
- xv. CRZ Clearance is not required.

- xvi. Total green area provided is 3,641.355 sqm. and it is proposed to plant 250 Nos trees. No tree cutting is proposed for the project.
- xvii. Expected timeline for completion of the project: 24-36 months from the date of grant of EC.
- xviii. Investment/Cost of the project is ₹114 Cr.
  - xix. Employment potential 211 persons during operation phase.
  - xx. Benefits of the project: The project is leading to development of the area by providing employment of the local people and better infrastructure.

**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 Haryana, it required appraisal at Central level by sectoral EAC.

**3.** The EAC observed that the excess treated water (about 151 KLD during monsoon season and about 142 KLD during non-monsoon season) is proposed to be disposed into sewer line and asked the PP to explore alternate arrangements for reuse and recycling of the same.

**4.** Keeping in view the project location is in Delhi NCR which is severely affected by poor air quality, the committee and the Chairman EAC (Infra-2) particularly advised to the PP to consider the development of dense plantation at the project site using appropriate techniques in consultation with the forest department/horticulture department/experts/consultants etc., to counter the air pollution in the area and also consider the use of Gas Gensets in place of regular DG sets. An action plan for increasing the green cover needs to be submitted immediately with the copy marked separately to the Chairman EAC (Infra-2).

**5.** The Committee noted that the PP has proposed 15 day cycle for OWC and suggested to opt for 30 day cycle for proper management. The EAC also asked the PP to increase the solar energy contribution towards power requirement.

**6.** The EAC (Infra-2), based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, decided to defer the proposal and asked the project proponent to provide the following additional information:

- i. Explore alternate arrangements for reuse and recycling of excess treated water generated in the project and resubmit the water balance diagram accordingly.
- ii. Revise the calculation for OWC by considering 30 day cycle.
- iii. Provide the details of solar energy installation proposed.
- iv. Provide the source and quantity requirement of STP treated water during construction phase.
- v. Provide details of provision for electrical vehicles charging.
- vi. Percentage increment in air pollution to be quantified and tabulated.
- vii. Submit revised EMP budget considering the proposed changes.

**viii.** Submit an action plan for increasing green cover in NCR region as discussed in the meeting and indicated at Sr. No. 4 above.

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#### AGENDA ITEM NO. 82.4.2

Residential Plotted Colony Project under DDJAY with built-up area of 48,896.03 sqm. located at Village-Kadarpur, Sector 63A, Gurugram, Haryana by M/s Signature Global India Pvt. Ltd. – Environmental Clearance

#### (IA/HR/MIS/254015/2022; F. No. 21-18/2022-IA-III)

**1.** The Project Proponent (M/s. Signature Global India Pvt. Ltd.) along with his consultant 'M/s. Grass Roots Research & Creation (P) Ltd.', made a presentation on the key parameters and salient features of the project to the EAC (Infra-2). The EAC took note of following key parameters and salient features of the project, as presented during the meeting; provided in the brief and application for this project:

- i. The project is located at Rect No.15 khasra No. 14/1/3 Min (West), 14/1/1, Village-Kadarpur, Sector-63A, Gurugram, Haryana.
- ii. The project is new.
- iii. The total plot area is 20,284.860 sqm. and total construction (Built-up) area of 48,896.03 sqm. The project will comprise of 01 No Building. Maximum height of the building is15 m. The details of building are as follows:

S.	Particulars	Total Area
No.		(sqm.)
1.	Total Plot Area	20,284.860
2.	Permissible Area	15213.654
	<ul> <li>Residential (61% of Plot Area)</li> </ul>	12,373.765
	Commercial (4% of Plot Area)	811.394
	Community (10% of Plot Area)	2,028.486
3.	Proposed Area	12852.046
	Residential (49.36% of Plot Area)	10012.16
	Commercial (4.00% of Plot Area)	811.400
	• Community (10.00% of Plot Area)	2028.486
4.	Permissible FAR	27649.1934
	• Residential (@2.64 of the proposed residential area)	26432.1024
	• Commercial (@1.5 of the proposed commercial area)	1,217.091

5.	Proposed FAR	27649.1934
	• Residential (@2.64 of the proposed residential area)	26432.1024
	• Commercial (@1.5 of the proposed commercial area)	1,217.091
6.	Total NON-FAR Area	21,246.836
7.	Total Built up area (5+6)	48,896.03
8.	Landscape Area (@9.36% of the plot area)	1899.640

- iv. During construction phase, total water requirement will be met from recycled water through private water tankers. During the construction phase, soak pits and septic tanks will be provided for disposal of wastewater. Temporary sanitary toilets will be provided during peak labour force.
- v. During operational phase, total water requirement of the project is expected to be 129 KLD and the same will be met by 89 KLD fresh water from Gurugram Metropolitan Development Authority (GMDA) and 40 KLD recycled water. Wastewater generated (105 KLD) will be treated in STP of total 130 KLD capacity. 94 KLD of treated wastewater will be generated of which 40 KLD will be recycled and reused for flushing (34 KLD) and for gardening (6 KLD). Excess treated water (about 59 KLD during monsoon season and about 54 KLD during non-monsoon season) will be discharge to external sewer.
- vi. About 768 Kg/day solid wastes will be generated in the project. The biodegradable waste (about 460.8 kg/day) will be processed in OWC and the non-biodegradable waste generated (about 230.4 kg/day) will be handed over to authorized local vendor.
- vii. The total power requirement during operation phase is 1450 kVA and will be met from Dakshin Haryana Bijli Vitran Nigam (DHBVN). 2 D.G sets of total 1,250 kVA (1 x 750 kVA + 1 x 500 kVA) will be provided for power back up.
- viii. Rooftop rainwater of buildings will be harvested through 05 RWH pits.
- ix. Adequate provision will be made for car/vehicle parking at the project site. There shall also be adequate parking provisions for visitors so as not to disturb the traffic and allow smooth movement at the site. For plotted development, the parking shall be within the plots by the individual plot owners.
- x. Solar power generation system of the capacity Minimum 40 Kilo Watt peak (KWp) shall be installed as per HAREDA guidelines.
- xi. The project is not located in Critically Polluted area.
- xii. Asola Bhatti Wildlife Sanctuary is about 7.8 km (E) from the project site. However, the project is located outside the ESZ (Notification dated 11.09.2017) of the Asola Bhatti Wildlife Sanctuary. NBWL Clearance is not required.
- xiii. Forest Clearance is not required.
- xiv. Clarification letter by Concerned Divisional Forest Officer has been obtained vide letter of Reference No. (SRN). KH2-P10-P1B4 dated 29.08.2021.

- xv. No court case is pending against the project.
- xvi. CRZ Clearance is not required.
- xvii. Total green area provided is 1899.640 sqm. No tree cutting is proposed and 254 Nos trees will be planted.
- xviii. Expected timeline for completion of the project: 24-36 months from the date of grant of EC.
  - xix. Investment/Cost of the project is ₹187 Cr.
  - xx. Employment potential 106 persons during operation phase.
  - xxi. Benefits of the project: The project is leading to development of the area by providing employment of the local people and better infrastructure.

**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 Haryana, it required appraisal at Central level by sectoral EAC.

**3.** The EAC observed that the excess treated water (about 59 KLD during monsoon season and about 54 KLD during non-monsoon season) is proposed to be disposed into sewer line and asked the PP to explore alternate arrangements for reuse and recycling of the same.

**4**. Keeping in view, the project location is in Delhi NCR which is severely affected by poor air quality, the committee and the Chairman EAC (Infra-2) particularly advised to the PP to consider the development of dense plantation at the project site using appropriate techniques in consultation with the forest department/horticulture department/experts/consultants etc., to counter the air pollution in the area and also consider the use of Gas Gensets in place of regular DG sets. An action plan for increasing the green cover needs to be submitted immediately with the copy marked separately to the Chairman EAC (Infra-2).

**5**. The Committee noted that the PP has proposed 15 day cycle for OWC and suggested to opt for 30 day cycle for proper management. The EAC also asked the PP to increase the solar energy contribution towards power requirement.

**6.** The EAC (Infra-2), based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, decided to defer the proposal and asked the project proponent to provide the following additional information:

- i. Provide the details of solar energy installation proposed.
- ii. Provide the source and quantity requirement of STP treated water during construction phase.
- iii. Provide details of provision for electrical vehicles charging.
- iv. Submit an action plan for increasing green cover in NCR region as discussed in the meeting and indicated at Sr. No. 4 above.
- v. Explore alternate arrangements for reuse and recycling of excess treated water generated in the project and resubmit the water balance diagram accordingly.

- vi. Percentage increment in air pollution to be quantified and tabulated.
- vii. Revise the calculation for OWC by considering 30 day cycle.
- viii. Submit revised EMP budget considering the proposed changes.

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#### AGENDA ITEM NO. 82.4.3

#### Warehouse Project with built-up area of 78,679.317 Sqm. at Village -Dhateer and Tehraki, Tehsil & District Palwal, Haryana by M/s Yael Real Estates Pvt. Ltd. -Environmental Clearance

#### (IA/HR/MIS/254073/2022; F. No. 21-17/2022-IA-III)

**1.** The Project Proponent (M/s. Yael Real Estates Pvt. Ltd.) along with his consultant 'M/s. Grass Roots Research & Creation (P) Ltd.', made a presentation on the key parameters and salient features of the project to the EAC (Infra-2). The EAC took note of following key parameters and salient features of the project, as presented during the meeting; provided in the brief and application for this project:

- i. The project is located at Khasra No.: 34//21, 35//25/1, 23, 24, 41//5/1, 6/2, 15, 5/2, 6/1, 19/2, 21/2, 22, 23, 13/2, 14, 17, 18, 19/1, 24, 25, 3, 4, 7, 8, 13/1, 16, 42//1/1, 10, 11, 20, 21/1, 60//2, 3, 4, 5/1, 7/1, 1, 10, 11/1, 60//13/2, 24, 16, 17, 18, 23, 6/2/2/2, 14/1, 15/2, 22/2, 19/2, 22/1, 66//2, 9, 3, Village Dhateer and Tehraki, Tehsil & District Palwal, Haryana.
- ii. The project is new.
- iii. The total plot area is 1,46,976.533Sqm; FSI area is 78,679.317 Sqm and total construction (Built-up) area of 78,679.317 Sqm. The project will comprise of Sheds (04 No's). Maximum height of the building is 19.285 m. The details of building are as follows:

S.	Particulars	Total Area
No.		(sqm.)
1.	Plot Area	1,46,976.533
2.	Permissible Ground Coverage (@ 60% of the plot area)	88,185.92
3.	Proposed Ground Coverage (@ 52.172% of the plot area)	76,680.17
4.	Permissible FAR (@ 75% of the plot area)	1,10,232.40
5.	Proposed FAR (@ 53.532% of the plot area)	78,679.317
б.	Built Up Area	78,679.317
7.	Permissible Landscape Area (15% of plot area)	22,046.48
8.	Proposed Landscape Area (@ 15% of the plot area)	22,046.48
9.	Required Parking Area (15% of plot area)	22,046.48
10.	Proposed Parking Area (16.134% of plot area)	23,713.853

11.	Maximum	height of	the building (meters)	19.285
-		- 6		

- The proposed warehouse project will be used to store products related iv. to food & beverage industry, textile products, apparel, leather and related products Tobacco products, Furniture, fittings & Artifact Products, Glass and Related products; wood and products of wood and cork, including furniture, articles of straw and plaiting materials, Paper and paper products, printing and reproduction of recorded media, paints and chemicals within threshold limits, FMCG, Pharmaceuticals, medicinal chemical and botanical products, Rubber, plastics and allied products, Other non-metallic products; Basic metals, Fabricated metal products, including machinery and equipment, Computer, electronic and optical products, Electrical equipment's and electronic products, Industrial machinery and equipment's; Automobiles products. ancillaries and allied products; Defense & Aerospace Industries, Construction equipment and materials etc. light assembly of goods is also envisaged in these warehouse sheds.
- v. During construction phase, total water requirement will be met from recycled water through private water tankers. During the construction phase, soak pits and septic tanks will be provided for disposal of wastewater. Temporary sanitary toilets will be provided during peak labor force.
- vi. During operational phase, total water requirement of the project is expected to be 306 KLD and the same will be met by 159 KLD fresh water in the form of ground water through borewell and 147KLD recycled water. Wastewater generated (208 KLD) will be treated in STP of total 260 KLD capacity. 187 KLD of treated wastewater will be generated of which 147 KLD will be recycled and reused for flushing (1 KLD) and for gardening (66 KLD). Excess treated water (about 95 KLD during rainy season and about 40 KLD during dry season) will be supplied to the nearby farmers for irrigation purpose.
- vii. About 1,643 Kg/day solid wastes will be generated in the project. The biodegradable waste (about 492.9 kg/day) will be processed in OWC and the non-biodegradable waste generated (about 1,150.1 kg/day) will be handed over to authorized local vendor.
- viii. The total power requirement during operation phase is 4,000 kVA and will be met from Dakshin Haryana Bijli Vitran Nigam (DHBVN). 9 no. of DG sets of total capacity 4,500 kVA (9 x 500 kVA) will be provided.
  - ix. Rooftop rainwater of buildings will be harvested through 37 RWH pits.
  - x. Parking area of 23,713.853 sqm. (16.134% of plot area) is provided against the requirement of 22,046.48 sqm. (15% of the net plot area) (According to local norms).
- xi. Solar power generation system of the capacity Minimum 40 Kilo Watt peak (KWp) shall be installed as per HAREDA guidelines.
- xii. The project is not located in Critically Polluted area.
- xiii. The project is not located within 10 km of Eco Sensitive Zone. NBWL Clearance is not required.
- xiv. Forest Clearance is not required.
- xv. No court case is pending against the project.

- xvi. CRZ Clearance is not required.
- xvii. Total green area provided is 22,046.48 sqm. and it is proposed to plant 1,850 trees within the project. No tree felling is required.
- xviii. Expected timeline for completion of the project: 24-36 months from the date of grant of EC.
  - xix. Investment/Cost of the project is ₹212 Cr.
  - xx. Employment potential About 246 persons during construction phase and about 5000 persons during operation phase.
  - xxi. Benefits of the project: The project is leading to development of the area by providing employment of the local people and better infrastructure.

**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 Haryana, it required appraisal at Central level by sectoral EAC.

**3.** Keeping in view, the project location is in Delhi NCR which is severely affected by poor air quality, the committee and the Chairman EAC (Infra-2) particularly advised to the PP to consider the development of dense plantation at the project site using appropriate techniques in consultation with the forest department/horticulture department/experts/consultants etc., to counter the air pollution in the area and also consider the use of Gas Gensets in place of regular DG sets. An action plan for increasing the green cover needs to be submitted immediately with the copy marked separately to the Chairman EAC (Infra-2).

**4.** The EAC (Infra-2), based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, decided to defer the proposal and asked the project proponent to provide the following additional information:

- i. Revise the calculation for OWC by considering 30 day cycle.
- ii. Clarify the details of solar energy installation proposed.
- iii. Provide the source and quantity requirement of STP treated water during construction phase.
- iv. Provide the detailed breakup of vehicle parking area specifying the number of heavy vehicles parking proposed. Also, provide the details of provision for electrical vehicles charging.
- v. Submit revised traffic circulation plan specifying sufficient turning radius for movement of large trucks.
- vi. Provide details of maintenance area for trucks.
- vii. Percentage increment in air pollution to be quantified and tabulated.
- viii. Submit revised EMP budget considering the proposed changes.
- ix. Submit an action plan for increasing green cover in NCR region as discussed in the meeting and indicated at Sr. No. 3 above.

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## AGENDA ITEM NO. 82.4.4

# Industrial/Warehouse/Logistics Project with built-up area of 1,46,192.23 sqm. at Village-Firozpur, Tehsil & District-Palwal, Haryana by M/s Adani Logistics Limited- Environmental Clearance

# (IA/HR/MIS/254109/2022; F. No. 21-15/2022-IA-III)

**1.**The Project Proponent (M/s. Adani Logistics Limited) along with his consultant 'M/s. Grass Roots Research & Creation (P) Ltd.', made a presentation on the key parameters and salient features of the project to the EAC (Infra-2). The EAC took note of following key parameters and salient features of the project, as presented during the meeting; provided in the brief and application for this project:

- i. The project is located at Village- Firozpur, Tehsil & District- Palwal, Haryana with coordinates 28°10'18.17"N Latitude and 77°20'13.53"E Longitude.
- ii. The project is new.
- iii. The total plot area is 2,68,225.64Sqm; FSI area is 1,46,192.23 sqm. and total construction (Built-up) area of 1,46,192.23 sqm. The project will comprise of Building (09 Nos) and Office Building. Maximum height of the building is 15 m. The details of building are as follows:

S. No.	Description	Area (sqm.)
1	Total Plot Area	2,68,225.6 4
2	Area for 30m Rail Corridor	22,512.98
3	Net Plot Area	2,45,712.6 6
4	Permissible Ground Coverage @60%	147,427.60
5	Proposed Ground Coverage @55.65% of the net plot area	1,36,745.2 9
6	Permissible FAR @75%	184,284.50
7	Proposed FAR @59.50% of the net plot area	1,46,192.2 3
8	Total Built Up Area	1,46,192.2 3
9	Proposed Green Area @15.02% of the net plot area	36,905.35
10	Proposed Parking Area@15.02% of the net plot area	
11	1 Maximum height of the building (m)	

iv. The proposed warehouse project will be used to store agro and non-agro products related to food & beverage industry, textile products, apparel, leather and related products Tobacco products, Furniture, fittings & Artifact Products, Glass and Related products; wood and products of wood and cork, including furniture, articles of straw and plaiting materials, Paper and paper products, printing and reproduction of recorded media, paints and chemicals within threshold limits, FMCG, Pharmaceuticals, medicinal chemical and botanical products, rubber, plastics and allied products, Other non-metallic products; Basic metals, Fabricated metal products, including machinery and equipment, Computer, electronic and optical products, Electrical equipment's and electronic products, Industrial machinery and equipment's; Automobiles products, ancillaries and allied products; Defense & Aerospace Industries, Construction equipment and materials etc.

- v. During construction phase, total water requirement is expected to be 292ML, which will be met by Private Water Tankers. During the construction phase, soak pits and septic tanks will be provided for disposal of waste water. Temporary sanitary toilets will be provided during peak labour force.
- vi. During operational phase, total water requirement of the project is expected to be 344 KLD and the same will be met by 150 KLD fresh water in the form of ground water and 178 KLD recycled water. Wastewater generated (198 KLD) will be treated in STP of total 248 KLD capacity. 178 KLD of treated wastewater will be generated and will be recycled and reused for flushing (80 KLD), filter backwash (3 KLD) and for gardening (95 KLD during dry season). In summer, additional treated water of about 16 KLD will be sourced for horticulture use. Excess treated water (about 76 KLD during monsoon season and about 28 KLD during winter season) will be supplied to the nearby farmers for irrigation purpose.
- vii. About 1,600 Kg/day solid wastes will be generated in the project. The biodegradable waste (about 480 kg/day) will be processed in OWC and the non-biodegradable waste generated (about 1,120 kg/day) will be handed over to authorized local vendor.
- viii. The total power requirement during operation phase is 3,959 kVA and will be met from Dakshin Haryana Bijli Vitran Nigam (DHBVN).5 D.G sets of total 3,010 kVA (4 x 500 kVA + 1 x 1010 kVA) capacity and 6 D.G of total capacity 2010 kVA (2 x 125 kVA + 3 x 250 kVA + 1 x 1010 kVA) on stand by for power back up.
- ix. Rooftop rainwater of buildings will be harvested through 10 RWH pits and stored in 2 Ponds of total 4620 m<sup>3</sup> capacity.
- x. Parking area of 36,903.37 sqm. (15.02% of the net plot area) is provided against the requirement of 36,856.90 sqm. (15% of the net plot area) (According to local norms).
- xi. Solar power generation system of the capacity Minimum 40 Kilo Watt peak (KWp) shall be installed as per HAREDA guidelines.
- xii. The project is not located in Critically Polluted area.
- xiii. The project is not located within 10 km of Eco Sensitive Zone. NBWL Clearance is not required.
- xiv. Forest Clearance is not required.
- xv. No court case is pending against the project.
- xvi. CRZ Clearance is not required.

- xvii. Total green area provided is 36,905.35 sqm. and 3072 Nos trees will be planted within the project. There are some trees within the project premises.
- xviii. Expected timeline for completion of the project: 24-36 months from the date of grant of EC.
  - xix. Investment/Cost of the project is ₹195 Cr.
  - xx. Employment potential 4873 persons.
  - xxi. Benefits of the project: The project is leading to development of the area by providing employment of the local people and better infrastructure.

**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 Haryana, it required appraisal at Central level by sectoral EAC.

**3.** Keeping in view the location of the project is in Delhi NCR which is severely affected by poor air quality, the committee and the Chairman EAC (Infra-2) particularly advised to the PP to consider the development of dense plantation at the project site using appropriate techniques in consultation with the forest department/horticulture department/experts/consultants etc., to counter the air pollution in the area and also consider the use of Gas Gensets in place of regular DG sets. An action plan for increasing the green cover needs to be submitted immediately with the copy marked separately to the Chairman EAC (Infra-2).

**4**. The Committee also suggested to consider increasing the rooftop solar power installation for energy management. The PP stated that planning is already under process for 100% coverage of roof area with solar panels.

**5.** The EAC (Infra-2), based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, decided to defer the proposal and asked the project proponent to provide the following additional information:

- i. Percentage increment in air pollution to be quantified and tabulated.
- ii. Submit revised traffic circulation plan specifying sufficient turning radius for movement of large trucks.
- iii. Provide the detailed breakup of vehicle parking area specifying the number of heavy vehicles parking proposed. Also, provide the details of provision for electrical vehicles charging.
- iv. Provide the source and quantity requirement of STP treated water during construction phase.
- v. Revise the calculation for OWC by considering 30 day cycle.
- vi. Clarify the details of solar energy installation proposed.
- vii. Submit an action plan for increasing green cover in NCR region as discussed in the meeting and indicated at Sr. No. 3 above.
- viii. Provide details of tree cutting.
  - ix. Provide details of maintenance area for trucks.
  - x. Submit revised EMP budget considering the proposed changes.

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## AGENDA ITEM NO. 82.4.5

# Proposed Shopping Mall with built-up area of 86,338.80 Sqm. at Sushant Lok III, Sector-57, Gurugram, Haryana by M/s Paryapt Infrastructure Pvt. Ltd.-Environmental Clearance

## (IA/HR/MIS/254111/2022; F. No. 21-16/2022-IA-III)

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

- i. The project is located at Sushant Lok III, Sector-57, Gurugram, Haryana.
- ii. The project is new.
- iii. The total plot area is 12,788.046 sqm. and total construction (Built-up) area of 86338.80 sqm. The project comprises of retail shopping with food court, restaurants & Studio apartments. Total no. of proposed Studio apartment is 311Nos. Maximum height of the building is 90.95 m. The details of building are as follows:

S. No.	Description	Total Quantity	Unit			
	GENERAL					
1	Plot Area	12788.046	sqm.			
2	Proposed Built Up Area	86338.80	sqm.			
3	Max Height of Building (Upto Terrace)	90.95	m			
4	Max No of Floors (Including Service Floor)	3B+G+15	No.			
5	Studio Apartments		No.			
6	Expected Population (1244 Fixed+6125 Floating)	7369	No.			
7	Total Cost of Project	299	Cr			
8 Project Activity : Commercial - Retail shopping with food co restaurants & service apartments etc.			court,			
	AREAS					
9	Permissible Ground Coverage Area (60%)	7672.83	sqm.			
10 Proposed Ground Coverage Area (56.2%)		7190.45	sqm.			

11	Permissible FAR Area 362 (350+12 for green rating)	46292.73	sqm.
12	Proposed FAR Area (361.98)	46289.90	sqm.
13	Non FAR areas - basement mumty machine rm etc.	40048.90	sqm.
14	Proposed Total Built Up Area	86338.80	sqm.

- iv. During construction phase, water requirement will be met from tanker 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 demand of the project is expected to be 453 KLD and the same will be met by 201 KLD fresh water from Municipal Supply (GMDA) and 252 KLD recycled water. Wastewater generated (280 KLD) will be treated in STPof total 350 KLD capacity. 252 KLD of treated wastewater will be completely recycled and reused) for flushing (118 KLD), Gardening (10 KLD), DG cooling (4 KLD) and for Air Conditioning (120 KLD).
- vi. About 2,590 kg/day solid waste will be generated in the project. The biodegradable waste (1,580 kg/day) will be processed in OWC and the non-biodegradable waste generated (1010 kg/day) will be handed over to authorized local vendor.
- vii. The total power requirement during operation phase is 2,812 kW and will be met from Dakshin Haryana Bijli Vitaran Nigam Limited (DHBVN). DG sets of total capacity 3,500 kVA (2 Nos x 1500 kVA + 1Nos x 500 kVA) will be provided as back-up.
- viii. Roof rainwater of buildings will be collected in 03No.sRWH pits for harvesting after filtration.
- ix. Parking facility for 929 four wheelers is proposed to be provided against the requirement of 926 ECS (according to local norms).
- x. Solar energy installation, SPV capacity of 90 kWp shall be provided.
- xi. The project is not located in Critically Polluted area.
- xii. The project is not located within 10 km of Eco Sensitive Zone. NBWL Clearance is not required.
- xiii. Forest Clearance is not required.
- xiv. No court case is pending against the project.
- xv. CRZ Clearance is not required.
- xvi. Green belt of 1,929.53 sqm. will be provided and 160 trees will be planted within the project. No tree cutting is proposed
- xvii. Expected timeline for completion of the project:- 48 Months
- xviii. Investment/Cost of the is ₹ 299 Crore
- xix. Employment potential: 100 persons.
- xx. Benefits of the project: The project is leading to development of the area by providing employment of the local people during construction and operation phase.

**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 Haryana, it required appraisal at Central level by sectoral EAC.

**3.** Keeping in view the location of project is in Delhi NCR which is severely affected by poor air quality, the committee and the Chairman EAC (Infra-2) particularly advised to the PP to consider the development of dense plantation at the project site using appropriate techniques in consultation with the forest department/horticulture department/experts/consultants etc., to counter the air pollution in the area and also consider the use of Gas Gensets in place of regular DG sets. An action plan for increasing the green cover needs to be submitted immediately with the copy marked separately to the Chairman EAC (Infra-2).

**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 201 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, wastewater shall be treated in the onsite STP having total 350 KLD capacity. Atleast 252 KLD of treated water from the STP shall be recycled and re-used for flushing (118 KLD), gardening (10 KLD), DG cooling (4 KLD) and for air conditioning (120 KLD). 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 1,929.53 sqm. As proposed, at least 160 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.
- 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 no. RWH pit shall be provided for rain water harvesting after filtration.

- vi. The solid waste shall be duly segregated into biodegradable and nonbiodegradable components and handled in separate area earmarked for segregation of solid waste, as per SWM Rules, 2016. As committed, biodegradable waste shall be utilized through the Bio-Gas generation plant/bio-bin unit to be installed within the site. Inert waste shall be disposed off as per norms at authorized site. The recyclable waste shall be sold to authorized vendors/recyclers. Construction & Demolition (C&D) waste shall be segregated and managed as per C&D Waste Management Rules, 2016.
- vii. 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 the State Urban Development department the bv and 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.
- viii. The PP shall provide electric charging points in parking areas for evehicles as committed.
- ix. As committed, atleast5 % of the electrical load shall be met through 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.

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## AGENDA ITEM NO. 82.4.6

Construction of Separated Family Accommodation (440Nos) (Phase -1 C/O 336 Nos. Type-II Qtrs., 96 Nos. Type-III Qtrs., 08 Nos. Type-IV Qtrs, Multipurpose Hall & Multipurpose Parking) for SSB with built-up area of49,042.36 sqm. at Faridabad, Haryana by Commandant 25th BN SSB, Faridabad (Ministry of Home Affairs) - Environmental Clearance

## (IA/HR/MIS/254128/2022; F. No. 21-10/2022-IA-III)

**1.** The Project Proponent [Commandant 25th BN SSB, Faridabad (Ministry of Home Affairs)] along with his consultant 'M/s. Ind Tech House Consult', made a presentation on the key parameters and salient features of the project to the

EAC (Infra-2). The EAC took note of following key parameters and salient features of the project, as presented during the meeting; provided in the brief and application for this project:

- i. The project is located at New Industrial Town, Faridabad Taluk & District, Haryana.
- ii. The project is new.
- iii. The total plot area is 30,171.46 sqm., FSI area is 32619.60 sqm. and total construction (Built-up) area of 49,042.36 sqm. The project will comprise of 05 No. Building blocks. Total 440no. of Dwelling Units is proposed. Maximum height of the building is 72.15 m. The details of building are as follows:

PROJECT SUMMARY ( Phase-1 Only)				
S. No.	Description	Total Quantity	Unit	
	GENERAL			
1	Plot Area	30171.46	sqm.	
2	Proposed Built Up Area	49042.36	sqm.	
3	Total no of DU's	440	No.	
4	Total No. of Blocks	5		
5	Max Height of Building	72.15	m	
6	Max No of Floors (Tallest Block - Type II Qrts)	St+21	No.	
7	Expected Population (2208 Residential Fixed + 243 Floating)	2451	No.	
8	Cost of Project	156.59	Cr	
9	Proj Activity : Residential quarters with commu	nity hall		
	AREAS			
10	Permissible Ground Coverage Area 35%	10560.0	sqm.	
11	1 Proposed Ground Coverage Area (17.78%)		sqm.	
12	2 Permissible FAR Area (175)		sqm.	
13	Proposed FAR Area (120.19)	32,619.60	sqm.	
14	Proposed Total Built Up Area	49042.36	sqm.	

- iv. During construction phase, water requirement will be met from tanker 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 demand of the project is expected to be 246.24 KLD and the same will be met by 151.17 KLD fresh water from Municipal Department Faridabad and 95.07 KLD recycled water. Wastewater generated (169.95 KLD) will be treated in an STP of total 200 KLD capacity. 153 KLD of treated wastewater will be generated of

which 95.07 KLD will be recycled and reused (49.02 KLD for flushing (49.01 KLD), DG cooling (0.8 KLD) and for gardening (45.26 KLD). Excess treated water (about 58 KLD) will be disposed in to municipal drain.

- vi. About 1.18 TPD solid waste will be generated in the project. The biodegradable waste (0.71 TPD) will be processed in OWC and the nonbiodegradable waste generated (0.47 TPD) will be handed over to authorized local vendor.
- vii. There are some existing structures at site which will be demolished.
- viii. The total power requirement during operation phase is 2184 KVA and will be met from Dakshin Haryana Bijli Vitran Nigam (DHBVN). DG sets of total capacity 800 kVA (400x2) will be provided as backup power supply.
- ix. Roof rainwater of buildings will be collected in 07 RWH pits for harvesting after filtration.
- x. Parking facility for 521 ECS is proposed to be provided against the requirement of 494 ECS (according to local norms).
- xi. Solar power generation of 30 kWp capacity is proposed i.e. 1.3% of total power load.
- xii. The project is not located in Critically Polluted area.
- xiii. Asola Wildlife Sanctuary is located at 5.86 km (NW). However, the project is located outside the ESZ (Notification dated 11.09.2017) of the Asola Bhatti Wildlife Sanctuary. NBWL Clearance is not required.
- xiv. Forest Clearance is not required.
- xv. No court case is pending against the project.
- xvi. Green belt of 9,051.44 sqm. will be provided and 380 Nos trees will be planted within the project. There are 465 nos. of trees on the project site approx. 203 Nos. of trees will be cut/transplanted with prior permission from forest department and compensatory plantation will be done in consultation with forest department.
- xvii. Expected timeline for completion of the project: 48 Months
- xviii. Investment/Cost of the is ₹156.59 Crore
- xix. Employment potential: About 100 persons during the construction phase and about 20 persons during the operation phase.
- xx. Benefits of the project: The project is leading to development of the area by providing employment of the local people during construction and operation phase.

**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 Haryana, it required appraisal at Central level by sectoral EAC.

**3.** The EAC observed that treated water of about 58 KLD is proposed to be disposed into municipal drain and asked the PP to explore alternate arrangements for reuse and recycling of the same.

**4**. Keeping in view of the location of the project is in Delhi NCR which is severely affected by poor air quality, the committee and the Chairman EAC (Infra-2) particularly advised to the PP to consider the development of dense plantation at the project site using appropriate techniques in consultation with the forest department/horticulture department/experts/consultants etc., to counter the air pollution in the area and also consider the use of Gas Gensets in place of regular DG sets. An action plan for increasing the green cover needs to be submitted immediately with the copy marked separately to the Chairman EAC (Infra-2).

**5.** The EAC (Infra-2), based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, decided to defer the proposal and asked the project proponent to provide the following additional information:

- i. Explore alternate arrangements for reuse and recycling of excess treated water generated in the project and resubmit the water balance diagram accordingly.
- ii. Provide the details of solar energy installation proposed.
- iii. Provide the source and quantity requirement of STP treated water during construction phase.
- iv. Provide details of provision for electrical vehicles charging.
- v. Provide details of C&D Waste Management.
- vi. Submit an action plan for increasing green cover in NCR region as discussed in the meeting and indicated at Sr. No. 4 above.

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## AGENDA ITEM NO. 82.4.7

Warehouse & Industrial (Non-Agro Produce) Project with built-up area of 51,581.27 sqm. at Village – Nimot & Rahaka, Tehsil-Sohna, District-Gurugram, Haryana by M/s LSA Warehousing Solutions Pvt. Ltd. - Environmental Clearance

## (IA/HR/MIS/254251/2022; F. No. 21-14/2022-IA-III)

**1.** The Project Proponent (M/s. LSA Warehousing Solutions Pvt. Ltd.) along with his consultant 'M/s. Grass Roots Research & Creation (P) Ltd.', made a presentation on the key parameters and salient features of the project to the EAC (Infra-2). The EAC took note of following key parameters and salient features of the project, as presented during the meeting; provided in the brief and application for this project:

- i. The project is located at Nimot & Rahaka Villages, Sohna Tehsil, Gurugram District, Haryana with coordinates 28°15'42.44" N Latitude and 77°09'36.28" E Longitude.
- ii. The project is new.
- iii. The project was earlier granted Environment Clearance by MOEF & CC vide letter no. 21-557/2007-IA.III dated 29.04.2008 for Plot area

4,15,700 sqm. (102.74 acres) for the construction of Biotech park with built up area of about 3,95,986 sqm. The Project was proposed by M/s Mayar India Limited. Then, the proponent applied for changes in built up area and Corrigendum was issued on 15.05.2008 with changed built up area i.e. 5,29,758 sqm. Later, the proponent applied for correction in company name from M/s Mayar India Limited to M/s Mayar Infrastructure Development Pvt. Ltd. to Haryana SEIAA and Corrigendum was issued by Haryana SEIAA vide letter no SEIAA/HR/2014/1612 dated 17.12.2014.

- iv. Now, due to change in planning, the proponent (M/s Mayar Infrastructure Development Pvt. Ltd.) sold the land in parts. Out of 102.74 acres of land 17.43 acres of land has been sold to M/s LSA Warehousing Solutions Pvt. Ltd. for the construction of Warehouse project. The Sale deed, Registry & Mutation between M/s Mayar Infrastructure Development Pvt. Ltd. and M/s LSA Warehousing Solutions Pvt. Ltd. have been submitted.
- v. The total plot area is 70,539.21 sqm.; FSI area is 51,581.27 sqm. and total construction (Built-up) area of 51,581.27 sqm. The project will comprise of Building (02 No's) and Office Building. Maximum height of the building is 16.235 m. The details of building are as follows:

S.	Particulars	Total Area
No.		(in sqm.)
1.	Total Plot Area	70,539.21
2.	Permissible Ground Coverage (@60% of the total plot area)	42,323.53
3.	Proposed Ground Coverage (@49.60% of the total plot area)	34,988.00
4.	Permissible FAR (@ 75% of the total plot area)	52,904.41
5.	Proposed FAR (@73.12% of the total plot area)	51,581.27
6.	Built Up Area	51,581.27
7.	Landscape Area (@ 16.85% of the total plot area)	11,883.21
8.	Parking Area (@15.03% of total plot area)	10,603.08
9.	Maximum height of the building (m)	16.235

The proposed warehouse will be used to store non-hazardous materials vi. /products in our above said warehouse project. We will also store products related to food & beverage industry, textile products, apparel, leather and related products Tobacco products, Furniture, fittings & Artifact Products, Glass and Related products; wood and products of wood and cork, including furniture, articles of straw and plaiting materials, Paper and paper products, printing and reproduction of recorded media, Non-Hazardous paints and chemicals, FMCG, Pharmaceuticals, medicinal chemical and botanical products, Rubber, plastics and allied products, Other non-metallic products; Basic metals, Fabricated metal products, including machinery and equipment, Computer, electronic and optical products, Electrical equipment's and products, Industrial machinery and equipment's; electronic Automobiles products, ancillaries and allied products; Defense & Aerospace Industries, Construction equipment and materials etc.

- vii. During construction phase, total water requirement will be met by recycled water from private water tankers. During the construction phase, soak pits and septic tanks will be provided for disposal of waste water. Temporary sanitary toilets will be provided during peak labour force.
- viii. During operational phase, total water requirement of the project is expected to be 86 KLD and the same will be met by 33 KLD fresh water in the form of ground water and 53 KLD recycled water. Wastewater generated is 43 KLD which will be treated in STP of total 55 KLD capacity. 39 KLD of treated wastewater will be generated which will be completely recycled and reused for flushing (17 KLD) and for gardening (22 KLD). About 14 KLD additional treated water will be sourced during summer for horticulture use. Excess treated water of about 16 KLD during monsoon season will be supplied to the nearby farmers for the irrigation purpose.
  - ix. About 348 Kg/day solid wastes will be generated in the project. The biodegradable waste 104.4 kg/day will be processed in OWC and the non-biodegradable waste generated 243.6 kg/day will be handed over to authorized local vendor.
  - x. The total power requirement during operation phase is 747 kVA and will be met from Dakshin Haryana Bijli Vitran Nigam (DHBVN).6 no. of DG sets of total capacity 900 kVA [(2 x 200 + 1 x 100 + 1 x 500 kVA + 1 x 100 kVA (stand by)] are proposed.
- xi. Rooftop rainwater of buildings will be harvested through 18 RWH pits and 2 Rain Gardens/Ponds.
- xii. Parking area of 10,603.08 sqm. (15.03% of the net plot area) is provided against the requirement of 10,580.88 sqm. (15% of the net plot area) (According to local norms).
- xiii. Solar power generation system of the capacity Minimum 40 Kilo Watt peak (KWp) shall be installed as per HAREDA guidelines.
- xiv. The project is not located in Critically Polluted area.
- xv. The project is not located within 10 km of Eco Sensitive Zone. NBWL Clearance is not required.
- xvi. Forest Clearance is not required.
- xvii. No court case is pending against the project.
- xviii. CRZ Clearance is not required.
- xix. Total green area provided is 11,883.21 sqm and 900No.s treeswill be planted. No tree cutting is proposed.
- xx. Expected timeline for completion of the project: 24-36 months from the date of grant of EC.
- xxi. Investment/Cost of the project is ₹42.3186 Cr.
- xxii. Employment potential About 1080 persons.
- xxiii. Benefits of the project: The project is leading to development of the area by providing employment of the local people and better infrastructure.

**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 Haryana, it required appraisal at Central level by sectoral EAC.

**3.** Keeping in view the location of the project is in Delhi NCR which is severely affected by poor air quality, the committee and the Chairman EAC (Infra-2) particularly advised to the PP to consider the development of dense plantation at the project site using appropriate techniques in consultation with the forest department/horticulture department/experts/consultants etc., to counter the air pollution in the area and also consider the use of Gas Gensets in place of regular DG sets. An action plan for increasing the green cover needs to be submitted immediately with the copy marked separately to the Chairman EAC (Infra-2).

**4.** The EAC (Infra-2), based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, decided to defer the proposal and asked the project proponent to provide the following additional information:

- i. Submit NOC from BPCL for the project since there is a BPCL line passing through the proposed land.
- ii. Submit site specific risk assessment plan considering the hazards related to BPCL line and HT line passing through the project site.
- iii. Revise the calculation for OWC by considering 30 day cycle.
- iv. Clarify the details of solar energy installation proposed.
- v. Provide the source and quantity requirement of STP treated water during construction phase.
- vi. Submit an action plan for increasing green cover in NCR region as discussed in the meeting and indicated at Sr. No. 3 above.
- vii. Provide the detailed breakup of vehicle parking area specifying the number of heavy vehicles parking proposed. Also, provide the details of provision for electrical vehicles charging.
- viii. Submit revised traffic circulation plan specifying sufficient turning radius for movement of large trucks.
  - ix. Provide details of maintenance area for trucks.
  - x. Percentage increment in air pollution to be quantified and tabulated.
  - xi. Submit revised EMP budget considering the proposed changes.

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#### AGENDA ITEM NO. 82.4.8

Proposed Residential Plotted Colony under DDJAY Scheme with built-up area of 3,45,623Sqm. on land measuring 30.24375 acres situated in the Revenue Estate of Village Ghata, Sector-58, Gurugram, Haryana by M/s Bequeath Infrastructure Private Limited-Environmental Clearance

(IA/HR/MIS/254566/2021; F. No. 21-21/2022-IA-III)

**1.** The Project Proponent (M/s Bequeath Infrastructure Private Limited) along with his consultant 'M/s. Ind Tech House Consult', made a presentation on the key parameters and salient features of the project to the EAC (Infra-2). The EAC took note of following key parameters and salient features of the project, as presented during the meeting; provided in the brief and application for this project:

- i. The project is located at the Revenue Estate of Village Ghata, Sector-58, Gurugram, Haryana.
- ii. The project is new.
- iii. ToR has been issued by SEIAA, Haryana vide letter no. SEIAA (133)/HR/2021/08 dated 03.01.2022.
- iv. The total plot area is 122391.92 sqm., FSI area is 172992.20 sqm. and total construction (Built-up) area of 345623 sqm. The project will comprise of 591 residential plots. Total no. of proposed DU's is 2364 Numbers. Maximum height of the building is 16.4 m. The project details are as follows:

Р	PROJECT SUMMARY (Plotted Colony with construction of DU's)					
S. No.	Description	Total Quantity	Unit			
	GENERAL	-				
1	Gross Plot Area	122391.92	sqm.			
2	Area Under UD	2038.705	sqm.			
3	Net Plot Area	120353.215	sqm.			
4	Proposed Built Up Area	345623	sqm.			
5	Total No. of Residential Plots	591	No.			
6	Total no of Saleable DU's (@4 Du's on each plot)	2364	No.			
7	Max Height	16.4	m			
8	No of Building Blocks (Residential)	591				
9	Max No of Floors	B+ST+4	No.			
10	Expected Population (10638 Residential+2018 Floating)	12656	No.			
11	Total Cost of Project	845	Cr			
12	12 Project Activity : Plotted Housing colony, Shopping & Community Facilities					
	AREAS					
13	Proposed Ground Coverage Area	43247.57	Sqm			
14	Proposed FAR Area	172992.20	Sqm			

15	Proposed Non FAR Areas	172630.80	Sqm
16	Proposed Total Built Up Area	345623	Sqm

v. The land area details are given as follows:

	Area in sqm.	Percentage %
Gross Plot Area	122391.92	
Area – UDL	2038.705	
Net Plot Area	120353.21	100
Area Under Residential Plots	65852.8	54.716
Area Under Commercial Development	3502.98	2.911
Area Under Green	9050.56	7.52
Area Under Community Site	12239.85	10.17
Area Under Roads	29707.02	24.68
TOTAL AREA	120353.21	100

- vi. During construction phase, water requirement will be met from tanker 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.
- vii. During operational phase, total water demand of the project is expected to be 1087.44 KLD and the same will be met by 716.83 KLD fresh water from Municipal supply and 370.61 KLD recycled water. Wastewater generated (812.57 KLD) will be treated in an STP of total 975 KLD capacity. 732.32 KLD of treated wastewater will be generated of which about 370.61 KLD will be recycled and reused for flushing (244 KLD), for DG cooling (6 KLD) and for gardening (120 KLD). Excess treated water of about 362 KLD will be disposed in to municipal drain.
- viii. About 5.7 TPD solid waste will be generated in the project. The biodegradable waste (3.5 TPD) will be processed in OWC and the non-biodegradable waste generated (2.2 TPD) will be handed over to authorized local vendor.
  - ix. The total power requirement during operation phase is 5000 KW and will be met from Dakshin Haryana Bijli Vitaran Nigam Limited (DHBVNL). Power back up will be supplied by DG sets of 6250 kVA (5 x 500 + 5 x 750 kVA)
  - x. Roof rainwater of buildings will be collected in 31 RWH pits for harvesting after filtration.
  - xi. Parking facility for 2364 ECS is proposed. Electric charging points for 20% of total parking will be provided.
- xii. Solar energy will be used by providing solar panels on the roof top within the proposed project asper HAREDA (Department of Renewable Energy, Govt. of Haryana) guidelines.

- xiii. The project is not located in Critically Polluted area.
- xiv. The project is not located within 10 km of Eco Sensitive Zone. NBWL Clearance is not required.
- xv. Aravali Biodiversity Park is located at 6.97 Km (E).
- xvi. Forest Clearance is not required.
- xvii. No court case is pending against the project.
- xviii. CRZ Clearance is not required.
- xix. Green belt of 24,070.6 sqm. will be provided. 18no.strees will be cut down with prior permission from forest department and the compensatory plantation as per forest NOC will be done.
- xx. Expected timeline for completion of the project:- 48 Months
- xxi. Investment/Cost of the is ₹ 845 Crore
- xxii. Employment potential: About 250 persons.
- xxiii. Benefits of the project: The project is leading to development of the area by providing employment of the local people during construction and operation phase.

**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 Haryana, it required appraisal at Central level by sectoral EAC.

**3.** Keeping in view the location of the project is in Delhi NCR which is severely affected by poor air quality, the committee and the Chairman EAC (Infra-2) particularly advised to the PP to consider the development of dense plantation at the project site using appropriate techniques in consultation with the forest department/horticulture department/experts/consultants etc., to counter the air pollution in the area and also consider the use of Gas Gensets in place of regular DG sets. An action plan for increasing the green cover needs to be submitted immediately with the copy marked separately to the Chairman EAC (Infra-2).

**4.** The EAC (Infra-2), based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, decided to defer the proposal and asked the project proponent to provide the following additional information:

- i. Provide the source and quantity requirement of STP treated water during construction phase.
- ii. Explore alternate arrangements for reuse and recycling of excess treated water of about 362 KLD in nearby areas and submit MoU in this regard.
- iii. Clarify the number of rain water harvesting pits.
- iv. Submit an action plan for increasing green cover in NCR region as discussed in the meeting and indicated at Sr. No. 3 above.

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## AGENDA ITEM NO. 82.4.9

Expansion of Proposed Mixed Land Use colony under TOD Policy with increase in land area from 13.23 acres to 15.03125 acres and increase in built-up area from 2,88,350.2075 sqm. to 4,77,029.99 sqm. in Sector-113, Gurgaon Manesar Urban Complex, Gurgaon, Haryana by M/s Union Buildmart Pvt. Ltd. – Terms of Reference

## (IA/HR/MIS/255381/2022; F. No. 21-19/2022-IA-III)

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

- i. The project is located at Sector-113, Gurgaon Manesar Urban Complex, Gurgaon, Haryana.
- ii. Earlier environment clearance was obtained vide EC letter no. SEIAA/HR/2019/162 dated 16.07.2019 for Gross plot area 53,539.826 sqm. and built-up area of 288,350.2075 sqm. respectively.
- iii. The proposed expansion is due to additional 7,289.388 sqm. plot area and change in the land profile of the project. Post expansion total plot area and built up area will be 60,829.214 sqm. and 4,77,029.99 sqm. respectively with total 1731 nos. of DUs. The details of the proposed expansion are given as follows:

S. No.	Description	As per Existing ECdated 16.07.2019	Proposed Expansion	Difference	Unit
1	Plot Area	53539.826	60829.214	+7289.388	sqm.
2	Proposed Built Up Area	288350.2075	477029.99	+188679.7825	sqm.
3	Max No of Floors	3B+G+32	2B+ST+36	Addition of 4 floors	Nos.
4	Expected Population	14231	27695	+ 13464	Nos.
5	Total Cost of Project	669.31	1099.51	+ 430.2	Cr
6	Total Water Requirement	715	1863	+ 1148	KLD
7	Fresh water requirement	505	962	+ 457	KLD
8	Treated Water Requirement	210	901	+ 691	KLD

9	Waste water Generation	603	1234	+ 631	KLD
10	Proposed Capacity of STP	725	1480	+ 755	KLD
11	Treated Water Available for Reuse	483	1111	+ 628	KLD
12	Treated Water Recycled	210	901	+ 691	KLD
13	Surplus treated water to be discharged in Municipal Sewer	273	210	-63	KLD
14	No of RWH of Pits Proposed	13	15	+ 2	Nos.
15	Proposed Total Parking	1500	3915	+ 2415	ECS
16	Proposed Green Area	11317.4143	12274.3	+ 956.8857	sqm.
17	Total Solid Waste Generation	4.36	9.17	+ 4.81	TPD
18	Organic waste	2.38	3.70	+ 1.32	TPD
19	Quantity of Hazardous waste Generation	10.06	9.61	- 0.45	LPD
20	Quantity of Sludge Generated from STP	391	86	- 305	KG/D AY
21	Total Power Requirement	8805	17218	8413	KW
22	DG set backup	7310	22000	14690	KVA

iv. Total Water requirement will be 1863 KLD out of which fresh water requirement of 962 KLD will be met from Municipal department and 901 KLD of treated water will be met from onsite STP and Additional 210 KLD will be met from Tanker.1234 KLD of waste water will be generated during operation phase and treated in onsite STP of 1480 KLD capacity. 1111 KLD of treated waste water will be generated. About 900 KLD of treated water will be recycled and reused for flushing, filter backwash, gardening, DG cooling and air conditioning. Excess treated water of about 210 KLD will be discharged into public sewer.

- v. Proposed project will generate about 9.17 TPD wastes including approx. 3.70 TPD biodegradable wastes. Biodegradable waste will be treated in the OWC proposed at site whereas non-biodegradable waste will be further segregated into recyclable and non-recyclable waste which will be handed over to authorized dealers for further process.
- vi. Power requirement during the operation phase will be 17,218 KW and will be met by Dakshin Haryana Bijli Vitaran Nigam Limited (DHBVNL). A total of 12 DG sets having capacity 22,000 KVA (9 @ 2000 + 2 @ 1500 + 1@1000kVA) DG sets will be provided as backup power supply.
- vii. Total 12274.3 sqm. (20.24 % of Plot Area) green area will be developed. No tree cutting is proposed.
- viii. Parking for 3915 ECS is proposed against the requirement of 3436 ECS.
- ix. The project is not located within 10 km of Eco Sensitive Zone. NBWL Clearance is not required.
- x. Forest Clearance is not required.
- xi. No court case is pending against the project.
- xii. CRZ Clearance is not required.
- xiii. Investment/Cost of the project is ₹1099.51 (in crore).
- xiv. Employment potential: 27695 persons
- xv. Benefits of the project: Employment will be generated.

**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 Haryana, it required appraisal at Central level by sectoral EAC.

**3.** Keeping in view the location of the project is in Delhi NCR which is severely affected by poor air quality, the committee and the Chairman EAC (Infra-2) particularly advised to the PP to consider the development of dense plantation at the project site using appropriate techniques in consultation with the forest department/horticulture department/experts/consultants etc., to counter the air pollution in the area and also consider the use of Gas Gensets in place of regular DG sets. An action plan for increasing the green cover needs to be submitted immediately with the copy marked separately to the Chairman EAC (Infra-2).

**4.** The EAC (Infra-2), based on the information, 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. Certified Compliance Report shall be obtained from the Integrated Regional Office of MoEF&CC.

- ii. PP shall explore alternate arrangements for excess treated water generated in the project for reuse and recycling in nearby areas and submit MoU in this regard.
- iii. PP shall explore the provision for achieving atleast 10% of total power requirement through generation of solar power.
- iv. Construction & Demolition Waste Management Plan shall be prepared as part of EMP.
- v. Details of green area development and tree plantation.

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# AGENDA ITEM NO. 82.4.10

Expansion of proposed commercial colony of area measuring 7.44375 acres with increase in built-up area from 1,66,066.108 sqm. to 1,74,006.058 sqm. in sector-74, Gurgaon, Haryana by M/s Prompt Engineering Pvt. Ltd. – Terms of Reference

## (IA/HR/MIS/254985/2022; F. No. 21-20/2022-IA-III)

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

- i. The project is located at sector-74, Gurgaon, Haryana.
- ii. Earlier, environment clearance [expansion] was obtained vide EC Identification No. EC21B039HR175893 on 22/11/2021 for plot area 30123.78 sqm. and built-up area 166066.108 sqm. respectively. The details of earlier ECs are given as follows:

S. No.	EC Grant	Project Details
1	1st EC was obtained vide letter noSEIAA/HR/2018/5930.01.2018	Plot Area: 30,198.595 sqm. Built Up Area: 76,594.14 sqm.
2	2nd EC was obtained vide file no.F.No.21-106/2018-1A-IIIdated21stJanuary,2019UnderExpansion	<b>_</b>
3	3rd EC was obtained vide file no.SEIAA/HR/2021/37222/11/2021 Under Expansion	Plot Area: 30,123.78 sqm. Built Up Area: 166066.108 sqm.

iii. The proposed expansion is due to 26.33 % extra purchasable FAR under TDR policy which will be used in Service Apartment Block only. Total No. of DU's (SP units attached to main DU) is 728 Nos. The details of the proposed expansion are given as follows:

S. No.	Description	Existing as per latest EC Letter	Expansio n	Total	Unit			
	GENERAL							
1	Total Plot Area	30123.78	-	30123.78	SQMT			
2	Proposed Built Up Area	166066.108	+ 7,939.95	1,74,006.058	SQMT			
3	DU's (SP units attached to main DU)	728	-	728	No.			
4	Max Height of Building (m)	110.09	-	110.09	М			
5	Max No of Floors	3B+LG+G+UG+3 0	-	3B+LG+G+UG+3 0	No.			
6	Cost of Project	335	14	349	CR			
		AR	EAS					
10	Permissible Ground Coverage Area	18074.24	-	18074.24	SQMT			
11	Proposed Ground Coverage Area	17734.419	-	17734.419	SQMT			
12	Permissible FAR Area - 362% (26.33% extra purchasable FAR under TDR policy)	109047.958	+7930.572	116978.53	SQMT			
13	Proposed FAR Area - 361.956	109038.582	+ 7939.948	1,16,978.53	SQMT			
14	Non FAR areas (stilt, basement, balconies &	57,027.53	-	57,027.53	SQMT			

other Non- FAR areas)				
Proposed Total Built Up Area	166066.108	+ 7939.948	1,74,006.056	SQMT
	T	WATER		
Total Water Requiremen t	1123	-	1123	KLD
Fresh water requirement	451	-	451	KLD
Treated Water Requiremen t	672	-	672	KLD
Waste water Generation	634	-	634	KLD
Proposed Capacity of STP	760	-	760	KLD
Treated Water Recycled	672	-	672	KLD
discharged in Municipal	Zero	-	Zero	KLD
	RAIN WAT	ER HARVES	TING	
No of RWH of Pits Proposed	8	-	8	No.
	P	ARKING		
Total Parking Required as / Building Bye Laws	1434	-	1434	ECS
Proposed Total Parking	1890	-	1890	ECS
Parking in Basements	1890	-	1890	ECS
	GR	EEN AREA		
Proposed Green Area	6040	-	6040	SQMT
		WASTE		
Total Solid Waste Generation	4.47	-	4.47	TPD
	Proposed Total Built Up Area Total Water Requirement t Fresh water requirement Treated Water Requirement t Waste water Generation Proposed Capacity of STP Treated Water Recycled Water to be discharged in Municipal Sewer No of RWH of Pits Proposed Total Parking Required as / Building Bye Laws Proposed Total Parking Parking in Basements	FAR areas)Proposed Total Built Up Area166066.108Total Built Up Area1123Requiremen t1123Requiremen t672Treated Water Requiremen t672Water Requiremen t634Generation760Capacity of STP760Capacity of STP760Vater Recycled672Water to be discharged in Municipal SewerZeroTotal Parking Required as / Building Bye Laws8Proposed Total Parking Parking in Basements1434Proposed Green Area6040Total Solid Waste4.47	FAR areas)Ic60066.108+ 7939.948Proposed Total Built Up AreaIc60066.108+ 7939.948Total Water Requirement tInternational State Presh water RequirementIcon Construct 	FAR areas)Image: style

32	Organic waste	2.46	-	2.46	TPD
33	Quantity of E- Waste Generation- Kg/Day	8.38	-	8.38	KG/D Ay
34	Quantity of Hazardous waste Generation	10.27	-	10.27	LPD
35	Quantity of Sludge Generated from STP	25	-	25	KG/D AY
		ENE	RGY		
36	Total Power Requirement	8760	-	8760	KW
37	DG set backup	10530	-	10530	KVA
38	No of DG Sets	8	-	8	No.

iv. Since there is no increase in no. of DU's, Population, Water, Waste water, Power, Solid waste, Parking etc. so detailed EIA study will be not required as the project comes under modification and adding (mezzanine area) the built-up area in Service Apartment Block only.

**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 Haryana, it required appraisal at Central level by sectoral EAC.

**3.** The EAC noted that the proposed increase in built-up area is only due to the addition of a mezzanine floor in each studio apartment in the proposed project with no impact on the population load or pollution load. Therefore, considering the nature of changes proposed, the Committee was of the opinion that the instant proposal need not be considered as an expansion and may be considered as a case of amendment. Accordingly, the EAC decided to return the instant proposal for Terms of Reference and asked the project proponent to apply in the amendment category.

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## AGENDA ITEM NO. 82.4.11

Modification & Expansion of Group Housing Colony Project at Village Dhanwapur, Sector-104, Gurugram, Haryana by M/s Juventus Estate Ltd. – Amendment in Environmental Clearance

# (IA/HR/MIS/255252/2022; F. No. 21-23/2022-IA-III)

**1.** The Project Proponent (M/s Juventus Estate Ltd.) along with her consultant 'M/s. Grass Roots Research & Creation (P) Ltd.', made a presentation on the key parameters and salient features of the project to the EAC (Infra-2). The EAC took note of following key parameters and salient features of the project, as presented during the meeting; provided in the brief and application for this project:

- i. The project is located at Village Dhanwapur, Sector-104, Gurugram, Haryana.
- ii. The project was earlier granted Environment Clearance by SEIAA, Haryana vide letter no. SEIAA/HR/2014/923 dated 11.07.2014 for Plot area-1,16,009.63 sqm. (28.66665 acre) and Built-up area 3,75,674.82 sqm. Due to some modifications, plot area was increased from 1,16,009.63 sqm. to 1,37,685.79 sqm. and built-up area was reduced from 3,75,674.82 sqm. to 3,61,332 sqm. The Environment Clearance was also granted by MoEF&CC vide file no. 21-104/2018-IA.III dated 17.05.2019. Amendment in EC was granted by MoEF&CC vide file no. 21-104/2018-IA.III dated 21.06.2019.
- iii. Now, the size of Dwelling units is increasing and number of the same is decreasing. Due to these changes, the Built-up area and pollution load w.r.t. population, water requirement, rain water harvesting, solid waste, parking etc. are decreasing but the plot area will remain same. Accordingly, application has been submitted for amendment in EC

S.	Particulars	Earlier EC	Under	After
No.		(sqm.)	Amendment	Amendment
				(sqm.)
1.	Total Plot Area	1,37,685.79	-	1,37,685.572
	Site area as per	1,37,428.411	-	1,37,428.8
	zoning			
	• Plot area in	1,31,613.2744	-	1,31,613.274
	intense			
	TOD zone			
	(32.522			
	acre)			
	• Plot area in	5,815.33	-	5,815.323
	transition			
	zone (1.437			
	acres)			
2.	Permissible	54,971.520	-	54,971.520
	Ground Coverage	(@40%)		(@40%)
3.	Proposed Ground	13,591.98	1,659.925	15,251.905
	Coverage	(@9.89%)		(11.09%)

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

4.	<ul> <li>Permissible FAR</li> <li>Permissible FAR in Intense Zone @3.0</li> <li>Permissible FAR in Transition Zone @2.5</li> </ul>	<b>4,09,378.13</b> (@ <b>3.0</b> ) 3,94,839.823 14,538.31	-	<b>4,09,378.13</b> (@ <b>3.0</b> ) 3,94,839.823 14,538.31
5.	<ul> <li>Proposed FAR</li> <li>Total FAR under Phase 1</li> <li>Total FAR under in Phase 2</li> <li>Proposed FAR of Convenient shopping</li> </ul>	<b>2,26,027.126</b> (@163.885%) 97,832.36 1,27,492.479 702.287	- <b>8,135.051</b> -12,642.214 4,507.163 -	<b>2,17,892.075</b> 85,190.146 1,31,999.642 702.287
6.	Non FAR area	30,479.93	-30,479.93	_
7.	Basement area	1,05,668	-16,871.092	88,796.908
	<ul><li>Basement 1</li><li>Basement 2</li><li>Basement 3</li></ul>	44,403.00 44,504.00 16,762.00	-263.324 153.232 -16,762	44,139.676 44,657.232 -
8.	Built-up Area (5+6+7)	3,61,332.00	-54,643.017	3,06,688.983
9.	Landscape Area	(@ 30% of net plot area)	4,033.762	41,850.3 (33.2%)
10.	Maximum Height of the Building (m)	128	-14.6	113.4

# v. The salient features of the project after amendment are given as follows:

S. No.	Particulars	Existing	After Amendment
-----------	-------------	----------	-----------------

1.	Total Units		2588 units
	Dwelling Units	1917 nos.	1854 nos.
	EWS	401 nos.	523 nos.
	Servants Rooms	196 nos.	221 nos.
2.	Population	14910 persons	13884 persons
3.	Total Water Requirement	1343 KLD	1209 KLD
4.	Total Fresh Water Requirement	804 KLD	734 KLD
5.	Total Waste Water Generation	915 KLD	851 KLD
6.	Treated Water	823 KLD	766 KLD
7.	Total STP Capacity	1100 KLD	1030 KLD
8.	Parking Provision	3395 ECS	2002 ECS
9.	Electric Load	15,255 kW (19078.75 kVA)	15,255 kW (19078.75 kVA)
10.	DG Sets	11,020 kVA (6x1500 kVA & 2x1010 kVA)	11,020 kVA (6x1500 kVA & 2x1010 kVA)
11.	Solid Waste	6537.3 kg/day (6.54 TPD)	5928 kg/day (5.92 TPD)
a)	Biodegradable Waste	3922.4 kg/day	3557 kg/day
b)	Non-Biodegradable Waste	2614.9 kg/day	2371 kg/day
12.	RWH Pits	35 nos.	34 nos.
13.	Total Cost of the project	INR 592.83 Cr.	INR 592.83 Cr.
14.	Built-up area	3,61,332.00 sqm.	3,06,688.983 sqm.

**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 Haryana, it required appraisal at Central level by sectoral EAC.

**3.** Keeping in the location of the project is in Delhi NCR which is severely affected by poor air quality, the committee and the Chairman EAC (Infra-2) particularly advised to the PP to consider the development of dense plantation at the project site using appropriate techniques in consultation with the forest department/horticulture department/experts/consultants etc., to counter the air pollution in the area. An action plan for increasing the green cover needs to be submitted immediately with the copy marked separately to the Chairman EAC (Infra-2).

**4.** The EAC (Infra-2), based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, decided to defer the proposal and asked the project proponent to provide the following additional information:

- i. Submit a detailed comparative chart of the proposed amendment specifying the floor wise changes in area and number of dwelling units.
- ii. Submit an action plan for increasing green cover in NCR region as discussed in the meeting and indicated at Sr. No. 3 above.

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## AGENDA ITEM NO. 82.4.12

Proposed Expansion of Sarvodaya Hospital & Research Centre (A Unit of Anshu Hospitals Ltd.) At Site No. 1, Sector - 08 at Faridabad – Amendment in Environmental Clearance

## (IA/HR/MIS/255454/2022; F. No. 21-24/2022-IA-III)

**1.** The Project Proponent (M/s Sarvodaya Hospital & Research Centre (A Unit of Anshu Hospitals Ltd.)) along with her consultant 'M/s. Ind Tech House Consult.', made a presentation on the key parameters and salient features of the project to the EAC (Infra-2). The EAC took note of following key parameters and salient features of the project, as presented during the meeting; provided in the brief and application for this project:

- i. The project is located at Site No.1, Sector 08 at Faridabad, Haryana.
- ii. Earlier, Environment Clearance has been issued by SEIAA, Haryana. vide letter No. SEIAA/HR/2017/798 dated 30.11.2017. The built up area in previous granted EC, vide letter dated 30.11.2017 was 32,892.50 sqm. and now the built up area utilization is 32,487.144 sqm. This area includes mumty area, machine room. Plan has been approved vide Memo No. 1513 dated 05.12.2017 and OC obtained. Now, amendment is requested for additions of 150 Beds in 32,487.144 sqm. built-up area.
- iii. A provisional EC was granted by SEIAA, Haryana on 22.07.2021 and revoked vide their letter dated 16.12.2021 with immediate effect vide

stating that "There is no such provision to issue any provisional EC letter, if so, then that will be in Violation EIA Notification 2006".

iv. Plot area of the project is 16,931.04 sqm. and the total built up area of the project is 32,487.144 sqm. The details of the proposed amendment are given as follows:

S. No.	Description	Previous	As per revised proposal	Unit	Increase /Decrease
1	Plot Area	16931.04	16931.04	SQM	No Change
2	Total Built Up Area	32892.5	32487.144	SQM	-405.356
3	No. of building block	3	3	NOS	No Change
4	No. of Beds	300	450	NOS	+ 150
5	Max Height of Building	29.95	29.95	М	No Change
6	Total water requirement	344	466	KLD	+ 122
7	Fresh water requirement	181	298	KLD	+ 117
8	Total waste water generation	144	226	KLD	+ 82
9	STP capacity	170	270	KLD	+ 100
10	ETP capacity	45	70	KLD	+ 25
11	Total power requirement	2004	2004	KVA	No Change
12	No. of RWH Pits	5	5	NOS	No Change

**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 Haryana, it required appraisal at Central level by sectoral EAC.

**3.** Keeping in the location of the project is in Delhi NCR which is severely affected by poor air quality, the committee and the Chairman EAC (Infra-2) particularly advised to the PP to consider the development of dense plantation at the project site using appropriate techniques in consultation with the forest department/horticulture department/experts/consultants etc., to counter the air pollution in the area. An action plan for increasing the green cover needs to be submitted immediately with the copy marked separately to the Chairman EAC (Infra-2).

**4.** The EAC (Infra-2), based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the

issues, decided to defer the proposal and asked the project proponent to provide the following additional information:

- i. Submit revised calculation of biomedical waste generated due to the proposed amendment.
- ii. Submit a copy of the Minutes of Meetings of SEIAA Haryana in which the proposal was considered for amendment along with a copy of the provisional EC granted by SEIAA, Haryana dated 22.07.2021 and their letter dated 16.12.2021 revoking the same.
- iii. Submit an action plan for increasing green cover in NCR region as discussed in the meeting and indicated at Sr. No.3 above.

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# LIST OF PARTICIPANTS OF EAC (INFRASTRUCTURE-2) IN 82<sup>nd</sup> MEETING OF EAC (INFRA-2) HELD DURING 15-16<sup>th</sup> FEBRUARY, 2022 THROUGH VIDEO CONFERENCING

S.	Name	Name Designation Attendance		dance	Sign
No.			15.02.2022	16.02.2022	Through VC
1.	Dr. N. P. Shukla	Chairman	Р	Р	_
2.	Dr. H. C. Sharatchandra	Member	Р	Р	-
3.	Shri V. Suresh	Member	Р	Р	-
4.	Dr. V. S. Naidu	Member	Р	Р	-
5.	Shri B. C. Nigam	Member	Р	Р	-
6.	Dr. Manoranjan Hota	Member	Р	Р	-
7.	Dr. Dipankar Saha	Member	Р	Р	-
8.	Dr. Jayesh Ruparelia	Member	Р	Р	-
9.	Dr. (Mrs.) Mayuri H. Pandya	Member	Р	Р	-
10.	Dr. M. V. Ramana Murthy	Member	А	А	-
11.	Prof. Dr. P.S.N. Rao	Member	А	А	-
12.	Dr. Dharmendra Kumar Gupta	Scientist "F" & Member Secretary	Р	Р	_

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# ANNEXURE-1

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

## I. Statutory compliance:

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

# II. Air quality monitoring and preservation:

- i. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g.,  $PM_{10}$  and  $PM_{2.5}$  in reference to PM emission, and SO<sub>2</sub> and NOx in reference to SO<sub>2</sub> and NOx emissions) within and outside the airport area at least at four locations (one within and three outside the plant area at an angle of 120°each), covering upwind and downwind directions.
- ii. Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG

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

- A detailed traffic management and traffic decongestion plan shall be iii. 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 Urban Development department bv the State and the P.W.D./competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.
- iv. Soil and other construction materials should be sprayed with water prior to any loading, unloading or transfer operation so as to maintain the dusty material wet
- v. The excavation working area should be sprayed with water after operation so as to maintain the entire surface wet.
- vi. Excavated materials shall be handled and transported in a manner that they do not cause any problems of air pollution.
- vii. The soil/construction materials carried by the vehicle should be covered by impervious sheeting to ensure that the dusty materials do not leak from the vehicle.

### III. Water quality monitoring and preservation:

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

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

## IV. Noise monitoring and prevention:

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

## V. Energy Conservation measures:

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

## VI. Waste management:

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

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

# VII. Green Belt:

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

# VIII. Public hearing and Human health issues:

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

## IX. Miscellaneous:

i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and

safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.

- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- v. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholder's / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- vi. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
- vii. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- viii. Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
  - ix. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
  - x. The criteria pollutant levels namely;  $PM_{10}$ ,  $PM_{2.5}$ ,  $SO_2$ , NOx (ambient levels) shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
  - xi. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project

by the concerned authorities, commencing the land development work and start of production operation by the project.

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

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#### **ANNEXURE-2**

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

#### I. Statutory compliance:

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

### II. Air quality monitoring and preservation:

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

- ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986.
- iii. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g.,  $PM_{10}$  and  $PM_{2.5}$  in reference to PM emission, and SO<sub>2</sub> and NOx in reference to SO<sub>2</sub> and NOx emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120°each), covering upwind and downwind directions.
- iv. Sampling facility at process stacks and at quenching towers shall be provided as per CPCB guidelines for manual monitoring of emissions.
- v. The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- vi. Appropriate Air Pollution Control (As proposed, air pollution control device viz. gas quencher; treatment with mixture of hydrated lime and activated powder for adsorption of partial acidity and VOCs (if any); bag filter/ESP for removal of particulate matter; venturi scrubber followed by packed bed scrubber with caustic circulation to neutralize the acidic vapours in flue gas; and demister column for arresting water carry over will be provided to the incinerator) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
- vii. The periodical monitoring of Dioxins and Furans in the Stack emissions shall be carried out. Analysis of Dioxins and Furans shall be done through CSIR-National Institute for Interdisciplinary Science and Technology (NIIST), Thiruvananthapuram or equivalent NABL Accredited laboratory
- viii. Gas generated in the Land fill should be properly collected, monitored and flared
- ix. A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 02 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 02 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.

### III. Water quality monitoring and preservation:

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

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

### IV. Noise monitoring and prevention:

i. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.

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

### V. Energy Conservation measures:

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

### VI. Waste management:

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

# VII. Green Belt:

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

# VIII. Public hearing and Human health issues:

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

### IX. 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.
- The company shall have a well laid down environmental policy duly v. approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental/forest/wildlife norms/conditions. The company have defined system reporting shall of infringements/deviation/violation of the environmental/forest/wildlife norms /conditions and/or shareholder's/stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- vi. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
- vii. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- viii. Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
- ix. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- x. The criteria pollutant levels namely; PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub>, NOx (ambient levels as well as stack emissions) or critical sectoral parameters,

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

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

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#### **ANNEXURE-3**

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

#### I. Statutory compliance:

- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1980, in case of the diversion of forest land for non-forest purpose involved in the project.
- ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan/Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report (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/Nm<sup>3</sup>.
- v. Appropriate Air Pollution Control (APC) system shall be provided for fugitive dust from all vulnerable sources, so as to comply prescribed standards. All necessary air pollution control devises (quenching, Venturi scrubber, mist eliminator) should be provided for compliance of emission standards.
- vi. Masking agents should be used for odour control.

# III. Water quality monitoring and preservation:

- i. The project proponent shall install effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. Waste water generated from the facility shall be treated in the ETP and treated waste water shall be reused in the APCD connected to the incinerator. The water quality of treated effluent shall meet the norms prescribed by State Pollution Control Board. Zero discharge should be maintained.
- iii. Process effluent/any waste water should not be allowed to mix with storm water.
- iv. Total fresh water use shall not exceed the proposed requirement as provided in the project details. Prior permission from competent authority shall be obtained for use of fresh water.
- v. Sewage Treatment Plant shall be provided to treat the wastewater generated from the project. Treated water shall be reused within the project.
- vi. A certificate from the competent authority for discharging treated effluent/ untreated effluents into the Public sewer/disposal/drainage systems along with the final disposal point should be obtained.
- vii. The leachate from the facility shall be collected and treated to meet the prescribed standards before disposal.
- viii. Magnetic flow meters shall be provided at the inlet and outlet of the ETP & all ground water abstraction points and records for the same shall be maintained regularly.
- ix. Rain water runoff from hazardous waste storage area shall be collected and treated in the effluent treatment plant.
- IV. Noise monitoring and prevention:
  - i. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.
- V. Energy Conservation measures:

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

# VI. Waste management:

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

# VII. Green Belt:

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

# VIII. Public hearing and Human health issues:

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

- i. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular languagewithin seven days indicating that the project has been accorded environment clearance and the details of MoEF&CC/SEIAA website where it is displayed
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- The company shall have a well laid down environmental policy duly v. approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental/forest/wildlife norms/conditions. The company shall have defined system of reporting infringements/deviation/violation of the environmental/forest/wildlife norms/ conditions and/or shareholder's/stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- vi. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
- vii. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- viii. Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
  - ix. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
  - x. The criteria pollutant levels namely;  $PM_{2.5}$ ,  $PM_{10}$ ,  $SO_2$ , NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a

convenient location near the main gate of the company in the public domain.

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

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# ANNEXURE-4

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

#### I. Statutory compliance:

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

### II. Air quality monitoring and preservation:

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

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

# IV. Noise monitoring and prevention:

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

### V. Energy Conservation measures:

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

# VII. Waste management

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

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

- i. Comply with the safety procedures, norms and guidelines (as applicable) as outlined in IS 5228, IS 5229 and IS 5230, code of practice for construction of aerial ropeways, Bureau of Indian Standards.
- ii. Maintaining hoists and lifts, lifting machines, chains, ropes, and other lifting tackles in good condition.
- iii. Ensuring that walking surfaces or boards at height are of sound construction and are provided with safety rails or belts.
- iv. The project should conform to the norms prescribed by the Director General Mine safety. Necessary clearances in this regard shall be obtained.

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

# VIII Miscellaneous:

- i. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEF&CC/SEIAA website where it is displayed.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- The company shall have a well laid down environmental policy duly v. 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 system shall have defined of reporting infringements/deviation/violation of the environmental/forest/wildlife norms /conditions and/or shareholder's/stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- vi. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
- vii. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the

Ministry/Regional Office along with the Six Monthly Compliance Report.

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

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### ANNEXURE-5

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

### I. Statutory compliance:

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

# II. Air quality monitoring and preservation:

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

# III. Water quality monitoring and preservation:

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

provided in the project details. Prior permission from competent authority shall be obtained for use of fresh water.

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

shall be accepted without consent from SPCB under the Water Act, 1974 as amended.

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

### IV. Noise monitoring and prevention:

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

#### V. Waste management:

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

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

# VII. Green Belt:

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

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

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

### IX. Miscellaneous:

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

board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.

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

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

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### ANNEXURE-6

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

### I. Statutory compliance:

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

### II. Air quality monitoring and preservation:

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories. (for projects involving incineration).
- ii. As proposed, air pollution control device viz. gas quencher; treatment with mixture of hydrated lime and activated powder for adsorption of partial acidity and VOCs (if any); bag filter/ESP for removal of particulate matter; venturi scrubber followed by packed bed scrubber with caustic circulation to neutralize the acidic vapours in flue gas; and demister column for arresting water carry over will be provided to the incinerator. Online pollutant monitoring shall be provided as per CPCB guidelines for monitoring particulate matter, SO<sub>2</sub>, NOx and CO from the

incinerator stack. The periodical monitoring of Dioxins and Furans in the Stack emissions shall be carried out.

- iii. Analysis of Dioxins and Furans shall be done through CSIR-National Institute for Interdisciplinary Science and Technology (NIIST), Thiruvananthapuram or equivalent NABL Accredited laboratory.
- iv. Incinerator shall be designed as per CPCB guidelines. Energy shall be recovered from incinerator.
- v. Gas generated in the Land fill should be properly collected, monitored and flared.
- vi. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g.,  $PM_{10}$  and  $PM_{2.5}$  in reference to PM emission, and SO<sub>2</sub> and NOx in reference to SO<sub>2</sub> and NOx emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions.

# III. Water quality monitoring and preservation:

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

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

#### IV. Waste management:

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

### V. Transportation:

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

### VI. Green belt:

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

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

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

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

### IX. Miscellaneous:

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently. (for projects involving incineration)
- ii. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEF&CC/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.
- The company shall have a well laid down environmental policy duly v. approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental/forest/wildlife norms/conditions. The company defined system reporting shall have of infringements/deviation/violation of the environmental/forest/wildlife norms/ conditions and/or shareholder's/stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- vi. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
- vii. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the

Ministry/Regional Office along with the Six Monthly Compliance Report.

- viii. Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
- ix. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- x. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- xi. The criteria pollutant levels namely;  $PM_{2.5}$ ,  $PM_{10}$ ,  $SO_2$ , NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain (in case of incineration involved).
- xii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- xiii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- xiv. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- xv. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- xvi. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xvii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xviii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
  - xix. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
  - xx. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any

other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

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

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### ANNEXURE-7

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

### I. Statutory compliance:

- i. The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.
- ii. The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of firefighting equipment etc. as per National Building Code including protection measures from lightening etc.
- iii. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1980, in case of the diversion of forest land for non-forest purpose involved in the project.
- iv. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- v. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.
- vi. The project proponent shall obtain the necessary permission for drawl of ground water / surface water required for the project from the competent authority.
- vii. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
- viii. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable, by project proponents from the respective competent authorities.
- ix. The provisions of the Solid Waste Management Rules, 2016, e-Waste (Management) Rules, 2016, and the Plastics Waste Management Rules, 2016, shall be followed.
- x. The project proponent shall follow the ECBC/ECBC-R prescribed by Bureau of Energy Efficiency, Ministry of Power strictly.
- II. Air quality monitoring and preservation:
- i. Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.
- ii. A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.
- iii. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the

main pollutants released (e.g.  $PM_{10}$  and  $PM_{2.5}$ ) covering upwind and downwind directions during the construction period.

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

### 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 byelaws 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 premixed concrete, curing agents and other best practices referred.
- xi. The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rain water harvesting recharge pits/storage tanks shall be provided for ground water recharging as per the CGWB norms.
- xii. A rain water harvesting plan needs to be designed where the recharge bores of minimum one recharge bore per 5,000 square meters of built up area and storage capacity of minimum one day of total fresh water requirement shall be provided. In areas where ground water recharge is not feasible, the rain water should be harvested and stored for reuse. The ground water shall not be withdrawn without approval from the Competent Authority.
- xiii. All recharge should be limited to shallow aquifer.
- xiv. No ground water shall be used during construction phase of the project.
- xv. Any ground water dewatering should be properly managed and shall conform to the approvals and the guidelines of the CGWA in the matter. Formal approval shall be taken from the CGWA for any ground water abstraction or dewatering.
- xvi. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water

balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.

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

#### IV. Noise monitoring and prevention:

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

#### V. Energy Conservation measures:

- i. Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC.
- ii. Outdoor and common area lighting shall be LED.
- iii. Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be

incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.

- iv. Energy conservation measures like installation of CFLs/ LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning.
- v. Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 1% of the demand load or as per the state level/ local building bye-laws requirement, whichever is higher.
- vi. Solar power shall be used for lighting in the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. Solar water heating shall be provided to meet 20% of the hot water demand of the commercial and institutional building or as per the requirement of the local building bye-laws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.

#### VI. Waste Management:

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

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

#### VII. Green Cover:

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

#### VIII. Transport

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

by the State Urban Development department and the P.W.D./competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.

#### IX. Human health issues:

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

### X. Miscellaneous:

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

board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.

- vi. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
- vii. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report
- viii. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
  - ix. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
  - x. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- xi. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP reportand also that during their presentation to the Expert Appraisal Committee.
- xii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change (MoEF&CC).
- xiii. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xiv. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xv. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xvi. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xvii. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

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

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