

**Minutes of the 244<sup>th</sup> Meeting of the State Expert Appraisal Committee (SEAC), Haryana held on 08.07.2022 and 09.07.2022 under the Chairmanship of Sh. V. K. Gupta, Chairman, SEAC, in Conference Hall (SEIAA), Bays No.55-58, First Floor, Paryatan Bhawan, Sector-2, Panchkula for considering Environmental Clearance of Projects (B Category) under Government of India Notification dated 14.09.2006**

At the outset the Chairman, SEAC welcomed the Members of the SEAC and advised the Member Secretary to give brief background of this meeting. The minutes of 243<sup>rd</sup> meeting were discussed and approved. In the meeting 31 nos. of agenda projects received from SEIAA, were taken up for scoping, appraisal and grading as per agenda circulated.

The following members joined the meeting:

<b>Sr. No.</b>	<b>Name</b>	<b>Designation</b>
1.	Shri Prabhakar Verma	Member
2.	Dr. Rajbir Singh Bondwal, IFS (Retd.),	Member
3.	Dr. Sandeep Gupta	Member
4.	Sh. Bhupender Singh Rinwa, Joint Director, Environment & Climate Change Department, Haryana	Member Secretary
5.	Shri Rajender Yadav, (on 08.07.2022)	Mining Engineer
6.	Shri Sanjay Simberwal (on 09.07.2022)	Mining Engineer

**244.01 EC for Modification & Expansion of Group Housing Scheme (19.244 acres) Under Mixed Landuse at Sector-53, District Gurugram, Haryana by M/s Vipul Limited**

**Project Proponent : Ms. Kavia Anand**  
**Consultant : Gaurang Environmental Solutions Pvt. Ltd.**

The project was submitted to the SEIAA, Haryana vide online proposal No. SIA/HR/MIS/74939/2018 dated 09.04.2022 as per check list approved by the SEIAA/SEAC for obtaining Environmental Clearance under Category 8(b) of EIA Notification 14.09.2006.

The case was taken up in 244<sup>th</sup> meeting of SEAC, Haryana held on 08.07.2022.

- The proposed project is for EC for Modification & Expansion of Group Housing Scheme (19.244 acres) Under Mixed Landuse" at Sector-53, Gurugram, Haryana by M/s Vipul Limited
- Earlier EC has been granted to the project by MoEF&CC vide F. No. 21-108/2018-IA-III dated 30.04.2019.
- Licence has been issued Licence No. 168-172 of 2004 dated 16.12.2004 & Licence No. 545-546 of 2006 dated 13.03.2006 valid till 15.12.2024 & 12.03.2025 respectively from Town and Country planning.
- CTE has been granted to the existing project vide letter dated 18.06.2019 valid till 29.04.2026
- The compliance report has been received from RO MoEF&CC vide letter dated 13.12.2021
- ToR was granted by SEIAA, Haryana vide letter no. SEIAA(133)/HR/2021/11 dated 03.01.2022.
- No wildlife sanctuary falls within 10km from the project site

The details of the project, as per the documents submitted by the project proponent and also as informed during the presentation in the meeting are as under:-

**TABLE 1: Basic Details**

<b>Name of the Project :“Modification &amp; Expansion of Group Housing Scheme (19.244 acres) Under Mixed Landuse” at Sector-53, Gurugram, Haryana</b>				
<b>Sr. No.</b>	<b>Particulars</b>	<b>As per Existing EC</b>	<b>Modification &amp; Expansion</b>	<b>Total</b>
1.	Online Proposal Number	SIA/HR/MIS/74939/2018		
2.	Latitude	28° 26' 10.13" N		
3.	Longitude	77° 6' 2.93" E		
4.	Total Plot Area	77,877.581 sq. m (19.244 acres)	-	77,877.581 sq. M(19.244 acres)
5.	Net Plot Area	-	-	-
6.	Achieved Ground Coverage	25.01% 19,477.468 sq. m	- 4,791.228 sq. m.	18.86% 14,686.24 sq. m.
7.	Achieved FAR	2,61,699.785 sq. m.	+ 9310.145 sq. m.	2,71,009.93 sq. m.
8.	Non FAR Area	1,36,720.52 sq. m	+ 1,45,071.983sq. m	2,81,792.503 sq. m
9.	Built up area	4,03,267.045 sq. m	+ 1,54,382.128 sq. m	5,57,649.173sq. m.
10.	Total Green Area with Percentage	23,671.766 sq. m (30.39 % of plot area)	-	23,671.766 sq. m (30.39 % of plot area)
11.	Rain Water Harvesting Pond	16 Pits	+ 3 Nos.	19 Pits
12.	STP Capacity	2 STPs of total capacity of 660 KLD (1 x 450 KLD + 1 x 210 KLD)	+ 390 KLD	1050 KLD
13.	Total Parking	3,799 ECS	+47 ECS	3,846 ECS
14.	Organic Waste Converter	-		3 nos. of Organic Waste Converters of capacity 2,250 Kg/day 2x1000 + 1x250)
15.	Maximum height & number of floors (in meter)	139.3 m 3B+S+37	+ 2.64 m +3 Floor	141.95 m 3B+ G/S+UG+40
16.	Power Requirement	13,278 KW	-1,410 KW	11,868 KW
17.	Power Backup	10 nos. DG set of total capacity 12,500 kVA: Residential- 5 x 1000 kVA + 1 x 1500 kVA Commercial- 2 x 1000 kVA + 2 x 2000 kVA	- 2 nos. DG set of total capacity 2,500 kVA: Residential- 1 x 1500 kVA Commercial- 1 x 1000 kVA	8 nos. DG set of total capacity 10,000 kVA: Residential- 5 x 1000 kVA Commercial- 2 x 2000 kVA + 1 x 1000 kVA
18.	Total Water Requirement (KLD) • One Time • Regular	986 KLD	+540 KLD + 516 KLD	1526 KLD 1502 KLD
19.	Domestic Water Requirement (KLD)	-		707 KLD
20.	Fresh Water Requirement (KLD) • One Time • Regular	528 KLD	+211 KLD +187 KLD	739 KLD 715 KLD
21.	Recycled/Treated Water Requirement (KLD)	458 KLD	+ 329 KLD	787 KLD
22.	Waste Water Generated (KLD)	522 KLD	+ 352 KLD	874 KLD
23.	Solid Waste Generated ( kg/day)	2,751 kg/day	+ 2,547 kg/day	5,298 kg/day
24.	Biodegradable Waste ( kg/day)	1101 kg/day	1019 kg/day	2120 kg/day
25.	Number of Towers	11 no's	-1 no's	10 no's

26.	Dwelling Units/ EWS	928/164	+ 156/27	1084/191
27.	Salable Units	-	-	-
28.	Community center	1no – 1941.143 sqm	+ 61.335 sqm	1no. – 2002.478 sqm
29.	Stories	Tower – 1_S+34 Tower – 2_S+37 Tower – 3_S+34 Tower – 4_S+22 Tower – 5_S+25 Tower – 6_S+28 Tower – 7_S+28 Tower – 8_S+25 Tower – 9_S+22 Tower – 10_S+30 Tower – 11_S+30	Tower – 1_+6 Tower – 2_+4 Tower – 3_+6 Tower – 4_+14 Tower – 5_+11 Tower – 6_+8 Tower – 7_+8 Tower – 8_+11 Tower – 9_+14 Tower – 10_+6 ➤ Tower – 11_+6	Tower – 1_S/G+UG+40 Tower – 2_S+40 Tower – 3_S/G+UG+40 Tower – 4_S/G+UG+36 Tower – S/G+UG+36 Tower – S/G+UG+36 Tower – S/G+UG+36 Tower – S/G+UG+36 Tower – S/G+UG+36 Tower – S/G+UG+36 Tower – S/G+UG+36 ➤ Tower – S/G+UG+36
30.	R+U Value of Material used	U-Value : Wall : 0.688 (W/m <sup>2</sup> °C) Roof : 0.81 (W/m <sup>2</sup> °C)		
31.	Total Cost of the project:	Rs. 1,549.76 crores	+ 1,329.29	2,879.05 crores
32.	EMP Budget (per year)	i) Capital Cost	2435.58 Lakh	
		ii) Recurring cost (per year)	223 Lakh	
33	Incremental Load in respect of:	i) PM 2.5	0.01387	
		ii) PM 10	0.1387	
		iii) SO <sub>x</sub>	0.08233	
		iv) NO <sub>x</sub>	0.0752	
		v) CO	0.0549700	

Table 2: EMP BUDGET

Sr. No	Capital Cost		Recurring Cost	
	Item	Rs. In Lakhs	Item	Rs in Lakh/year
1.	STP	350	Effluent & water quality monitoring & O and M Costs & maintenance	30
2.	Stack attached to DG set	300	Stack emission & ambient air monitoring	10
3.	Solid waste management	150	Solid waste handling treatment & disposal	10
4.	Rainwater harvesting system	180	Maintenance of RWH	40
5.	Storm water drainage system	250	Maintenance of drainage	50
6.	Landscaping	1025.58	Maintenance of green area	80
7.	Solar powered lighting within the project site	150		

8.	Development of Miyawaki Forest outside the project boundary & surrounded area	10	Maintenance of Miyawaki Forest outside the project boundary & surrounded area	3
9.	Social Activities	20		
	<b>Total</b>	<b>2435.58</b>	<b>Total</b>	<b>223</b>

The discussion was held on area details, watercalculations, EMP budget, solar energy, zero liquid discharge, landscape plan and certified compliance and certain observations were raised :-

1. The PP shall submit the undertaking for zero liquid discharge
2. The PP shall submit the revised tangible EMP
3. The PP shall submit revised solar requirement.
4. The PP shall submit time line for greenbelt development

The PP submitted the reply of above said observations vide letter dated 08.07.2022 and also submitted undertakings in response to the observations.

The documents were placed before the committee. The committee after discussion considered the reply and rated this project with **"Gold Rating"** and was of the unanimous view that this case for granting Environmental Clearance under EIA Notification dated 14.9.2006 issued by the Ministry of Environment and Forest, Government of India should be recommended to the SEIAA with the following specific and general stipulations:

**A. Specific conditions:-**

- 1) Sewage shall be treated in the STP based on latest Technology to achieve standards ordered by NGT. The Treated effluent from STP shall be recycled /reused for flushing. DG cooling and Gardening
- 2) The PP shall also develop the Miyawaki Forest as proposed in the EMP with the capital cost and maintain the same. The Miyawaki forest shall be developed under the guidance of MD Forest Corporation Haryana
- 3) The Project Proponent would devise a monitoring plan to the satisfaction of the State Pollution Control Board so as to continuously monitor the treated waste water being used for flushing in terms of faecal coli forms and other pathogenic bacteria.
- 4) The PP shall ensure that total 2% of the cost of project shall be spent on EMP Budget. However, the amount and component shown in EMP table above shall also be included for the purpose of 2% amount. The EMP cost on Socio Economic activities shall be used before the commencement of the project & EMP recurring inside the project shall be implemented throughout the operation of the project. The PP shall establish Environment monitoring cell as per documents submitted.
- 5) The PP shall not carry out any construct above and below revenue rasta if passing through the project and ensure that permission of the competent authority shall be obtained before carry out any construction above or below the revnuerasta. The PP shall put notice board on the revenue rasta for the passer byes.
- 6) The project proponent shall upload the status of compliance of the basic details (given in above tables), stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- 7) 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.
- 8) Separate wet and dry bins must be provided in each unit and at ground level for facilitating segregation of waste. Solid Waste shall be segregated into wet garbage and inert materials. Wet Garbage shall be composted in Organic waste convertor. Adequate area shall be provided for solid waste management within the premises which will include area for segregation, composting. The Inert waste from the project will be sent to solid waste dumping site through authorized vendor.
  - 9) Traffic management plan as submitted shall be implemented in letter and spirit. Apart, a detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or purpose to be carried out by the project or other agencies in this 05kms radius of the site in different scenarios of space and time
  - 10) No tree cutting has been proposed in the instant project. A minimum of 1 tree for every 80sqm of land should be planted and maintained. The Existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping. As proposed 23,671.766 sq.m (30.39% total plot area) shall be provided for Green Area development for whole project, excluding plot areas.
  - 11) 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.
  - 12) Consent to establish/operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of pollution) Act, 1981 and the Water (Prevention and control of pollution) Act, 1974.
  - 13) The Approval of the Competent Authority shall be obtained for structural safety of building code due to earthquakes, adequacy of fire fighting equipments etc. as per National Building Code including protection measures from lightning etc.
  - 14) The PP shall obtain the Fire NOC from the Competent Authority before taking the occupation of the building.
  - 15) The PP shall install the Eco Friendly Green Transformer based on ester oil to reduce the carbon footprint. The PP shall shift to gas based generator set when the gas is available. The PP shall install APCM for the DG set. The PP shall reduce the So<sub>2</sub> load by 30% if HSD is used. The DG sets will be operated for maximum 04 hours during power failure through Executing Agency
  - 16) The PP shall not give occupation or possession before the water supply and sewage connection permitted by the competent authority.
  - 17) The PP shall not give occupation or possession before the electricity connection permitted by the competent Authority.
  - 18) The PP shall obtain the permission regarding withdrawal of ground water, if any from HWRA/CGWA before the start of the project and also obtained the CTO from HSPCB after the approval from HWRA/CGWA.
  - 19) The PP shall carry out the quarterly awareness programs for the stakeholders of the project.
  - 20) 3 Rain water harvesting recharge pits in addition to already provided 16 pits shall be provided for ground water recharging as per the CGWB norms
  - 21) The PP shall install Digital water level recorder for monitoring the water recharge and carry out quarterly maintenance and cleaning of 19RWH pits.

- 22) The PP shall ensure the compliance of provisions of Plastic Waste Management (Amendment) Rules, 2022 relevant to the project.
- 23) The PP may provide electric charging stations to facilitate electric vehicle commuters.
- 24) The PP shall provide the Anti smog gun mounted on vehicle in the project for suppression of dust during construction & operational phase and shall use the treated water, if feasible.
- 25) The PP shall take all preventive measures including water sprinkles to control dust during construction and operational phase.
- 26) Any change in stipulations of EC will lead to Environment Clearance void-ab-initio and PP will have to seek fresh Environment Clearance.

#### **B. Statutory Compliance:**

- [1] The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority for ground coverage, FAR and should be in accordance with zoning plan approved by Competent Authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.
- [2] 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 lightning etc.
- [3] The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for nonforest purpose involved in the project.
- [4] The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- [5] 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 Haryana State Pollution Control Board.
- [6] The project proponent shall obtain the necessary permission for drawl of ground water /surface water required for the project from the competent authority.
- [7] 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.
- [8] 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.
- [9] The provisions of the Solid Waste (Management) Rules, 2016, e-Waste (Management) Rules, 2016, the Plastics Waste (Management) Rules, 2016 and Batteries waste (Management Handling Rules 2001 as amended in 2020) shall be followed.
- [10] The project proponent shall follow the ECBC Act/ECBC-Rules prescribed by Bureau of Energy Efficiency, Ministry of Power strictly in addition of bylaws of the State Government.

#### **I Air Quality Monitoring and Preservation**

- 1) 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.
- 2) A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.
- 3) The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM2.5) covering upwind and downwind directions during the construction period.
- 4) 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 ultra lowsulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board
- 5) Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the

- site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murrum and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
- 6) Sand, murrum, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.
  - 7) Wet jet shall be provided for grinding and stone cutting.
  - 8) Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
  - 9) 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 Rules 2016.
  - 10) The diesel generator sets to be used during construction phase shall be ultra lowsulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.
  - 11) 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. Ultra 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.
  - 12) For indoor air quality the ventilation provisions as per National Building Code of India.

## **II Water Quality Monitoring and Preservation**

- 1) 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.
- 2) Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.
- 3) Total fresh water use shall not exceed the proposed requirement as provided in the project details. The per capita supply should adhere to NBC 2016 and CGWA Notification dated 12.12.2018.
- 4) 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.
- 5) 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.
- 6) At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.
- 7) 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.
- 8) 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.
- 9) 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.
- 10) Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- 11) The local bye-law provisions on rain water harvesting should be followed. If local byelaw 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 pits shall be provided for ground water recharging as per the CGWB norms.

- 12) 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.
- 13) All recharge should be limited to shallow aquifer.
- 14) No ground water shall be used during construction phase of the project.
- 15) 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.
- 16) 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.
- 17) 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.
- 18) No sewage or untreated effluent water would be discharged through storm water drains.
- 19) 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.
- 20) Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.
- 21) 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.

### **III Noise Monitoring and Prevention**

- 1) Ambient noise levels shall conform to residential area/commercial area 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.
- 2) 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.
- 3) 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 Energy Conservation Measures**

- 1) Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency as per ECBC Act, 2017 read with ECBC Rules, 2018 shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC also which is in no case should be less than 25% as prescribed.
- 2) Outdoor and common area lighting shall be LED.
- 3) 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 R & U-values shall be as per ECBC specifications.



- 4) 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.
- 5) 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.
- 6) 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.
- 7) The PP will submit report indicating compliance of each parameter of ECBC requirement and submit quantification saving report for each component.

## **V Waste Management**

- 1) 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.
- 2) Disposal of muck during construction phase shall not create any adverse effect on the neighboring 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.
- 3) 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.
- 4) Organic Waste Converter within the premises with a minimum capacity of 0.5 kg /person/day must be installed. Leaves to be put in earmarked pits for converting them into compost to be used as manure
- 5) All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.
- 6) Any hazardous waste generated during construction phase, shall be disposed of as per applicable rules and norms with necessary approvals of the State Pollution Control Board.
- 7) 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.
- 8) Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.
- 9) Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Rules, 2016.
- 10) 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.

## **VI Green Cover**

- 1) 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).
- 2) A minimum of 1 tree (5' tall) 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.

- 3) 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.
- 4) 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.

## **VII Transport**

- 1) 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.
- 2) 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.
- 3) 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.

## **VIII Human Health Issues**

1. 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.
2. For indoor air quality the ventilation provisions as per National Building Code of India.
3. Emergency preparedness plan based on the Hazard Identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
4. 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.
5. Occupational health surveillance of the workers shall be done on a regular basis.
6. A First Aid Room shall be provided in the project both during construction and operations of the project.

## **IX Corporate Environment Responsibility**

- 1) The project proponent shall comply with the provisions of CER, as applicable.
- 2) 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.

- 3) 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 to the head of the organization.
- 4) 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.

## **X Miscellaneous**

- 1) The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed.
- 2) 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.
- 3) 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.
- 4) 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.
- 5) 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.
- 6) 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.
- 7) The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- 8) The project proponent shall abide by all the commitments and recommendations made in the form-IA, Conceptual Plan and also that during their presentation to the Expert Appraisal Committee.
- 9) No further expansion or modifications in the plan shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC)/SEIAA, Haryana. The project proponent shall seek fresh environmental clearance under EIA notification 2006 if at any stage there is change of area of this project.
- 10) Any change in planning of the approved plan will leads to Environment Clearance voidab-initio and PP will have to seek fresh Environment Clearance
- 11) The PP should give unambiguous affidavit giving land promoters in accordance with your ownership and possession of land legal the case referred for Environment Clearance to SEIAA.
- 12) 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.
- 13) The Ministry/SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- 14) The Ministry/SEIAA reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- 15) 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.
- 16) 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.

**244.02 EC for the Proposed Affordable Group Housing Colony located at Village Hayatpur, Sector-89, Gurugram- Manesar Urban Complex, Gurugram, Haryana by M/s Kiwi Land and Housing Private Limited**

**Project Proponent : Shri Mukesh Kumar**  
**Consultant : Gaurang Environmental Solutions Pvt. Ltd.**

The project was submitted to the SEIAA, Haryana vide online proposal No.SIA/HR/MIS/250538/2022 dated 07.01.2022 as per check list approved by the SEIAA/SEAC for obtaining Environmental Clearance under Category 8(a) of EIA Notification 14.09.2006.

The case was considered in 244th meeting of SEAC held on 08.07.2022. The PP presented the case before the committee.

- The proposed project is for EC for Affordable Group Housing Colony "Rama Homes" over an area measuring 5.15625 acres at Village Hayatpur, Sector-89, Gurugram Manesar Urban Complex, Gurugram, Haryana promoted by M/s. Kiwi Land and Housing Pvt. Ltd
- The project is on approved building plans from the competent authority
- The license no. 49 of 2021 has been granted to the project vide letter dated 12.08.2021 which is valid upto 11.08.2026

The details of the project, as per the documents submitted by the project proponent and also as informed during the presentation in the meeting are as under:-

**Table 1: Basic Details**

<b>Name of the Project: Affordable Group Housing Colony "Rama Homes" coming up at Village Hayatpur, Sector-89, Gurugram Manesar Urban Complex, Gurugram, Haryana by M/s Kiwi Land and Housing Private Limited</b>		
Sr. No.	Particulars	Details
1.	Latitude	28°25 '18.67 "N
2.	Longitude	76°56'41.88"E
3.	Total Plot Area	20,866.57 sq. m. (5.15625 acres) o Residential : 92 % (1669.326 sq.m.) o Commercial : 8 % (19,197.2447 sq.m.)
4.	Built Up area	53,227.70 sq. m
5.	Proposed Ground Coverage	22.39 % ( 4672.21 sq. m)
6.	Permissible Ground Coverage	50 % (10433.2850 sq. m )
7.	Permissible FAR	Residential : 2.25 (43193.8055 sq.m) Commercial : 1.75 (2921.32 sq.m)
8.	Proposed FAR	Residential : IGBC FAR : 12 % Plot area (2503.9884 sq.m) Achieved : 2.236 (45,730.80 sq.m) (a) Commercial : 1.67 (2798.13 sq.m) (b)
9.	Green Area	20 % (4173.3sq.m)
10.	Rain Water Harvesting Pits	5 nos.
11.	STP Capacity	350 KLD (1no.) & 10 KLD (1no modular.)
12.	Parking Required	393 ECS 716 Two Wheelers
13.	Parking Provided	393 ECS 846 Two Wheelers
14.	Organic Waste Converter	500 kg/day each (2 no.)

15.	Maximum Height of the Building (m)	73 m	
16.	Power Requirement	Connected load : 4765 KW Maximum demand : 2393 KW	
17.	Source	DHBVN	
18.	Power Backup	125 kVA (1no.)	
19.	Total Water Requirement	366KLD	
20.	Fresh Water Requirement	246 KLD	
21.	Recycled/Treated Water Requirement	120 KLD	
22.	Waste Water Generated	295 KLD	
23.	Solid Waste Generated	2324 kg/day	
24.	Biodegradable Waste	930 kg/day	
25.	Number of Towers	7 nos.	
26.	Basement	1 no.	
27.	Stories	As under:- Tower 1 : Ground Floor +1 <sup>st</sup> to 24 <sup>th</sup> Floor Tower 2 : Ground Floor +1 <sup>st</sup> to 24 <sup>th</sup> Floor Tower 3 : Ground Floor +1 <sup>st</sup> to 24 <sup>th</sup> Floor Tower 4 : Ground Floor +1 <sup>st</sup> to 16 <sup>th</sup> Floor Commercial : Basement+ Ground Floor +2 floors Commercial : Ground Floor +2 floors Community & Anganbadi: Ground Floor +1 <sup>st</sup>	
28.	R+U Value of Material used (Glass)	U Value(W/m <sup>2</sup> °K) : Roof : 0.308 Wall : 0.370	
29.	Total Cost of the project:	Rs. 180 Cr.	
30.	CER	Rs. 3.60 Cr	
31.	Incremental Load in respect of:	PM 2.5	0.0023µg/ m <sup>3</sup>
		PM 10	0.0073 µg/ m <sup>3</sup>
		SO <sub>x</sub>	0.0046 µg/ m <sup>3</sup>
		NO <sub>x</sub>	0.22 µg/ m <sup>3</sup>
		CO	0.12mg/ m <sup>3</sup>

Table 2: EMP BUDGET

S. No.	Particulars	Capital Cost(In lacs)	Annual recurring cost
1.	Acoustic enclosures & stack attached to DG sets	10	2.0
2.	STP	80	20
3.	Rain water harvesting	27	3
4.	Solid waste management	50	10
5.	Pollution monitoring	-	1.0
6.	Firefighting & emergency handling	250	2.0
7.	Green Belt	4	1.0
8.	Solar roof top grid tied	35	7.0
9.	Socio EMP	360	-
	<b>TOTAL</b>	<b>816 lacs</b>	<b>46 lacs</b>

The discussion was held on approved site plan, green building certificate i.e ICBC, providing separate STP for area separated by revenue rasta, solar panel capacity, mosaic plan, Rain

water Harvesting Structure, Approved RWH Plan, Landscape Plan, Aravali and Forest NOC, and Energy Conservation technique and certain observations were raised as following:-

1. The PP shall submit the approved site plan along with green building certificate i.e ICBC
2. The PP shall submit the undertaking for providing separate STP for area separated by revenue rasta and revised solar panel requirement
3. The PP shall submit the Revised Water Balance and mosaic plan showing revised location of STP
4. The PP shall submit the Revised Rain water Harvesting Calculation and RWH plan
5. The PP shall submit the Landscape Plan with list of native trees to be provided and time line for greenbelt development.
6. The PP shall submit the Energy Conservation technique details.
7. The PP shall submit the Undertaking for wildlife conservation Budget.
8. The PP shall submit the revised Form I and Form IA with revised details as per observation

The PP submitted the reply of above said observations vide letter dated 09.07.2022 and also enclosed undertakings in response to the observations.

The documents were placed before the committee. The committee after discussion considered the reply and rated this project with **"Gold Rating"** and was of the unanimous view that this case be recommended to the SEIAA for granting Environmental Clearance under EIA Notification dated 14.09.2006 issued by the Ministry of Environment and Forest, Government of India should with the following specific and general stipulations:

**A. Specific conditions:-**

1. Sewage shall be treated in the STP based on latest Technology with tertiary treatment i.e. Ultra Filtration to achieve standards ordered by NGT. The Treated effluent from STP shall be recycled /reused for flushing DG cooling and Gardening. The dimension of each component of STP should be properly designed as per Norms.
2. The PP shall spend Rs.5 Lakhs on various wildlife conservation activities like artificial nests on the trees, digging of ponds and construction of feeding platforms through Environment Management Plan
3. The Project Proponent would devise a monitoring plan to the satisfaction of the State Pollution Control Board so as to continuously monitor the treated waste water being used for flushing in terms of faecal coli forms and other pathogenic bacteria.
4. 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.
5. Separate wet and dry bins must be provided in each unit and at ground level for facilitating segregation of waste. Solid Waste shall be segregated into wet garbage and inert materials. Wet Garbage shall be composted in Organic waste convertor. Adequate area shall be provided for solid waste management within the premises which will include area for segregation, composting. The Inert waste from the project will be sent to dumping site.
6. Traffic management plan as submitted shall be implemented in letter and spirit. Apart, a detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05kms 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 purpose to be carried out by the project or other agencies in this 05kms radius of the site in different scenarios of space and time
7. The PP is required to plant 10 times trees at the project site and compensatory tree plantation will be done @1:10. No tree cutting has been proposed in the instant project. A minimum of 1 tree for every 80sqm of land should be planted and maintained. The Existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping. As proposed 20 % (4173.3sq.m) of plot area shall be provided for green area development.
  8. 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.
  9. The PP shall install the Eco Friendly Green Transformer based on ester oil to reduce the carbon footprint. The PP shall shift to gas based generator set when the gas is available. The PP shall install APCM for the DG set. The PP shall reduce the SO<sub>2</sub> load by 30% if HSD is used
  10. Consent to establish/operate for the expansion project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of pollution) Act, 1981 and the Water (Prevention and control of pollution) Act, 1974.
  11. The Approval of the Competent Authority shall be obtained for structural safety of building code due to earthquakes, adequacy of fire fighting equipments etc. as per National Building Code including protection measures from lightning etc.
  12. The PP shall not carry any construction above or below the Revenue Rasta, if any
  13. The PP shall not carry any construction below the HT Line passing through the project, if any.
  14. The PP shall obtain the Fire NOC from the Competent Authority before taking occupation of the building.
  15. The PP shall not give occupation or possession before the water supply and sewage connection permitted by the competent authority.
  16. The PP shall not give occupation or possession before the electricity connection permitted by the competent Authority.
  17. The PP shall obtain the permission regarding withdrawal of ground water from CGWA before the start of the project and also obtained the CTO from HSPCB after the approval from CGWA.
  18. The PP shall carry out the quarterly awareness programs for the stakeholders of the commercial colony/project.
  19. 5 Rain water harvesting recharge pits shall be provided for ground water recharging as per the CGWB norms.
  20. The PP shall install Digital water level recorder for monitoring the water recharge and carry out quarterly maintenance and cleaning of 5 RWH pits.
  21. The PP shall ensure the compliance of provisions of Plastic Waste Management (Amendment) Rules, 2022 relevant to the project.
  22. The PP may provide electric charging stations to facilitate electric vehicle commuters.
  23. The PP shall take all preventive measures including water sprinkles to control dust during construction and operational phase.
  24. Any change in stipulations of EC will lead to Environment Clearance void-ab-initio and PP will have to seek fresh Environment Clearance.

#### **B. Statutory Compliance:**

1. The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority for ground coverage, FAR and should be in accordance with zoning plan approved by Competent Authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.
2. 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 lightning etc.
3. 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.

4. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
5. 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 Haryana State Pollution Control Board.
6. The project proponent shall obtain the necessary permission for drawl of groundwater /surface water required for the project from the competent authority.
7. 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.
8. 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.
9. The provisions of the Solid Waste (Management) Rules, 2016, e-Waste (Management) Rules, 2016, the Plastics Waste (Management) Rules, 2016 and Batteries waste (Management Handling) Rules 2001 as amended in 2020 shall be followed.
10. The project proponent shall follow the ECBC Act/ECBC-Rules prescribed by Bureau of Energy Efficiency, Ministry of Power strictly in addition of bylaws of the State Government.

## **I 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 carry out Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM2.5) 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 ultra 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 Rules 2016.
- x. The diesel generator sets to be used during construction phase shall be ultra 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. Ultra 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.

## **II 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. The per capita supply should adhere to NBC 2016 and CGWA Notification dated 12.12.2018.
- iv. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.
- v. A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.
- vi. At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.
- vii. Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc. other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.
- viii. Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.
- ix. Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.
- x. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- xi. The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Bye-laws, 2016. Rain Water Harvesting pits 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 use. 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, not 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.

### **III Noise Monitoring and Prevention**

- i. Ambient noise levels shall conform to residential area/commercial area 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.

### **IV Energy Conservation Measures**

- i. Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency as per ECBC Act, 2017 read with ECBC Rules, 2018 shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC also which is in no case should be less than 25% as prescribed.
- 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 R & 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.
- vii. The PP will submit report indicating compliance of each parameter of ECBC requirement and submit quantification saving report for each component.

### **V 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 neighboring 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 Converter within the premises with a minimum capacity of 0.5 kg/person/day must be installed. Leaves to be put in earmarked pits for converting them into compost to be used as manure.
- 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 of as per applicable rules and norms with necessary approvals of the State Pollution Control Board.
- vii. Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials.
- viii. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.
- ix. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition 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.

## **VI 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 (5' tall) for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.
- iii. Where the trees need to be cut with prior permission from the concerned local Authority, compensatory plantation in the ratio of 1:10 (i.e. planting of 10 trees for every 1 tree that is cut) shall be done and maintained. Plantations to be ensured species (cut) to species (planted). Area for green belt development shall be provided as per the details provided in the project document.
- iv. Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.

## **VII 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.
  - i. Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
  - ii. Traffic calming measures.
  - iii. Proper design of entry and exit points.
  - iv. 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 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.

### **VIII 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.

### **IX Corporate Environment Responsibility**

- i. The project proponent shall comply with the provisions of CER, as applicable.
- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/ deviation/ violation of the environmental/ forest/ wildlife norms/conditions. The company shall have defined system of reporting infringements/deviation/ violation of the environmental/ forest/ wildlife norms/ conditions and/ or shareholders/ stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

### **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 project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vi. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- vii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- viii. The project proponent shall abide by all the commitments and recommendations made in the form-IA, Conceptual Plan and also that during their presentation to the Expert Appraisal Committee.
- ix. No further expansion or modifications in the plan shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC)/SEIAA, Haryana. The project proponent shall seek fresh environmental clearance under EIA notification 2006 if at any stage there is change of area of this project.
- x. Any change in planning of the approved plan will lead to Environment Clearance void-ab-initio and PP will have to seek fresh Environment Clearance.
- xi. The PP should give unambiguous affidavit giving land promoters in accordance with your ownership and possession of land legal the case referred for Environment Clearance to SEIAA.
- xii. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xiii. The Ministry/SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiv. The Ministry/SEIAA reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xvi. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

**244.03 EC for Proposed Commercial Complex "GR Corporate Tower" coming up at Plot No. 7B, Sector 18, Maruti Industrial Complex, Gurugram (IT/ITEs), Haryana by G R Infra projects Limited**

**Project Proponent : Not present**  
**Consultant : Gaurang Environmental Solutions Pvt. Ltd.**

The project was submitted to the SEIAA, Haryana vide online proposal No.SIA/HR/MIS/271393/2022 dated as per check list approved by the SEIAA/SEAC for obtaining Environmental Clearance under Category 8(a) of EIA Notification 14.09.2006.

The case was taken up in 244<sup>th</sup> meeting of SEAC, Haryana held on 08.07.2022 but the consultant gave a letter in writing dated 28.06.2022 that due to some unavoidable circumstances, the PP would not be able to present in the SEAC meeting and requested to defer the case. The committee acceded with the request of PP and deferred the case and shall be put up in next meeting.

**244.04 EC of Affordable Group Housing Colony Project “BOTH 79” at Revenue Estate of Village Naurangpur, Sector 79, Gurugram Manesar Urban Complex, Haryana by M/s Top Haven Developers Private Limited**

**Project Proponent :Sh. Praveen Shukla**  
**Consultant : Aplinka Solutions & Technologies Private Limited**

The project was submitted to the SEIAA, Haryana vide online proposal No.SIA/HR/MIS/266567/2022 dated 08.04.2022 as per check list approved by the SEIAA/SEAC for obtaining Environmental Clearance under Category 8(a) of EIA Notification 14.09.2006.

The case was taken up in 244th meeting of SEAC held on 08.07.2022. The PP presented the case before the committee:-

The project is an Affordable Group Housing Colony Project “BODH 79”, which will be developed by “Top Haven Developers Pvt. Ltd.” at Revenue estate of village Naurangpur, Sector-79, District Gurugram, Manesar Urban Complex, Haryana. The case was taken up in 244<sup>th</sup> Meeting of SEAC held on dated 08.07.2022. The brief of the projects areas under:

- The total plot area of the project is 17426.75 sq.m. (4.30625 acres) and proposed built up area is 48007.74sq. m.
- The land license no. 91 of 2021 was granted to Sterling Infrastructure LLP and KJS Colonizers LLP, C/o Sterling Infrastructure LLP for setting up of an Affordable Group Housing Colony over an area measuring 4.30625 acres.
- Permission for transfer of said license of 4.30625 acres and change of developer as “Top Haven Developers Pvt. Ltd.” has been issued on 01.04.2022 by Town & Country planning Department, Haryana
- The project consist of total of 6 Towers, Aaganwadi, Community Center and 2 Commercial Blocks.
- The Project will follow IGBC guidelines to achieve Gold Rating and has obtained the approval of building plan by DTCP, Haryana with 12% additional FAR.
- Sultanpur National Park, AsolaBhati Wildlife Sanctuary and Okhla BirdSanctuary lie at about 13.3 Km (NNW), 20 Km (NE) and 38.82 Km (NNE) distance respectively.
- The PP submitted the copy of DD for Rs.2.0 lakh in favour of MS, SEIAA

The discussion was held on the area details, EMP, sanctioned drawing and others.

Further, certain observations were raised as following:

- PP shall increase the proposed power requirement being met through solar power to 05 of total power demand
- PP should increase the green area to 20% of the plot area out of which 15% must be tree cover and remaining 5% can be developed as green.
- PP shall submit the revised tangible EMP plan with pond management and development of nearby school infrastructure facilities.
- The PP shall submit the year-wise implementation schedule STP, green area, OWC and RWH pits of the project.

The PP submitted the reply of above said observations, giving clarifications for the queries communicated in the minutes of 244<sup>th</sup>SEAC, Haryana meeting vide letter date 08.07.2022 and also enclosed affidavit in response to the observations.

The details of the project, as per the documents submitted by the project proponent and also as informed during the presentation in the meeting are as under:-

Table 1 Basic Details

Sr. No.	Particulars		Total
1	Online Proposal Number		SIA/HR/MIS/266567/2022
2	Latitude		28°21'23.84"N
3	Longitude		76°58'13.72"E
4	Plot Area		17426.75 sq.m.
5	Net Plot Area		17426.75 sq.m.
6	Proposed Ground Coverage		5673.58 sq.m.
7	Proposed FAR		40455 sq.m.
8	Non FAR Area		7084.48 sq.m.
9	Total Built Up area		48007.74 sq.m.
10	Total Green Area with %		3485 (20% of the plot area)
11	Rain Water Harvesting Pits (with size)		5 No. of recharge pits of dimension 3.5 meter length, 4.5 meters depth
12	STP Capacity		290 KLD (MBBR Technology)
13	Total Parking		878 two wheelers, 439 ECS
14	Organic Waste Converter		1 no. of organic waste convertor(OWC-130).
15	Maximum Height of the Building (m)		44.80 meter
16	Power Requirement		6677.48 KW
17	Power Backup		2 DG sets of total 288 KW capacity (1No. x 200 kVA + 1Nos. x 160 kVA)
18	Total Water Requirement		286 KLD
19	Domestic Water Requirement		201 KLD
20	Fresh Water Requirement		201 KLD
21	Treated Water		85 KLD
22	Waste Water Generated		231 KLD
23	Solid Waste Generated		1622 kg per day
24	Biodegradable Waste		979.72 kg per day
25	Number of Buildings		6 residential Towers, Aaganwadi , Community Center and 2 Commercial Blocks
26	Dwelling Units/ EWS		595 DUs
27	Basement		Not proposed
28	Community Center		245.15 sq.m.
29	Stories		Tower 1, 2,6 (S+14), Tower 3 (S+13), Tower 4 (S+10) and Tower 5 (S+12)
30	R+U Value of Material used (Glass)		U = 5.4 W/sqm K R-0.9
31	Total Cost of the project:	i) Land Cost	166.37 crores
		ii)Construction Cost	
32	EMP Budget (per year)	Capital Cost	120 lakhs inside the site, 25 lakhs outside the site
		Recurring Cost	189 lakhs inside the site
33	Incremental Load in respect of:	i. PM 2.5	0.08 µg/m <sup>3</sup>
		ii. PM 10	0.08 µg/m <sup>3</sup>
		iii. SO2	0.125 µg/m <sup>3</sup>
		iv. NO2	0.577 µg/m <sup>3</sup>
		v. CO	0.39 µg/m <sup>3</sup>
34	Status of Construction		Vacant land as it is fresh project
35	Construction Phase:	i) Power Back-up	1 DG set of 165 kVA
		ii) Water Requirement	15KLD of fresh water for domestic purpose (from the local fresh water supplier).

		&Source	6KLD of water for construction purpose (by GMDA STP at Berhampur Gurugram)
		iii) STP (Modular)	None
		iv) Anti-Smoke Gun	1

Table 2 EMP Budget

COMPONENT	During Construction Phase	
	Capital Cost (Lakhs)	Recurring Cost (Lakhs for 7 year)
EMP cost of Construction phase(green net, tarpaulin cover to cover the construction material)	10	12
Tractors/Tanker cost for Water sprinkling for dust suppression	5	7
Wheel wash arrangement during construction phase	4	6
Sanitation for labours (mobile toilets/septic tank)	7	9
Environmental Monitoring and six monthly compliances		10
Anti-Smog Gun	5	7
Sedimentation Tank	3	5
Handling of construction waste material	4	8
PPE for workers, Health check up and medical facilities	5	7
<b>Total</b>	<b>43</b>	<b>71</b>

COMPONENT	During Operation Phase	
	Capital Cost (Lakhs)	Recurring Cost in lakhs for 10 years
Sewage Treatment Plant	15	18
Rain water Harvesting Pits	10	15
Acoustic enclosure/stack for DG sets and Energy savings	7	9
Solid Waste Management / OWC	10	12
Environmental Monitoring and six monthly compliances		12
Green Area/ Landscape Area	10	12
Installation of Solar PV	13	15
Water meters	6	8
Water efficient fixture and measures	6	7
Environment Management Cell		10
<b>Total (in lakhs)</b>	<b>77</b>	<b>118</b>

#### Brief budget outline with activities budget for nearby area/outside the project boundary

S. No.	Activities	Areas proposed	Tangible outcome	Capital Cost (in Rs)							Total cost (in Rs)
				1st Year	2nd Year	3rd Year	4th Year	5th Year	6th Year	7th Year	



S. No.	Activities	Areas proposed	Tangible outcome	Capital Cost (in Rs)							Total cost (in Rs)
1.	Pond Maintenance (less than 5 acre area)	Pond Name: Baba Mana Wala Location: Shikohpur village, Manesar UID No.: 01HRFRDFRD0123KHER015	1 pond	1300000/-	-	-	-	-	-	-	1300000/-
2.	Development of Toilets (Separate toilets for boys & girls) in schools for students	1 Govt. Medium School- Naurangpur School Code 6180110001	Four toilets	-	-	50000/-	50000/-	50000/-	-	50000/-	200000/-
3.	Installation of Smart classroom in School	2 Govt. Primary School; Shikohpur- School Code 6180109401	Four smart classrooms	-	100000/-	-	100000/-	-	100000/-	100000/-	400000/-
4.	Installation of Solar Panel	3.Govt. Primary School Sakatpur- School Code 6180300101. 4. Govt. Primary School Bar Gujjar- School Code 6180109201.	Four KW solar panels	-	-	75000/-	75000/-	75000/-	75000/-	-	300000/-
5.	Development of RWH pits in consultation/ Association with Gram Panchayat	1 Village: Naurangpur 2.Village: Shikohpur 3 Village: Bar Gujjar 4 Village: Teekli	Four RWH	-	50000/-	-	50000/-	50000/-	50000/-	-	200000/-
7	Tree Plantation in association with Gram Panchayat	Villages in the downwind direction (i.e. towards W direction): Teekli, Aklimpur, Sakatpur and Shihohpur village	Tree Plantation in four villages	-	50000/-	-	-	-	50000/-	-	100000/-
<b>Total</b>				<b>1300000</b>	<b>200000</b>	<b>125000</b>	<b>275000</b>	<b>225000</b>	<b>225000</b>	<b>150000</b>	<b>2500000</b>

#### Total EMP budget

Components	Amount in Lakhs
EMP budget for inside the project boundary( capital cost)	120
EMP budget for inside the project boundary( recurring cost)	189
EMP budget for nearby area/ outside the project boundary	25
<b>Total EMP budget</b>	<b>334.00</b>

The documents were placed before the committee and discussed at length. After discussion and detailed deliberation, the committee rated this project with “**Gold Rating**” and was of the unanimous view that this case for granting Environmental Clearance under EIA Notification dated 14.9.2006 issued by the Ministry of Environment and Forest, Government of India should be recommended to the SEIAA with the following specific and general stipulations:

#### A. Specific conditions:-

1. Sewage shall be treated in the modular STP based on latest Technology to achieve standards ordered by NGT. The Treated effluent from STP shall be recycled /reused for flushing. DG cooling and Gardening
2. The PP should provide separate services across the revenue rasta passing through project.
3. The Project Proponent would devise a monitoring plan to the satisfaction of the State Pollution Control Board so as to continuously monitor the treated waste water being used for flushing in terms of faecal coli forms and other pathogenic bacteria.
4. The PP shall ensure that total 2% of the cost of project shall be spent on EMP Budget. However, the amount and component shown in EMP table above shall also be included for the purpose of 2% amount. The EMP cost on Socio Economic activities shall be used before the commencement of the project & EMP recurring inside the project shall be implemented throughout the operation of the project. The PP shall establish Environment monitoring cell as per documents submitted.
5. The PP shall not carry out any construct above and below revenue rasta, if passing through the project and ensure that permission of the competent authority shall be obtained before carry out any construction above or below the revnuerasta. The PP shall put notice board on the revenue rasta for the passer byes.
6. The project proponent shall upload the status of compliance of the basic details (given in above tables), stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
7. 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.
8. Separate wet and dry bins must be provided in each unit and at ground level for facilitating segregation of waste. Solid Waste shall be segregated into wet garbage and inert materials. Wet Garbage shall be composted in Organic waste convertor. Adequate area shall be provided for solid waste management within the premises which will include area for segregation, composting. The Inert waste from the project will be sent to solid waste dumping site through authorized vender.
9. Traffic management plan as submitted shall be implemented in letter and spirit. Apart, a detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is marinated and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habilitation being carried out or purpose to be carried out by the project or other agencies in this 05kms radius of the site in different scenarios of space and time
10. No tree cutting has been proposed in the instant project. A minimum of 1 tree for every 80 sqm of land should be planted and maintained. The Existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping. As proposed 3485 sqm. (20% of the plot area) shall be provided for Green Area development for whole project, excluding plot areas.
11. 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.
12. Consent to establish/operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of pollution) Act, 1981 and the Water (Prevention and control of pollution) Act, 1974.
13. The Approval of the Competent Authority shall be obtained for structural safety of building code due to earthquakes, adequacy of fire fightingequipments etc. as per National Building Code including protection measures from lightening etc.
14. The PP shall obtain the Fire NOC from the Competent Authority before taking the occupation of the building.

15. The PP shall install the Eco Friendly Green Transformer based on ester oil to reduce the carbon footprint. The PP shall shift to gas based generator set when the gas is available. The PP shall install APCM for the DG set. The PP shall reduce the So2 load by 30% if HSD is used. The DG sets will be operated for maximum 04 hours during power failure through Executing Agency
16. The PP shall not give occupation or possession before the water supply and sewage connection permitted by the competent authority.
17. The PP shall not give occupation or possession before the electricity connection permitted by the competent Authority.
18. The PP shall obtain the permission regarding withdrawal of ground water, if any from HWRA/CGWA before the start of the project and also obtained the CTO from HSPCB after the approval from HWRA/CGWA.
19. The PP shall carry out the quarterly awareness programs for the stakeholders of the project.
20. 05 Rain water harvesting recharge pits shall be provided for ground water recharging as per the CGWB norms.
21. The PP shall install Digital water level recorder for monitoring the water recharge and carry out quarterly maintenance and cleaning of 05 RWH pits.
22. The PP shall ensure the compliance of provisions of Plastic Waste Management (Amendment) Rules, 2022 relevant to the project.
23. The PP may provide electric charging stations to facilitate electric vehicle commuters.
24. The PP shall provide the Anti smog gun mounted on vehicle in the project for suppression of dust during construction & operational phase and shall use the treated water, if feasible.
25. The PP shall take all preventive measures including water sprinkles to control dust during construction and operational phase.
26. Any change in stipulations of EC will lead to Environment Clearance void-ab-initio and PP will have to seek fresh Environment Clearance.

#### **B. Statutory Compliance:**

- [1] The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority for ground coverage, FAR and should be in accordance with zoning plan approved by Competent Authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.
- [2] 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 lightning etc.
- [3] 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.
- [4] The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- [5] 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 Haryana State Pollution Control Board.
- [6] The project proponent shall obtain the necessary permission for drawl of ground water /surface water required for the project from the competent authority.
- [7] 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.
- [8] 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.
- [9] The provisions of the Solid Waste (Management) Rules, 2016, e-Waste (Management) Rules, 2016, the Plastics Waste (Management) Rules, 2016 and Batteries waste (Management Handling Rules 2001 as amended in 2020) shall be followed.
- [10] The project proponent shall follow the ECBC Act/ECBC-Rules prescribed by Bureau of Energy Efficiency, Ministry of Power strictly in addition of bylaws of the State Government.

## I Air Quality Monitoring and Preservation

- i. Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.
- ii. A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.
- iii. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM2.5) 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 ultra lowsulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board
- v. Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murrum and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
- vi. Sand, murrum, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.
- vii. Wet jet shall be provided for grinding and stone cutting.
- viii. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
- ix. All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules 2016.
- x. The diesel generator sets to be used during construction phase shall be ultra lowsulphur 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. Ultra 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.

## II 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. The per capita supply should adhere to NBC 2016 and CGWA Notification dated 12.12.2018.
- iv. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.
- v. A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed

- the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.
- vi. At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.
  - vii. Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.
  - viii. Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.
  - ix. Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.
  - x. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
  - xi. The local bye-law provisions on rain water harvesting should be followed. If local byelaw 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 pits 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.

### **III Noise Monitoring and Prevention**

- i. Ambient noise levels shall conform to residential area/commercial area 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

- ii. 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.

#### **IV Energy Conservation Measures**

- i. Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency as per ECBC Act, 2017 read with ECBC Rules, 2018 shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC also which is in no case should be less than 25% as prescribed.
- 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 R & 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.
- vii. The PP will submit report indicating compliance of each parameter of ECBC requirement and submit quantification saving report for each component.

#### **V 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 neighboring 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 Converter within the premises with a minimum capacity of 0.5 kg /person/day must be installed. Leaves to be put in earmarked pits for converting them into compost to be used as manure.
- 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 of as per applicable rules and norms with necessary approvals of the State Pollution Control Board.
- vii. Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other

environment friendly materials.

- viii. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.
- ix. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition 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.

## **VI 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 (5' tall) for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.
- iii. Where the trees need to be cut with prior permission from the concerned local Authority, compensatory plantation in the ratio of 1:10 (i.e. planting of 10 trees for every 1 tree that is cut) shall be done and maintained. Plantations to be ensured species (cut) to species (planted). Area for green belt development shall be provided as per the details provided in the project document.
- iv. Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.

## **VII 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.

## **VIII 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.

#### **IX Corporate Environment Responsibility**

- i. The project proponent shall comply with the provisions of CER, as applicable.
- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/ deviation/ violation of the environmental/ forest/ wildlife norms/ conditions. The company shall have defined system of reporting infringements/ deviation/ violation of the environmental/ forest/ wildlife norms/ conditions and/ or shareholders/ stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

#### **X Miscellaneous**

- i. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- v. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vi. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- vii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- viii. The project proponent shall abide by all the commitments and recommendations made in the form-IA, Conceptual Plan and also that during their presentation to the Expert Appraisal Committee.



- ix. No further expansion or modifications in the plan shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC)/SEIAA, Haryana. The project proponent shall seek fresh environmental clearance under EIA notification 2006 if at any stage there is change of area of this project.
- x. Any change in planning of the approved plan will lead to Environment Clearance void-ab-initio and PP will have to seek fresh Environment Clearance
- xi. The PP should give unambiguous affidavit giving land promoters in accordance with your ownership and possession of land legal the case referred for Environment Clearance to SEIAA.
- xii. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xiii. The Ministry/SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiv. The Ministry/SEIAA reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xvi. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

**244.05 EC for Affordable Group Housing colony "Adore Legend" at Village Kheri Karan, sector-84, District Faridabad, Haryana by M/s Singhania Infratech**

**Project Proponent : Sh. Ajay Singh**  
**Consultant : Aplinka Solutions & Technologies Private Limited**

The project was submitted to the SEIAA, Haryana vide online proposal No.SIA/HR/MIS/269020/2022 dated 22.04.2022 as per check list approved by the SEIAA/SEAC for obtaining Environmental Clearance under Category 8(a) of EIA Notification 14.09.2006. The case was taken up in 244th meeting of SEAC held on 08.07.2022. The PP presented the case before the committee. The brief of the project is as under:

- The total plot area of the project is 18084.36 sqm (4.469 acres) having built-up area 65,653.89 sqm.
- The Land License has been issued by DTCP, Haryana for an area measuring 4.46875 acres in favour of M/s Singhania Infratech vide License no. 115 of 2021 dated 23.12.2021.
- The project consists of 12 no. of residential towers, commercial area, aanganwadi area, milk booth & a Community Hall.
- Additional 3% FAR is being considered for the solid waste management plant. Approval of the architectural plan of the Affordable group housing project has been obtained from DTCP, Haryana
- Asola Bhati Wildlife Sanctuary and Okhla Bird Sanctuary lie at about 11.25 Km (WWN) and 15.8 Km (NNW) distance respectively.
- The PP submitted the copy of DD for Rs. 2.0 lakh in favour of MS, SEIAA

The discussion was held on the area details, EMP, sanctioned drawing and others. Further, certain observations were raised as following:

- PP shall increase the proposed power requirement being met through solar to 05% of total power demand.
- PP should increase the green area to 20% of the plot area out of which 15% must be tree cover and remaining 5% can be developed as green. A part of tree cover shall be planned for miyawaki plantation.
- PP shall submit the revised tangible EMP plan with pond management and development of nearby school infrastructure facilities.
- The PP shall submit the year-wise implementation schedule STP, green area, OWC and RWH pits of the project.
- PP shall submit the plan showing rain water harvesting pits location.

The PP submitted the reply of above said observations, giving clarifications for the queries communicated in the minutes of 244<sup>th</sup>SEAC, Haryana meeting vide letter dated 08.07.2022 and also enclosed affidavit in response to the observations raised.

The details of the project, as per the documents submitted by the project proponent and also as informed during the presentation in the meeting are as under:-

**Table 1: Basic Details**

<b>Name of the Project: Affordable Group housing Colony "Adore Legend" by M/s Singhania Infratech at Village Kheri Kalan, Sector- 84, Faridabad, Haryana.</b>		
<b>Sr. No.</b>	<b>Particulars</b>	<b>Total</b>
1.	Online Proposal Number	SIA/HR/MIS/269020/2022
2.	Latitude	28°24'33.79"N
3.	Longitude	77°22'0.31"E
4.	Plot Area	18084.36 m <sup>2</sup>
5.	Net Plot Area	18084.36 m <sup>2</sup>
6.	Proposed Ground Coverage	5150.77 m <sup>2</sup>
7.	Proposed FAR	40502.30 m <sup>2</sup>
8.	Non FAR Area	24654.08 m <sup>2</sup>
9.	Total Built Up area	65653.89 m <sup>2</sup>
10.	Total Green Area with %	3616.87 m <sup>2</sup> (20% of Plot area)
11.	Rain Water Harvesting Pits (with size)	5 RWH pits ( Dia=4 m, Depth=4.5 m)
12.	STP Capacity	350 KLD
13.	Total Parking	769 ECS , 800no. 2-wheelers
14.	Organic Waste Converter	1 unit
15.	Maximum Height of the Building (m)	48.25 m
16.	Power Requirement	4494 KW
17.	Power Backup	2 no. DG set of total 960 KW capacity (1000 KVA X 1 + 200 KVA X 1)
18.	Total Water Requirement	334 KLD
19.	Domestic Water Requirement	228 KLD
20.	Fresh Water Requirement	228 KLD
21.	Treated Water	106 KLD
22.	Waste Water Generated	269 KLD
23.	Solid Waste Generated	1935 Kg/day
24.	Biodegradable Waste	1169 Kg/day
25.	Number of Buildings	12 residential towers, commercial area, aanganwadi area, milk booth & a Community Hall
26.	Dwelling Units/ EWS	DUs 664
27.	Basement	Single basement
28.	Community Center	2778.84 m <sup>2</sup>
29.	Stories	Tower 1-12 (S + 14)

	R+U Value of Material used (Glass)	U = 5.4 W/sqm K R-0.9
30.	Total Cost of the project:	i) Land Cost
		ii) Construction Cost
INR 170 /-Crore		
31.	EMP Budget	i) Capital Cost
		ii) Recurring Cost
		125 Lakhsinside the site and 20 LakhsOutside the project boundary
		195 Lakhsinside the site
32.	Incremental Load in respect of:	i) PM 2.5
		ii) PM 10
		iii) SO <sub>2</sub>
		iv) NO <sub>2</sub>
		v) CO
		2.801 µg/m <sup>3</sup>
		2.801 µg/m <sup>3</sup>
		2.81 µg/m <sup>3</sup>
		3.03 µg/m <sup>3</sup>
		2.94 µg/m <sup>3</sup>
33.	Status of Construction	Vacant land as it is fresh project
34.	Construction Phase:	Power Back-up
		Water Requirement & Source
		STP (Modular)
		Anti-Smoke Gun
		1 DG of 62.5 kVA
		Treated water of 50 KLD from HSVP
		Nil
		1

Table 2: Green area Bifurcation

Sr. No	Particulars	Proposed (sqm)	Percentage
1.	Total Green Area [2(a)+ 2(c)+	3616.87	20 % of Plot area
2.	Tree Covered Area	2712.65	15 % of Plot area
2(a)	Peripheral Green	842.01	
2(a)	Central Green	1070.64	
2(c)	Miyawaki Plantation	800.00	
3.	Lawn Area	904.22	5 % of Plot area

Table 3: Plot area bifurcation

S. No.	Description	Area (sqm)	Percentage
1.	Total plot area	18084.36	100.00
2.	Proposed Ground Coverage	5150.77	28.48
3.	Proposed Green Area	3616.87	20.00
4.	Road and Paved area	9317.06	51.52

### EMP Budget Plan

Table 4: Construction phase-

Sr.No.	Component	Capital Cost (Rs in lakhs)	Recurring Cost (Rs in lakhs)
1.	EMP cost of Construction phase(green net, tarpaulin cover to cover the construction material)	6	10
2.	Tractors/Tanker cost for Water sprinkling for dust suppression	3	5.5
3.	Wheel wash arrangement during construction phase	1	3

4.	Sanitation for labours (mobile toilets/septic tank)	4	5.5
5.	Anti-Smog Gun	10	16
6.	Sedimentation Tank	3	6
7.	Handling of construction waste material	2	6
<b>Total</b>		<b>29</b>	<b>52</b>

**Table 5: Operation Phase**

S.no	Component	Capital Cost (Rs in lakhs)	Recurring Cost (Rs in lakhs)
1.	Sewage Treatment Plant	30	50
2.	Rain water Harvesting Pits	18	22
3.	Acoustic enclosure/stack for DG sets and Energy savings	6	10
4.	Solid Waste Management / OWC	10	13
5.	Green Area/ Landscape Area	10	15
6.	Installation of Solar PV	20	30
7.	Water efficient fixture and measures	2	3
<b>Total</b>		<b>96</b>	<b>143</b>

**Table 6: Brief budget outline with activities budget for nearby area/outside the project boundary**

S. No.	Activities	Proposed Locations	Tangible outcome	Capital Cost (in Rs)							Total cost (in Rs)
				1st Year	2nd Year	3rd Year	4th Year	5th Year	6th Year	7th Year	
1.	Pond Maintenances (area less than 5 acres)	Pond Name: Kheri Kalan Location: Faridabad UID No.: 01HRGGMGGM0160SHIK003	1 pond	1300000	-	-	-	-	-	-	1300000
2.	Installation of Smart classroom in School	1. Govt.girls senior secondary school 2. Govt. model senior secondary, School, faridabad 3. Govt. Senior secondary School.	Three smart classrooms	-	180000	-	90000	90000	90000	-	450000
3.	Books distribution in Library		Distribution in three libraries	-	-	-	40000	30000	30000	50000	150000
4.	Miyawaki Plantation (1 acres)	Village- Kheri Kalan		-	-	50000				50000	100000
<b>Total</b>				<b>1300000</b>	<b>180000</b>	<b>50000</b>	<b>130000</b>	<b>120000</b>	<b>120000</b>	<b>100000</b>	<b>2000000</b>

**Table 6: Total EMP Budget:**

S. No.	Particular	Cost in Lakhs
1.	EMP budget for nearby area/ outside the project boundary	20
2.	EMP budget for inside the project boundary(Capital cost)	125
3.	EMP budget for inside the project boundary(Recurring cost)	195
<b>Total EMP budget</b>		<b>340</b>

The documents were placed before the committee and discussed at length. After discussion and detailed deliberation, the committee rated this project with “**Gold Rating**” and was of the unanimous view that this case for granting Environmental Clearance under EIA Notification dated 14.9.2006 issued by the Ministry of Environment and Forest, Government of India should be recommended to the SEIAA with the following specific and general stipulations:

**A. Specific conditions:-**

1. Sewage shall be treated in the modular STP based on latest Technology to achieve standards ordered by NGT. The Treated effluent from STP shall be recycled /reused for flushing. DG cooling and Gardening
2. The PP should provide separate services across the revenue rasta passing through project.
3. The Project Proponent would devise a monitoring plan to the satisfaction of the State Pollution Control Board so as to continuously monitor the treated waste water being used for flushing in terms of faecal coli forms and other pathogenic bacteria.
4. The PP shall ensure that total 2% of the cost of project shall be spent on EMP Budget. However, the amount and component shown in EMP table above shall also be included for the purpose of 2% amount. The EMP cost on Socio Economic activities shall be used before the commencement of the project & EMP recurring inside the project shall be implemented throughout the operation of the project. The PP shall establish Environment monitoring cell as per documents submitted.
5. The PP shall not carry out any construct above and below revenue rasta, if passing through the project and ensure that permission of the competent authority shall be obtained before carry out any construction above or below the revnuerasta. The PP shall put notice board on the revenue rasta for the passer byes.
6. The project proponent shall upload the status of compliance of the basic details (given in above tables), stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
7. 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.
8. Separate wet and dry bins must be provided in each unit and at ground level for facilitating segregation of waste. Solid Waste shall be segregated into wet garbage and inert materials. Wet Garbage shall be composted in Organic waste convertor. Adequate area shall be provided for solid waste management within the premises which will include area for segregation, composting. The Inert waste from the project will be sent to solid waste dumping site through authorized vender.
9. Traffic management plan as submitted shall be implemented in letter and spirit. Apart, a detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is marinated and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habilitation being carried out or purpose to be carried out by the project or other agencies in this 05kms radius of the site in different scenarios of space and time
10. No tree cutting has been proposed in the instant project. A minimum of 1 tree for every 80sqm of land should be planted and maintained. The Existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping. As proposed 3616.87 m2 (20% of Plot area) shall be provided for Green Area development for whole project, excluding plot areas.

11. 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.
12. Consent to establish/operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of pollution) Act, 1981 and the Water (Prevention and control of pollution) Act, 1974.
13. The Approval of the Competent Authority shall be obtained for structural safety of building code due to earthquakes, adequacy of fire fighting equipments etc. as per National Building Code including protection measures from lightening etc.
14. The PP shall obtain the Fire NOC from the Competent Authority before taking the occupation of the building.
15. The PP shall install the Eco Friendly Green Transformer based on ester oil to reduce the carbon footprint. The PP shall shift to gas based generator set when the gas is available. The PP shall install APCM for the DG set. The PP shall reduce the So2 load by 30% if HSD is used. The DG sets will be operated for maximum 04 hours during power failure through Executing Agency
16. The PP shall not give occupation or possession before the water supply and sewage connection permitted by the competent authority.
17. The PP shall not give occupation or possession before the electricity connection permitted by the competent Authority.
18. The PP shall obtain the permission regarding withdrawal of ground water, if any from HWRA/CGWA before the start of the project and also obtained the CTO from HSPCB after the approval from HWRA/CGWA.
19. The PP shall carry out the quarterly awareness programs for the stakeholders of the project.
20. 05 Rain water harvesting recharge pits shall be provided for ground water recharging as per the CGWB norms.
21. The PP shall install Digital water level recorder for monitoring the water recharge and carry out quarterly maintenance and cleaning of 05 RWH pits.
22. The PP shall ensure the compliance of provisions of Plastic Waste Management (Amendment) Rules, 2022 relevant for the project.
23. The PP may provide electric charging stations to facilitate electric vehicle commuters.
24. The PP shall provide the Anti smog gun mounted on vehicle in the project for suppression of dust during construction & operational phase and shall use the treated water, if feasible.
25. The PP shall take all preventive measures including water sprinkles to control dust during construction and operational phase.
26. Any change in stipulations of EC will lead to Environment Clearance void-ab-initio and PP will have to seek fresh Environment Clearance.

#### **B. Statutory Compliance:**

- [1] The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority for ground coverage, FAR and should be in accordance with zoning plan approved by Competent Authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.
- [2] 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.
- [3] 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.
- [4] The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- [5] 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 Haryana State Pollution Control Board.
- [6] The project proponent shall obtain the necessary permission for drawl of ground water /surface water required for the project from the competent authority.

- [7] 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.
- [8] 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.
- [9] The provisions of the Solid Waste (Management) Rules, 2016, e-Waste (Management) Rules, 2016, the Plastics Waste (Management) Rules, 2016 and Batteries waste (Management Handling Rules 2001 as amended in 2020) shall be followed.
- [10] The project proponent shall follow the ECBC Act/ECBC-Rules prescribed by Bureau of Energy Efficiency, Ministry of Power strictly in addition of bylaws of the State Government.

## **I 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 carry out Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM2.5) 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 ultra low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board
- v. Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murrum and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
- vi. Sand, murrum, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.
- vii. Wet jet shall be provided for grinding and stone cutting.
- viii. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
- ix. All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules 2016.
- x. The diesel generator sets to be used during construction phase shall be ultra 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. Ultra 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.

## **II 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. The per capita supply should adhere to NBC 2016 and CGWA Notification dated 12.12.2018.
  - iv. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.
  - v. A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.
  - vi. At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.
  - vii. Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.
  - viii. Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.
  - ix. Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.
  - x. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
  - xi. The local bye-law provisions on rain water harvesting should be followed. If local byelaw 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 pits 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.

### **III Noise Monitoring and Prevention**

- I. Ambient noise levels shall conform to residential area/commercial area 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.

### **IV Energy Conservation Measures**

- i. Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency as per ECBC Act, 2017 read with ECBC Rules, 2018 shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC also which is in no case should be less than 25% as prescribed.
- 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 R & 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.
- vii. The PP will submit report indicating compliance of each parameter of ECBC requirement and submit quantification saving report for each component.

### **V 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 neighboring 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 Converter within the premises with a minimum capacity of 0.5 kg /person/day must be installed. Leaves to be put in earmarked pits for converting them into compost to be used as manure.
  - 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 of as per applicable rules and norms with necessary approvals of the State Pollution Control Board.
  - vii. Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials.
  - viii. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.
  - ix. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition 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.

## **VI 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 (5' tall) for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.
- iii. Where the trees need to be cut with prior permission from the concerned local Authority, compensatory plantation in the ratio of 1:10 (i.e. planting of 10 trees for every 1 tree that is cut) shall be done and maintained. Plantations to be ensured species (cut) to species (planted). Area for green belt development shall be provided as per the details provided in the project document.
- iv. Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.

## **VII 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.

## **VIII 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.

## **IX Corporate Environment Responsibility**

- I. The project proponent shall comply with the provisions of CER, as applicable.
- II. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/ deviation/ violation of the environmental/ forest/ wildlife norms/ conditions. The company shall have defined system of reporting infringements/ deviation/ violation of the environmental/ forest/ wildlife norms/ conditions and/ or shareholders/ stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- III. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- IV. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

## **X Miscellaneous**

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

- IV. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- V. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- VI. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- VII. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- VIII. The project proponent shall abide by all the commitments and recommendations made in the form-IA, Conceptual Plan and also that during their presentation to the Expert Appraisal Committee.
- IX. No further expansion or modifications in the plan shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC)/SEIAA, Haryana. The project proponent shall seek fresh environmental clearance under EIA notification 2006 if at any stage there is change of area of this project.
- X. Any change in planning of the approved plan will leads to Environment Clearance void-ab-initio and PP will have to seek fresh Environment Clearance
- XI. The PP should give unambiguous affidavit giving land promoters in accordance with your ownership and possession of land legal the case referred for Environment Clearance to SEIAA.
- XII. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- XIII. The Ministry/SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- XIV. The Ministry/SEIAA reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- XV. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- XVI. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

**244.06 EC for Mining of Stone along with Associated Minor Minerals (69,00,000 MTPA) mine located at Khasra No. 46 Min, Village Usmapur, District Mahendragarh, Haryana (M.L area 33.10 ha) by M/s Astha Infra Developers Private Limited**

**Project Proponent : Shri Abhishek Sharma**  
**Consultant : Aplinka Solutions & Technologies Private Limited**  
**Shri Rajender Yadav, Senior Mining Engineer on 09.07.2022 in Mining Cases**

The project was submitted to the SEIAA, Haryana vide online proposal No.SIA/HR/MIN/76930/2021 dated 19.05.2022 as per check list approved by the SEIAA/SEAC for obtaining Environmental Clearance under Category 1(a) of EIA Notification 14.09.2006. The PP submitted the EIA report along with prefeasibility report, approved DSR, approved Mining plan and Mine closure plan on dated 04.07.2022. PP has submitted DD for a sum of Rs.1,50,000/- as scrutiny fee.

The case was taken up in 244<sup>th</sup> meeting of SEAC, Haryana held on 08.07.2022. PP presented the case before the committee. The brief of the case are as under:-

- It is new mine lease and LOI has been granted vide Memo No. DMG/HY/ML/Usmapur/2016/3520 dated 01.07.2016 issued to M/s Astha Infra Developers Pvt. Ltd. by Director of Mines & Geology, State Govt. of Haryana, Chandigarh for a period of 10 year.
- The Stone along with associated minor minerals mining lease have an area of 33.10 ha; Government land. The Geographical extent of mine lease area is as follows.  
Latitude: 28° 19'0.441" N to 28° 19'35.045" N  
Longitude: 76° 03' 02.904" "Eto 76° 03' 20.402" E
- Mine Lease area falls on Survey of India Toposheet No. 53-D/3.
- The proposed mining project is owned by M/s. Astha Infra Developers Pvt. Ltd.
- The Term of References (ToR) were approved by SEIAA, Haryana vide letter No. SEIAA (133)/HR/2021/09 dated 03.01.2022 for the proposed mining of Stone along with associated minor mineral at khasra no. 46 min Usmapur, District- Mahendragarh, Haryana
- The Mining Plan along with Progressive Mine Closure Plan has been approved by the Director Mines and Geology, Haryana, vide Memo No. DMG/HY/MP/Usmapur/2022/3328 dated 19.05.2022. Copy of approved Mining plan was placed in record. MN
- The main block which is 33.10 Hectares in area is in the form of a hill sloping in all directions. It consists of massive deposits of quartzite stone without any soil cover on it.
- It is proposed to excavate 69, 00,000 TPA of Stone along with associated minor minerals; by Open-cast mechanized method. The Mine lease area is 33.10 Ha and total geological reserves are 10, 68, 84,940 MT. The total Mineable reserves for life of mine is 9, 61, 96,446 MT. The annual production is 69, 00,000 ton/annum. The expected life of the mine will be 14 years.
- The area is having shrubs and bushes. The highest altitude of the area is 460 mRL and lowest level at the adjacent ground is 298mRL. The height of the lease area above the ground level is 162 m.
- Primary baseline data on ambient air quality, water quality, noise level, soil quality; flora & fauna and Socio-economic aspects were collected in winter season (October to December )2021
- The delayed hydrogeological study was carried out and water table is found at 90 mbgl (208 mRL).  
submitted that No ground water will intersect at any point of time as mining will be carried out upto 244 mRL which is about 36 m above ground water table.
- The Conservation Plan has been approved by Chief Wild Life Warden Haryana dated 05/06/18 for schedule-I and II species found in buffer zone.
- Public hearing was held on dated; 05/05/2022 and the point raised by participants were included in EMP.

The details of the project, as per the documents submitted by the project proponent, and also as informed during the presentation in the meeting are as under:-

**Table 1 – Basic Details**

Name of the Project: "Stone along with associated Minor Mineral Mine, Project capacity 69, 00,000 MTPA at Khasra No. 46 Min, Mine Area 33.10 Ha, in Village-Usmapur, District- Mahendragarh, Haryanaby M/s. Astha Infra Developers Pvt. Ltd. That is Govt. land.				
Sr. No.	Particulars			
1.	Online Proposal Number	SIA/HR/MIN/76930/2021		
2.	Latitude	Pillar No.	Latitude (N)	Longitude (E)
3.	Longitude	A	28° 19'35.045"	76° 03' 03.891"

		B	28° 19'33.52"	76° 03' 12.208"
		C	28° 19'30.825"	76° 03' 20.402"
		D	28° 19'13.882"	76° 03'17.165"
		E	28° 19'0.441"	76° 03' 14.965"
		F	28° 19' 05.948"	76° 03' 02.904"
		G	28° 19' 23.884"	76° 03' 04.302"
4.	Plot Area/Lease Area		33.10 Ha	
5.	Total Green Area with%		2.06Ha(6.22%)	
6.	Total Water Requirement		31.0KLD	
7.	Domestic Water Requirement		4.0 KLD	
8.	Fresh Water Requirement		4.0 KLD	
9.	Treated Water requirement		27KLD	
10.	Total Cost of the project	Land Cost	Govt. land Expected Project cost: Rs. 10 Crore	
11.	CER		10 lac/-	
12.	EMP Budget		Capital - Rs. -20.0 lac/-Recurring-10.0 lac/Annum	
13.	Incremental Load in respect of:	PM <sub>10</sub>	0.233 µg/m <sup>3</sup>	

**Table2 : EMP and CER BUDGET**

S.No	Activity	Capital Cost (lac)	Recurring expenses proposed/ annum ((lac)
1	Dust Suppression	2.0/-	1.0 /-
2	Green Belt development	7.0 /-	1.0 /-
3	Haul road and other roads construction and Maintenance	3.0 /-	1.0 /-
4	Waste water treatment and solid waste treatment	3.0 /-	1.0 /-
5	Environmental Monitoring – Air, Water, Noise and Soil environmental Monitoring	--	5.0 /-
6	RWH	5.0 /-	1.0 /-
7	CER	10.0 /-	---
<b>Total</b>		<b>30.0 /-</b>	<b>10.0 /-</b>

**Table3:Landuse Pattern of Mining lease Area**

Sr.No.	Heads	At present (Ha.)	At the end of 5 years (Ha.)	At the end of life of mine (Ha)
1.	Pits	0.0	28.76	0.00
2.	Dump	0.0	0.64	0.00
3.	Road	0.65	0.70	0.70
4.	Plantation	0.0	2.06	29.00
5.	Infrastructure	0.0	0.94	0.10
6.	Water Body	0.00	0.00	3.30
7.	Un disturbed area	32.45	0	0.00

Sr.No.	Heads	At present (Ha.)	At the end of 5 years (Ha.)	At the end of life of mine (Ha)
8.	Total lease area	33.1	33.1	33.1

### Ultimate Pit Limits

It is proposed to work the deposit from the top to the below surface level (i.e 298 mRL accordingly, the Ultimate Pit Limit has been drawn upto the 244 MRL (refer conceptual plate),

Proposed ultimate pit angle 45 degree or less as the rock is competent enough to make the slope stable. Excavated part will be developed a water reservoir (3.30 ha) for water recharge & will be properly fenced and secured to stop the inadvertently, and remaining area (29.0 ha) area will be backfilled followed by stabilization through Tree plantation.

### Ultimate size of the pit:Block:-

Sr.no	Length(inm)	Width(inm)	Depth(inm)
1	900 (average approximate)	300 (average approximate)	60 Meters from the ground level (last depth will be 238 mRL against the average ground level of 298mRL)

**Table 4: Year wise Production Details**

Year	Bench level At the end of each year	Total Production during year (MTPA)
1 <sup>st</sup>	460,451,442,433,424,415 mRL	65,00,000
2 <sup>nd</sup>	406, 397, 388mRL	69,00,000
3 <sup>rd</sup>	379,370,361mRL	69,00,000
4 <sup>th</sup>	352,343,334mRL	69,00,000
5 <sup>th</sup>	325,316,307,298 mRL	69,00,000

**Remark: - There will be no waste generation as entire excavated mineral is useable**

**Table5: List of Machinery**

Sr.No.	Type of Machine	Size	Nos
1	Hydraulic Excavator for Loading of mineral	3.2cu.m	8
2	Rock breaker (Hydraulic Excavator) as substitute to secondary blasting	1.6 cum	2
3	Rear dumpers for transportation of mineral from mine to destination	25T	80
4	Drill Machine with compressor of 365 cfm capacity.	100-110mm	4
5	Track chain Dozer	350 HP	1
6	Pay loader (General Purpose, loading etc.)	145 HP	1
7	Crane	40T	1
8	Tyre handler	-	1
9	Water sprinkler	10 KL	1
10	Mobile Maintenance van		1
11	Tractor	50hp	1
12	Tractor mounted compressor		1

**Table 6:Detailsof Blasting Parameters**

Sr.No.	Item	Values
1	Bench height (m)	09

Sr.No.	Item	Values
2	Hole depth (m) (including sub-grade drilling)	9.6
3	Burden (m)	4.0
4	Spacing (m)	5.0
5	Volume (m <sup>3</sup> )	180
6	Tonnage yield (t)	450 T
7	Powder Factor (assumed)	6T/kg of explosive
8	Charge per hole (kg)	75 Kg
9	Total quantity of rock to be Broken per day (ton)	23,000 TPD
10	Explosive required for blasting per day	3833 kg
11	Blasting Frequency ( Every day )	1
12	Explosive required per blast per day	3833 kg
13.	No. of holes per day	51 Holes
14.	No of holes per blast	51

Total quantity of explosive required per day= 3833kg/day

- Method of Mining will be mechanized opencast for mining of Stone along with associated (Minor Mineral) with production capacity of 69,00,000 MTPA by digging, sorting, grading and transportation of mineral by trucks/dumpers. Deploying heavy earth mining machines and deep hole drilling blasting. The PP informed that no crusher will be installed in the Mine lease area. It is proposed to work from top of the hill to below ground level with ultimate pit slope of 45° by forming bench height of 9 meter and width 15-20 m which will reduced to **6.5 m**. Plantation to be carried out has been marked on Green belt development and RWH plan and Year wise production and development plan. The ground water table is about 90 below from surface level, at 208mRL.
- Project proponent reported that ground vibration, fly rock, air blast, noise, dust and fumes are the deleterious effect of blasting on Environment. Ground vibration from mine blasting is expressed by amplitude, frequency, duration of blast. By adopting controlled blasting, the problems will be greatly minimized and the impacts will also be minimized by choosing proper detonating system, optimizing total charge and charge/delay. Controlled blasting by using slurry explosive along with non electrical Nonel delay detonators will be carried out
- The method of mining will be open cast mechanized means in shifts of 8 hours each under the supervision of qualified 1st class mines manager/mining engineer. For lightening during night, portable light will be placed at convenient place. Although electricity is available near to site, DG set are also proposed to be kept in case of failure of electricity.
- PP submitted that all the precautions laid down in MMR-1961 Regulation 124 will be strictly complied such posting of two person at the extreme end of the road, Communication between them and putting the red flag both the sites, not allowing the traffic until clearances from site is taken that all the holes loaded has been blasted.
- The year wise mine development plan has been proposed from top to below ground level working, so that at the last stage almost complete area will be worked to recover maximum mineral and to restore the land to its optimum reclamation for future use. The year wise plan & sections and position of the benches at the end of each year have been prepared and given in Plate No. 5 to 10. There is no overburden material in the area to be mined.
  - During the period of first year, the work will be carried out between 460 - 415mRL by forming 5 benches of 9.0 m height as shown on Plate No. 10 of Mining Plan
  - In the period of second year, the work will be carried out additionally



between 415-388mRL by forming 3 more benches of 9.0 m height as shown on Plate No.10 of Mining Plan.

- During the period of third year, the work will be carried out additionally between 388-361mRL by forming 3 more benches of 9 m height as shown on Plate No. 10 of Mining Plan.
  - In fourth year, the work will be carried out additionally between 361 – 334mRL by forming 3 more benches of 9.0 m height as shown on Plate No.10 of Mining Plan.
  - In fifth year, the work will be carried out additionally between 334-298mRL by forming 4 more benches of 9.0 m height as shown on Plate No.10 of Mining Plan.
  - Proposed ultimate pit angle is 45 degree as the rock is competent enough to make the slopes stable. Conceptually, excavated area will be developed as water reservoir, which will recharge the ground water table. Excavated part will be fenced and secured to stop the inadvertent entry.
- Ambient Air Quality Monitoring reveals that the minimum and maximum concentrations of PM<sub>10</sub> for all the 8 AAQM stations were found to be 77.23 µg/m<sup>3</sup> to 85.88 µg/m<sup>3</sup> respectively and minimum and maximum concentrations of PM<sub>2.5</sub> for all the 8 AAQM stations were found to be 38.60 µg/m<sup>3</sup> to 44.88 µg/m<sup>3</sup> respectively. The minimum and maximum concentrations of SO<sub>2</sub> were found to be – 9.41 µg/m<sup>3</sup> to 13.18 µg/m<sup>3</sup> respectively. The minimum and maximum concentrations of NO<sub>2</sub> were found to be 19.38 µg/m<sup>3</sup> to 24.07 µg/m<sup>3</sup> respectively. The prescribed CPCB limit of SO<sub>2</sub> and NO<sub>2</sub> is 80 µg/m<sup>3</sup> for residential and rural areas has never surpassed at any monitoring station.
  - It is proposed to have plantation on 7.5-meter statutory boundary barrier, & transportation route to provide cover against dust dissemination. At the end of life of mine; part area will be converted into water reservoir and remaining will be treated with Tree plantation for stabilization.

The discussion was held on Public hearing, TOR points, EIA report, EMP, Baseline data, Noise level during blasting, Schedule 1 species, Conservation plan, Green plan, Overburden, LOI, Economic validity of ore, % constituents of ore, Dust constituents, CER, Daily use of explosive, NOC from Explosive and approval, scope of testing of Testing lab, Aravalli plantation, section plan, Key plan, Surface Geological plan, Number of employees, slope of pit, Haul road, pit stability, wall slope, Muffle blasting, pattern of blasting, bench pattern, calculation of safety, dilution of different bench height etc and certain observations were raised and following affidavits were asked to be submitted by Project Proponent:-

**1) Affidavit for various commitments :-**

- Statutory requirements and directives of judgments of the Honorable Supreme Court of India in Writ Petition (Civil) 114 of 2014 dated 2nd August 2017, in the matter of Common Cause Vs. Union of India and others shall be strictly complied with.
- Bench height and width during operation phase shall be 9 meters and 15 meters respectively. The bench width shall be reduced to 6.5-meter width during the bench reclamation phase, at the end of bench lifecycle.
- Mining operations shall be restricted 30 meters above the ground water table.
- Two rain water harvesting ponds of sizes 10m x 15m x 10m, and 40m x 50m x 10m, respectively shall be constructed inside the Mining Lease area to collect the surface runoff during the rainy season and recharge the ground water table.
- Water for dust suppression and plantation shall be purchased from the nearby STP and potable water for drinking purposes shall be purchased from legitimate sources. No extraction of ground water is proposed for mining purposes.
- Total number of 5000 plants shall be grown along the periphery of the Mining Lease area

in a width of 7.50 meters. The same shall be completed within first 03 (Three) years after starting the mining operations. A total budget of Rs. 10,00,000 (Rs. Ten lac) only will be earmarked towards plantation and upkeep of these plants. In addition to the above, plantation shall also be done on both sides of the major transportation route with an approximate length of 500 meters and this plantation along the transportation route shall be completed within one year from starting of the mining operations. The existing shrubs in the barrier zone of the 7.50 meters along the Mining Lease boundary shall not be disturbed. All attempts shall be made to supplement the growth of local herbs and native flora species for ecological preservation.

- Compensatory afforestation; if necessary shall be carried out and trees sapling will be planted at a ratio of 1:10 in consultation and supervision of the concerned District Forest Officer and the secretary of the Gram Panchayat.
- Control blasting shall be carried out using delay detonators to control of blast induced ground vibrations and the distance of fly rocks will be contained to 50 -60 meters only.
- Ambient Air Monitoring System will be installed at mine site for detection of air pollutants arising from mine which will be operational for 24 hours.
- To give preference to the nearby villages in employment and at least 20% of the manpower employed in the project shall be from nearby villages and their duties and responsibilities shall commensurate to their academic qualification and skill level.
- To pay minimum wages as per the wage rates applicable as per central govt. norms to the local people engaged in the mining project.
- Water Sprinkling for dust suppression shall be carried out four times a day during mining
- Mining operations shall be executed in compliance with the guidelines laid down under the Mines Act 1952, Metalliferous Mines Regulations 1961 and conditions cited by the Director General of Mines Safety (DGMS), applicable to mining operations, prevailing at present and as amended from time to time.
- Appropriate safety measures to ensure safety of workmen working in the mine i.e., personal protective equipment like helmet, shoes, goggles, ear plugs etc. shall be provided, healthy and hygienic atmosphere, proper training before work etc. shall be adopted.
- To improve ground water condition, ponds in villages Usmapur and Zerpur will be adopted. The unique identification numbers (UID) of these ponds as per the Haryana Pond and Waste Water Management Authority are 01HRNRLMDG0017USHM001 in Usmapur and 01HRNRLMDG0016ZERP001 in Zerpur.

## **2) Affidavit for commitments made during Public Hearing :-**

- To reduce the impact of dust generation, wet drilling with water sprinkling shall be practiced. Sharp drill bits will be used for drilling and regrinding is done periodically to reduce generation of dust. The drill machines will be kept leakage free and equipped with wet drilling arrangements.
- Blasting will be done in controlled manner with the use of latest technology like use of millisecond delay detonators, cord relay to control and prevent the dust to get air borne and to limit the fly rocks within 50–60 m. With the good blasting system, dozing of broken rocks will be less and hence dust due to dozing will be less. Competent persons will carry out blasting and all the precautions lay under MMR, 1961 Act will be followed.
- Frequent water spraying shall be done on haul roads, services roads and overburden dumps.
- Regular maintenance of vehicle and machineries will be carried out in order to control emissions.
- The approach road used for mineral transportation over a length of 500 meters shall be made paved with an approximate expense of 300,000 (Rs. Three lac) only.
- A total number of 5000 plants shall be grown along the periphery of the Mining Lease area in a width of 7.50 meters within first 03 (Three) years after starting the mining operations. In addition to the above, plantation shall also be done on both sides of the major transportation route with an approximate length of 500 meters and this plantation shall be completed within one year from starting of the mining operations.

- The borewells existing inside the Mining Lease area shall be duly safeguarded and protected from damage and a tentative expense of Rs. 200,000 (Rs Two Lac) only shall be earmarked for protection of these borewells by means of construction of brick / masonry stone room / wall.
- In case the aforementioned borewell undergoes damage due to our mining operations, project proponent (PP) will dig a new borewell to facilitate water to the village at our own cost. In addition to this, PP will also dig a new borewell in nearby Rajawas village at place and time directed by the Gram Panchayat.
- To provide 5000 tons of raw stone boulders every year from mine free of cost to facilitate construction activities in nearby three villages e.g. Usmapur, Rajawas and Zerpur. This activity will be conducted in due consultation with the Gram Panchayat of these three villages.
- To give preference to the nearby villages in employment and at least 20% of the manpower employed by PP in the project and their duties and responsibilities shall commensurate to their academic qualification and skill level.
- To pay minimum wages as per the wage rates applicable as per norms to the local people engaged in the project.
- To support youths from local villages for preparation for defense services and a budget of Rs. 500,000 (Five lac) only per annum will be earmarked towards physical training and nutrition needs of these youth defense services aspirants.
- To promote sports activities in nearby villages and develop play grounds in nearby villages at your own expenses at the land contributed / suggested by the concerned Gram Panchayat. The gross total budget allocated towards playground development is Rs. 1000,000 (Rs. 10 lac) only. In addition, provide sports kits to the sports-oriented youth in consultation with Gram Panchayat. The total budget allocated towards distribution of sports kit in nearby villages is Rs. 50,000 (Rs. Fifty Thousand) only per year.
- To carry out plantation around the Mining Lease boundary and transportation route, also do plantation at lands suggested by the Gram Panchayats of the nearby villages.

**3) Affidavit of Mining Standard Operating Procedure (SoP);- It shall have details of following**

- Cleaning and leveling of ML area, Approach road preparation & maintenance, Soil removal, if any, Drilling & Blasting, loading and transportation of mineral
- Safety precautions to be followed during Mining operations and transportation
- Precaution will be taken up during different weather conditions

The PP submitted the reply dated 09/07/22 along with affidavits in response to the observations raised. The reply was placed before the SEAC and committee discussed and accepted the reply.

After deliberations the Committee was of the unanimous view that this case should be recommended to the SEIAA for granting Environmental Clearance for five years as per approved mining plan under EIA Notification dated 14.9.2006 issued by the Ministry of Environment and Forest, Government of India with the following specific and general stipulations:

**A: Specific conditions:-**

1. The Environmental Clearance is valid for 05 years from the start of mining as per the mining plan approved by Director General, Mines & Geology, Haryana.
2. The Environmental clearance is subject to obtaining clearance, if any, under the wild life (protection) Act,1972 from the competent Authority, as applicable to the project

3. The PP shall submit the approved wild life conservation plan from the competent Authority before the meeting of SEIAA.
4. The Environmental clearance is granted subject to the Final outcome of Hon'ble Supreme Court of India, Hon'ble High Court of India and any other court of law, if any as applicable to this project.
5. The PP shall construct the pucca link roads to the mining site before the start of mining.
6. The PP shall prepare the Mine safety plan and get it approved from the competent authority before the start of mining
7. Main haulage road in the mine should be provided with permanent water sprinklers and other roads should be regularly wetted with water tankers fitted with sprinklers.
8. Transportation of the minerals by road passing through the village shall not be allowed. A 'bypass' road should be constructed (say, leaving a gap of at least 200 meters) for the purpose of transportation of the minerals so that the impact of sound, dust and accidents could be mitigated. The Project Proponent shall bear the cost towards the widening and strengthening of existing public road network in case the same is proposed to be used for the Project. No road movement should be allowed on existing village road network without appropriately increasing the carrying capacity of such roads.
9. Likewise, Alteration or re-routing of foot paths, pagdandies, cart roads, and village infrastructure public utilities or roads (for purposes of land acquisition for mining) shall be avoided to the extent possible and in case such acquisition is inevitable, alternative arrangements shall be made first and then only the area acquired. In these types of cases, inspection Reports by site visit by experts may be insisted upon which should be done through reputed institutes.
10. The PP shall ensure that total 2% of the cost of project shall be spent on EMP Budget. However, the amount and component shown in EMP table above shall also be included for the purpose of 2% amount. The EMP cost on Socio Economic activities shall be used before the commencement of the project & EMP recurring inside the project shall be implemented throughout the operation of the project.
11. Socio Economic Development of the neighborhood Habitats could be planned and executed by the Project Proponent more systematically based on the 'Need based door to door survey' by established Social Institutes/Workers. The report shall be submitted to the SEIAA on six monthly basis.
12. 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.
13. Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and maintain records accordingly; also, Occupational health check-ups for workers having some ailments like BP, diabetes, habitual smoking, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. The Recommendations of National Institute for ensuring good occupational environment for mine workers shall be implemented
14. An independent study be organized during peak activity, to understand how the actual compare with the carrying capacities and further decisions taken to maintain sustainability of this essential stone extraction and supply activity. Project Proponent shall ensure that the road may not be damaged due to transportation of stone.
- 10 Traffic management plan as submitted shall be implemented in letter and spirit. Apart, a detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is marinated and improved upon after the implementation of the project.

- 11 No tree cutting has been proposed in the instant project. A minimum of 1 tree for every 80sqm of land should be planted and maintained. The Existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping. As proposed the plantation in 13.40 hectares area will be carried out including statutory boundary barrier, Gram Panchayat, nearby schools, hospitals and along the road in consultation with local authority or Govt. Body. Native plant species as suggested by villagers/specialist may be planted
- 12 Implementation of Action Plan on the issues raised during the Public Hearing shall be ensured. The PP shall complete all the tasks as per the Action Plan submitted with budgetary provisions during the Public Hearing.
- 13 The mining operations shall be restricted to above ground water table and it should not intersect groundwater table. In case of working below ground water table, prior approval of the Ministry of Environment, forest and Climate Change and Central Ground Water Authority shall be obtained, for which a detailed hydro-geological study shall be carried out; The Report on six monthly basis on changes in Ground water level and quality shall be submitted to the Regional Office of the Ministry.
- 14 The pollution due to transportation load on the environment will be effectively controlled & water sprinkling will also be done regularly Vehicles with PUC only will be allowed to ply. The mineral transportation shall be carried out through covered trucks only and the vehicles carrying the mineral shall not be overloaded. Project should obtain 'PUC' certificate for all the vehicles from authorized pollution testing centres.
- 15 There shall be planning, developing and implementing facility of rainwater harvesting measures on long terms basis in consultation with Regional Director, Central Groundwater Board and implementation of conservation measures to augment ground water resources in the area in consultation with Central Ground Water Board.
- 16 Where ever blasting is undertaken as part of mining activity, the Project Proponent shall carry out vibration studies well before approaching any such habitats or other buildings, to evaluate the zone of influence and impact of blasting on the neighbourhood. Within 500 meters of such sites vulnerable to blasting vibrations avoidance of use of explosives and adoption of alternative means of mineral extraction, such as ripper/dozer combination/rock breakers/surface miners etc. should be seriously considered and practiced wherever practicable. A provision for monitoring of each blast should be made so that the impact of blasting on nearby habitation and dwelling units could be ascertained. The covenant of lease deed under Rule 31 of MCR 1960 provides that no mining operations shall be carried out within 50 meters of public works such as public roads and buildings or inhabited sites except with the prior permission from the competent authority
- 17 The Project Proponent shall obtain all necessary clearance/permission from all relevant agencies before commencement of work.
- 18 Consent to establish/operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.
- 19 The PP shall take precautions to suppress the dust in and around the mining site. Use of effective sprinkler system to suppress fugitive dust on haul roads and other transport roads shall be ensured.
- 20 Implementation of Haryana Government Rehabilitation and Resettlement of Land Owners' Policy as per applicability in the area.
- 21 Implementation of Environment Management Policy of the Company w.r.t. judicious use of Mineral resources for growth & development synchronizing mining & environment with prosperity.
- 22 The Project Proponent shall also take all precautionary measures during mining operation for conservation and protection of endangered flora/fauna, if any, spotted in the study area.

- 23 The illumination and sound at night at project site, disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. Project Proponent must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/masks away from the villagers and keeping the noise levels well within the prescribed limits for day light/night hours.
- 24 A comprehensive study for slope stabilization of mine benches and OB dumps shall be undertaken within one year.
- 25 The PP shall manage the overburden at the mining site if left after sale.
- 26 Washing of all transport vehicle should be done inside the mining lease.
- 27 The PP shall create environment division unit in the project for implementing the conditions of Environment clearance.
- 28 The PP shall obtain the permission regarding withdrawal of ground water from CGWA before the start of the project if any and also obtained the CTO from HSPCB after the approval from CGWA
- 29 Any change in stipulations of EC of the approved mining plan will lead to Environment Clearance void-ab-initio and PP will have to seek fresh Environment Clearance
- 30 The PP shall adhere to the approved mining plan and approved closure plan by the competent authority.

**B: Statutory compliance:-**

1. This Environmental Clearance (EC) is subject to orders/ judgment of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, Common Cause Conditions as may be applicable.
2. The Project proponent complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated 2nd August,2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India &Ors before commencing the mining operations.
3. The State Government concerned shall ensure that mining operation shall not be commenced till the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department of Mining & Geology in strict compliance of Judgment of Hon'ble Supreme Court dated 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India &Ors.
4. This Environmental Clearance shall become operational only after receiving formal NBWL Clearance from MoEF&CC subsequent to the recommendations of the Standing Committee of National Board for Wildlife, if applicable to the Project.
5. This Environmental Clearance shall become operational only after receiving formal Forest Clearance (FC) under the provision of Forest Conservation Act, 1980, if applicable to the Project.
6. Project Proponent (PP) shall obtain Consent to Operate after grant of EC and effectively implement all the conditions stipulated therein. The mining activity shall not commence prior to obtaining Consent to Establish/Consent to Operate from the concerned State Pollution Control Board/Committee.
7. The PP shall adhere to the provision of the Mines Act, 1952, Mines and Mineral (Development & Regulation), Act, 2015 and rules & regulations made there under. PP shall adhere to various circulars issued by Directorate General Mines Safety (DGMS), Mines & Geology Department, Haryana and Indian Bureau of Mines from time to time.. Also adhere to Haryana Minor Mineral Concession, Stocking, Transportation of Minerals and Prevention of Illegal Mining Rules, 2012.
8. The Project Proponent shall obtain consents from all the concerned land owners, before start of mining operations, as per the provisions of MMDR Act, 1957 and rules made there under in respect of lands which are not owned by it.
9. The Project Proponent shall follow the mitigation measures provided in MoEFCC's Office Memorandum No. Z-11013/57/2014-IA.II (M), dated 29th October, 2014, titled "Impact of mining activities on Habitations-Issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area".

10. The Project Proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of surface water and from CGWA for withdrawal of ground water for the project.
11. A copy of EC letter will be marked to concerned Panchayat / local NGO etc. if any, from whom suggestion / representation has been received while processing the proposal.
12. State Pollution Control Board/Committee shall be responsible for display of this EC letter at its Regional office, District Industries Centre and Collector's office/ Tehsildar's Office for 30 days.
13. The Project Authorities should widely advertise about the grant of this EC letter by printing the same in at least two local newspapers, one of which shall be in vernacular language of the concerned area. The advertisement shall be done within 7 days of the issue of the clearance letter mentioning that the instant project has been accorded EC and copy of the EC letter is available with the State Pollution Control Board/Committee and web site of the Ministry of Environment, Forest and Climate Change ([www.parivesh.nic.in](http://www.parivesh.nic.in)). A copy of the advertisement may be forwarded to the concerned MoEFCC Regional Office for compliance and record.
14. The Project Proponent shall inform the MoEF&CC for any change in ownership of the mining lease. In case there is any change in ownership or mining lease is transferred than mining operation shall only be carried out after transfer of EC as per provisions of the para 11 of EIA Notification, 2006 as amended from time to time.

#### **I. Air quality monitoring and preservation**

1. The Project Proponent shall install a minimum of 3 (three) online Ambient Air Quality Monitoring Stations with 1 (one) in upwind and 2 (two) in downwind direction based on long term climatological data about wind direction such that an angle of 120° is made between the monitoring locations to monitor critical parameters, relevant for mining operations, of air pollution viz. . PM<sub>10</sub>, PM<sub>2.5</sub>, NO<sub>2</sub>, CO and SO<sub>2</sub> etc. as per the methodology mentioned in NAAQS Notification No. B-29016/20/90/PCI/I, dated 18.11.2009 covering the aspects of transportation and use of heavy machinery in the impact zone. The ambient air quality shall also be monitored at prominent places like office building, canteen etc. as per the site condition to ascertain the exposure characteristics at specific places. The above data shall be digitally displayed within 03 months in front of the main Gate of the mine site.
2. Effective safeguard measures for prevention of dust generation and subsequent suppression (like regular water sprinkling, metalled road construction etc.) shall be carried out in areas prone to air pollution wherein high levels of PM<sub>10</sub> and PM<sub>2.5</sub> are evident such as haul road, loading and unloading point and transfer points. The Fugitive dust emissions from all sources shall be regularly controlled by installation of required equipments/ machineries and preventive maintenance. Use of suitable water-soluble chemical dust suppressing agents may be explored for better effectiveness of dust control system. It shall be ensured that air pollution level conform to the standards prescribed by the MoEFCC/Central Pollution Control Board.

#### **II. Water quality monitoring and preservation**

1. In case, immediate mining scheme envisages intersection of ground water table, then Environmental Clearance shall become operational only after receiving formal clearance from CGWA. In case, mining operation involves intersection of ground water table at a later stage, then PP shall ensure that prior approval from CGWA and MoEFCC is in place before such mining operations. The permission for intersection of ground water table shall essentially be based on detailed hydro-geological study of the area.
2. Regular monitoring of the flow rate of the springs and perennial nallahs flowing in and around the mine lease shall be carried out and records maintain. The natural water bodies and or streams which are flowing in an around the village, should not be disturbed. The Water Table should be nurtured so as not to go down below the pre-mining period. In case of any water

scarcity in the area, the Project Proponent has to provide water to the villagers for their use. A provision for regular monitoring of water table in open dug well located in village should be incorporated to ascertain the impact of mining over ground water table. The Report on changes in Ground water level and quality shall be submitted on six-monthly basis to the Regional Office of the Ministry, CGWA and State Groundwater Department / State Pollution Control Board.

3. Project Proponent shall regularly monitor and maintain records w.r.t. ground water level and quality in and around the mine lease by establishing a network of existing wells as well as new piezo-meter installations during the mining operation in consultation with Central Ground Water Authority/ State Ground Water Department. The Report on changes in Ground water level and quality shall be submitted on six-monthly basis to the Regional Office of the Ministry, CGWA and State Groundwater Department / State Pollution Control Board.
4. The Project Proponent shall undertake regular monitoring of natural water course/ water resources/ springs and perennial nallahs existing/ flowing in and around the mine lease and maintain its records. The project proponent shall undertake regular monitoring of water quality upstream and downstream of water bodies passing within and nearby/ adjacent to the mine lease and maintain its records. Sufficient number of gullies shall be provided at appropriate places within the lease for management of water. PP shall carryout regular monitoring w.r.t. pH and included the same in monitoring plan. The parameters to be monitored shall include their water quality vis-à-vis suitability for usage as per CPCB criteria and flow rate. It shall be ensured that no obstruction and/ or alteration be made to water bodies during mining operations without justification and prior approval of MoEF&CC. The monitoring of water courses/ bodies existing in lease area shall be carried out four times in a year viz. pre- monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January) and the record of monitored data may be sent regularly to Ministry of Environment, Forest and Climate Change and its Regional Office, Central Ground Water Authority and Regional Director, Central Ground Water Board, State Pollution Control Board and Central Pollution Control Board. Clearly showing the trend analysis on six-monthly basis.
5. Quality of polluted water generated from mining operations which include Chemical Oxygen Demand (COD) in mines run-off; acid mine drainage and metal contamination in runoff shall be monitored along with Total Suspended Solids (TDS), Dissolved Oxygen (DO), pH and Total Suspended Solids (TSS). The monitored data shall be uploaded on the website of the company as well as displayed at the project site in public domain, on a display board, at a suitable location near the main gate of the Company. The circular No. J-20012/1/2006-IA.II (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change may also be referred in this regard.
6. Project Proponent shall plan, develop and implement rainwater harvesting measures on long term basis to augment ground water resources in the area in consultation with Central Ground Water Board/State Groundwater Department. A report on amount of water recharged needs to be submitted to Regional Office MoEF&CC annually.
7. Industrial waste water (workshop and waste water from the mine) should be properly collected and treated so as to conform to the notified standards prescribed from time to time. The standards shall be prescribed through Consent to Operate (CTO) issued by concerned State Pollution Control Board (SPCB). The workshop effluent shall be treated after its initial passage through Oil and grease trap.
8. The water balance/water auditing shall be carried out and measure for reducing the consumption of water shall be taken up and reported to the Regional Office of the MoEF&CC and State Pollution Control Board/Committee.

### **III. Noise and vibration monitoring and prevention**

1. The peak particle velocity at 500m distance or within the nearest habitation, whichever is closer shall be monitored periodically as per applicable DGMS guidelines.



2. The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/masks away from the villagers and keeping the noise levels well within the prescribed limits for day/night hours.
3. The Project Proponent shall take measures for control of noise levels below 85 dba in the work environment. The workers engaged in operations of HEMM, etc. should be provided with ear plugs /muffs. All personnel including laborers working in dusty areas shall be provided with protective respiratory devices along with adequate training, awareness and information on safety and health aspects. The PP shall be held responsible in case it has been found that workers/ personals/ laborers are working without personal protective equipment.

#### **IV. Mining Plan**

1. The Project Proponent shall adhere to the working parameters of mining plan which was submitted at the time of EC appraisal wherein year-wise plan was mentioned for total excavation i.e. quantum of mineral, waste, over burden, inter burden and top soil etc.. No change in basic mining proposal like mining technology, total excavation, mineral & waste production, lease area and scope of working (viz. method of mining, overburden & dump management, O.B & dump mining, mineral transportation mode, ultimate depth of mining etc.) shall not be carried out without prior approval of the Ministry of Environment, Forest and Climate Change, which entail adverse environmental impacts, even if it is a part of approved mining plan modified after grant of EC or granted by State Govt. in the form to Short Term Permit (STP), Query license or any other name.
2. The Project Proponent shall get the Final Mine Closure Plan along with Financial Assurance approved from Indian Bureau of Mines/Department of Mining & Geology as required under the Provision of the MMDR Act, 1957 and Rules/ Guidelines made there under. A copy of approved final mine closure plan shall be submitted within 2 months of the approval of the same from the competent authority to the concerned Regional Office of the Ministry of Environment, Forest and Climate Change and SEIAA for record and verification.
3. The land-use of the mine lease area at various stages of mining scheme as well as at the end-of-life shall be governed as per the approved Mining Plan. The excavation vis-à-vis backfilling in the mine lease area and corresponding afforestation to be raised in the reclaimed area shall be governed as per approved mining plan. PP shall ensure the monitoring and management of rehabilitated areas until the vegetation becomes self-sustaining. The compliance status shall be submitted half-yearly to the MoEF&CC and its concerned Regional Office.

#### **V. Land reclamation**

1. The Overburden (O.B.) generated during the mining operations shall be stacked at earmarked OB dump site(s) only and it should not be kept active for a long period of time. The physical parameters of the OB dumps like height, width and angle of slope shall be governed as per the approved Mining Plan as per the guidelines/circulars issued by D.G.M.S w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of top soil/OB dumps. The topsoil shall be used for land reclamation and plantation.
2. The reject/waste generated during the mining operations shall be stacked at earmarked waste dump site(s) only. The physical parameters of the waste dumps like height, width and angle of slope shall be governed as per the approved Mining Plan as per the guidelines/circulars issued by DGMS w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of waste dumps.

3. The reclamation of waste dump sites shall be done in scientific manner as per the Approved Mining Plan cum Progressive Mine Closure Plan.
4. The slope of dumps shall be vegetated in scientific manner with suitable native species to maintain the slope stability, prevent erosion and surface run off. The selection of local species regulates local climatic parameters and help in adaptation of plant species to the microclimate. The gullies formed on slopes should be adequately taken care of as it impacts the overall stability of dumps. The dump mass should be consolidated with the help of dozer/ compactors thereby ensuring proper filling/ leveling of dump mass. In critical areas, use of geo textiles/geo-membranes/clay liners/Bentonite etc. shall be undertaken for stabilization of the dump.
5. The Project Proponent shall carry out slope stability study in case the dump height is more than 30 meters. The slope stability report shall be submitted to concerned regional office of MoEF&CC/SEIAA.
6. Catch drains, settling tanks and siltation ponds of appropriate size shall be constructed around the mine working, mineral yards and Top Soil/OB/Waste dumps to prevent run off of water and flow of sediments directly into the water bodies (Nallah/ River/ Pond etc.). The collected water should be utilized for watering the mine area, roads, green belt development, plantation etc. The drains/ sedimentation sumps etc. shall be de-silted regularly, particularly after monsoon season, and maintained properly.
7. Check dams of appropriate size, gradient and length shall be constructed around mine pit and OB dumps to prevent storm run-off and sediment flow into adjoining water bodies. A safety margin of 50% shall be kept for designing of sump structures over and above peak rainfall (based on 50 years data) and maximum discharge in the mine and its adjoining area which shall also help in providing adequate retention time period thereby allowing proper settling of sediments/silt material. The sedimentation pits/ sumps shall be constructed at the corners of the garland drains.
8. The top soil, if any, shall temporarily be stored at earmarked site(s) within the mine lease only and should not be kept unutilized for long. The physical parameters of the top soil dumps like height, width and angle of slope shall be governed as per the approved Mining Plan and as per the guidelines framed by DGMS w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of dumps. The topsoil shall be used for land reclamation and plantation purpose.

## **VI. Transportation**

1. No Transportation of the minerals shall be allowed in case of roads passing through villages/ habitations. In such cases, PP shall construct a 'bypass' road for the purpose of transportation of the minerals leaving an adequate gap (say at least 200 meters) so that the adverse impact of sound and dust along with chances of accidents could be mitigated. All costs resulting from widening and strengthening of existing public road network shall be borne by the PP in consultation with nodal State Govt. Department. Transportation of minerals through road movement in case of existing village/ rural roads shall be allowed in consultation with nodal State Govt. Department only after required strengthening such that the carrying capacity of roads is increased to handle the traffic load. The pollution due to transportation load on the environment will be effectively controlled and water sprinkling will also be done regularly. Vehicular emissions shall be kept under control and regularly monitored. Project should obtain Pollution under Control (PUC) certificate for all the vehicles from authorized pollution testing centers.
2. The Main haulage road within the mine lease should be provided with a permanent water sprinkling arrangement for dust suppression. Other roads within the mine lease should be wetted regularly with tanker-mounted water sprinkling system. The other areas of dust generation like crushing zone, material transfer points, material yards etc. should invariably be

provided with dust suppression arrangements. The air pollution control equipments like bag filters, vacuum suction hoods, dry fogging system etc. shall be installed at Crushers, belt-conveyors and other areas prone to air pollution. The belt conveyor should be fully covered to avoid generation of dust while transportation. PP shall take necessary measures to avoid generation of fugitive dust emissions.

#### **VII. Green Belt**

1. The Project Proponent shall develop greenbelt in 7.5m wide safety zone all along the mine lease boundary as per the guidelines of CPCB in order to arrest pollution emanating from mining operations within the lease. The whole Green belt shall be developed within first 5 years starting from windward side of the active mining area. The development of greenbelt shall be governed as per the EC granted by the Ministry irrespective of the stipulation made in approved mine plan.
2. The Project Proponent shall carryout plantation/afforestation in backfilled and reclaimed area of mining lease, around water body, along the roadsides, in community areas etc. by planting the native species in consultation with the State Forest Department/ Agriculture Department/ Rural development department/Tribal Welfare Department/Gram Panchayat such that only those species be selected which are of use to the local people. The CPCB guidelines in this respect shall also be adhered. The density of the trees should be around 2500 saplings per Hectare. Adequate budgetary provision shall be made for protection and care of trees.
3. The Project Proponent shall make necessary alternative arrangements for livestock feed by developing grazing land with a view to compensate those areas which are coming within the mine lease. The development of such grazing land shall be done in consultation with the State Government. In this regard, Project Proponent should essentially implement the directions of the Hon'ble Supreme Court with regard to acquisition of grazing land. The sparse trees on such grazing ground, which provide mid-day shelter from the scorching sun, should be scrupulously guarded/ protected against felling and plantation of such trees should be promoted.
4. The Project Proponent shall undertake all precautionary measures for conservation and protection of endangered flora and fauna and Schedule-I species during mining operation. A Wildlife Conservation Plan shall be prepared for the same clearly delineating action to be taken for conservation of flora and fauna. The Plan shall be approved by Chief Wild Life Warden of the State Govt.
5. And implemented in consultation with the State Forest and Wildlife Department. A copy of Wildlife Conservation Plan and its implementation status (annual) shall be submitted to the Regional Office of the Ministry.

#### **VIII. Public Hearing and Human Health Issues**

1. The Project Proponent shall appoint an Occupational Health Specialist for Regular as well as Periodical medical examination of the workers engaged in the mining activities, as per the DGMS guidelines. The records shall be maintained properly. PP shall also carryout Occupational health check-ups in respect of workers which are having ailments like BP, diabetes, habitual smoking, etc. The check-ups shall be undertaken once in six months and necessary remedial/ preventive measures be taken. A status report on the same may be sent to MoEF&CC Regional Office and DGMS on half-yearly basis.
2. The Project Proponent must demonstrate commitment to work towards 'Zero Harm' from their mining activities and carry out Health Risk Assessment (HRA) for identification workplace hazards and assess their potential risks to health and determine appropriate control measures to protect the health and wellbeing of workers and nearby community. The proponent shall maintain accurate and systematic records of the HRA. The HRA for neighborhood has to focus on Public Health Problems like Malaria, Tuberculosis, HIV, Anaemia, Diarrhoea in children under five, respiratory infections due to bio mass cooking. The proponent shall also create awareness and educate the nearby community and workers for Sanitation, Personal Hygiene, Hand

washing, not to defecate in open, Women Health and Hygiene (Providing Sanitary Napkins), hazard of tobacco and alcohol use. The Proponent shall carryout base line HRA for all the category of workers and thereafter every five years.

3. The Proponent shall carry out Occupational health surveillance which be a part of HRA and include Biological Monitoring where practical and feasible, and the tests and investigations relevant to the exposure (e.g. for Dust a X-Ray chest; For Noise Audiometric; for Lead Exposure Blood Lead, For Welders Full Ophthalmologic Assessment; for Manganese Miners a complete Neurological Assessment by a Certified Neurologist, and Manganese (Mn) Estimation in Blood; For Inorganic Chromium- Fortnightly skin inspection of hands and forearms by a responsible person. Except routine tests all tests would be carried out in a Lab accredited by NABH. Records of Health Surveillance must be kept for 30 years, including the results of and the records of Physical examination and tests. The record of exposure due to materials like Asbestos, Hard Rock Mining, Silica, Gold, Kaolin, Aluminum, Iron, Manganese, Chromium, Lead, Uranium need to be handed over to the Mining Department of the State in case the life of the mine is less than 30 years. It would be obligatory for the State Mines Departments to make arrangements for the safe and secure storage of the records including X-Ray. Only conventional X-Ray will be accepted for record purposes and not the digital one). X-Ray must meet ILO criteria (17 x14 inches and of good quality).
4. The Proponent shall maintained a record of performance indicators for workers which includes (a) there should not be a significant decline in their Body Mass Index and it should stay between 18.5 -24.9, (b) the Final Chest X-Ray compared with the base line X-Ray should not show any capacities ,(c) At the end of their leaving job there should be no Diminution in their Lung Functions Forced Expiratory Volume in one second (FEV1), Forced Vital Capacity (FVC), and the ratio) unless they are smokers which has to be adjusted, and the effect of age, (d) their hearing should not be affected. As a proof an Audiogram (first and last need to be presented), (e) they should not have developed any Persistent Back Pain, Neck Pain, and the movement of their Hip, Knee and other joints should have normal range of movement, (f) they should not have suffered loss of any body part. The record of the same should be submitted to the Regional Office, MoEF&CC annually along with details of the relief and compensation paid to workers having above indications.
5. The Project Proponent shall ensure that Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects.
6. Project Proponent shall make provision for the housing for workers/labors or shall construct labor camps within/outside (company owned land) with necessary basic infrastructure/ facilities like fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche for kids etc. The housing may be provided in the form of temporary structures which can be removed after the completion of the project related infrastructure. The domestic waste water should be treated with STP in order to avoid contamination of underground water.
7. The activities proposed in Action plan prepared for addressing the issues raised during the Public Hearing shall be completed as per the budgetary provisions mentioned in the Action Plan and within the stipulated time frame. The Status Report on implementation of Action Plan shall be submitted to the concerned Regional Office of the Ministry along with District Administration.

#### **IX. Corporate Environment Responsibility (CER)**

1. The activities and budget earmarked for Corporate Environmental Responsibility (CER) as per Ministry's O.M No 22-65/2017-IA. II (M) dated 01.05.2018 or as proposed by EAC should be kept in a separate bank account. The activities proposed for CER shall be implemented in a time bound manner and annual report of implementation of the same along with documentary proof viz. photographs, purchase documents, latitude & longitude of infrastructure developed & road

constructed needs to be submitted to Regional Office MoEF&CC annually along with audited statement.

2. Project Proponent shall keep the funds earmarked for environmental protection measures in a separate account and refrain from diverting the same for other purposes. The Year wise expenditure of such funds should be reported to the MoEF& CC and its concerned Regional Office.

#### **X. Miscellaneous**

1. The Project Proponent shall prepare digital map (land use & land cover) of the entire lease area once in five years purpose of monitoring land use pattern and submit a report to concerned Regional Office of the MoEF& CC.
2. The Project Authorities should inform to the Regional Office regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.
3. The Project Proponent shall submit six monthly compliance reports on the status of the implementation of the stipulated environmental safeguards to the MOEF&CC & its concerned Regional Office, Central Pollution Control Board and State Pollution Control Board.
4. A separate 'Environmental Management Cell' with suitable qualified manpower should be set-up under the control of a Senior Executive. The Senior Executive shall directly report to Head of the Organization. Adequate number of qualified Environmental Scientists and Mining Engineers shall be appointed and submit a report to RO, MoEF& CC.
5. The concerned Regional Office of the MoEF&CC including other authorized organization shall randomly monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the MoEF&CC officer(s) including other authorized officer by furnishing the requisite data/information

#### **244.07 EC for Revision and Expansion of Industrial Warehousing/Storage/Logistics Project at Village Faizabad, District Jhajjar, Haryana by M/s Indospace Industrial Park Badli Pvt. Ltd**

**Project Proponent : Shri Nitin Gawali**  
**Consultant : Amlinka Solutions & Technologies Private Limited**

The project was submitted to the SEIAA, Haryana vide online proposal no.SIA/HR/MIS/70179/2019 dated 04.06.2022. The project proponent submitted the case to the SEIAA as per check list approved by the SEIAA/SEAC for EC under Category 8(b) of EIA Notification 14.09.2006.

The case was taken up in 244<sup>th</sup> meeting of SEAC held on 08.07.2022. The PP presented the case before the committee and submitted as under:-

- 1<sup>st</sup> Environment Clearance is obtained by the PP vide letter no. SEIAA/HR/2017/571 dated 21.08.2017 for construction of warehouse.
- 2<sup>nd</sup> Environment Clearance was granted vide letter no. SEIAA/HR/2019/442 dated 13.11.2019 for Expansion of the project having a built up area 1,85,378.00m<sup>2</sup>.
- 1<sup>st</sup> CLU dated 31.01.2017 over land area measuring 2,32,444.74 m<sup>2</sup>. 2<sup>nd</sup> CLU dated 24.05.2019 for additional land area measuring 77,020.647 m<sup>2</sup>. 3<sup>rd</sup> CLU dated 11.09.2019 for additional land area measuring 1,770.50 m<sup>2</sup>. 4<sup>th</sup> CLU dated 27.04.2022 for an additional area measuring 60,322.51m<sup>2</sup>.
- Revision and Expansion of industrial Warehouse/Storage/Logistic project at the Village: Faizabad, District: Jhajjar, Haryana is proposed over on a net plot area measuring 3,71,533.952 m<sup>2</sup>. having a proposed BUA of 2,46,235.41 m<sup>2</sup>.
- 8 no. of warehouse blocks were sanctioned as per the previous EC dated 13.11.2019, out of which 5 blocks have obtained OC and 3 are under construction. 2 new blocks (B-1500 & B-1600) are proposed that will cater for the chemical storage as well.

- Sultanpur National Park, Bhindawas Bird Sanctuary and Khaparwas Bird Sanctuary lie at about 16.4 km (SE), 20 km (W) and 22.5 Km (W) distance from the project site respectively.
- ToR Application was submitted online vide Proposal No. SIA/HR/MIS/70180/2021; dated 16.12.2021. The Terms of Reference for the proposed revision and expansion was granted vide letter no. SEIAA(135)/HR/2022/260; dated 29.01.2022
- EIA of project was submitted online vide Proposal No. SIA/HR/MIS/70179/2019 dated 04.06.2022.
- The PP submitted the copy of DD for Rs. 2.0 lakh in favour of MS, SEIAA

The discussion was held on the CLUs, Earlier ECs dated 21.08.2017 and 13.11.2019 and the Occupancy Certificates of the warehouse blocks sanctioned as per the previous ECs accorded. Further, certain observations were raised as following:

1. The PP shall submit the project brief clarifying the status of land parcels, CLUs obtained and occupancy status of the blocks on which the previous ECs were granted.
2. The PP shall increase the solar power upto 10% of total power demand.
3. The PP shall submit an affidavit confirming that they will complete the green area of the existing phase as sanctioned in previous EC. The green area of the expansion phase must be 20% including 15% tree cover and 5% green.
4. The PP shall submit the details of the status of the existing RWH pits and ponds as per the previous EC accorded and the RWH pits and ponds proposed for the expansion phase of the project.
5. The PP shall submit the revised tangible EMP budget for the project.
6. The PP shall submit the CSR/CER expenditure details done till date.
7. The PP shall submit the year-wise implementation schedule of the project regarding green plan, RWH, STP, OWC.
8. The PP shall submit the plot area bifurcation of the project as per revised green area.
9. The PP shall submit undertaking to the effect that indigenous species of trees will be planted that are suitable for the local climatic conditions.

The PP submitted the reply of above said observations, giving clarifications for the queries communicated in the minutes of 244<sup>th</sup> SEAC meeting vide letter dated 08.07.2022 and also enclosed affidavit in response to the observations.

**Table 1: Basic Details**

<b>Name of the Project: Revision and Expansion of Industrial Warehousing/Storage/Logistics Project by M/s Indospace Industrial Park Badli Pvt. Ltd. Project at Village Village-Faizabad, District-Jhajjar, Haryana</b>				
<b>S. No.</b>	<b>Particulars</b>	<b>Existing</b>	<b>Expansion</b>	<b>Total</b>
1.	Online Proposal Number	SIA/HR/MIS/397 06/2019	SIA/HR/MIS/70179/2019	
2.	Latitude	28°34'33.00"N		
3.	Longitude	76°45'58.70"E		
4.	Plot Area	3,75,143.82 m <sup>2</sup>		
5.	Net Plot Area	3,11,237.885 m <sup>2</sup>	60,296.067 m <sup>2</sup>	3,71,533.952 m <sup>2</sup>
6.	Proposed Ground Coverage	1,77,205.08 m <sup>2</sup>	36,916.66 m <sup>2</sup>	2,14,121.74 m <sup>2</sup> (57.63% of plot area)
7.	Proposed FAR	1,67,628.00 m <sup>2</sup>	78,354.81 m <sup>2</sup>	2,45,982.81 m <sup>2</sup>
8.	Non FAR Area	252.60 m <sup>2</sup>	-	252.60 m <sup>2</sup>
9.	Total Built Up area	1,85,378 m <sup>2</sup>	60,857.41 m <sup>2</sup>	2,46,235.41 m <sup>2</sup>
10.	Total Green Area with %	63,033.03 m <sup>2</sup>	12,059.21 m <sup>2</sup>	75,092.24 m <sup>2</sup> (20.21% of

				net plot area)
11.	Rain Water Harvesting Pits (with size)	76 recharge pits and 1 RWH pond	16 recharge pits and 1 RWH pond	92 recharge pits and 2 RWH ponds
12.	STP Capacity	150 KLD (80 KLD - Existing + 70 KLD)	280 KLD	430 KLD (80 KLD + 70 KLD + 280 KLD) (MBBR Technology)
13.	Total Parking	47,673.45 m <sup>2</sup>	8,056.64 m <sup>2</sup>	55,730.09 m <sup>2</sup> (15 % of the net plot area)
14.	Organic Waste Converter	1	-	1
15.	Maximum Height of the Building (m)	17.8 m	1.5 m	19.8 m
16.	Power Requirement	4750 kVA	1500 kVA	6250 kVA
17.	Power Backup	14 no. of DG sets: 2x500 kVA+ 6x125 kVA+4x250 kVA+2x1000 kVA	4 no. of DG sets: 2 x 500 kVA and 2 x 250kVA	18 no. of DG sets: 4x500 kVA + 6x125 kVA + 6x250 kVA + 2x1000 kVA
18.	Total Water Requirement	170 KLD	384 KLD	554 KLD
19.	Domestic Water Requirement	57 KLD	154 KLD	211 KLD
20.	Fresh Water Requirement	57 KLD	154 KLD	211 KLD
21.	Treated Water	113 KLD	230 KLD	343 KLD
22.	Waste Water Generated	75 KLD	269 KLD	344 KLD
23.	Solid Waste Generated	1,615 Kg/day	625 Kg/day	2,240 Kg/Day
24.	Biodegradable Waste	648 Kg/day	707 Kg/day	1,355 kg/day
25.	Number of Buildings	8 Warehousing buildings	2 Warehousing buildings	10 Warehousing buildings
26.	Dwelling Units/ EWS	NA	NA	NA
27.	Basement	NA	NA	NA
28.	Community Center	NA	NA	NA
29.	Stories	B-700, B-800, B-900, B-1000, B-1100, B-1200, B-1300, B-1400 (Ground+Mezzanine)	B-1500, B-1600 (Ground+Mezzanine)	B-700, B-800, B-900, B-1000, B-1100, B-1200, B-1300, B-1400, B-1500, B-1600 (Ground+Mezzanine)
30.	R+U Value of Material used (Glass)	Use of glass is not proposed		
31.	Total Cost of the project:	i) Land Cost	₹487 Crores	₹91.6 Crores
		ii) Construction Cost		₹578.6 Crores
32.	EMP Budget (per year)	iii) Capital Cost	₹473/-Lakhs inside the project, ₹112.4 Lakhs outside the project	₹178.9/-Lakhs inside the project, ₹20 Lakhs outside the project
		ii) Recurring Cost	₹51.5/-Lakhs	₹72/-Lakhs
33.	Incremental Load in respect of:	i. PM 10	1.27 µg/m <sup>3</sup>	

		ii. PM 2.5	1.27 µg/m <sup>3</sup>
		iii. SO <sub>2</sub>	1.83 µg/m <sup>3</sup>
		iv. NO <sub>2</sub>	8.63 µg/m <sup>3</sup>
		v. CO	6.03 µg/m <sup>3</sup>
34	Status of Construction	<ul style="list-style-type: none"> <li>Blocks B-800, B-900, B-1000, B-1000, B-1100, B-1200 (OC obtained)</li> <li>Blocks B-700, B-1300, B-1400 (Under Construction)</li> <li>Blocks B-1500, B-1600 (Proposed)</li> </ul>	
35.	Construction Phase:	Power Back-up	62.5 kVA
		Water Requirement & Source	09 KLD domestic water to be obtained from local fresh water suppliers, 50 KLD treated water will be procured from nearby STP/CSTP (authorized water supplier)
		STP (Modular)	None (Septic tank proposed)
		Anti-Smog Gun	1

**TABLE2 : EMP BUDGET (CAPITAL COST)**

S. No	COMPONENTS	EXISTING (Rs. IN LACS)	EXPANSION (Rs. IN LACS)
1.	Antismog gun & Water sprinkling for dust suppression	-	30/-
2.	Sewage Treatment Plant	75.00/-	25.4/-
3.	Rain water Harvesting Pits	120.00/-	35.5/-
4.	Green Area/ Landscape Area	230.00/-	32/-
5.	Solid Waste Management (OWC)	30.00/-	7/-
6.	Acoustic enclosure/stack for DG sets and Energy savings	13.00/-	30/-
7.	Environmental Monitoring	-	3/-
8.	Handling of construction waste material	-	5/-
9.	Miscellaneous (PPE Kit for workers, Health check-ups and medical facilities, Sanitation facilities, Green nets, etc.)	5.00/-	11/-
<b>Total</b>		<b>473.00/-</b>	<b>178.9/-</b>

**TABLE 3 :EMP BUDGET (RECURRING COST)**

S. No	COMPONENT	EXISTING (Rs. IN LACS)	EXPANSION (Rs. IN LACS)
1.	Sewage Treatment Plant	15/-	8/-
2.	Rain water Harvesting Pits	5/-	9/-
3.	Acoustic enclosure/stack for DG sets and Energy savings	1/-	8/-



S. No	COMPONENT	EXISTING (Rs. IN LACS)	EXPANSION (Rs. IN LACS)
4.	Solid Waste Management (OWC)	3/-	1/-
5.	Environmental Monitoring	1.5/-	17/-
6.	Green Area/ Landscape Area	23/-	8/-
7.	Miscellaneous (Solar PV, Environment Management Cell, Water efficient fixture and measures,)	3/-	21/-
<b>Total</b>		<b>51.50/-</b>	<b>72/-</b>

The total EMP budget of both construction and operation phases are summarised below:

**TABLE :4 : TOTAL EMP BUDGET**

S. No.	Particular	Cost in Lakhs (Existing)	Cost in Lakhs (Expansion)
	EMP budget (Capital cost)	473/-	178.9/-
	EMP budget (Recurring cost)	51.5/-	72/-
	Development Programmes and other Initiatives	112.4	20/-
<b>Total</b>		<b>636.9/-</b>	<b>270.9/-</b>

The details of Development Programmes and other Initiatives are given in the table below:

**ABLE 5 :DEVELOPMENT PROGRAMMES AND OTHER INITIATIVES**

S. No.	Activities	Areas proposed	Tangible outcome	Capital Cost (in Rs)							Total cost (in Rs)
				1st Year	2nd Year	3rd Year	4th Year	5th Year	6th Year	7th Year	
6.	Pond Maintenance (less than 5 acre area)	Pond Name: Gui Location: Badli UID No.: 01HRJJRDDL0087FEJ A001	1 pond	1300000/-	-	-	-	-	-	-	1300000/-
7.	Installation of Smart classroom in School	1 Govt. Primary School Pahasour Code 6150108701	Four Smart Class		75000/-	-	75000/-	75000/-	75000/-		300000/-
8.	Development of Toilets (Separate toilets for boys & girls) in schools for students	MohmmadpurMajra - School Code 6150204701 3 Govt. Medium School Suhra-School Code 6150106202	Four toilets		-	50000/-	50000/-	50000/-	-	50000/-	200000/-
9.	Books distribution in Library	4. Govt. High – School Ladpur Code 6150104202	Distribution in Four libraries		-	-	-	25000/-	25000/-	50000/-	100000/-
5.	Plantation program in association with Gram Panchayat	1. Badli 2. Ladpur 3. Fejabad 4. Faizabad	Tree Plantation in four villages		25000/-	25000/-	25000/-	-	25000/-		100000/-
<b>Total</b>				1300000/-	100000/-	75000/-	150000/-	150000/-	125000/-	100000/-	<b>2000000</b>

**Plot area bifurcation of the project as per revised green area**

S. No.	Particular	Area in sq. m	Percentage (%)
1	<b>Net Planned Area</b>	<b>3,71,533.95</b>	<b>100.00</b>
2	Proposed Ground Coverage	2,14,121.74	57.63
3	Surface Parking area	55,730.09	15
4	Road area	26,589.88	7.16
5	Green area	75,092.24	20.21

The documents were placed before the committee and committee after discussion considered the reply and after deliberations the Committee rated this project with **“Gold Rating”** and was of the unanimous view that this caseshould be recommended to SEIAA for granting Environmental Clearance under EIA Notification dated 14.9.2006 issued by the Ministry of Environment and Forest, Government of India with the following specific and general stipulations:

**A: Specific Conditions:**

1. The PP shall take the necessary approval from PESO, if applicable
2. The PP shall follow the compliance of Public Liability Insurance Act, 1991
3. The PP shall carry the isolated storage of each chemical to be stored with the existing precautions as per the MSHIC Rules, 1989 and abide by all conditions of MSDS.
4. The Approval of the Competent Authority shall be obtained for structural safety of building code due to earthquakes, adequacy of firefighting equipments etc. as per National Building Code including protection measures from lightening etc.
5. The PP shall ensure that total 2% of the cost of project shall be spent on EMP Budget. However, the amount and component shown in EMP table above shall also be included for the purpose of 2% amount. The EMP cost on Socio Economic activities shall be used before the commencement of the project & EMP recurring inside the project shall be implemented throughout the operation of the project.
6. The PP and consultant agree to display the First Aid measure, Fire Fighting Measure, Accidental Release measure, Exposure and control (Personal Measure) at the site.
7. The project proponent shall upload the status of compliance of the basic details (given in above tables), stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
8. Sewage shall be treated in the STP based on latest Technology with tertiary treatment i.e.Ultra Filtration. The Treated effluent from STP shall be recycled/ reused for flushing. DG cooling, Gardening and HVAC.
9. The PP shall comply with provisions of Occupational Safety health and working conditions Code 2019.
10. The Project Proponent would devise a monitoring plan to the satisfaction of the State Pollution Control Board so as to continuously monitor the treated waste water being used for flushing in terms of faecal coli forms and other pathogenic bacteria.
11. 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.
12. Separate wet and dry bins must be provided for facilitating segregation of waste. Solid Waste shall be segregated into wet garbage and inert materials. Wet Garbage shall be composted in Organic waste convertor. Adequate area shall be provided for solid waste management within the premises which will include area for segregation, composting. The Inert waste from the project will be sent to solid waste dumping site through authorized vender.

13. The PP shall implement the EMP and assess that the implemented EMP is adequate and periodic environmental audits shall be conducted and maintained the records of audit. These audits shall be followed by Corrective action plan to correct the various measures identified during the audits (CAP).
14. Traffic management plan as submitted shall be implemented in letter and spirit. Apart, a detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 km radius of the project is marinated and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habilitation being carried out or purpose to be carried out by the project or other agencies in this 05kms radius of the site in different scenarios of space and time
15. No tree cutting has been proposed in the instant project. A minimum of 1 tree for every 80sqm 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. 75,092.24 m<sup>2</sup> (20.21% of net plot area) shall be provided for green area development.
16. The PP shall also develop the Miyawaki Forest as proposed in the EMP in the area of 600sqm.inside the project area and maintain the same. The Miyawaki forest shall be developed under the guidance of MD, Forest Corporation,Haryana
17. The PP shall provide the Anti-smog gun mounted on vehicle in the project for suppression of dust during construction phase and shall use the treated water, if feasible.
18. The PP shall install the Eco Friendly Green Transformer based on ester oil to reduce the carbon footprint. The PP shall shift to gas based generator set when the gas is available. The PP shall install APCM for the DG set. The PP shall reduce the SO<sub>2</sub> load by 30% if HSD is used.
19. The PP shall not carry any construction below the HT Line passing through the project, if any.
20. The PP shall not carry any construction above or below the Revenue Rasta, if any.
21. The PP shall obtain the permission regarding withdrawal of ground water from CGWA/State water Authority, Haryana before the start of the project and also obtained the CTO from HSPCB after the approval from CGWA.
22. The PP shall not allow parking of the vehicles on the roads or revenue Rasta outside the project area.
23. The PP shall not give occupation or possession before the water supply and sewage connection permitted by the competent authority
24. The PP shall develop the onsite and offsite emergency plan in consultation with the regulatory authority.
25. The PP shall use 10% solar energy of total power demand.
26. 92 Rain Water Harvesting recharge pits and 2 ponds shall be provided for ground water recharging as per the CGWB norms.
27. The PP shall install Digital water level recorder for monitoring the water recharge and carry out quarterly maintenance and cleaning of 92 RWH pits.
28. The PP shall ensure the compliance of provisions of Plastic Waste Management (Amendment) Rules, 2022 relevant for the project.
29. The PP may provide electric charging stations to facilitate electric vehicle commuters.
30. The PP shall not allow establishment of any category A or B type industry in the project area.
31. The PP shall carry out the quarterly awareness programs for the staff.
32. Any change in stipulations of EC will lead to Environment Clearance void-ab-initio and PP will have to seek fresh Environment Clearance.
33. The PP shall comply with provisions of Manufacturing storage and import of Hazardous chemical rules

**B. Statutory Compliance:**

- [1] The project proponent shall obtain all necessary clearance/permission from all relevant agencies including town planning authority for ground coverage, FAR and should be in accordance with zoning plan approved by Competent Authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.

- [2] 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.
- [3] 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.
- [4] The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- [5] 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 Haryana State Pollution Control Board.
- [6] The project proponent shall obtain the necessary permission for drawl of ground water /surface water required for the project from the competent authority.
- [7] 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.
- [8] 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.
- [9] The provisions of the Solid Waste (Management) Rules, 2016, e-Waste (Management) Rules, 2016, and the Plastics Waste (Management) Rules, 2016 and Batteries waste (Management Handling Rules 2001 as amended in 2020) shall be followed.
- [10] The project proponent shall follow the ECBC Act/ECBC, Rules prescribed by Bureau of Energy Efficiency, Ministry of Power strictly in addition of bylaws of the State Government.

#### **I. Air quality Monitoring and Preservation**

- i) Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.
- ii) A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.
- iii) The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM2.5) 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 ultra 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 3meters height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murrum and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
- vi) Sand, Murrum, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.
- vii) Wet jet shall be provided for grinding and stone cutting.
- viii) Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
- ix) All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules 2016.
- x) The diesel generator sets to be used during construction phase shall be ultra-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. Ultra-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.

## II. Water Quality Monitoring and Preservation

- i) The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bio-swales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water.
- ii) Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.
- iii) Total fresh water use shall not exceed the proposed requirement as provided in the project details.
- iv) The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.
- v) A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.
- vi) At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.
- vii) Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc. and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.
- viii) Use of water saving devices/fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc.) for water conservation shall be incorporated in the building plan.
- ix) Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.
- x) Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- xi) The local bye-law provisions on rain water harvesting should be followed. If local byelaw 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 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.

### III. Noise Monitoring and Prevention

- i) Ambient noise levels shall conform to residential area/commercial area 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.

### IV. Energy Conservation measures

- i) Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency as per ECBC Act, 2017 read with ECBC Rules, 2018 shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC also which is no case shall be less than 25% as prescribed.
- 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 R & 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.

- vii) The PP will submit report indicating compliance of each parameter of ECBC requirement and submit quantification saving report for each component.

#### **V. 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 neighboring 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 Converter within the premises with a minimum capacity of 0.5 kg/person/day must be installed. Leaves to be put in earmarked pits for converting them into compost to be used as manure.
- v) All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.
- vi) Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.
- vii) Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum Blocks, Compressed Earth Blocks, and other environment friendly materials.
- viii) Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.
- ix) Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition 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.

#### **VI. 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 (5' tall) for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.
- iii) Where the trees need to be cut with prior permission from the concerned local Authority, compensatory plantation in the ratio of 1:10 (i.e. planting of 10 trees for every 1 tree that is cut) shall be done and maintained. Plantations to be ensured species (cut) to species (planted). Area for green belt development shall be provided as per the details provided in the project document.
- iv) Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.

#### **VII. 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.

#### **VIII. 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.

#### **IX. Corporate Environment Responsibility**

- i) The project proponent shall comply with the provisions as applicable, regarding Corporate Environment Responsibility for expansion and existing parts.
- ii) The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental/ forest/ wildlife norms/ conditions. The company shall have defined system of reporting infringements/ deviation/ violation of the environmental/ forest/ wildlife norms/ conditions and/or shareholders/stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii) A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv) Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

#### **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 project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vi) The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- vii) The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- viii) The project proponent shall abide by all the commitments and recommendations made in the form-IA, Conceptual Plan and also that during their presentation to the Expert Appraisal Committee.
- ix) No further expansion or modifications in the plan shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC)/SEIAA, Haryana. The project proponent shall seek fresh environmental clearance under EIA notification 2006 if at any stage there is change of area of this project.
- x) Any change in planning of the approved plan will leads to Environment Clearance void-ab-initio and PP will have to seek fresh Environment Clearance
- xi) The PP should give unambiguous affidavit giving land promoters in accordance with your ownership and possession of land legal the case referred for Environment Clearance to SEIAA.
- xii) Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xiii) The Ministry/SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiv) The Ministry/SEIAA reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xv) The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data/information/monitoring reports.
- xvi) The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India/High Courts and any other Court of Law relating to the subject matter.

**244.08 EC for Expansion of Proposed Mixed land use colony under ToD policy on land measuring 15.03125 acres in Sector 113, Gurgaon, Manesar Urban Complex Gurgaon, Haryana by M/s Union BuildmartPvt. Ltd**

**Project Proponent :Mr. Satyapal Singh (Authorized Signatory)**  
**Consultant : Ind Tech House Consult**

The project was submitted to the SEIAA, Haryana vide online proposal No. SIA/HR/MIS/75100/2018 dated 14.04.2022 as per check list approved by the SEIAA/SEAC for obtaining Environmental Clearance under Category 8(b) of EIA Notification 14.09.2006.

The case was again taken up in 244<sup>th</sup> meeting of SEAC held on 08.07.2022. The PP and consultant presented the case before the committee as under:

- Terms of Reference was granted by MoEF&CC vide File No. 21-19/2022-IA-III dated 11th March 2022.
- Earlier environment clearance was obtained vide EC letter no. SEIAA/HR/2019/162 dated 16.07.2019 for Gross plot area 53,539.826 m<sup>2</sup> and built-up area of 288,350.2075 m<sup>2</sup> respectively.
- The proposed expansion is due to additional 7,289.388 m<sup>2</sup> plot area.
- Post expansion total plot area and built up area will be 60,829.214 m<sup>2</sup> and 4,77,029.99 m<sup>2</sup> respectively with total 1731 nos. of DUs.
- Certified Compliance report was received vide file no. 16-05/2020/IRO/167-168-169 dated 14.03.2022 and ATR was submitted on 11.03.2022.

The details of the project, as per the documents submitted by the project proponent and also as informed during the presentation in the meeting are as under:

**Table 1 Basic Details**

<b>Name of Project: EC for Expansion of Proposed Mixed land use colony under ToD policy on land measuring 15.03125 acres in Sector 113, Gurgaon, Manesar Urban Complex Gurgaon, Haryana by M/s Union Buildmart Pvt. Ltd</b>					
<b>S. No.</b>	<b>Description</b>	<b>As per Existing EC</b>	<b>Proposed Expansion</b>	<b>Total</b>	<b>Unit</b>
1	Plot Area	53539.826	7289.388	60829.214	SQMT
2	Built Up Area	288350.2075	188679.8	477029.99	SQMT
3	Max No of Floors	3B+G+32	Addition of 4 floors	2B+ST+36	Nos.
4	Population	14231	13464	27695	Nos,
5	Total Cost of Project	669.31	430.2	1099.51	CR
6	Total Water Requirement	715	1148	1863	KLD
7	Fresh water requirement	505	457	962	KLD
8	Treated Water Requirement	210	691	901	KLD
9	Waste water Generation	603	631	1234	KLD
10	Proposed Capacity of STP	725	755	1480	KLD
11	Treated Water Available for Reuse	483	628	1111	KLD
12	Treated Water Recycled	210	691	901	KLD
13	Surplus treated water to be discharged in Municipal Sewer	273	-63	210	KLD
14	No of RWH of Pits Proposed	13	2	15	Nos.
15	Proposed Total Parking	1500	2415	3915	ECS
16	Proposed Green Area	11317.4143	956.8857	12274.3	SQMT
17	Total Solid Waste Generation	4.36	4.81	9.17	TPD
18	Organic waste	2.38	1.32	3.70	TPD
19	Total Power Requirement	8805	8413	17218	KW

20	GG set backup	7310	14690	22000	KVA
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**Table 2: EMP BUDGET (CONSTRUCTION PHASE)**

COMPONENT	CAPITAL COST (Rs in Lacs)	RECURRING COST (Rs in Lacs)/Annum
BARRICADING OF CONSTRUCTION SITE	75	16.5
ANTI - SMOG GUN WITH COMPLETE ASSEMBLY	5	2.4
DUST MITIGATION MEASURES	1.5	0.25
SITE SANITATION	2	1
MOBILE STP	3	1
DISINFECTION/ PEST CONTROL		0.5
LABOUR HEALTH CHECK UP & FIRST AID FACILITY	1	0.5
LABOR WELFARE (canteen, creche, safe access road - water power, cooking kerosene/gas)	2.5	1.5
WHEEL WASHING	1	0.5
WASTE STORAGE BINS - LABOUR CAMP/SITE OFFICES	1.5	0.75
TRAFFIC MANAGEMENT SIGNAGES	1.5	0.15
SAFETY TRAINING TO WORKERS		1
ENVIRONMENT MONITORING & 6 MONTHLY COMPLIANCE REPORT OF EC CONDITIONS		2
<b>TOTAL</b>	<b>94</b>	<b>28.05</b>

**Table 3: EMP BUDGET (OPERATION PHASE)**

COMPONENT	CAPITAL COST (Rs in Lacs)	RECURRING COST (Rs in Lacs)/Annum
SEWAGE TREATMENT PLANT ( 1480 KLD)	296	79.92
RAIN WATER HARVESTING SYSTEM (15 Nos)	52.5	7.88
SOLID WASTE STORAGE BINS & COMPOSTER (Organic Waste Converter 3.7 tpd)	62.90	41.51
HORTICULTURE DEVELOPMENT (TREE PLANTATION & LANDSCAPING)	13.13472	3.28
ROOF TOP SPV PLANT (1720 KWp)	1376	0.00
POND MAINTENANCE	54.00	0.00
ENVIRONMENT MONITORING & 6 MONTHLY COMPLIANCES OF ENVIRONMENT CLEARANCE CONDITIONS		2.00
<b>TOTAL</b>	<b>1854.53</b>	<b>134.59</b>

The discussion was held on Green plan, population, building plan, water calculations, dual plumbing plan, traffic circulation plan, parking plan, air dispersion model, Revised EMP, etc. and certain observations were raised as following:

1. The PP shall submit the proof of **approved of area plan**.
2. The PP shall submit the green belt development plan

3. The PP shall **part develop green** as per miyawaki forestation

4. The PP shall revise tangible EMP

The PP submitted the reply of above said observations vide letter dated 09.07.2022 along with affidavits in response to the observations. The documents were placed before the committee and committee after discussion considered the reply and after deliberations the Committee rated this project with **"Gold Rating"** and was of the unanimous view that this case should be recommended to SEIAA for granting Environmental Clearance under EIA Notification dated 14.9.2006 issued by the Ministry of Environment and Forest, Government of India with the following specific and general stipulations:

**A. Specific conditions:-**

- 1) Sewage shall be treated in the STP based on latest Technology with tertiary treatment i.e. Ultra Filtration to achieve standards ordered by NGT. The Treated effluent from STP shall be recycled /reused for flushing. DG cooling and Gardening. The dimension of each component of STP should be properly designed as per Norms.
- 2) The Project Proponent would devise a monitoring plan to the satisfaction of the State Pollution Control Board so as to continuously monitor the treated waste water being used for flushing in terms of faecal coli forms and other pathogenic bacteria.
- 3) 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.
- 4) Separate wet and dry bins must be provided in each unit and at ground level for facilitating segregation of waste. Solid Waste shall be segregated into wet garbage and inert materials. Wet Garbage shall be composted in Organic waste convertor. Adequate area shall be provided for solid waste management within the premises which will include area for segregation, composting. The Inert waste from the project will be sent to dumping site.
- 5) Traffic management plan as submitted shall be implemented in letter and spirit. Apart, a detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habilitation being carried out or purpose to be carried out by the project or other agencies in this 05kms radius of the site in different scenarios of space and time
- 6) The PP is required to plant 10 times trees at the project site and compensatory tree plantation will be done @1:10. No tree cutting has been proposed in the instant project. A minimum of 1 tree for every 80sqm of land should be planted and maintained. The Existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping. As proposed 12274.3 m<sup>2</sup> (20% of total plot area) shall be provided for green area development out of which 5% shall be developed under Miyawaki method.
- 7) 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.
- 8) The PP shall install the Eco Friendly Green Transformer based on ester oil to reduce the carbon footprint. The PP shall shift to gas based generator set when the gas is available. The PP shall install APCM for the DG set. The PP shall reduce the SO<sub>2</sub> load by 30% if HSD is used
- 9) The PP shall install electric charging points for charging of electric vehicles.
- 10) The PP shall use 5% solar energy of total power demand.

- 11) Consent to establish/operate for the expansion project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of pollution) Act, 1981 and the Water (Prevention and control of pollution) Act, 1974.
- 12) The Approval of the Competent Authority shall be obtained for structural safety of building code due to earthquakes, adequacy of fire fighting equipments etc. as per National Building Code including protection measures from lightening etc.
- 13) The PP shall not carry any construction above or below the Revenue Rasta, if any
- 14) The PP shall not carry any construction below the HT Line passing through the project, if any.
- 15) The PP shall obtain the Fire NOC from the Competent Authority before taking occupation of the building.
- 16) The PP shall not give occupation or possession before the water supply and sewage connection permitted by the competent authority.
- 17) The PP shall not give occupation or possession before the electricity connection permitted by the competent Authority.
- 18) The PP shall obtain the permission regarding withdrawal of ground water from CGWA before the start of the project and also obtained the CTO from HSPCB after the approval from CGWA.
- 19) The PP shall carry out the quarterly awareness programs for the stakeholders of the commercial colony/project.
- 20) 15 Rain water harvesting recharge pits shall be provided for ground water recharging as per the CGWB norms.
- 21) The PP shall install Digital water level recorder for monitoring the water recharge and carry out quarterly maintenance and cleaning of 15 RWH pits.
- 22) The PP shall ensure the compliance of provisions of Plastic Waste Management (Amendment) Rules, 2022 relevant for the project.
- 23) The PP may provide electric charging stations to facilitate electric vehicle commuters.
- 24) The PP shall take all preventive measures including water sprinkles to control dust during construction and operational phase.
- 25) Any change in stipulations of EC will lead to Environment Clearance void-ab-initio and PP will have to seek fresh Environment Clearance.

**B. Statutory compliance:**

- [1] The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority for ground coverage, FAR and should be in accordance with zoning plan approved by Competent Authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.
- [2] 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.
- [3] 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.
- [4] The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- [5] 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 Haryana State Pollution Control Board.
- [6] The project proponent shall obtain the necessary permission for drawl of ground water /surface water required for the project from the competent authority.
- [7] 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.
- [8] 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.
- [9] The provisions of the Solid Waste (Management) Rules, 2016, e-Waste (Management) Rules, 2016, and the Plastics Waste (Management) Rules, 2016 shall be followed.

[10] The project proponent shall follow the ECBC Act/ECBC-Rules prescribed by Bureau of Energy Efficiency, Ministry of Power strictly in addition of bylaws of the State Government.

## **I Air Quality Monitoring and Preservation**

- i. Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.
- ii. A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.
- iii. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM25) 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 ultra low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board
- v. Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murrum and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
- vi. Sand, murrum, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.
- vii. Wet jet shall be provided for grinding and stone cutting.
- viii. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
- ix. All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules 2016.
- x. The diesel generator sets to be used during construction phase shall be ultra 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. Ultra 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.

## **II 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. The per capita supply should adhere to NBC 2016 and CGWA Notification dated 12.12.2018.
- iv. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.
- v. A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed,

- the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.
- vi. At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.
  - vii. Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.
  - viii. Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.
  - ix. Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.
  - x. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
  - xi. The local bye-law provisions on rain water harvesting should be followed. If local byelaw 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 pits 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.

### III Noise Monitoring and Prevention

- i. Ambient noise levels shall conform to residential area/commercial area 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.

#### **IV Energy Conservation Measures**

- i. Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency as per ECBC Act, 2017 read with ECBC Rules, 2018 shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC also which is in no case should be less than 25% as prescribed.
- 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 R & 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.
- vii. The PP will submit report indicating compliance of each parameter of ECBC requirement and submit quantification saving report for each component.

#### **V 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 neighboring 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 Converter within the premises with a minimum capacity of 0.5 kg /person/day must be installed. Leaves to be put in earmarked pits for converting them into compost to be used as manure.
- v. All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.
- vi. Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.
- vii. Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials.
- viii. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January,



2016. Ready mixed concrete must be used in building construction.
- ix. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition 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.

## **VI 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 (5' tall) for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.
- iii. Where the trees need to be cut with prior permission from the concerned local Authority, compensatory plantation in the ratio of 1:10 (i.e. planting of 10 trees for every 1 tree that is cut) shall be done and maintained. Plantations to be ensured species (cut) to species (planted). Area for green belt development shall be provided as per the details provided in the project document.
- iv. Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.

## **VII 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.

## **VIII 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

- v. 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.

#### **IX Corporate Environment Responsibility**

- i. The project proponent shall comply with the provisions as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/ deviation/ violation of the environmental/ forest/ wildlife norms/ conditions. The company shall have defined system of reporting infringements/ deviation/ violation of the environmental/ forest/ wildlife norms/ conditions and/ or shareholders/ stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

#### **X Miscellaneous**

- i. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- v. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vi. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- vii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- viii. The project proponent shall abide by all the commitments and recommendations made in the form-IA, Conceptual Plan and also that during their presentation to the Expert Appraisal Committee.
- ix. No further expansion or modifications in the plan shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC)/SEIAA, Haryana. The project proponent shall seek fresh environmental clearance under EIA notification 2006 if at any stage there is change of area of this project.
- x. Any change in planning of the approved plan will leads to Environment Clearance void-ab-initio and PP will have to seek fresh Environment Clearance

- xi. The PP should give unambiguous affidavit giving land promoters in accordance with your ownership and possession of land legal the case referred for Environment Clearance to SEIAA.
- xii. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xiii. The Ministry/SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiv. The Ministry/SEIAA reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xvi. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

**244.09 EC for proposed Expansion of Plotted Colony on 23.2999 acres land under DDJAY Scheme at Village Behrampur&Ullawas, Sector-61, Gurugram, Haryana by M/s Commander Realtors Private Limited and others**

**Project Proponent :Mr. Satyapal Singh (Authorized Signatory)**  
**Consultant : Ind Tech House Consult**

The project was submitted to the SEIAA, Haryana vide online proposal No. SIA/HR/NCP/57972/2020 dated 07.06.2022 as per check list approved by the SEIAA/SEAC for obtaining Environmental Clearance under Category 8(b) of EIA Notification 14.09.2006.

The case was taken up in 244<sup>th</sup> meeting of SEAC, Haryana held on 08.07.2022. The PP and consultant presented the case before the committee as under:

- TOR was granted on 28.04.2022.
- Earlier, Environment clearance was obtained vide No. SEIAA(127)/HR/2021/472 dated 11.05.2021 for total plot area 22.6187 Acres, builtup area 2,29,926.5 sqm .
- Now, the Project is going under Expansion due to addition of 2757.017 sqm of plot area, After this the total plot area will be 94291.704 sqm and built up area will also increases from 229926.5 sqm to 250894.71 sqm.
- Certified Compliance Report has been obtained vide F. No. 16-29/2021/IRO/187-188-189 dated 25.03.2022 and ATR was submitted on 22<sup>nd</sup> March 2022.

The details of the project, as per the documents submitted by the project proponent, and also as informed during the presentation in the meeting are as under:

**Table 1 : Basic Details**

Sr. No.	Particulars	Existing details as per EC letter	Expansion	Total Area (in M <sup>2</sup> )
	<b>Online Project Proposal Number</b>	<b>SIA/HR/NCP/57972/2020</b>		
1.	Latitude	<b>28°24'32.60" N,</b>		
2.	Longitude	<b>77°05'48.89" E</b>		
3.	Plot Area	91534.687Sqm	2757.017Sqm	94291.704 Sqm
4.	Proposed Ground Coverage	40051.825Sqm	1089Sqm	41140.825Sqm

5.	Proposed FAR	143194.52 Sqm	13105.25 Sqm	156299.77Sqm	
6.	Total Built Up area	229926.5 Sqm	20968.21 Sqm	250894.71Sqm	
7.	Total Green Area with Percentage	18604.88 Sqm	-	18604.88 Sqm	
8.	Rain Water Harvesting Pits	22 Nos	-	22 Nos	
9.	STP Capacity	800 KLD	20 KLD	820 KLD	
10.	Total Parking	1805 ECS	44 ECS	1849 ECS	
11.	Organic Waste Converter	1 Nos	-	1 Nos.	
12.	Maximum Height of the Building Up to Terrace level (m)	15 m	1.32 m	16.32 m	
13.	Power Requirement	5350Kw	308Kw	5658Kw	
14.	Power Backup	2750 KVA	-	2750 KVA	
15.	Total Water Requirement	837 KLD	19 KLD	856 KLD	
16.	Fresh Water Requirement	551 KLD	14 KLD	565 KLD	
17.	Waste Water Generated	634.81 KLD	15.2 KLD	650 KLD	
18.	Solid Waste Generated	4500 kg/day	110 kg/day	4610 kg/day	
19.	Biodegradable Waste	2700 kg/day	66 kg/day	2766 kg/day	
20.	Number of Towers	-	-	-	
21.	Dwelling Units/ EWS	-	-	-	
22.	Salable Units	1620	44	1664	
23.	Basement	1 Nos	-	1 Nos	
24.	Community Center	1 Nos	-	1 Nos	
25.	Stories			St + 4	
26.	Total Cost of the project:	i) Land Cost	461 Cr	5 Cr	466 Cr
		ii) Construction Cost			
27.	Construction Phase:	i) Power Back-up			01x125 kva
		ii) Water Requirement & Source			Through authorized tanker supply
		iii) STP (Modular)			Yes
		iv) Anti-Smoke Gun			Yes

**Table 2: EMP BUDGET (CONSTRUCTION PHASE)**

COMPONENT	CAPITAL COST (Rs in Lacs)	RECURRING COST (Rs in Lacs)/Annum
BARRICADING OF CONSTRUCTION SITE	20	3
ANTI – SMOG GUN WITH COMPLETE SYSTEM)	6	3
DISPLAY OF DUST MITIGATION MEASURES	1.5	0.2
SITE SANITATION -	4	1
MOBILE STP	4	1.5
DISINFECTION/ PEST CONTROL	-	2
LABOUR HEALTH CHECK UP & FIRST AID FACILITY	3	2.0

LABOR WELFARE (canteen, 85rèche, safe access road – water power)	5	3
WHEEL WASHING	3	1.5
WASTE STORAGE BINS – LABOUR CAMP/SITE OFFICES	1.5	0.5
TRAFFIC MANAGEMENT SIGNAGES	1.5	0.2
SAFETY TRAINING TO WORKERS	-	2
ENVIRONMENT MONITORING & 6 MONTHLY COMPLIANCE REPORT OF EC CONDITIONS	-	2
<b>TOTAL</b>	<b>49.5</b>	<b>21.9</b>

**Table 3: EMP BUDGET (OPERATION PHASE)**

COMPONENT	CAPITAL COST (Rs in Lacs)	RECURRING COST (Rs in Lacs)/Annum
SEWAGE TREATMENT PLANT (820 KLD)	164	44.28
RAIN WATER HARVESTING (22 Nos. Recharge Pit)	77	11.55
SOLID WASTE STORAGE BINS & COMPOSTER (Organic Waste Converter 2.76 tpd)	47.02	31.03
HORTICULTURE DEVELOPMENT (TREE PLANTATION & LANDSCAPING)	18.89	4.72
ROOF TOP SPV PLANT (170 KWp)	136	0.00
POND MAINTAINANCE, Behrampur (100), 02HRGGMGUR0025BEHR001	18	
ENVIRONMENT MONITORING & 6 Monthly COMPLIANCES OF ENVIRONMENT CLEARANCE CONDITIONS		2.00
<b>TOTAL</b>	<b>460.91</b>	<b>93.59</b>

The discussion was held on Green plan, population, building plan, water calculations, dual plumbing plan, traffic circulation plan, parking plan, air dispersion model, Revised EMP, etc. and certain observations were raised as following:

1. The PP shall submit the revised list of trees to be planted
2. The pp shall revise tangible EMP including pond maintenance and revised solar power

The PP submitted the reply of above said observations vide letter dated 09.07.2022 and also submitted affidavit in response to the observations. The documents were placed before the committee and committee after discussion considered the reply and after deliberations the Committee rated this project with **“Gold Rating”** and was of the unanimous view that this case should be recommended to the SEIAA for granting Environmental Clearance under EIA Notification dated 14.9.2006 issued by the Ministry of Environment and Forest, Government of India with the following specific and general stipulations:

**A. Specific conditions:-**

1. Sewage shall be treated in the STP based on latest Technology to achieve standards ordered by NGT. The Treated effluent from STP shall be recycled /reused for flushing. DG cooling and Gardening

2. The Project Proponent would devise a monitoring plan to the satisfaction of the State Pollution Control Board so as to continuously monitor the treated waste water being used for flushing in terms of faecal coli forms and other pathogenic bacteria.
3. The PP shall ensure that total 2% of the cost of project shall be spent on EMP Budget. However, the amount and component shown in EMP table above shall also be included for the purpose of 2% amount. The EMP cost on Socio Economic activities shall be used before the commencement of the project & EMP recurring inside the project shall be implemented throughout the operation of the project. The PP shall establish Environment monitoring cell as per documents submitted.
4. The PP shall maintain a pond (Behrampur (100), 02HRGGMGUR0025BEHR001) as proposed in EMP Budget (Operation Phase)
5. The project proponent shall upload the status of compliance of the basic details (given in above tables), stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
6. 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.
7. Separate wet and dry bins must be provided in each unit and at ground level for facilitating segregation of waste. Solid Waste shall be segregated into wet garbage and inert materials. Wet Garbage shall be composted in Organic waste convertor. Adequate area shall be provided for solid waste management within the premises which will include area for segregation, composting. The Inert waste from the project will be sent to solid waste dumping site through authorized vender.
8. Traffic management plan as submitted shall be implemented in letter and spirit. Apart, a detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is marinated and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habilitation being carried out or purpose to be carried out by the project or other agencies in this 05kms radius of the site in different scenarios of space and time
9. No tree cutting has been proposed in the instant project. A minimum of 1 tree for every 80sqm of land should be planted and maintained. The Existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping. As proposed 18604.88 Sqm (19% of Plot Area) shall be provided for Green Area development for whole project, excluding plot areas. The project has 7 existing trees which shall be transplanted or cut with the permission of DFO and plant 10 trees for each cutting o tree.
10. 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.
11. Consent to establish/operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of pollution) Act, 1981 and the Water (Prevention and control of pollution) Act, 1974.
12. The Approval of the Competent Authority shall be obtained for structural safety of building code due to earthquakes, adequacy of fire fightingequipments etc. as per National Building Code including protection measures from lightening etc.
13. The PP shall obtain the Fire NOC from the Competent Authority before taking the occupation of the building.
14. The PP shall install the Eco Friendly Green Transformer based on ester oil to reduce the carbon footprint. The PP shall shift to gas based generator set when the gas is available. The PP shall install APCM for the DG set. The PP shall reduce the SO<sub>2</sub> load by30% if HSD is used. The DG sets will be operated for maximum 04 hours during power failure through Executing Agency
15. The PP shall use 3% as solar power of total power demand.

16. The PP shall not give occupation or possession before the water supply and sewage connection permitted by the competent authority.
17. The PP shall not give occupation or possession before the electricity connection permitted by the competent Authority.
18. The PP shall obtain the permission regarding withdrawal of ground water, if any from HWRA/CGWA before the start of the project and also obtained the CTO from HSPCB after the approval from HWRA/CGWA.
19. The PP shall carry out the quarterly awareness programs for the stakeholders of the project.
20. 22 Rain water harvesting recharge pits shall be provided for ground water recharging as per the CGWB norms
21. The PP shall install Digital water level recorder for monitoring the water recharge and carry out quarterly maintenance and cleaning of 22 RWH pits
22. The PP shall ensure the compliance of provisions of Plastic Waste Management (Amendment) Rules, 2022 relevant for the project.
23. The PP may provide electric charging stations to facilitate electric vehicle commuters.
24. The PP shall provide the Anti smog gun mounted on vehicle in the project for suppression of dust during construction & operational phase and shall use the treated water, if feasible.
25. The PP shall take all preventive measures including water sprinkles to control dust during construction and operational phase.
26. Any change in stipulations of EC will lead to Environment Clearance void-ab-initio and PP will have to seek fresh Environment Clearance.
27. The PP shall get agreement with individual plot holder to plant one tree in each plot.

#### **B. Statutory Compliance:**

- [1] The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority for ground coverage, FAR and should be in accordance with zoning plan approved by Competent Authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.
- [2] 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.
- [3] 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.
- [4] The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- [5] 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 Haryana State Pollution Control Board.
- [6] The project proponent shall obtain the necessary permission for drawl of ground water /surface water required for the project from the competent authority.
- [7] 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.
- [8] 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.
- [9] The provisions of the Solid Waste (Management) Rules, 2016, e-Waste (Management) Rules, 2016, the Plastics Waste (Management) Rules, 2016 and Batteries waste (Management Handling Rules 2001 as amended in 2020) shall be followed.
- [10] The project proponent shall follow the ECBC Act/ECBC-Rules prescribed by Bureau of Energy Efficiency, Ministry of Power strictly in addition of bylaws of the State Government.

#### **I 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

Minutes of 244<sup>th</sup> Meeting of SEAC, Haryana held on 08.07.2022 & 09.07.2022

Environmental Clearance shall be complied with.

- ii. A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.
- iii. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM2.5) 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 ultra lowsulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board
- v. Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murrum and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
- vi. Sand, murrum, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.
- vii. Wet jet shall be provided for grinding and stone cutting.
- viii. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
- ix. All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules 2016.
- x. The diesel generator sets to be used during construction phase shall be ultra lowsulphur 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. Ultra 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.

## **II 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. The per capita supply should adhere to NBC 2016 and CGWA Notification dated 12.12.2018.
- iv. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.
- v. A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.
- vi. At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.



- vii. Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.
- viii. Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.
- ix. Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.
- x. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- xi. The local bye-law provisions on rain water harvesting should be followed. If local byelaw 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 pits 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.

### **III Noise Monitoring and Prevention**

- i. Ambient noise levels shall conform to residential area/commercial area 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.

#### **IV Energy Conservation Measures**

- i. Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency as per ECBC Act, 2017 read with ECBC Rules, 2018 shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC also which is in no case should be less than 25% as prescribed.
- 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 R & 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.
- vii. The PP will submit report indicating compliance of each parameter of ECBC requirement and submit quantification saving report for each component.

#### **V 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 neighboring 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 Converter within the premises with a minimum capacity of 0.5 kg /person/day must be installed. Leaves to be put in earmarked pits for converting them into compost to be used as manure.
- 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 of as per applicable rules and norms with necessary approvals of the State Pollution Control Board.
- vii. Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials.
- viii. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.
- ix. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition 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.

#### **VI 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 (5' tall) for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.
- iii. Where the trees need to be cut with prior permission from the concerned local Authority, compensatory plantation in the ratio of 1:10 (i.e. planting of 10 trees for every 1 tree that is cut) shall be done and maintained. Plantations to be ensured species (cut) to species (planted). Area for green belt development shall be provided as per the details provided in the project document.
- iv. Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.

## **VII 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.

Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.

- a) Traffic calming measures.
- b) Proper design of entry and exit points.
- c) 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.

## **VIII 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.

## **IX Corporate Environment Responsibility**

- i. The project proponent shall comply with the provisions of CER, as applicable.
- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to

- have proper checks and balances and to bring into focus any infringements/ deviation/ violation of the environmental/ forest/ wildlife norms/ conditions. The company shall have defined system of reporting infringements/ deviation/ violation of the environmental/ forest/ wildlife norms/ conditions and/ or shareholders/ stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
  - iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

#### **X Miscellaneous**

- i. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- v. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vi. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- vii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- viii. The project proponent shall abide by all the commitments and recommendations made in the form-IA, Conceptual Plan and also that during their presentation to the Expert Appraisal Committee.
- ix. No further expansion or modifications in the plan shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC)/SEIAA, Haryana. The project proponent shall seek fresh environmental clearance under EIA notification 2006 if at any stage there is change of area of this project.
- x. Any change in planning of the approved plan will leads to Environment Clearance void-ab-initio and PP will have to seek fresh Environment Clearance
- xi. The PP should give unambiguous affidavit giving land promoters in accordance with your ownership and possession of land legal the case referred for Environment Clearance to SEIAA.
- xii. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xiii. The Ministry/SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiv. The Ministry/SEIAA reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

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

**244.10 EC for Expansion of Expansion Mixed Land Use Colony (70% Residential and 30% Commercial) on the land measuring 14.4125 Acres in Revenue Estate of village Maidawas and Badshahpur, Sector 65 of GMUC, Gurugram, Haryana by M/s Mangalam Multiplex Pvt. Ltd**

**Project Proponent :Mr. Satyapal Singh (Authorized Signatory)**  
**Consultant : Ind Tech House Consult**

The project was submitted to the SEIAA, Haryana vide online proposal No.SIA/HR/MIS/72534/2022 dated 31.05.2022 as per check list approved by the SEIAA/SEAC for obtaining Environmental Clearance under Category 8(b) of EIA Notification 14.09.2006. The case was again taken up in 244<sup>th</sup> meeting of SEAC held on 08.07.2022. The PP and consultant presented the case before the committee as under:

- TOR was granted on 28.04.2022.
- The environmental clearance to the project under expansion category was awarded earlier under Category 8(b) for 58,325.22 sq. M. Plot area and 3,59,940.462 sq. M. Built-up area (vide letter no. SEIAA/HR/2019/212 dated 24<sup>th</sup> July 2019).
- Total plot area for the entire project will be 58,325.226 sqm and total built-up area will be 3,64,603.92 sqm.
- Certified Compliance Report has been obtained vide F. No. 16-29/2021/IRO/187-188-189 dated 25.03.2022 and ATR was submitted on 22<sup>nd</sup> March 2022.

The details of the project, as per the documents submitted by the project proponent, and also as informed during the presentation in the meeting are as under:

**Table 1 Basic Details**

Sr. No.	Particulars	Existing details as per EC letter	Expansion	Total Area (in M <sup>2</sup> )
1.	Online Project Proposal Number	SIA/HR/MIS/72534/2022		
2.	Latitude	28°24'18.83"N,		
3.	Longitude	77°03'56.48"E		
4.	Plot Area	58325.22 Sqm	-	58325.22 Sqm
5.	Proposed Ground Coverage	29149.197 Sqm	468.242 Sqm	29617.439 Sqm
6.	Proposed FAR	204689.723 Sqm	5796.367 Sqm	210486.09Sqm
7.	Total Built Up area	359940.462 Sqm	4663.458 Sqm	364603.92 Sqm
8.	Total Green Area with Percentage	11679 Sqm	-	11679 Sqm
9.	Rain Water Harvesting Pits	10 Nos	-	10 Nos
10.	STP Capacity	1220 KLD	30 KLD	1250 KLD
11.	Total Parking	2839 ECS	-	2839 ECS
12.	Organic Waste Converter	2 nos	-	2 Nos

13.	Maximum Height of the Building (m)	153.6 m	9.475 m	163.075 m	
14.	Power Requirement	9575 Kw	392 Kw	9967 Kw	
15.	Power Backup	7860 KVA	-	7860 KVA	
16.	Total Water Requirement	1499 KLD	30 KLD	1529 KLD	
17.	Fresh Water Requirement	684 KLD	20 KLD	704 KLD	
18.	Waste Water Generated	1016 KLD	24 KLD	1040 KLD	
19.	Solid Waste Generated	4430 kg/day	140 kg/day	4570 kg/day	
20.	Biodegradable Waste	2658 kg/day	84 kg/day	2742 kg/day	
21.	EWS	212	8	220	
22.	Salable Units	1196 Nos	48 Nos	1244 Nos	
23.	Basement	3	-	3	
24.	Stories	3B+LG/G+UG+47	Addition of 1 floor	3B+LG/G+UG+48	
25.	Total Cost of the project:	i) Land Cost	670 Cr	10 Cr	680 Cr
		ii) Construction Cost			
26.	Construction Phase:	Power Back-up		01x125 kva	
		Water Requirement & Source		Through authorized tanker supply	
		STP (Modular)		Yes	
		Anti-Smoke Gun		Yes	

**Table 2: EMP BUDGET (OPERATION PHASE)**

ENVIRONMENT BUDGET (Operation Stage)		
COMPONENT	CAPITAL COST (Rs in Lacs)	RECURRING COST (Rs in Lacs)/Annum
SEWAGE TREATMENT PLANT (30 KLD)	6	1.62
SOLID WASTE STORAGE BINS & COMPOSTER (Organic Waste Converter 0.14 TPD)	2.38	1.5
ROOF TOP SPV PLANT (500KWp)	400	-
POND MAINTAINANCE Choma (62)02HRGGMGUR0002CHMA001	18	-
HORTICULTURE DEVELOPMENT (TREE PLANTATION & LANDSCAPING)	1.44	0.36
ENVIRONMENT MONITORING & 6 MONTHLY COMPLIANCES OF ENVIRONMENT CLEARANCE CONDITIONS		2.00
<b>TOTAL</b>	<b>427.82</b>	<b>5.48</b>

The discussion was held on Green plan, population, building plan, water calculations, dual plumbing plan, traffic circulation plan, parking plan, air dispersion model, Revised EMP, etc. and certain observations were raised as following:

1. The PP shall submit Revised list of trees to be planted
2. The PP shall submit time schedule of green development
3. The PP shall submit the proposal for miyawaki forestation

The PP submitted the reply of observations in the form of an affidavit vide letter dated 09.07.2022 stating therein:

1. That out of 20% of total green area will be developed 5% as Miyawaki Method
2. That as suggested, the DG module has been revised as under 6x1000 + 3x625.

The documents were placed before the committee and after discussion considered the reply and after deliberations the Committee rated this project with **“Gold Rating”** and was of the unanimous view that this case should be recommended to SEIAA for granting Environmental Clearance under EIA Notification dated 14.9.2006 issued by the Ministry of Environment and Forest, Government of India with the following specific and general stipulations:

**A. Specific conditions:-**

1. Sewage shall be treated in the STP based on latest Technology with tertiary treatment i.e. Ultra Filtration to achieve standards ordered by NGT. The Treated effluent from STP shall be recycled /reused for flushing. DG cooling and Gardening. The dimension of each component of STP should be properly designed as per Norms.
2. The Project Proponent would devise a monitoring plan to the satisfaction of the State Pollution Control Board so as to continuously monitor the treated waste water being used for flushing in terms of faecal coli forms and other pathogenic bacteria.
3. 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.
4. Separate wet and dry bins must be provided in each unit and at ground level for facilitating segregation of waste. Solid Waste shall be segregated into wet garbage and inert materials. Wet Garbage shall be composted in Organic waste convertor. Adequate area shall be provided for solid waste management within the premises which will include area for segregation, composting. The Inert waste from the project will be sent to dumping site.
5. Traffic management plan as submitted shall be implemented in letter and spirit. Apart, a detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habilitation being carried out or purpose to be carried out by the project or other agencies in this 05kms radius of the site in different scenarios of space and time
6. The PP shall maintain a pond Choma (62) 02HRGGMGUR0002CHMA001 as proposed in EMP Budget (Operation Phase)
7. The PP is required to plant 10 times trees at the project site and compensatory tree plantation will be done @1:10. No tree cutting has been proposed in the instant project. A minimum of 1 tree for every 80 sqm of land should be planted and maintained. The Existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping. As proposed 11679 Sqm(20% of total plot area) shall be provided for green area development out of which 5% shall be developed under Miyawaki method.
8. 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.
9. The PP shall install the Eco Friendly Green Transformer based on ester oil to reduce the carbon foot print. The PP shall shift to gas based generator set when the gas is available.

- The PP shall install APCM for the DG set. The PP shall reduce the SO<sub>2</sub> load by 30% if HSD is used
10. The PP shall use 5% solar energy of total power demand.
  11. Consent to establish/operate for the expansion project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of pollution) Act, 1981 and the Water (Prevention and control of pollution) Act, 1974.
  12. The Approval of the Competent Authority shall be obtained for structural safety of building code due to earthquakes, adequacy of fire fighting equipments etc. as per National Building Code including protection measures from lightening etc.
  13. The PP shall not carry any construction above or below the Revenue Rasta, if any
  14. The PP shall not carry any construction below the HT Line passing through the project, if any.
  15. The PP shall obtain the Fire NOC from the Competent Authority before taking occupation of the building.
  16. The PP shall not give occupation or possession before the water supply and sewage connection permitted by the competent authority.
  17. The PP shall not give occupation or possession before the electricity connection permitted by the competent Authority.
  18. The PP shall obtain the permission regarding withdrawal of ground water from CGWA before the start of the project and also obtained the CTO from HSPCB after the approval from CGWA.
  19. The PP shall carry out the quarterly awareness programs for the stakeholders of the commercial colony/project.
  20. 10 Rain water harvesting recharge pits shall be provided for ground water recharging as per the CGWB norms.
  21. The PP shall ensure the compliance of provisions of Plastic Waste Management (Amendment) Rules, 2022 relevant for the project.
  22. The PP may provide electric charging stations to facilitate electric vehicle commuters.
  23. The PP shall increase the capacity of STP already installed
  24. The PP shall submit the time schedule of Green Area Development, Miyawaki, plantation, STP, OWC, RWH.
  25. The PP shall install Digital water level recorder for monitoring the water recharge and carry out quarterly maintenance and cleaning of 10 RWH pits.
  26. The PP shall take all preventive measures including water sprinkles to control dust during construction and operational phase.
  27. Any change in stipulations of EC will lead to Environment Clearance void-ab-initio and PP will have to seek fresh Environment Clearance.

**B. Statutory compliance:**

- [1] The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority for ground coverage, FAR and should be in accordance with zoning plan approved by Competent Authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.
- [2] 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.
- [3] 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.
- [4] The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- [5] 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 Haryana State Pollution Control Board.
- [6] The project proponent shall obtain the necessary permission for drawl of ground water /surface water required for the project from the competent authority.
- [7] 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.



- [8] 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.
- [9] The provisions of the Solid Waste (Management) Rules, 2016, e-Waste (Management) Rules, 2016, and the Plastics Waste (Management) Rules, 2016 shall be followed.
- [10] The project proponent shall follow the ECBC Act/ECBC-Rules prescribed by Bureau of Energy Efficiency, Ministry of Power strictly in addition of bylaws of the State Government.

## **I Air Quality Monitoring and Preservation**

- i. Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.
- ii. A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.
- iii. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM25) 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 ultra low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board
- v. Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murrum and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
- vi. Sand, murrum, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.
- vii. Wet jet shall be provided for grinding and stone cutting.
- viii. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
- ix. All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules 2016.
- x. The diesel generator sets to be used during construction phase shall be ultra 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. Ultra 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.

## **II 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. The per capita supply should adhere to NBC 2016 and CGWA Notification dated 12.12.2018.
- iv. The quantity of fresh water usage, water recycling and rainwater harvesting shall be

- measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.
- v. A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.
  - vi. At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.
  - vii. Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.
  - viii. Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.
  - ix. Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.
  - x. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
  - xi. The local bye-law provisions on rain water harvesting should be followed. If local byelaw 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 pits 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.

### **III Noise Monitoring and Prevention**

- i. Ambient noise levels shall conform to residential area/commercial area 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.

#### **IV Energy Conservation Measures**

- i. Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency as per ECBC Act, 2017 read with ECBC Rules, 2018 shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC also which is in no case should be less than 25% as prescribed.
- 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 R & 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.
- vii. The PP will submit report indicating compliance of each parameter of ECBC requirement and submit quantification saving report for each component.

#### **V 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 neighboring 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 Converter within the premises with a minimum capacity of 0.5 kg /person/day must be installed. Leaves to be put in earmarked pits for converting them into compost to be used as manure.
- v. All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.
- vi. Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.
- vii. Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other

environment friendly materials.

- viii. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.
- ix. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition 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.

## **VI 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 (5' tall) for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.
- iii. Where the trees need to be cut with prior permission from the concerned local Authority, compensatory plantation in the ratio of 1:10 (i.e. planting of 10 trees for every 1 tree that is cut) shall be done and maintained. Plantations to be ensured species (cut) to species (planted). Area for green belt development shall be provided as per the details provided in the project document.
- iv. Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.

## **VII 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.

## **VIII 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.

#### **IX Corporate Environment Responsibility**

- i. The project proponent shall comply with the provisions as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/ deviation/ violation of the environmental/ forest/ wildlife norms/ conditions. The company shall have defined system of reporting infringements/ deviation/ violation of the environmental/ forest/ wildlife norms/ conditions and/ or shareholders/ stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

#### **X Miscellaneous**

- i. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- v. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vi. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- vii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- viii. The project proponent shall abide by all the commitments and recommendations made in the form-IA, Conceptual Plan and also that during their presentation to the Expert Appraisal Committee.
- ix. No further expansion or modifications in the plan shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC)/SEIAA,

- Haryana. The project proponent shall seek fresh environmental clearance under EIA notification 2006 if at any stage there is change of area of this project.
- x. Any change in planning of the approved plan will leads to Environment Clearance void-ab-initio and PP will have to seek fresh Environment Clearance
  - xi. The PP should give unambiguous affidavit giving land promoters in accordance with your ownership and possession of land legal the case referred for Environment Clearance to SEIAA.
  - xii. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
  - xiii. The Ministry/SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
  - xiv. The Ministry/SEIAA reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
  - xv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
  - xvi. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

**244.11 EC for Expansion of Commercial Complex Project at Sushant Lok, Sector 27, Gurugram, Haryana by M/s Asthetic Township Developers Private Limited**

**Project Proponent : Not present**  
**Consultant : Ind Tech House Consult**

The project was submitted to the SEIAA, Haryana vide online proposal No. SIA/HR/MIS/276205/2022 dated 03.06.2022 as per check list approved by the SEIAA/SEAC for obtaining Environmental Clearance under Category 8(a) of EIA Notification 14.09.2006.

The case was taken up in 244th meeting of SEAC, Haryana held on 08.07.2022 but the PP submitted a letter dated 08.07.2022 with a request to defer the case to the next meeting due to unavailability of Certified Compliance Report. The committee acceded with the request of PP and deferred the case.

**244.12 ToR under violation category for Storage of Non Agro Product falling in the Revenue Estate of Village Jatola, District Sonapat, Haryana by M/s Flowtech Industrial Projects Private Limited**

**Project Proponent : Not present.**  
**Consultant : Ind Tech House Consult**

The project was submitted to the SEIAA, Haryana vide online proposal No. SIA/HR/MIS/77799/2022 dated 04.05.2022 as per check list approved by the SEIAA/SEAC for obtaining ToR (Violation) under Category 8(a) of EIA Notification 14.09.2006.

The case was taken up in 244<sup>th</sup> meeting of SEAC, Haryana held on 08.07.2022. The PP submitted a letter stating therein that they have applied their project vide proposal no.

SIA/HR/MIS/31313/2019 for environment clearance but their project falls under violation so they have withdrawn their proposal and applied the proposal for approval of terms of reference under violation category vide proposal no. SIA/HR/MIS/77799/2022.

During the appraisal in 242<sup>nd</sup> Meeting of the State Expert Appraisal Committee, Haryana, they have informed the above facts to Hon'ble committee and Committee recommended TOR under violation. So, PP has requested to grant the ToR under violation for proposal no. SIA/HR/MIS/77799/2022.

The Committee discussed the case at length. **This case was submitted off line by the PP. The case was taken up in 242<sup>nd</sup> meeting at Agenda No.242.08 on 24.06.2022 and recommended for ToR under violation category, therefore, it is recommended that the offline submitted proposal be delisted to avoid overlapping/duplicacy** and Committee further deliberated that online proposal no.SIA/HR/MIS/77799/2022, taken up in 244<sup>th</sup> Meeting of SEAC at Agenda No.244.12 on 08.09.2022, should be recommended to SEIAA for granting ToR (under Violation Category) with following conditions:

- The State Government/SPCB to take action against the project proponent under the provisions of the Section 15 read with Section 19 of the Environment (Protection) Act, 1986, and further no Consent to Operate or Occupancy Certificate to be issued till the project is granted EC.
- Detailed SOP dated 07.07.2021 regarding grant of EC to violation cases to be considered on merits. The action may be initiated under section 15 read with section 19 of the EP Act, 1986 against all violations.
- The Project Proponent shall comply with Penalty provision for violation as EC has not been obtained.
- The Project Proponent shall be required to submit a bank guarantee equivalent to the amount of remediation plan and natural and community resource augmentation plan with the SPCB prior to the grant EC. The quantum shall be recommended by the SEAC and finalized by the regulatory authority. The bank guarantee shall be released after successful implementation of the EMP, followed by recommendations of the SEAC and approval of the regulatory authority.

The Committee further deliberated and recommended to send the case to SEIAA for approval of TOR under violation and the project proponent will prepare the EIA by using Model Terms of Reference of MoEF&CC with following additional Terms of Reference:

#### **Standard ToR**

- [1] Examine details of land use as per Master Plan and land use around 10 km radius of the project site. Analysis should be made based on latest satellite imagery for land use with raw images. Check on flood plain of any river.
- [2] Submit details of environmentally sensitive places, land acquisition status, rehabilitation of communities/villages and present status of such activities.
- [3] Examine baseline environmental quality along with projected incremental load due to the project.
- [4] Environmental data to be considered in relation to the project development would be (a) land, (b) groundwater, (c) surface water, (d) air, (e) bio-diversity, (f) noise and vibrations, (g) socio economic and health.
- [5] Submit a copy of the contour plan with slopes, drainage pattern of the site and surrounding area. Any obstruction of the same by the project.
- [6] Submit the details of the trees to be felled for the project.
- [7] Submit the present land use and permission required for any conversion such as forest, agriculture etc.

- [8] Submit Roles and responsibility of the developer etc for compliance of environmental regulations under the provisions of EP Act.
- [9] Ground water classification as per the Central Ground Water Authority.
- [10] Examine the details of Source of water, water requirement, use of treated waste water and prepare a water balance chart.
- [11] Rain water harvesting proposals should be made with due safeguards for ground water quality. Maximize recycling of water and utilization of rain water. Examine details.
- [12] Examine soil characteristics and depth of ground water table for rainwater harvesting.
- [13] Examine details of solid waste generation treatment and its disposal.
- [14] Examine and submit details of use of solar energy and alternative source of energy to reduce the fossil energy consumption, energy conservation and energy efficiency.
- [15] DG sets are likely to be used during construction and operational phase of the project. Emissions from DG sets must be taken into consideration while estimating the impacts on air environment. Examine and submit details.
- [16] Examine road/rail connectivity to the project site and impact on the traffic due to the proposed project. Present and future traffic and transport facilities for the region should be analyzed with measures for preventing traffic congestion and providing faster trouble free system to reach different destinations in the city.
- [17] A detailed traffic and transportation study should be made for existing and projected passenger and cargo traffic.
- [18] Examine the details of transport of materials for construction which should include source and availability.
- [19] Examine separately the details for construction and operation phases both for Environmental Management Plan and Environmental Monitoring Plan with cost and parameters.
- [20] Submit details of a comprehensive Disaster Management Plan including emergency evacuation during natural and man-made disaster.
- [21] Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
- [22] The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.
- [23] Any further clarification on carrying out the above studies including anticipated impacts due to the project and mitigative measure, project proponent can refer to the model ToR available on Ministry website "<http://moef.nic.in/Manual/Townships>".

**Additional ToR:**

- 1) The PP shall submit the Details of the ownership of the land along with the collaboration agreement
- 2) The PP shall submit the details of existing trees on the project site
- 3) The PP shall submit the details of green area plan as per the land use
- 4) The PP shall submit the solar power generation as per the existing norms
- 5) The PP shall submit the contour plan of whole of the area for flood management
- 6) The PP shall submit the strictly compliance of the rules and guidelines under manufacture, storage and import of hazardous chemicals MSIHC Rules 1989 as amended time to time. All transportation of hazardous chemicals shall be as per motor vehicle act 1989
- 7) The PP shall submit Environment Impact Assessment of vehicles during peak hours in and around the project area.
- 8) The PP shall submit the traffic circulation and parking management plan
- 9) The PP shall submit the ECBC Compliance Report along with percentage of energy savings.
- 10) The PP shall submit the revised water assurance from the Competent Authority
- 11) The PP shall submit the details of amount, threshold level along with MSDS sheet of chemicals to be stored in the project.
- 12) The PP shall submit the quantity and location of Diesel storage and approval of Competent Authority for storage of diesel above the threshold level.
- 13) The PP shall submit the Rain Water Harvesting Plan (double well housing structure) with



- recent rainfall and run-off data including digital water level recorder.
- 14) The PP shall submit the Environment Impact Assessment of Rain water harvesting on the water level in the region, along with total availability of underground water.
  - 15) The project proponent should submit Air Quality Modelingisopleths of DG Sets with Air mode Software version details along with pollution remedial measures.
  - 16) The PP shall obtain the permission regarding withdrawal of ground water from CGWA before the start of the project and also obtained the CTO from HSPCB after the approval from CGWA.
  - 17) The PP should give detailed back up data of Ambient Air Quality, monitoring, height of stack, details of DG stack etc along with air quality modeling with dispersion of distance
  - 18) The PP shall submit hydrological study for the project area.
  - 19) The PP shall submit the details of STP along with its location, area covered, design and structure.
  - 20) The PP shall submit the details of interlinked projects
  - 21) The PP shall submit the details of the existing Panchayat or revenue roads passing through the project
  - 22) The PP shall submit energy saving details of the project and detailed ECBC compliance with percentage energy savings.
  - 23) The PP should enclose all analysis reports of Air, Water, Soil, Noise etc. from MoEF& CC/ NABL Laboratory with scope of accreditation along with range of testing. All original reports should be available during approval of project
  - 24) The PP should submit approved zoning plan, elevation plan, floor plan, sector plan along with EIA/EMP report.
  - 25) The PP shall submit legible plans and Geo Tag Photographs where required
  - 26) The PP shall submit the details of prosecution carried out under Section 19 of EP Act.
  - 27) The PP shall submit the remediation plan, Community Resource Augmentation Plan.

**244.13 EC of Proposed Expansion of Commercial Complex Project at Sector 66, Gurugram, Haryana by M/s Gentle Realtors Pvt. Ltd.**

**Project Proponent :Sh.Satpal Singh**  
**Consultant : Ind Tech House Consult**

The project was submitted to the SEIAA, Haryana vide online proposal No. SIA/HR/MIS/278736/2022 dated 17.06.2022 as per check list approved by the SEIAA/SEAC for obtaining Environmental Clearance under Category 8(a) of EIA Notification 14.09.2006.

The case was taken up in 244th meeting of SEAC, Haryana held on 08.07.2022. The consultant appeared on behalf of PP and submitted that the Certified Compliance Report has been received in this case but it could not be circulated among the members. The PP requested to defer the case. After deliberation, the committee acceded with the request of PP and decided that PP shall circulate the Certified Compliance Report to all the members and deferred the case for the next meeting.

**244.14 EC for proposed Commercial complex on land measuring 14326.37 sqm situated at site/ Building No.4, Sector-43, Urban estate Gurgaon-II, Gurugram Haryana by M/s LekhBuildtech Private Limited**

**Project Proponent :Mr. Satyapal Singh (Authorized Signatory)**  
**Consultant : Ind Tech House Consult**

The project was submitted to the SEIAA, Haryana vide online proposal No. SIA/HR/MIS/279545/2022 dated 22.06.2022 as per check list approved by the SEIAA/SEAC for obtaining Environmental Clearance under Category 8(a) of EIA Notification 14.09.2006.

The case was again taken up in 244<sup>th</sup> meeting of SEAC held on 08.07.2022. The PP and consultant presented the case before the committee as under:

- The Gross Plot area is 14326.37 m<sup>2</sup>. The Built-up area of the project is 78490.000 m<sup>2</sup>.
- Plot was allotted by Haryana ShahriVikasPradikaran on 19.05.2022.
- Expected population will be 10649 persons.

The details of the project, as per the documents submitted by the project proponent, and also as informed during the presentation in the meeting are as under:

**Table 1 Basic Details**

<b>Name of Project: EC for proposed Commercial complex on land measuring 14326.37 sqm situated at site/ Building No.4, Sector-43, Urban estate Gurgaon-II, Gurugram Haryana by M/s LekhBuildtech Private Limited</b>		
<b>Sr. No.</b>	<b>Particulars</b>	
1.	Online Proposal Number	SIA/HR/MIS/279545/2022
2.	Latitude	28° 27' 30.95" N
3.	Longitude	77° 05' 40.62" E
4.	Plot Area	14326.37Sqm
5.	Proposed Built Up Area	78490.000 sqm
6.	Max Height of Building (up to terrace)	87 M
7.	Max No of Floors	2B+G+MZ+18
8.	Cost of Project	655 Cr
9.	Total Green Area	2149.5 sqm
10.	Rain Water Harvesting Pits	3 Nos.
11.	STP Capacity	375 KLD
12.	Total Parking	809 ECS
13.	Organic Waste Converter	0.98 TPD
14.	Power Requirement	4190 KW
15.	Power Backup	5000 KVA
16.	Total Water Requirement	532 KLD
17.	Fresh Water Requirement	204 KLD
18.	Treated Water	270 KLD
19.	Waste Water Generated	299 KLD
20.	Solid Waste Generated	1.63 TPD
21.	Biodegradable Waste	0.98 TPD
22.	Basement	Two basement
23.	Stories	2B+G+MZ+18
24.	Total Cost of the project:	i) Land Cost
		ii) Construction Cost
27.	Construction Phase:	v) Power Back-up
		vi) Water Requirement & Source
		vii) STP (Modular)
		viii) Anti-Smoke Gun
		125 KVA
		Authorized treated water tanker supply
		Yes
		Yes

**Table 2: EMP BUDGET (CONSTRUCTION PHASE)**

<b>COMPONENT</b>	<b>CAPITAL COST (Rs in Lacs)</b>	<b>RECURRING COST (Rs in Lacs)/Annum</b>
BARRICADING OF CONSTRUCTION SITE	7.5	1.65
ANTI – SMOG GUN WITH COMPLETE ASSEMBLY	5	2.4
DUST MITIGATION MEASURES	1.5	0.25
SITE SANITATION	2	1
MOBILE STP	3	1
DISINFECTION/ PEST CONTROL		0.5
LABOUR HEALTH CHECK UP & FIRST AID FACILITY	1	0.5
LABOR WELFARE (canteen, 107rèche, safe access road – water power, cooking kerosene/gas)	2.5	1.5
WHEEL WASHING	1	0.5
WASTE STORAGE BINS – LABOUR CAMP/SITE OFFICES	1.5	0.75
TRAFFIC MANAGEMENT SIGNAGES	1.5	0.15
SAFETY TRAINING TO WORKERS		1
ENVIRONMENT MONITORING & 6 MONTHLY COMPLIANCE REPORT OF EC CONDITIONS		2
<b>TOTAL</b>	<b>26.5</b>	<b>13.2</b>

**Table 3: EMP BUDGET (OPERATION PHASE)**

<b>ENVIRONMENT BUDGET (Operation Stage)</b>		
<b>COMPONENT</b>	<b>CAPITAL COST (Rs in Lacs)</b>	<b>RECURRING COST (Rs in Lacs)/Annum</b>
SEWAGE TREATMENT PLANT ( 375 KLD)	75	20.25
RAIN WATER HARVESTING SYSTEM (03 Nos)	10.5	1.58
SOLID WASTE STORAGE BINS & COMPOSTER (Organic Waste Converter 0.98 tpd)	16.66	11.00
HORTICULTURE DEVELOPMENT (TREE PLANTATION & LANDSCAPING)	1.75	0.44
ROOF TOP SPV PLANT (209KWp)	167	0.00
POND MAINTAINANCE	18.0	
ENVIRONMENT MONITORING & 6 MONTHLY COMPLIANCES OF ENVIRONMENT CLEARANCE CONDITIONS		2.00
<b>TOTAL</b>	<b>288.91</b>	<b>35.26</b>

The discussion was held on Green plan, population, building plan, water calculations, dual plumbing plan, traffic circulation plan, parking plan, air dispersion model, Revised EMP, etc. and certain observations were raised as following:

1. The PP shall submit revised list of proposed species of trees
2. The PP shall increase solar power to 5 % of total power demand.
3. The PP shall maintain 15% of total plot area as landscape in addition with 5% vertical green.

The PP submitted the reply of above said observations vide letter dated 09.07.2022 and also submitted **affidavit in response to the observations.**

The documents were placed before the committee and committee after discussion considered the reply and after deliberations the Committee rated this project with **“Gold Rating”** and was of the unanimous view that this caseshould be recommended to SEIAA for granting Environmental Clearance under EIA Notification dated 14.9.2006 issued by the Ministry of Environment and Forest, Government of India with the following specific and general stipulations:

**A. Specific conditions:-**

1. Sewage shall be treated in the STP based on latest Technology with tertiary treatment i.e.Ultra Filtrationto achieve standards ordered by NGT. The Treated effluent from STP shall be recycled /reused for flushing. DG cooling and Gardening
2. The Project Proponent would devise a monitoring plan to the satisfaction of the State Pollution Control Board so as to continuously monitor the treated waste water being used for flushing in terms of faecal coli forms and other pathogenic bacteria.
3. 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.
4. Separate wet and dry bins must be provided in each unit and at ground level for facilitating segregation of waste. Solid Waste shall be segregated into wet garbage and inert materials. Wet Garbage shall be composted in Organic waste convertor. Adequate area shall be provided for solid waste management within the premises which will include area for segregation, composting. The Inert waste from the project will be sent to dumping site.
5. Traffic management plan as submitted shall be implemented in letter and spirit. Apart, a detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is marinated and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habilitation being carried out or purpose to be carried out by the project or other agencies in this 05kms radius of the site in different scenarios of space and time
6. The PP shall cut existing trees if needed, from the site with the permission of concerned DFO. The PP is required to plant 10 times trees at the project site and compensatory tree plantation will be done @1:10. A minimum of 1 tree for every 80sqm of land should be planted and maintained. The Existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping. As proposed 2149.5 sqm(15% plot area)shall be provided for green area development.

7. 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.
8. In basements adequate ventilation/Exhaust fans shall be provided so that the polluted basement air shall be recharged from the cutouts located at the ground level.
9. The PP shall install the Eco-Friendly Green Transformer based on ester oil to reduce the carbon footprint
10. Consent to establish/operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of pollution) Act, 1981 and the Water (Prevention and control of pollution) Act, 1974.
11. The Approval of the Competent Authority shall be obtained for structural safety of building code due to earthquakes, adequacy of firefighting equipments etc. as per National Building Code including protection measures from lightning etc.
12. The PP shall not carry any construction above or below the Revenue Rasta.
13. The PP shall not carry any construction below the HT Line passing through the project.
14. The PP shall increase solar power to 5% of total power demand.
15. The PP shall provide electric charging points for charging of electric vehicles.
16. The PP shall obtain the Fire NOC from the Competent Authority before taking occupation of the building.
17. The PP shall not give occupation or possession before the water supply and sewage connection permitted by the competent authority.
18. The PP shall not give occupation or possession before the electricity connection permitted by the competent Authority.
19. The PP shall obtain the permission regarding withdrawal of ground water from CGWA before the start of the project and also obtained the CTO from HSPCB after the approval from CGWA.
20. The PP shall carry out the quarterly awareness programs for the stakeholders of the commercial colony/project.
21. 03 Rain Water Harvesting pits shall be provided for rainwater usages as per the CGWB norms.
22. The PP shall install Digital water level recorder for monitoring the water recharge and carry out quarterly maintenance and cleaning of 03 RWH pits
23. The PP shall ensure the compliance of provisions of Plastic Waste Management (Amendment) Rules, 2022 relevant for the project.
24. The PP may provide electric charging stations to facilitate electric vehicle commuters.
25. The PP shall provide the Anti smog gun mounted on truck in the project for suppression of dust during construction and operational phase and shall use the treated water, if feasible.
26. The PP shall take all preventive measures including water sprinkles to control dust during construction and operational phase.
27. The PP shall provide the mechanical ladder for use in case of emergency.
28. Any change in stipulations of EC will lead to Environment Clearance void-ab-initio and PP will have to seek fresh Environment Clearance.

**B. Statutory compliance:**

- [1] The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority for ground coverage, FAR and should be in accordance with zoning plan approved by Competent Authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.
- [2] 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 lightning etc.
- [3] 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.
- [4] The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.

- [5] 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 Haryana State Pollution Control Board.
- [6] The project proponent shall obtain the necessary permission for drawl of ground water /surface water required for the project from the competent authority.
- [7] 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.
- [8] 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.
- [9] The provisions of the Solid Waste (Management) Rules, 2016, e-Waste (Management) Rules, 2016, and the Plastics Waste (Management) Rules, 2016 shall be followed.
- [10] The project proponent shall follow the ECBC Act/ECBC-Rules prescribed by Bureau of Energy Efficiency, Ministry of Power strictly in addition of bylaws of the State Government.

#### **I Air Quality Monitoring and Preservation**

- i) Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.
- ii) A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.
- iii) The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM25) 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 ultra low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board
- v) Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murrum and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
- vi) Sand, murrum, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.
- vii) Wet jet shall be provided for grinding and stone cutting.
- viii) Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
- ix) All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules 2016.
- x) The diesel generator sets to be used during construction phase shall be ultra 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. Ultra 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.

## II 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-swailes, 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. The per capita supply should adhere to NBC 2016 and CGWA Notification dated 12.12.2018.
- iv) The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.
- v) A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.
- vi) At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.
- vii) Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.
- viii) Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.
- ix) Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.
- x) Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- xi) The local bye-law provisions on rain water harvesting should be followed. If local byelaw 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 pits 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.

### **III Noise Monitoring and Prevention**

- i) Ambient noise levels shall conform to residential area/commercial area 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.

### **IV Energy Conservation Measures**

- i) Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency as per ECBC Act, 2017 read with ECBC Rules, 2018 shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC also which is in no case should be less than 25% as prescribed.
- 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 R &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.
- vii) The PP will submit report indicating compliance of each parameter of ECBC requirement and submit quantification saving report for each component.



## **V 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 neighboring 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 Converter within the premises with a minimum capacity of 0.5 kg /person/day must be installed. Leaves to be put in earmarked pits for converting them into compost to be used as manure.
- v) All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.
- vi) Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.
- vii) Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials.
- viii) Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.
- ix) Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition 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.

## **VI 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 (5' tall) for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.
- iii) Where the trees need to be cut with prior permission from the concerned local Authority, compensatory plantation in the ratio of 1:10 (i.e. planting of 10 trees for every 1 tree that is cut) shall be done and maintained. Plantations to be ensured species (cut) to species (planted). Area for green belt development shall be provided as per the details provided in the project document.
- iv) Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.

## **VII 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.

### **VIII 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.

### **IX Corporate Environment Responsibility**

- i) The project proponent shall comply with the provisions contained in this Ministry's OM vide F. No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
- ii) The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/ deviation/ violation of the environmental/ forest/ wildlife norms/ conditions. The company shall have defined system of reporting infringements/ deviation/ violation of the environmental/ forest/ wildlife norms/ conditions and/ or shareholders/ stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii) A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv) Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

**X Miscellaneous**

- i) The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed.
- ii) The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii) The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv) The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- v) The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vi) The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- vii) The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- viii) The project proponent shall abide by all the commitments and recommendations made in the form-IA, Conceptual Plan and also that during their presentation to the Expert Appraisal Committee.
- ix) No further expansion or modifications in the plan shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC)/SEIAA, Haryana. The project proponent shall seek fresh environmental clearance under EIA notification 2006 if at any stage there is change of area of this project.
- x) Any change in planning of the approved plan will leads to Environment Clearance void-ab-initio and PP will have to seek fresh Environment Clearance
- xi) The PP should give unambiguous affidavit giving land promoters in accordance with your ownership and possession of land legal the case referred for Environment Clearance to SEIAA.
- xii) Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xiii) The Ministry/SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiv) The Ministry/SEIAA reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xv) The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xvi) The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

**244.15 EC for proposed Commercial complex on land admeasuring 5344.61 situated at site/ Building No.1, Sector-25, Urban estate Gurgaon-II, Gurugram by M/s LekhBuildtech Private Limited**

**Project Proponent :Mr. Satyapal Singh (Authorized Signatory)**  
**Consultant : Ind Tech House Consult**

The project was submitted to the SEIAA, Haryana vide online proposal No.SIA/HR/MIS/279528/2022 dated 22.06.2022 as per check list approved by the SEIAA/SEAC for obtaining Environmental Clearance under Category 8(a) of EIA Notification 14.09.2006.

The case was again taken up in 244<sup>th</sup> meeting of SEAC held on 08.07.2022. The PP and consultant presented the case before the committee as under:

- The Gross Plot area is 5344.61 m2. The Built-up area of the project is 22794.810 m2.
- Plot was allotted by Haryana ShahriVikasPradikaran on 19.05.2022.
- Max No of Floors will be 2B+G+MZ+4

The details of the project, as per the documents submitted by the project proponent, and also as informed during the presentation in the meeting are as under:

**Table 1 Basic Details**

<b>EC for proposed Commercial complex on land admeasuring 5344.61 situated at site/ Building No.1, Sector-25, Urban estate Gurgaon-II, Gurugram by M/s LekhBuildtech Private Limited</b>		
<b>Sr. No.</b>	<b>Particulars</b>	
1.	Online Proposal Number	SIA/HR/MIS/279528/2022
2.	Latitude	28° 28' 46.69"N
3.	Longitude	77° 04' 35.18"E
4.	Plot Area	5344.61 Sqm
5.	Proposed Built Up Area	22794.810 sqm
6.	Max Height of Building (up to terrace)	25.75 M
7.	Max No of Floors	2B+G+MZ+4
8.	Cost of Project	219 Cr
9.	Total Green Area	801.69 sqm
10.	Rain Water Harvesting Pits (with size)	2 Nos.
11.	STP Capacity	150 KLD
12.	Total Parking	200 ECS
13.	Organic Waste Converter	0.38 TPD
14.	Power Requirement	1620 KW
15.	Power Backup	1500 KVA (1x1000 +1x500)
16.	Total Water Requirement	231 KLD
17.	Fresh Water Requirement	97 KLD
18.	Treated Water	102 KLD
19.	Waste Water Generated	114 KLD
20.	Solid Waste Generated	0.38 TPD
21.	Biodegradable Waste	0.23 TPD
22.	Basement	Two basement
23.	Stories	2B+G+MZ+4
24.	Total Cost of the project:	i) Land Cost
		ii) Construction Cost
		219 Cr.

25.	Construction Phase:	Power Back-up	125 KVA
		Water Requirement & Source	Authorized treated water tanker supply
		STP (Modular)	Yes
		Anti-Smoke Gun	Yes

**Table 2: EMP BUDGET (CONSTRUCTION PHASE)**

Environment Budget (Construction Phase)		
COMPONENT	CAPITAL COST (Rs in Lacs)	RECURRING COST (Rs in Lacs)/Annum
BARRICADING OF CONSTRUCTION SITE	7.5	1.65
ANTI – SMOG GUN WITH COMPLETE ASSEMBLY	5	2.4
DUST MITIGATION MEASURES	1.5	0.25
SITE SANITATION	2	1
MOBILE STP	3	1
DISINFECTION/ PEST CONTROL		0.5
LABOUR HEALTH CHECK UP & FIRST AID FACILITY	1	0.5
LABOR WELFARE (canteen, 117rèche, safe access road – water power, cooking kerosene/gas)	2.5	1.5
WHEEL WASHING	1	0.5
WASTE STORAGE BINS – LABOUR CAMP/SITE OFFICES	1.5	0.75
TRAFFIC MANAGEMENT SIGNAGES	1.5	0.15
SAFETY TRAINING TO WORKERS		1
ENVIRONMENT MONITORING & 6 MONTHLY COMPLIANCE REPORT OF EC CONDITIONS		2
<b>TOTAL</b>	<b>26.5</b>	<b>13.2</b>

**Table 3: EMP BUDGET (OPERATION PHASE)**

COMPONENT	CAPITAL COST (Rs in Lacs)	RECURRING COST (Rs in Lacs)/Annum
SEWAGE TREATMENT PLANT ( 150 KLD)	30	8.10
RAIN WATER HARVESTING SYSTEM (02 Nos)	7	1.05
SOLID WASTE STORAGE BINS & COMPOSTER (Organic Waste Converter 0.38 tpd)	6.46	4.26
HORTICULTURE DEVELOPMENT (TREE PLANTATION & LANDSCAPING)	0.66	0.16
ROOF TOP SPV PLANT (81KWp)	65	0.00
POND MAINTAINANCE	18.0	
ENVIRONMENT MONITORING & 6 MONTHLY COMPLIANCES OF ENVIRONMENT CLEARANCE CONDITIONS		2.00
<b>TOTAL</b>	<b>127.12</b>	<b>15.58</b>

The discussion was held on Green plan, population, building plan, water calculations, dual plumbing plan, traffic circulation plan, parking plan, air dispersion model, EMP, etc. and certain observations were raised as following:

1. The PP shall submit revised list of proposed species of trees
2. The PP shall increase solar to 5 % of total power demand.

The PP submitted the reply of above said observations vide letter dated 09.07.2022 and also attached affidavit in response to the observations. The documents were placed before the committee and committee after discussion considered the reply and after deliberations the Committee rated this project with “**Gold Rating**” and was of the unanimous view that this case should be recommended to SEIAA for granting Environmental Clearance under EIA Notification dated 14.9.2006 issued by the Ministry of Environment and Forest, Government of India with the following specific and general stipulations:

**A. Specific conditions:-**

1. Sewage shall be treated in the STP based on latest Technology with tertiary treatment i.e.Ultra Filtration to achieve standards ordered by NGT. The Treated effluent from STP shall be recycled /reused for flushing. DG cooling and Gardening
2. The Project Proponent would devise a monitoring plan to the satisfaction of the State Pollution Control Board so as to continuously monitor the treated waste water being used for flushing in terms of faecal coli forms and other pathogenic bacteria.
3. 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.
4. Separate wet and dry bins must be provided in each unit and at ground level for facilitating segregation of waste. Solid Waste shall be segregated into wet garbage and inert materials. Wet Garbage shall be composted in Organic waste convertor. Adequate area shall be provided for solid waste management within the premises which will include area for segregation, composting. The Inert waste from the project will be sent to dumping site.
5. Traffic management plan as submitted shall be implemented in letter and spirit. Apart, a detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is marinated and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habilitation being carried out or purpose to be carried out by the project or other agencies in this 05kms radius of the site in different scenarios of space and time
6. The PP shall cut existing trees if needed, from the site with the permission of concerned DFO. The PP is required to plant 10 times trees at the project site and compensatory tree plantation will be done @1:10. 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. As proposed 2149.5 sqm (15% plot area) shall be provided for green area development.
7. 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.

8. In basements adequate ventilation/Exhaust fans shall be provided so that the polluted basement air shall be recharged from the cutouts located at the ground level.
9. The PP shall install the Eco Friendly Green Transformer based on ester oil to reduce the carbon footprint
10. Consent to establish/operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of pollution) Act, 1981 and the Water (Prevention and control of pollution) Act, 1974.
11. The Approval of the Competent Authority shall be obtained for structural safety of building code due to earthquakes, adequacy of fire fighting equipments etc. as per National Building Code including protection measures from lightening etc.
12. The PP shall not carry any construction above or below the Revenue Rasta.
13. The PP shall not carry any construction below the HT Line passing through the project.
14. The PP shall increase solar power to 5% of total power demand.
15. The PP shall provide electric charging points for charging of electric vehicles.
16. The PP shall obtain the Fire NOC from the Competent Authority before taking occupation of the building.
17. The PP shall not give occupation or possession before the water supply and sewage connection permitted by the competent authority.
18. The PP shall not give occupation or possession before the electricity connection permitted by the competent Authority.
19. The PP shall obtain the permission regarding withdrawal of ground water from CGWA before the start of the project and also obtained the CTO from HSPCB after the approval from CGWA.
20. The PP shall carry out the quarterly awareness programs for the stakeholders of the commercial colony/project.
21. 03 Rain Water Harvesting pits shall be provided for rainwater usages as per the CGWB norms.
22. The PP shall install Digital water level recorder for monitoring the water recharge and carry out quarterly maintenance and cleaning of 03 RWH pits
23. The PP shall ensure the compliance of provisions of Plastic Waste Management (Amendment) Rules, 2022 relevant for the project.
24. The PP may provide electric charging stations to facilitate electric vehicle commuters.
25. The PP shall provide the Anti smog gun mounted on truck in the project for suppression of dust during construction and operational phase and shall use the treated water, if feasible.
26. The PP shall take all preventive measures including water sprinkles to control dust during construction and operational phase.
27. The PP shall provide the mechanical ladder for use in case of emergency.
28. Any change in stipulations of EC will lead to Environment Clearance void-ab-initio and PP will have to seek fresh Environment Clearance.

**B. Statutory compliance:**

- [1] The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority for ground coverage, FAR and should be in accordance with zoning plan approved by Competent Authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.
- [2] 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.
- [3] 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.
- [4] The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- [5] 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 Haryana State Pollution Control Board.

- [6] The project proponent shall obtain the necessary permission for drawl of ground water /surface water required for the project from the competent authority.
- [7] 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.
- [8] 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.
- [9] The provisions of the Solid Waste (Management) Rules, 2016, e-Waste (Management) Rules, 2016, and the Plastics Waste (Management) Rules, 2016 shall be followed.
- [10] The project proponent shall follow the ECBC Act/ECBC-Rules prescribed by Bureau of Energy Efficiency, Ministry of Power strictly in addition of bylaws of the State Government.

## **I Air Quality Monitoring and Preservation**

1. 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.
2. A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.
3. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM25) covering upwind and downwind directions during the construction period.
4. 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 ultra low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board
5. Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murrum and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
6. Sand, murrum, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.
7. Wet jet shall be provided for grinding and stone cutting.
8. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
9. 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 Rules 2016.
10. The diesel generator sets to be used during construction phase shall be ultra low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.
11. 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. Ultra 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.
12. For indoor air quality the ventilation provisions as per National Building Code of India.

## **II 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. The per capita supply should adhere to NBC 2016 and CGWA Notification dated 12.12.2018.
  - iv. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.
  - v. A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.
  - vi. At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.
  - vii. Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.
  - viii. Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.
  - ix. Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.
  - x. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
  - xi. The local bye-law provisions on rain water harvesting should be followed. If local byelaw 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 pits 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.

### **III Noise Monitoring and Prevention**

- i. Ambient noise levels shall conform to residential area/commercial area 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.

### **IV Energy Conservation Measures**

- i. Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency as per ECBC Act, 2017 read with ECBC Rules, 2018 shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC also which is in no case should be less than 25% as prescribed.
- 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 R &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.
- vii. The PP will submit report indicating compliance of each parameter of ECBC requirement and submit quantification saving report for each component.

### **V 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 neighboring 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 Converter within the premises with a minimum capacity of 0.5 kg /person/day must be installed. Leaves to be put in earmarked pits for converting them into compost to be used as manure.
  - v. All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.
  - vi. Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.
  - vii. Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials.
  - viii. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.
  - ix. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition 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.

## **VI Green Cover**

1. 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).
2. A minimum of 1 tree (5' tall) 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.
3. 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.
4. 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.

## **VII Transport**

- a. 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.
  - i. Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
  - ii. Traffic calming measures.

- iii. Proper design of entry and exit points.
- iv. Parking norms as per local regulation.
- b. 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.
- c. 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.

### **VIII 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.

### **IX Corporate Environment Responsibility**

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F. No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/ deviation/ violation of the environmental/ forest/ wildlife norms/ conditions. The company shall have defined system of reporting infringements/ deviation/ violation of the environmental/ forest/ wildlife norms/ conditions and/ or shareholders/ stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

**X Miscellaneous**

- i. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- v. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vi. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- vii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- viii. The project proponent shall abide by all the commitments and recommendations made in the form-IA, Conceptual Plan and also that during their presentation to the Expert Appraisal Committee.
- ix. No further expansion or modifications in the plan shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC)/SEIAA, Haryana. The project proponent shall seek fresh environmental clearance under EIA notification 2006 if at any stage there is change of area of this project.
- x. Any change in planning of the approved plan will leads to Environment Clearance void-ab-initio and PP will have to seek fresh Environment Clearance
- xi. The PP should give unambiguous affidavit giving land promoters in accordance with your ownership and possession of land legal the case referred for Environment Clearance to SEIAA.
- xii. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xiii. The Ministry/SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiv. The Ministry/SEIAA reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xvi. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

**244.16** EC for proposed expansion of Affordable Residential Plotted Colony Project under DDJAY-2016 located at Village- Dhunela, Sector-33, Tehsil- Sohna & District- Gurugram Haryana having total built-up area 73592.53 sqm. i.e. it falls under Category 8(a) as per EIA notification 2006 and its amendment by M/s Global Horizon Holdings Private Limited

**Project Proponent : Shri Harshit Singla**  
**Consultant : Oceao Enviro Management Solutions (India) Pvt. Ltd.**

The project was submitted to the SEIAA, Haryana vide online proposal No. SIA/HR/MIS/279337/2022 dated 22.06.2022 as per check list approved by the SEIAA/SEAC for obtaining Environmental Clearance under Category 8(a) of EIA Notification 14.09.2006. The PP submitted scrutiny fee of Rs.1,50,000/- vide DD no. 001837 dated 29.04.2022

The case was taken up in 244th meeting of SEAC, Haryana held on 08.07.2022. The PP presented the case before the committee:

The details of the project as per the documents submitted by the project proponent and also as informed during the presentation in the meeting are as under:-

<b>Name of the Project: Affordable Residential Plotted Colony under DDJAY by M/s Global Horizon Holdings Private Limited</b>				
<b>Sr. No.</b>	<b>Particulars</b>	<b>Existing</b>	<b>Expansion</b>	<b>Total Area (in M<sup>2</sup>)</b>
	<b>Online Project Proposal Number</b>	<b>SIA/HR/MIS/279337/2022</b>		
1.	Latitude	28° 17' 02.82" N	28° 17' 07.42" N	
2.	Longitude	77° 04' 14.48" E	77° 04' 06.80" E	
3.	Plot Area	31944.872 sqm	1037.006 sqm	32981.878 sqm
4.	Net Plot Area	31944.872 sqm	1037.006 sqm	32981.878 sqm
5.	Proposed Ground Coverage under Commercial	471.658 sqm	-	471.658 sqm
6.	Proposed FAR under Plots	11506.500 sqm (263.99%)	32333.050 sqm (263.99%)	43839.550 sqm (263.99%)
	Proposed FAR under Commercial	1414.975 sqm (130.39%)	-	1414.975 sqm (130.39%)
	Total FAR	12921.475 sqm	32333.050 sqm	45254.525 sqm
7.	Non-FAR Area	3656.205 sqm	24681.80 sqm	28338.05 sqm
8.	Total Built Up area	16577.68 Sqm	57014.85 Sqm	73592.53 sqm
9.	Total Green Area with Percentage	3178.48 sqm	2682.30 sqm	5860.78 sqm (17.77%)
10.	Rainwater Harvesting Pits	04 Nos	04 Nos	08 Nos
11.	STP Capacity	70 KLD	280 KLD	350 KLD
12.	Total Parking	139 ECS	428 ECS	567 ECS
13.	Organic Waste Converter	-	01 Nos	01 Nos
14.	Maximum Height of the Building (m)	15.00 m	15.00 m	15.00 m
15.	Power Requirement	739.70 KW	1900 KW	2639.70 KW
16.	Power Backup	1 X 750 KVA	1 X 250 KVA	1 X 250 KVA
			2 X 750 KVA	3 X 750 KVA
17.	Total Water Requirement	79.50 KLD	276.50 KLD	356 KLD
18.	Domestic Water Requirement	48 KLD	167 KLD	215 KLD

19.	Fresh Water Requirement	48 KLD	167 KLD	215 KLD	
20.	Treated Water	31.50 KLD	109.50 KLD	141 KLD	
21.	Wastewater Generated	63.60 KLD	220.40 KLD	284 KLD	
22.	Solid Waste Generated	400 kg/day	861 kg/day	1261 kg/day	
23.	Biodegradable Waste	240 kg/day	516.60 kg/day	756.60 kg/day	
24.	Number of Towers	01 Nos Commercial	01 Nos Commercial	01 Nos Commercial	
25.	Dwelling Units/ EWS	140 DU	368 DU	508 DU	
26.	Salable Units	35 Plots	92 Plots	127 Plots	
27.	Basement	706.15 sqm	-	706.15 sqm	
28.	Community Center	NA	NA	NA	
29.	Stories	S + 4	S + 4	S + 4	
30.	R+U Value of Material used (Glass)	U-Value: 3.3W/m <sup>2</sup> °C (0.588 Btu/hr.ft <sup>2</sup> °F) Solar heat gain coefficient: 0.29 R-Value: 3.5 m <sup>2</sup> -°C/W			
31.	Total Cost of the project:	Land Cost	33.62	-	33.62
		Construction Cost	15.08	41.30	56.38
		Total	48.70	41.30	90.00
32.	CER	NA	NA	NA	
33.	EMP Cost/Budget	-	181 lacs	181 lacs	
34.	Incremental Load in respect of:	PM 2.5	65.20	0.08	65.28
		PM 10	115.60	1.04	116.64
		SO <sub>2</sub>	10.80	3.69	14.49
		NO <sub>2</sub>	24.50	14.01	38.51
		CO	0.37	1.68	2.05
35.	Construction Phase:	Power Back-up	01 DG Set of 750 KVA		
		Water Requirement & Source	10 KLD Private Water Tanker for domestic		
		STP (Modular)	5 KLD		

### EMP BUDGET

Description	During Construction Phase		During Operation Phase		
	Capital Cost (Lakhs)	Recurring Cost (Lakhs/Year)	Capital Cost (Lakhs)		Recurring Cost (Lakhs/Year)
Water for Dust suppression	5.50	2.00	Wastewater Management(STP)	100.00	10.00
Wastewater Management	1.50	1.00	Solid Waste Management	15.00	1.50
Air, Noise, Soil, Water Monitoring	0.00	1.00	Green Belt Development	20.00	2.00
PPE for workers & Health Care	1.50	0.5	Monitoring for Air, Water, Noise & Soil	0.00	1.00
Green Belt Development	5.50	0.5	RWH Pits	32.00	3.00
<b>Total</b>	<b>Rs 14.00</b>	<b>Rs. 5.0</b>		<b>Rs. 167.00</b>	<b>Rs. 17.5</b>

The discussion was held on building plan approval of different layout plots, Approved Zoning Plan, Consent to Establish for existing part, Contour Map, Location and Capacity of STP, Dual pipe plumbing, EMP Budget, structural stability, undertaking for discharge of excess treated water and certain observations were raised which were replied by the PP vide letter dated 09.07.2022 and also submitted affidavit in response to the observations. The reply was considered by the committee. The PP submitted all building plan, approval of different plots, undertaking for no discharge of excess treated water without prior permission from HSVP, undertaking for responsibility of structural stability, undertaking for construction done in existing part for which Consent to Establish has been obtained from HSPCB and revised tangible EMP budget. The PP submitted the revised cost of 181 Lakhs in the EMP budget.

After discussions and deliberations, the Committee rated this project with “**Gold Rating**” and was of the unanimous view that this case should be recommended to the SEIAA for granting Environmental Clearance under EIA Notification dated 14.09.2006 issued by the Ministry of Environment and Forest, Government of India with the following specific and general stipulations:

**A. Specific conditions:-**

1. Sewage shall be treated in the STP based on latest Technology to achieve standards ordered by NGT. The Treated effluent from STP shall be recycled /reused for flushing. DG cooling and Gardening
2. The Project Proponent would devise a monitoring plan to the satisfaction of the State Pollution Control Board so as to continuously monitor the treated waste water being used for flushing in terms of faecal coli forms and other pathogenic bacteria.
3. The PP shall ensure that total 2% of the cost of project shall be spent on EMP Budget. However, the amount and component shown in EMP table above shall also be included for the purpose of 2% amount. The EMP cost on Socio Economic activities shall be used before the commencement of the project & EMP recurring inside the project shall be implemented throughout the operation of the project. The PP shall establish Environment monitoring cell as per documents submitted.
4. The project proponent shall upload the status of compliance of the basic details (given in above tables), stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
5. 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.
6. Separate wet and dry bins must be provided in each unit and at ground level for facilitating segregation of waste. Solid Waste shall be segregated into wet garbage and inert materials. Wet Garbage shall be composted in Organic waste convertor. Adequate area shall be provided for solid waste management within the premises which will include area for segregation, composting. The Inert waste from the project will be sent to solid waste dumping site through authorized vender.
7. Traffic management plan as submitted shall be implemented in letter and spirit. Apart, a detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is marinated and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habilitation being carried out or purpose 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



8. No tree cutting has been proposed in the instant project. A minimum of 1 tree for every 80sqm of land should be planted and maintained. The Existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping. As proposed 5860.78 sqm (17.77%) shall be provided for Green Area development for whole project, excluding plot areas. The project has 7 existing trees which shall be transplanted or cut with the permission of DFO and plant 10 trees for each cutting o tree.
9. 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.
10. Consent to establish/operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of pollution) Act, 1981 and the Water (Prevention and control of pollution) Act, 1974.
11. The Approval of the Competent Authority shall be obtained for structural safety of building code due to earthquakes, adequacy of fire fighting equipments etc. as per National Building Code including protection measures from lightening etc.
12. The PP shall obtain the Fire NOC from the Competent Authority before taking the occupation of the building.
13. The PP shall install the Eco Friendly Green Transformer based on ester oil to reduce the carbon footprint. The PP shall shift to gas based generator set when the gas is available. The PP shall install APCM for the DG set. The PP shall reduce the SO<sub>2</sub> load by 30% if HSD is used. The DG sets will be operated for maximum 04 hours during power failure through Executing Agency
14. The PP shall use 3% as solar power of total power demand.
15. The PP shall not give occupation or possession before the water supply and sewage connection permitted by the competent authority.
16. The PP shall not give occupation or possession before the electricity connection permitted by the competent Authority.
17. The PP shall obtain the permission regarding withdrawal of ground water, if any from HWRA/CGWA before the start of the project and also obtained the CTO from HSPCB after the approval from HWRA/CGWA.
18. The PP shall carry out the quarterly awareness programs for the stakeholders of the project.
19. 08 Rain water harvesting recharge pits shall be provided for ground water recharging as per the CGWB norms
20. The PP shall install Digital water level recorder for monitoring the water recharge and carry out quarterly maintenance and cleaning of 08 RWH pits
21. The PP shall ensure the compliance of provisions of Plastic Waste Management (Amendment) Rules, 2022 relevant for the project.
22. The PP may provide electric charging stations to facilitate electric vehicle commuters.
23. The PP shall provide the Anti smog gun mounted on vehicle in the project for suppression of dust during construction & operational phase and shall use the treated water, if feasible.
24. The PP shall take all preventive measures including water sprinkles to control dust during construction and operational phase.
25. Any change in stipulations of EC will lead to Environment Clearance void-ab-initio and PP will have to seek fresh Environment Clearance.
26. The PP shall get agreement with individual plot holder to plant one tree in each plot.

**B. Statutory Compliance:**

- [1] The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority for ground coverage, FAR and should be in accordance with zoning plan approved by Competent Authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.
- [2] 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.

- [3] 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.
- [4] The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- [5] 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 Haryana State Pollution Control Board.
- [6] The project proponent shall obtain the necessary permission for drawl of ground water /surface water required for the project from the competent authority.
- [7] 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.
- [8] 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.
- [9] The provisions of the Solid Waste (Management) Rules, 2016, e-Waste (Management) Rules, 2016, the Plastics Waste (Management) Rules, 2016 and Batteries waste (Management Handling Rules 2001 as amended in 2020) shall be followed.
- [10] The project proponent shall follow the ECBC Act/ECBC-Rules prescribed by Bureau of Energy Efficiency, Ministry of Power strictly in addition of bylaws of the State Government.

#### **I Air Quality Monitoring and Preservation**

1. 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.
2. A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.
3. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM2.5) covering upwind and downwind directions during the construction period.
4. 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 ultra lowsulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board
5. Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murrum and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
6. Sand, murrum, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.
7. Wet jet shall be provided for grinding and stone cutting.
8. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
9. 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 Rules 2016.
10. The diesel generator sets to be used during construction phase shall be ultra lowsulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.
11. 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. Ultra 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.
12. For indoor air quality the ventilation provisions as per National Building Code of India.

## **II Water Quality Monitoring and Preservation**

1. 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.
2. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.
3. Total fresh water use shall not exceed the proposed requirement as provided in the project details. The per capita supply should adhere to NBC 2016 and CGWA Notification dated 12.12.2018.
4. 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.
5. 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.
6. At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.
7. 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.
8. 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.
9. 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.
10. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
11. The local bye-law provisions on rain water harvesting should be followed. If local byelaw 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 pits shall be provided for ground water recharging as per the CGWB norms.
12. 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.
13. All recharge should be limited to shallow aquifer.
14. No ground water shall be used during construction phase of the project.
15. 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.
16. 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.
17. 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.
18. No sewage or untreated effluent water would be discharged through storm water drains.

19. 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.
20. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.
21. 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.

### **III Noise Monitoring and Prevention**

1. Ambient noise levels shall conform to residential area/commercial area 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.
2. 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.
3. 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 Energy Conservation Measures**

1. Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency as per ECBC Act, 2017 read with ECBC Rules, 2018 shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC also which is in no case should be less than 25% as prescribed.
2. Outdoor and common area lighting shall be LED.
3. 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 R & U-values shall be as per ECBC specifications.
4. 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.
5. 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.
6. 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.
7. The PP will submit report indicating compliance of each parameter of ECBC requirement and submit quantification saving report for each component.

## **V Waste Management**

1. 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.
2. Disposal of muck during construction phase shall not create any adverse effect on the neighboring 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.
3. 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.
4. Organic Waste Converter within the premises with a minimum capacity of 0.5 kg /person/day must be installed. Leaves to be put in earmarked pits for converting them into compost to be used as manure.
5. All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.
6. Any hazardous waste generated during construction phase, shall be disposed of as per applicable rules and norms with necessary approvals of the State Pollution Control Board.
7. 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.
8. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.
9. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Rules, 2016.
10. 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.

## **VI Green Cover**

1. 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).
2. A minimum of 1 tree (5' tall) 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.
3. 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.
4. 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.

## **VII Transport**

1. 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.
2. 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.
  3. 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.

### **VIII Human Health Issues**

1. 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.
2. For indoor air quality the ventilation provisions as per National Building Code of India.
3. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
4. 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.
5. Occupational health surveillance of the workers shall be done on a regular basis.
6. A First Aid Room shall be provided in the project both during construction and operations of the project.

### **IX Corporate Environment Responsibility**

1. The project proponent shall comply with the provisions of CER, as applicable.
2. 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.
3. 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 to the head of the organization.
4. 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.

### **X Miscellaneous**

1. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days

indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed.

2. 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.
3. 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.
4. 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.
5. 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.
6. 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.
7. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
8. The project proponent shall abide by all the commitments and recommendations made in the form-IA, Conceptual Plan and also that during their presentation to the Expert Appraisal Committee.
9. No further expansion or modifications in the plan shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC)/SEIAA, Haryana. The project proponent shall seek fresh environmental clearance under EIA notification 2006 if at any stage there is change of area of this project.
10. Any change in planning of the approved plan will leads to Environment Clearance void-ab-initio and PP will have to seek fresh Environment Clearance
11. The PP should give unambiguous affidavit giving land promoters in accordance with your ownership and possession of land legal the case referred for Environment Clearance to SEIAA.
12. 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.
13. The Ministry/SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
14. The Ministry/SEIAA reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
15. 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.
16. 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.

**244.17 EC for for proposed Expansion of proposed Commercial Colony of area measuring 7.443 cares in sector-74, Gurugram, Haryana by M/s Prompt Engineering Pvt. Ltd.**

**Project Proponent : Sh. Satya Pal Singh**  
**Consultant : Ind Tech House Consult**

The project was submitted to the SEIAA, Haryana vide online proposal no. SIA/HR/MIS/78733/2021 dated 22.06.2022. The project proponent submitted the case to the SEIAA as per check list approved by the SEIAA/SEAC for EC under Category 8(b) of EIA Notification 14.09.2006.

The case was again taken up in 244<sup>th</sup> meeting of SEAC held on 08.07.2022. The PP and consultant presented the case before the committee as under:

- In the absence of SEIAA-Haryana, application for approval of ToR for this project was submitted to MOEF&CC but EAC quoted as under:  
*“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 to 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”.*
- As directed by EAC- Infra 2 (MoEF&CC), they have applied for Amendment in Environment Clearance to SEIAA, Haryana vide proposal no. SIA/HR/MIS/266823/2022 dated 8<sup>th</sup> April 202 and EDS was generated by SEIAA, Haryana and directed us to apply the proposal in expansion category
- The proposal was applied in Expansion category and Terms of Reference was granted on 06.06.2022 by SEIAA, Haryana.
- The environment clearance [expansion] was obtained vide EC Identification No.EC21B039HR175893 on 22/11/2021 for plot area 30123.78 m<sup>2</sup> and built-up area 166066.108 m<sup>2</sup> respectively.
- The proposed expansion is due to 26.33 % extra purchasable FAR under TDR policy which will be used in Service Apartment Block only.
- 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.
- Certified Compliance Report has been obtained vide F. No. 16-57/2018/IRO/207-208-209 dated 01.04.2022 and ATR was submitted on 1<sup>st</sup> April 2022.

The details of the project, as per the documents submitted by the project proponent, and also as informed during the presentation in the meeting are as under:

<b>Name of Project: EC for for proposed Expansion of proposed Commercial Colony of area measuring 7.443 Hac. In Sector-74, Gurugram, Haryana by M/s Prompt Engineering Pvt. Ltd.</b>					
<b>Sl. No.</b>	<b>Description</b>	<b>Existing as per EC Letter</b>	<b>Expansion</b>		<b>Unit</b>
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	M
5	Max No of Floors	3B+LG+G+UG+30	-	3B+LG+G+UG+30	No.
6	Cost of Project	335	14	349	CR
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 & other Non-FAR areas)	57,027.53	-	57,027.53	SQMT
16	Proposed Total Built Up Area	166066.108	+ 7939.948	1,74,006.056	SQMT
17	Total Water Requirement	1123	-	1123	KLD
18	Fresh water requirement	451	-	451	KLD
19	Treated Water Requirement	672	-	672	KLD
20	Waste water Generation	634	-	634	KLD
21	Proposed Capacity of STP	760	-	760	KLD
23	Treated Water Recycled	672	-	672	KLD
25	Water to be discharged in Municipal Sewer	Zero	-	Zero	KLD
26	No of RWH of Pits Proposed	8	-	8	No.
27	Total Parking Required as / Building Bye Laws	1434	-	1434	ECS
28	Proposed Total Parking	1890	-	1890	ECS
29	Parking in Basements	1890	-	1890	ECS
30	Proposed Green Area	6040	-	6040	SQMT
31	Total Solid Waste Generation	4.47	-	4.47	TPD
32	Organic waste	2.46	-	2.46	TPD
33	Quantity of E-Waste Generation- Kg/Day	8.38	-	8.38	KG/DAY
34	Quantity of Hazardous waste Generation	10.27	-	10.27	LPD
35	Quantity of Sludge Generated from STP	25	-	25	KG/DAY
36	Total Power Requirement	8760	-	8760	KW
37	DG set backup	10530	-	10530	KVA
38	No of DG Sets	8	-	8	No.

**Table 2: ENVIRONMENT BUDGET (OPERATIONAL PHASE)**

COMPONENT	CAPITAL COST (Rs in Lacs)	RECURRING COST (Rs in Lacs)/Annum
SEWAGE TREATMENT PLANT (760 KLD)	60	30
RAIN WATER HARVESTING SYSTEM ( 8 Nos)	61	8.25
SOLID WASTE COMPOSTER (Organic Waste Converter 2.46 tpd)	37	14
HORTICULTURE DEVELOPMENT	30	10
ROOF TOP SPV PLANT	36	1
ENVIRONMENT MONITORING		2
<b>TOTAL</b>	<b>223</b>	<b>65.9</b>

The discussion was held on Green plan, building plan, water calculations, dual plumbing plan, traffic circulation plan, parking plan, air dispersion model, Revised EMP, etc. and committee after discussion considered the reply and after deliberations the Committee rated this project with “**Gold Rating**” and was of the unanimous view that this case should be recommended to SEIAA for granting Environmental Clearance under EIA Notification dated 14.9.2006 issued by the Ministry of Environment and Forest, Government of India with the following specific and general stipulations:

**A. Specific conditions:-**

1. Sewage shall be treated in the STP based on latest Technology with tertiary treatment i.e.Ultra Filtration to achieve standards ordered by NGT. The Treated effluent from STP shall be recycled /reused for flushing. DG cooling and Gardening. The dimension of each component of STP should be properly designed as per Norms.
2. The Project Proponent would devise a monitoring plan to the satisfaction of the State Pollution Control Board so as to continuously monitor the treated waste water being used for flushing in terms of faecal coli forms and other pathogenic bacteria.
3. 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.
4. Separate wet and dry bins must be provided in each unit and at ground level for facilitating segregation of waste. Solid Waste shall be segregated into wet garbage and inert materials. Wet Garbage shall be composted in Organic waste convertor. Adequate area shall be provided for solid waste management within the premises which will include area for segregation, composting. The Inert waste from the project will be sent to dumping site.
5. Traffic management plan as submitted shall be implemented in letter and spirit. Apart, a detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habilitation being carried out or purpose 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
6. The PP is required to plant 10 times trees at the project site and compensatory tree plantation will be done @1:10. No tree cutting has been proposed in the instant project. A minimum of 1 tree for every 80 sqm of land should be planted and maintained. The Existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping. As proposed 6040Sqm (20% of total plot area) shall be provided for green area development.
7. 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.
8. The PP shall install the Eco Friendly Green Transformer based on ester oil to reduce the carbon foot print. The PP shall shift to gas based generator set when the gas is available. The PP shall install APCM for the DG set. The PP shall reduce the SO<sub>2</sub> load by 30% if HSD is used
9. The PP shall install electric charging points for charging of electric vehicles.
10. The PP shall use 5% solar energy of total power demand.
11. Consent to establish/operate for the expansion project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of pollution) Act, 1981 and the Water (Prevention and control of pollution) Act, 1974.
12. The Approval of the Competent Authority shall be obtained for structural safety of building code due to earthquakes, adequacy of fire fighting equipments etc. as per National Building Code including protection measures from lightning etc.
13. The PP shall not carry any construction above or below the Revenue Rasta, if any
14. The PP shall not carry any construction below the HT Line passing through the project, if any.
15. The PP shall obtain the Fire NOC from the Competent Authority before taking occupation of the building.
16. The PP shall not give occupation or possession before the water supply and sewage connection permitted by the competent authority.
17. The PP shall not give occupation or possession before the electricity connection permitted by the competent Authority.
18. The PP shall obtain the permission regarding withdrawal of ground water from CGWA before the start of the project and also obtained the CTO from HSPCB after the approval from CGWA.

19. The PP shall carry out the quarterly awareness programs for the stakeholders of the commercial colony/project.
20. 08 Rain water harvesting recharge pits shall be provided for ground water recharging as per the CGWB norms.
21. The PP shall ensure the compliance of provisions of Plastic Waste Management (Amendment) Rules, 2022 relevant for the project.
22. The PP may provide electric charging stations to facilitate electric vehicle commuters.
23. The PP shall increase the capacity of STP already installed
24. The PP shall submit the time schedule of Green Area Development, STP, OWC, RWH.
25. The PP shall install Digital water level recorder for monitoring the water recharge and carry out quarterly maintenance and cleaning of 08 RWH pits.
26. The PP shall take all preventive measures including water sprinkles to control dust during construction and operational phase.
27. Any change in stipulations of EC will lead to Environment Clearance void-ab-initio and PP will have to seek fresh Environment Clearance.

**B. Statutory compliance:**

- [1] The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority for ground coverage, FAR and should be in accordance with zoning plan approved by Competent Authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.
- [2] 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.
- [3] 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.
- [4] The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- [5] 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 Haryana State Pollution Control Board.
- [6] The project proponent shall obtain the necessary permission for drawl of ground water /surface water required for the project from the competent authority.
- [7] 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.
- [8] 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.
- [9] The provisions of the Solid Waste (Management) Rules, 2016, e-Waste (Management) Rules, 2016, and the Plastics Waste (Management) Rules, 2016 shall be followed.
- [10] The project proponent shall follow the ECBC Act/ECBC-Rules prescribed by Bureau of Energy Efficiency, Ministry of Power strictly in addition of bylaws of the State Government.

**I Air Quality Monitoring and Preservation**

1. 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.
2. A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.
3. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM25) covering upwind and downwind directions during the construction period.
4. 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 ultra low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board

5. Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murrum and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
6. Sand, murrum, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.
7. Wet jet shall be provided for grinding and stone cutting.
8. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
9. 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 Rules 2016.
10. The diesel generator sets to be used during construction phase shall be ultra low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.
11. 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. Ultra 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.
12. For indoor air quality the ventilation provisions as per National Building Code of India.

## **II Water Quality Monitoring and Preservation**

1. 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.
2. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.
3. Total fresh water use shall not exceed the proposed requirement as provided in the project details. The per capita supply should adhere to NBC 2016 and CGWA Notification dated 12.12.2018.
4. 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.
5. 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.
6. At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.
7. 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.
8. 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.
9. 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.
10. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.

11. The local bye-law provisions on rain water harvesting should be followed. If local byelaw 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 pits shall be provided for ground water recharging as per the CGWB norms.
12. 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.
13. All recharge should be limited to shallow aquifer.
14. No ground water shall be used during construction phase of the project.
15. 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.
16. 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.
17. 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.
18. No sewage or untreated effluent water would be discharged through storm water drains.
19. 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.
20. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.
21. 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.

### **III Noise Monitoring and Prevention**

1. Ambient noise levels shall conform to residential area/commercial area 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.
2. 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.
3. 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 Energy Conservation Measures**

1. Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency as per ECBC Act, 2017 read with ECBC Rules, 2018 shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC also which is in no case should be less than 25% as prescribed.
2. Outdoor and common area lighting shall be LED.
3. 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 R & U-values shall be as per ECBC specifications.

4. 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.
5. 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.
6. 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.
7. The PP will submit report indicating compliance of each parameter of ECBC requirement and submit quantification saving report for each component.

## **V Waste Management**

1. 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.
2. Disposal of muck during construction phase shall not create any adverse effect on the neighboring 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.
3. 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.
4. Organic Waste Converter within the premises with a minimum capacity of 0.5 kg /person/day must be installed. Leaves to be put in earmarked pits for converting them into compost to be used as manure.
5. All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.
6. 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.
7. 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.
8. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.
9. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Rules, 2016.
10. 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.

## **VI Green Cover**

1. 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).
2. A minimum of 1 tree (5' tall) 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.
3. 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.

4. 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.

## **VII Transport**

1. 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.
  - e. Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
  - f. Traffic calming measures.
  - g. Proper design of entry and exit points.
  - h. Parking norms as per local regulation.
2. 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.
3. 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.

## **VIII Human Health Issues**

1. 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.
2. For indoor air quality the ventilation provisions as per National Building Code of India.
3. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
4. 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.
5. Occupational health surveillance of the workers shall be done on a regular basis.
6. A First Aid Room shall be provided in the project both during construction and operations of the project.

## **IX Corporate Environment Responsibility**

1. The project proponent shall comply with the provisions as applicable, regarding Corporate Environment Responsibility.
2. 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.
3. 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 to the head of the organization.

4. 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.

## **X Miscellaneous**

1. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed.
2. 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.
3. 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.
4. 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.
5. 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.
6. 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.
7. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
8. The project proponent shall abide by all the commitments and recommendations made in the form-IA, Conceptual Plan and also that during their presentation to the Expert Appraisal Committee.
9. No further expansion or modifications in the plan shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC)/SEIAA, Haryana. The project proponent shall seek fresh environmental clearance under EIA notification 2006 if at any stage there is change of area of this project.
10. Any change in planning of the approved plan will leads to Environment Clearance void-ab-initio and PP will have to seek fresh Environment Clearance
11. The PP should give unambiguous affidavit giving land promoters in accordance with your ownership and possession of land legal the case referred for Environment Clearance to SEIAA.
12. 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.
13. The Ministry/SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
14. The Ministry/SEIAA reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
15. 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.
16. 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.

**244.18 EC for Proposed “Affordable Group Housing Colony” on the land measuring 6.15 acres (Built-up Area: 73,235.380 m) at Kila No. 13, 8/2, 18, 3/2, 7, 8/1, 14/1, 17/2, 23/1, 14/2 of Village Badshahpur, Sector-70 District Gurugram, Haryana by M/s Riseonic Realty Private Limited**

**Project Proponent : Mr. Mukesh Tanwar (Managing Liasoning)**  
**Consultant : P & M Solutions**

The project was submitted to the SEIAA, Haryana vide online proposal No.SIA/HR/MIS/268548/2022 dated 20.04.2022 as per check list approved by the SEIAA/SEAC for obtaining Environmental Clearance under Category 8(a) of EIA Notification 14.09.2006. The case was accepted by SEIAA and forwarded to SEAC on 25.04.2022 which was accepted by SEAC on 23.06.2022.

The case was taken up in 244<sup>th</sup> meeting of SEAC held on 09.07.2022. The PP presented the case before the committee.

- The proposed project is for EC for Affordable Group Housing Colony over an area measuring 6.15 acres in the revenue estate of village Badshahpur, Sector 70, Gurugram, Haryana by M/s Riseonic Realty Pvt. Ltd.
- The building plans for the project are already approved for 73235.380 m<sup>2</sup> vide letter no. ACE (HQ) 33220 dated 22.02.2022.
- The license no.03 of 2022 has been granted to the project vide letter no. LC-4486-JE (VA)-2022/1195-1209, Chandigarh dated on 6.01.2022 which is valid upto 06.01.2027.

The details of the project, as per the documents submitted by the project proponent and also as informed during the presentation in the meeting are as under: -

**Table 1: Basic Details**

<b>Name of the Project: Affordable Group Housing Colony over an area measuring 6.15 acres in the revenue estate of village Badshahpur, Sector 70, Gurugram, Haryana by M/s Riseonic Realty Pvt. Ltd.</b>		
<b>S. No.</b>	<b>Particulars</b>	
1.	Online Proposal Number	SIA/HR/MIS/268548/2022
2.	Latitude	28°23'40.36" N
3.	Longitude	77° 1'8.03" E
4.	Plot Area	24888.1275 m <sup>2</sup>
5.	Proposed Ground Coverage	8769.12m <sup>2</sup>
6.	Proposed FAR for Commercial	3721.96 m <sup>2</sup>
7.	Proposed FAR for Residential	54184.68 m <sup>2</sup>
8.	Community Hall	218.35 m <sup>2</sup>
9.	Non-FAR Area	15328.74 m <sup>2</sup>
10.	Total Built Up area	73235.38 m <sup>2</sup>
11.	Total Green Area with %	4977.31 m <sup>2</sup> @20% of total plot area
12.	Rainwater Harvesting Pits (with size)	6 pits (63.59 m <sup>3</sup> )
13.	STP Capacity	620 KLD
14.	Total Parking	479 for ECS or 958 for 2 Wheelers
15.	Maximum Height of the Building (m)	45 m
16.	Power Requirement	3980.53 kVA

17.	Power Backup	4x1000 kVA	
18.	Total Water Requirement	651 KLD	
19.	Domestic Water Requirement	424.7	
20.	Fresh Water Requirement	424.7	
21.	Treated Water	226.3	
22.	Wastewater Generated	514 KLD	
23.	Solid Waste Generated	2674 Kg/day	
24.	Biodegradable Waste	1471 Kg/day	
25.	Number of Towers	8	
26.	Dwelling Units	856	
27.	Organic Waste Convertor	02 (1 of 1000 kg/day capacity and 1 of 500 kg/day capacity)	
28.	Basement	Not Applicable, the proposed project is an Affordable Group Housing Colony	
29.	Community Center	218.35 m <sup>2</sup>	
30.	Stories	S+14	
31.	R+U Value of Material used (Glass)	5.5 w/m <sup>2</sup> K U	
32.	Total Cost of the Project	INR 23296.46 Lakhs	
33.	EMP Budget	i) Capital Cost	INR 136 Lakhs-Construction INR 330 Lakhs-Operation
		ii) Recurring Cost (per year)	INR 190 Lakhs-Construction INR 509 Lakhs-Operation
34.	CER Budget	INR 11 Lakhs	
35.	Incremental Load in respect of:	i) PM 2.5	0.13µg/ m <sup>3</sup>
		ii) PM 10	0.21 µg/ m <sup>3</sup>
		iii) SO <sub>2</sub>	0.02 µg/ m <sup>3</sup>
		iv) NO <sub>x</sub>	6.68 µg/ m <sup>3</sup>
		v) CO	0.0025mg/m <sup>3</sup>

Table 2: EMP Budget

During Construction Phase			During Operation Phase		
Description	Capital Cost	Recurring Cost	Description	Capital Cost	Recurring Cost
	(In Lakhs)	(In Lakhs for 5 Year)		(In Lakhs)	(In Lakhs for 10 Year)
Sanitation and Wastewater Management (STP)	15	40	Wastewater Management	90	190
			(Sewage Treatment Plant)		
Garbage & Debris disposal	0	15	Solid Waste Management	60	90
			(Dust bins & OWC)		
Green Belt Development	40	25	Green Belt Development	70	90
Air, Noise, Soil, Water Monitoring	0	5	Monitoring for Air, Water, Noise & Soil	0	30
Rainwater harvesting system (6 pits)	25	10	Rainwater harvesting system	0	40
Dust Mitigation Measures Including site barricading, water sprinkling and anti-smog gun)	20	15	DG Sets including stack height and acoustics	45	30
PPE for workers & Health Care	11	35	Energy Saving	40	29

			(Solar Panel system)		
Medical cum First Aid facility (providing medical room & Doctor)	10	40	Providing 40 nos of Desktop in the nearby village-Badshahpur	25	10
Storm Water Management (temporary drains and sedimentation basin)	15	5			
<b>Total</b>	<b>136</b>	<b>190</b>	<b>Total</b>	<b>330</b>	<b>509</b>

The discussion was held on Building Approval Plan, all NOCs related or required certificates, green area, STP, RWHP, water demand with breakup (activity-wise). During discussion the following observations were raised:-

1. The PP shall submit revise green plan upto 20% of total plot area.
2. The PP shall increase solar power upto 5% of total power demand
3. The PP shall revise EMP and submit tangible EMP
4. The PP shall submit undertaking that plantation shall be completed 2 years before the completion of project
5. The PP shall submit undertaking that no land has been acquired from government.

The PP submitted the reply to the observations vide letter dated 09.07.2022 and also enclosed affidavits in response to the observations raised. The committee after discussion considered the reply and rated this project with “**Gold Rating**” and was of the unanimous view that this case for granting Environmental Clearance under EIA Notification dated 14.09.2006 issued by the Ministry of Environment and Forest, Government of India should be recommended to the SEIAA with the following specific and general stipulations:

**A. Specific conditions: -**

1. Sewage shall be treated in the STP based on latest Technology to achieve standards ordered by NGT. The Treated effluent from STP shall be recycled /reused for flushing. DG cooling and Gardening
2. The Project Proponent would devise a monitoring plan to the satisfaction of the State Pollution Control Board so as to continuously monitor the treated wastewater being used for flushing in terms of faecal coli forms and other pathogenic bacteria.
3. The PP shall ensure that total 2% of the cost of project shall be spent on EMP Budget. However, the amount and component shown in EMP table above shall also be included for the purpose of 2% amount. The EMP cost on Socio Economic activities shall be used before the commencement of the project & EMP recurring inside the project shall be implemented throughout the operation of the project. The PP shall establish Environment monitoring cell as per documents submitted.
4. The project proponent shall upload the status of compliance of the basic details (given in above tables), stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
5. 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.
6. Separate wet and dry bins must be provided in each unit and at ground level for facilitating segregation of waste. Solid Waste shall be segregated into wet garbage and inert materials. Wet Garbage shall be composted in Organic waste convertor. Adequate area shall be provided for

solid waste management within the premises which will include area for segregation, composting. The Inert waste from the project will be sent to solid waste dumping site through authorized vender.

7. Traffic management plan as submitted shall be implemented in letter and spirit. Apart, a detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is marinated 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 purpose 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
8. No tree cutting has been proposed in the instant project. A minimum of 1 tree for every 80sqm of land should be planted and maintained. The Existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping. As proposed 4,977.11sq. m. (@ 20.0% of plot area) shall be provided for Green Area development for whole project, excluding plot areas.
9. 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.
10. Consent to establish/operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of pollution) Act, 1981 and the Water (Prevention and control of pollution) Act, 1974.
11. The Approval of the Competent Authority shall be obtained for structural safety of building code due to earthquakes, adequacy of firefighting equipments etc. as per National Building Code including protection measures from lightening etc.
12. The PP shall obtain the Fire NOC from the Competent Authority before taking the occupation of the building.
13. The PP shall install the Eco-Friendly Green Transformer based on ester oil to reduce the carbon footprint. The PP shall shift to gas-based generator set when the gas is available. The PP shall install APCM for the DG set. The PP shall reduce the SO<sub>2</sub> load by 30% if HSD is used. The DG sets will be operated for maximum 04 hours during power failure through Executing Agency
14. The PP shall not give occupation or possession before the water supply and sewage connection permitted by the competent authority.
15. The PP shall not give occupation or possession before the electricity connection permitted by the competent Authority.
16. The PP shall obtain the permission regarding withdrawal of ground water, if any from HWRA/CGWA before the start of the project and also obtained the CTO from HSPCB after the approval from HWRA/CGWA.
17. The PP shall carry out the quarterly awareness programs for the stakeholders of the project.
18. 6 Rainwater harvesting recharge pits shall be provided for ground water recharging as per the CGWB norms
19. The PP shall install Digital water level recorder for monitoring the water recharge and carry out quarterly maintenance and cleaning of 6 RWH pits
20. The PP shall ensure the compliance of provisions of Plastic Waste Management (Amendment) Rules, 2022 relevant for the project.
21. The PP may provide electric charging stations to facilitate electric vehicle commuters.
22. The PP shall provide the Anti-smog gun mounted on vehicle in the project for suppression of dust during construction & operational phase and shall use the treated water, if feasible.
23. The PP shall take all preventive measures including water sprinkles to control dust during construction and operational phase.
24. Any change in stipulations of EC will lead to Environment Clearance void-ab-initio and PP will have to seek fresh Environment Clearance.

**B. Statutory Compliance: -**

1. The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority for ground coverage, FAR and should be in accordance with zoning plan approved by Competent Authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.

2. 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 lightning etc.
3. 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.
4. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
5. 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 Haryana State Pollution Control Board.
6. The project proponent shall obtain the necessary permission for drawl of groundwater /surface water required for the project from the competent authority.
7. 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.
8. 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.
9. The provisions of the Solid Waste (Management) Rules, 2016, e-Waste (Management) Rules, 2016, the Plastics Waste (Management) Rules, 2016 and Batteries waste (Management Handling Rules 2001 as amended in 2020) shall be followed.
10. The project proponent shall follow the ECBC Act/ECBC-Rules prescribed by Bureau of Energy Efficiency, Ministry of Power strictly in addition of bylaws of the State Government.

#### **I. Air Quality Monitoring and Preservation**

- i. Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.
- ii. A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.
- iii. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g., PM<sub>10</sub> and PM<sub>2.5</sub>) covering upwind and downwind directions during the construction period.
- iv. Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of ultra-low Sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board
- v. Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3-meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murrum and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
- vi. Sand, murrum, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.
- vii. Wet jet shall be provided for grinding and stone cutting.
- viii. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.

- ix. All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules 2016.
- x. The diesel generator sets to be used during construction phase shall be ultra-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. Ultra-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.

## **II. 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 rainwater.
- ii. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.
- iii. Total freshwater use shall not exceed the proposed requirement as provided in the project details. The per capita supply should adhere to NBC 2016 and CGWA Notification dated 12.12.2018.
- iv. The quantity of freshwater 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. 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.
- vii. Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets taps aerators etc.) for water conservation shall be incorporated in the building plan.
- viii. 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.
- ix. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- x. The local bye-law provisions on rainwater harvesting should be followed. If local byelaw provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rainwater Harvesting pits shall be provided for ground water recharging as per the CGWB norms.
- xi. A rainwater harvesting plan needs to be designed. In areas where ground water recharge is not feasible, the rainwater should be harvested and stored for reuse. The ground water shall not be withdrawn without approval from the Competent Authority.

- xii. All recharges should be limited to shallow aquifer.
- xiii. No ground water shall be used during construction phase of the project.
- xiv. 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.
- xv. The quantity of freshwater 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.
- xvi. 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 into municipal drain.
- xvii. No sewage or untreated effluent water would be discharged through storm water drains.
- xviii. Onsite sewage treatment of capacity of treating 120% wastewater 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 wastewater 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.
- xix. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.
- xx. 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.

### **III. Noise Monitoring and Preservation**

- i. Ambient noise levels shall conform to residential area/commercial area 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.

### **IV. Energy Conservation Measures**

- i. Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency as per ECBC Act, 2017 read with ECBC Rules, 2018 shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC also which is in no case should be more than 20% as prescribed.
- 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 R & 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 byelaws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.
- vii. The PP will submit report indicating compliance of each parameter of ECBC requirement and submit quantification saving report for each component.

#### **V. 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 Converter within the premises with a minimum capacity of 0.5 kg/person/day must be installed. Leaves to be put in earmarked pits for converting the minto compost to be used as manure.
- 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 of 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 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.

#### **VI. Green Cover**

- i. No tree can be felled/transplant unless exigencies demand. Where absolutely necessary, tree felling shall be with prior permission from the concerned regulatory authority. Old trees should be retained based on girth and age regulations as may be prescribed by the Forest Department. Plantations to be ensured species (cut) to species (planted).



- ii. A minimum of 1 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.
- iii. Where the trees need to be cut with prior permission from the concerned local Authority, compensatory plantation in the ratio of 1:10 (i.e., planting of 10 trees for every 1 tree that is cut) shall be done and maintained. Plantations to be ensured species (cut) to species (planted). Area for green belt development shall be provided as per the details provided in the project document.
- iv. Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.

#### **VII. 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 the subdepartments.

#### **VIII. 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.

### **IX. Corporate Environment Responsibility**

- i. The project proponent shall comply with the provisions of CER, as applicable.
- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental/forest/wildlife norms/conditions. The company shall have defined system of reporting infringements/deviation/ violation of the environmental/ forest/ wildlife norms/ conditions and/ or shareholders/ stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six-Monthly Compliance Report.

### **X. Miscellaneous**

- i. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest, and Climate Change at environment clearance portal.
- v. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vi. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- vii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- viii. The project proponent shall abide by all the commitments and recommendations made in the form-IA, Conceptual Plan and also that during their presentation to the Expert Appraisal Committee.
- ix. No further expansion or modifications in the plan shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC)/SEIAA, Haryana. The

project proponent shall seek fresh environmental clearance under EIA notification 2006 if at any stage there is change of area of this project.

- x. Any change in planning of the approved plan will leads to Environment Clearance void-ab-initio and PP will have to seek fresh Environment Clearance
- xi. The PP should give unambiguous affidavit giving land promoters in accordance with your ownership and possession of land legal the case referred for Environment Clearance to SEIAA.
- xii. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xiii. The Ministry/SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiv. The Ministry/SEIAA reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xvi. The above conditions shall be enforced, inter-alia under the provisions of the Water(Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

**244.19 EC for Proposed Max Super Speciality Hospital at Sector 56, Gurgaon, Haryana by M/s Max Healthcare Institute Limited**

**Project Proponent :Dr.Mradul Kaushik**  
**Consultant : Atmos Sustanaible Solutions Pvt. Ltd.**

The project was submitted to the SEIAA, Haryana vide online proposal No.SIA/HR/MIS/271568/2022 dated 06.05.2022 as per check list approved by the SEIAA/SEAC for obtaining Environmental Clearance under Category 8(a)of EIA Notification 14.09.2006.

The case was taken up in 244<sup>th</sup>meeting of SEAC, Haryana held on 09.07.2022. The PP presented the case before the committee:-

- The PP has submitted the required scrutiny fee amounting to Rs. 2,00,000 vide DD No. 564883 dated 04.05.2022 in compliance of Haryana Government, Environment & Climate Change Notification No. DE&CCH/3060 dated 14<sup>th</sup> October, 2021.
- The project involves in the Construction of Proposed Max Super Speciality Hospital at Sector-56, Gurgaon Haryana by M/s Max Health Care Institute Limited.

**Table 1 – Basic Details**

S. No.	Description	Proposed
1.	Online Proposal No.	SIA/HR/MIS/271568/2022
2.	Latitude Longitude	28°25'48.41"N 77° 5'59.28"E
3.	Plot Area	21,245.560m <sup>2</sup>
4.	FAR Area	31,847.370m <sup>2</sup>

5.	Non - FAR Area	42,460.073m <sup>2</sup>
6.	Ground Coverage	4,997.478m <sup>2</sup>
7.	Proposed Built Up Area	74,307.443m <sup>2</sup>
8.	Green Area with Percentage	6,440m <sup>2</sup> (@30.31 % of Plot Area)
9.	No. of beds	289
10.	Cost of Project	484.84 Cr.
11.	Maximum Height of Hospital Building	35.00 m (Up to Mumty)
12.	Max. no. of floor	3 basements +LG floor + UG floor + Service floor+6 floors
13.	Expected Population	5,323
14.	Total Water Requirement Domestic water Requirement Daily Fresh water Requirement Recycled water	361KLD 241KLD 207KLD 215 KLD
15.	Wastewater Generation, STP & ETP Capacity & Technology	Domestic waste water - 217KLD, Effluent generation - 22KLD, STP Capacity - 300KLD; MBR ETP Capacity - 30KLD
16.	Sludge Generation	30 Kg/day
17.	Rainwater Harvesting Structure with Dimension	4 Nos. (4 mtrs *3mtrs* 4mtrs)
18.	No. of ECS Proposed	778 ECS
19.	Power Source & Requirement	4,000kVA Dakshin Haryana BijliVitrان Nigam Limited (DHBVN)
20.	Power-backup supply	DG set of capacity 4*1500 kVA (3W + 1S)
21.	Total Solid Waste Generated Total bio medical waste generation Total Municipal Solid Waste	1,316 kg/day 434kg/day 882 kg/day
22.	Biodegradable Waste	529.2 kg/day
23.	SWM Area	85 sqm.
24.	BMW Area	142 sqm.
25.	EMP Cost/Budget	The total of 491lakhs is allocated as Environmental Management capital cost. The estimated annual recurring environmental cost will be 57.5lakhs
26.	Renewal Energy	Solar PV of 250 kWp will be provided on roof top, which is 6.25 % of the electrical load
27.	Incremental Load PM HC + Nox CO	1.08 µg/m <sup>3</sup> 21.62 µg/m <sup>3</sup> 16.22 µg/m <sup>3</sup>
28.	Construction Phase:  I. Power Back-Up II. Water Requirement & Source III. Anti-Smoke Gun	Power requirement is 300kVA 50KLD STP treated water supply from Behrampur Gurugram Yes

**Table 2 - Environment Management Plan**

<b>COMPONENT</b>	<b>CAPITAL COST (Rs. IN LACS)</b>	<b>RECURRING COST/ANNUM (Rs. IN LACS)</b>
Rain water harvesting	26	1.5
Sewage treatment plant	120	15.0
Effluent Treatment Plant	120	10
Green belt development	25	2.5
Solid Waste Management	15	8.5
External pond adoption and its rejuvenation	60	5
Solar Generation	125	6
Environmental Awareness / Training Programme, Health and Safety measures	Nil	9
<b>Total</b>	<b>491</b>	<b>57.5</b>

The discussion was held on building plan, EMP, ETP, STP, parking, traffic study, green plan, solar power, ECBC, pond, RWH, DG sets and single use plastic and certain observations were raised and PP was asked to submit an affidavit for the following:

1. PP shall not mix ETP treated effluent with STP treated effluent.
2. PP shall follow NBC guidelines 2016 regarding population.
3. PP shall submit SOP for reduction of Air and Noise pollution during construction and operation phase
4. PP shall submit Revised parking details
5. PP shall submit SOP for traffic management
6. PP shall submit increase the capacity of ETP
7. PP shall obtain permission of DFO for cutting of existing trees
8. PP shall increase solar power upto 5% of total power demand
9. PP shall submit Revised tangible EMP cost
10. PP shall submit ECBC SOP
11. PP shall submit SOP to reduce heat island effect
12. PP shall submit SOP regarding single use plastic as per recent guidelines of government of India.
13. PP shall submit Hybrid DG sets
14. PP shall ensure Reduction of carbon footprints
15. PP shall submit Adoption and maintenance of pond
16. PP shall submit Revised landscape plan

The PP submitted reply of above said observations vide letter dated 09.07.2022 along with required affidavit in response to the observations.

The documents were placed before the committee which was considered by the committee and after Deliberation, the committee rated this project with **“Gold Rating”** and was of the unanimous view that this case for granting Environmental Clearance under EIA Notification dated 14.9.2006 issued by the Ministry of Environment and Forest, Government of India with the following specific and general stipulations:

**A. Specific conditions:-**

1. Sewage shall be treated in the STP on latest Technology to achieve standards ordered by NGT. The Treated effluent from STP shall be recycled /reused for flushing. DG cooling and Gardening.
2. The PP should not mix the ETP effluent after treatment in the STP and ETP effluent shall be separately utilized for the purposes
3. The Project Proponent would devise a monitoring plan to the satisfaction of the State Pollution Control Board so as to continuously monitor the treated waste water being used for flushing in terms of faecal coli forms and other pathogenic bacteria.
4. The PP shall ensure that total 2% of the cost of project shall be spent on EMP Budget. However, the amount and component shown in EMP table above shall also be included for the purpose of 2% amount. The EMP cost on Socio Economic activities shall be used before the commencement of the project & EMP recurring inside the project shall be implemented throughout the operation of the project. The PP shall establish Environment monitoring cell as per documents submitted.
5. The PP shall not carry out any construct above and below revenue rasta if passing through the project and ensure that permission of the competent authority shall be obtained before carry out any construction above or below the revenue rasta. The PP shall put notice board on the revenue rasta for the passer byes.
6. The project proponent shall upload the status of compliance of the basic details (given in above tables), stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
7. 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.
8. Separate wet and dry bins must be provided in each unit and at ground level for facilitating segregation of waste. Solid Waste shall be segregated into wet garbage and inert materials. Wet Garbage shall be composted in Organic waste convertor. Adequate area shall be provided for solid waste management within the premises which will include area for segregation, composting. The Inert waste from the project will be sent to solid waste dumping site through authorized vender.
9. Traffic management plan as submitted shall be implemented in letter and spirit. Apart, a detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is marinated 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 purpose to be carried out by the project or other agencies in this 05kms radius of the site in different scenarios of space and time
10. No tree cutting has been proposed in the instant project. A minimum of 1 tree for every 80sqm of land should be planted and maintained. The Existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping. As proposed 6,440m<sup>2</sup> (@30.31 % of Plot Area) shall be provided for Green Area development for whole project, excluding plot areas. The PP shall carry out the plantation in phased manner with 20% every year from the date of start of construction.
11. 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.
12. Consent to establish/operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of pollution) Act, 1981 and the Water (Prevention and control of pollution) Act, 1974.

13. The Approval of the Competent Authority shall be obtained for structural safety of building code due to earthquakes, adequacy of fire fighting equipments etc. as per National Building Code including protection measures from lightening etc.
14. The PP shall obtain the Fire NOC from the Competent Authority before taking the occupation of the building.
15. The PP shall install the Eco Friendly Green Transformer based on ester oil to reduce the carbon footprint. The PP shall shift to gas based generator set when the gas is available. The PP shall install APCM for the DG set. The PP shall reduce the So2 load by 30% if HSD is used. The DG sets will be operated for maximum 04 hours during power failure through Executing Agency
16. The PP shall not mix ETP treated effluent with STP water
17. The PP Shall comply with SOP for reduction of Air and Noise pollution during construction and operation phase
18. The PP shall increase the capacity of ETP
19. The PP shall increase solar power upto 5% of total power demand
20. The PP shall follow SOP regarding single use plastic free
21. The PP shall follow the SOP for reduction of carbon footprints
22. The PP shall adopt and maintain one external pond (Sarai Alawardi Pond, 02-HRGGM-GUR-0002-SAWD-001 - UID) for its rejuvenation.
23. The PP shall obtain the permission regarding withdrawal of ground water, if any from HWRA/CGWA before the start of the project and also obtained the CTO from HSPCB after the approval from HWRA/CGWA.
24. The PP shall carry out the quarterly awareness programs for the stakeholders of the project.
25. 04 Rain water harvesting recharge pits shall be provided for ground water recharging as per the CGWB norms.
26. The PP shall install Digital water level recorder for monitoring the water recharge and carry out quarterly maintenance and cleaning of 04 RWH pits.
27. The PP shall ensure the compliance of provisions of Plastic Waste Management (Amendment) Rules, 2022 relevant for the project.
28. The PP may provide electric charging stations to facilitate electric vehicle commuters.
29. The PP shall provide the Anti smog gun mounted on vehicle in the project for suppression of dust during construction & operational phase and shall use the treated water, if feasible.
30. The PP shall take all preventive measures including water sprinkles to control dust during construction and operational phase.
31. Any change in stipulations of EC will lead to Environment Clearance void-ab-initio and PP will have to seek fresh Environment Clearance.

#### **B. Statutory Compliance:**

- [1] The project proponent shall obtain all necessary clearance/permission from all relevant agencies including town planning authority for ground coverage, FAR and should be in accordance with zoning plan approved by Competent Authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.
- [2] 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.
- [3] 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.
- [4] The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- [5] 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 Haryana State Pollution Control Board.
- [6] The project proponent shall obtain the necessary permission for drawl of ground water /surface water required for the project from the competent authority.
- [7] 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.

- [8] 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.
- [9] The provisions of the Solid Waste (Management) Rules, 2016, e-Waste (Management) Rules, 2016, the Plastics Waste (Management) Rules, 2016 and Batteries waste (Management Handling Rules 2001 as amended in 2020) shall be followed.
- [10] The project proponent shall follow the ECBC Act/ECBC-Rules prescribed by Bureau of Energy Efficiency, Ministry of Power strictly in addition of bylaws of the State Government.

## **I Air Quality Monitoring and Preservation**

- i. Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.
- ii. A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.
- iii. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM2.5) 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 ultra lowsulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board
- v. Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murrum and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
- vi. Sand, murrum, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.
- vii. Wet jet shall be provided for grinding and stone cutting.
- viii. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
- ix. All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules 2016.
- x. The diesel generator sets to be used during construction phase shall be ultra lowsulphur 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. Ultra 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.

## **II 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. The per capita supply should adhere to NBC 2016 and CGWA Notification dated 12.12.2018.
- iv. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.
  - v. A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.
  - vi. At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.
  - vii. Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.
  - viii. Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.
  - ix. Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.
  - x. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
  - xi. The local bye-law provisions on rain water harvesting should be followed. If local byelaw 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 pits 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.

### **III Noise Monitoring and Prevention**

- i. Ambient noise levels shall conform to residential area/commercial area 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.

### **IV Energy Conservation Measures**

- i. Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency as per ECBC Act, 2017 read with ECBC Rules, 2018 shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC also which is in no case should be less than 25% as prescribed.
- 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 R & 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.
- vii. The PP will submit report indicating compliance of each parameter of ECBC requirement and submit quantification saving report for each component.

### **V 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 neighboring 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 Converter within the premises with a minimum capacity of 0.5 kg /person/day must be installed. Leaves to be put in earmarked pits for converting them into

- compost to be used as manure.
- 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 of as per applicable rules and norms with necessary approvals of the State Pollution Control Board.
  - vii. Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials.
  - viii. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.
  - ix. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition 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.

## **VI 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 (5' tall) for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.
- iii. Where the trees need to be cut with prior permission from the concerned local Authority, compensatory plantation in the ratio of 1:10 (i.e. planting of 10 trees for every 1 tree that is cut) shall be done and maintained. Plantations to be ensured species (cut) to species (planted). Area for green belt development shall be provided as per the details provided in the project document.
- iv. Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.

## **VII 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.

### **VIII 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.

### **IX Corporate Environment Responsibility**

- i. The project proponent shall comply with the provisions of CER, as applicable.
- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/ deviation/ violation of the environmental/ forest/ wildlife norms/ conditions. The company shall have defined system of reporting infringements/ deviation/ violation of the environmental/ forest/ wildlife norms/ conditions and/ or shareholders/ stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

### **X Miscellaneous**

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

- vi. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- vii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- viii. The project proponent shall abide by all the commitments and recommendations made in the form-IA, Conceptual Plan and also that during their presentation to the Expert Appraisal Committee.
- ix. No further expansion or modifications in the plan shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC)/SEIAA, Haryana. The project proponent shall seek fresh environmental clearance under EIA notification 2006 if at any stage there is change of area of this project.
- x. Any change in planning of the approved plan will leads to Environment Clearance void-ab-initio and PP will have to seek fresh Environment Clearance
- xi. The PP should give unambiguous affidavit giving land promoters in accordance with your ownership and possession of land legal the case referred for Environment Clearance to SEIAA.
- xii. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xiii. The Ministry/SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiv. The Ministry/SEIAA reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xvi. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

**244.20                    Modification in EC for Hotel, Restaurant, Banquet Hall, Recreational Park and Health Club “Noor Mahal located at Village Phusgarh, Sector 32, Karnal, Haryana by M/s Jewels Classic Hotels Private Limited**

**Project Proponent        : Sh. Rajiv Verma**

**Consultant                        : Oceao Enviro Management Solutions (India) Pvt. Ltd.**

The case was submitted to the SEIAA, Haryana vide online proposal No.SIA/HR/MIS/266086/2022 dated 05.04.2022 for obtaining modification in Environmental Clearance dated 12.08.2021 earlier granted under violation of EIA Notification 14.09.2006.

The case of revision/modification for Remediation Plan and Natural and Community Resource Augmentation Plan is taken up in 244<sup>th</sup> meeting of SEAC, Haryana held on 09.07.2022. The PP presented the case before the committee.

Based on the information furnished by the project proponent, the SEAC recommended the proposal to SEIAA for grant of Amendment in Environmental Clearance subject to the following specific conditions in addition to all standard conditions applicable for such projects:

1. SEAC recommended for an amount of Rs.1,32,00,000/- towards Remediation plan

and Natural and Community Resource Augmentation plan to be spend within a span of five years. The details are given below:

S. No.	Environment Attributes	Damages	Remedial Measures	1st Year	2nd Year	3rd Year	Budget Allocation (In Rs.)
1	Air	Damage to Health of nearby residents due to air emissions	Health Check-up Camps. 1) Govt. Sen. Sec. School, Uchana, Haryana 2) Government Middle School, Sector 6, Karnal, Haryana 3) Government I.T.I Uchana, Haryana	1,27,500	1,27,500	1,27,500	3,82,500
2	Noise	Increase in ambient noise levels due to construction activities	Providing Horticulture & Road divider belt with earth filling, Plantation, Kerb Stones installation, painting etc. on road opposite of project site that is the Village PhoosgarhBudhakhera Road in front of project. (Approx. 1.6 km long)	5,00,000	5,00,000	5,00,000	15,00,000
3	Energy Conservation	High Consumption of energy per capita and power outages	LED based energy efficient solar lighting 1. Specification- 75 nos. of bright (white) superflux LEDs. Solar panel is 300.00 mm* 350.0 mm (2 no's of panels connected together). 2. Cost of each unit is approx. Rs. 20,000 3. 60 Units of solar lighting will be installed at village-Sector Road from Tennis Academy to T Road Junction of Satsang Bias.	4,00,000	4,00,000	4,00,000	12,00,000
4	Ground Water	Depletion in water levels due to paving, increase run off factor	Development of ponds in nearby area. 01 Nos of pond will renovate at Village Uchana, Haryana Pond ID: 01HRKLNKLN0006UNCH131	5,00,000	5,00,000	5,00,000	15,00,000
5	Rain Water Harvesting	Depletion in ground water in the aquifers underground	Increase number of rain water harvesting pits and ground water recharge pits (01 Nos of RWH pits will be constructed at Govt Sen. Sec. School, Uchana Haryana & 01 RHW pits inhouse at project site, Haryana Total 3 pits @ approx. Rs. 3,50,000 per pit.)	3,50,000	3,50,000	3,50,000	10,50,000
6	Sewage Treatment Plant	Cross contamination of ground and surface water with illegal discharge of sewage water	Upgradation of Inhouse STP	4,00,000	4,00,000	4,00,000	12,00,000
			Installation of Multi-effect Evaporation in inhouse arrangement at site itself	10,00,000	-	-	10,00,000
7	Ecology	Impact on plants and trees in the vicinity of the plant & impact on Fauna	Distribution of free saplings to peripheral villager's preferably native plants. 2500nos of free - plant saplings will be distributed to nearby Residential areas and households in near project itself in Sector-32 Karnal	85,000	80,000	85,000	2,50,000
			Funds will be deposited with Forest Department for creating fodder resources in Reserve Forests	1,20,000	1,15,000	1,15,000	3,50,000
8	Socio-Economic	Inflow of construction workers increase load on local infrastructure	Installation of lift in orphanage of The Desperate & Destitute Of India (MDD), Bal Bhawan Orphanage building, Rajiv Puram, Village ChhapraKhera Road, P. B. 13, Karnal, Haryana 132001	-	12,50,000	-	12,50,000
			Midday meals in Mission to The orphan children and Desperate & Destitute kids of India (MDD), Bal Bhawan Orphanage building, Rajiv Puram, ChhapraKhera Road, P. B. 13, Karnal, Haryana - 132001	1,30,000	1,40,000	1,30,000	4,00,000

			1) 10 nos of persons will be imparted training and provided for sewing machine operation at Mission To The Desperate & Destitute Of India (MDD), Bal Bhawan Building, Rajiv Puram, ChhapraKhera road P. B. 13, Karnal, Haryana 132001	-	-	68,750	<b>68,750</b>
			Scholarship to meritorious students for education. (30 nos per year if meritorious students of local schools will be given scholarship)	1,65,000	1,65,000	1,70,000	<b>5,00,000</b>
			Provision of clean drinking water taps for public (04 nos. of drinking water coolers @ approx. 50,000 per water cooler will be provided. One Nos at Mortuary/Shamshan Ghat - Cremation Ground, Uchana, Haryana & One Nos at Govt. Sen. Sec. School, Uchana, Haryana & Two Nos at Project inhouse.	1,50,000	75,000	75,000	<b>3,00,000</b>
			Providing books & computers in the following Govt. Girls. School to promote Beti Bachao Beti Padhao Abhiyan: 1. Govt. Girls Sr. Sec. School 3 Karnal, Railway Road, Chaudhary Colony, Karnal, Haryana 2. Govt. Girls High. School Urban Estate, Sector 13, Karnal, Haryana 132001, India	8,00,000	8,00,000	6,48,750	<b>22,48,750</b>
<b>Total</b>				<b>47,27,500</b>	<b>49,02,500</b>	<b>35,70,000</b>	<b>1,32,00,000</b>

### Proposed Revised Remedial Plan with Cost Assessment

S. No.	Environment Attributes	Damages	Remedial Measures	1st Year	2nd Year	3rd Year	Budget Allocation (In Rs.)	Expenditure Occurs Till Date (Rs.)
1	Air	Damage to Health of nearby residents due to air emissions	Health Check-up Camps. 1) Govt. Sen. Sec. School, Uchana, Haryana 2) Government Middle School, Sector 6, Karnal, Haryana 3) Government I.T.I Uchana, Haryana	1,27,500	1,27,500	1,27,500	<b>3,82,500</b>	
2	Noise	Increase in ambient noise levels due to construction activities	Providing Horticulture & Road divider belt with earth filling, Plantation, Kerb Stones installation, painting etc. on road opposite of project site that is the Village PhoosgarhBudhakhera Road in front of project. (Approx. 1.6 km long)	5,00,000	5,00,000	5,00,000	<b>15,00,000</b>	5,00,000
3	Energy Conservation	High Consumption of energy per capita and power outages	LED based energy efficient solar lighting 1. Specification- 75 nos. of bright (white) superflux LEDs. Solar panel is 300.00 mm* 350.0 mm (2 no's of panels connected together). 2. Cost of each unit is approx. Rs. 20,000 3. 60 Units of solar lighting will be installed at village-Sector road from Tennis Academy to T Road Junction of Satsang Bias.	4,00,000	4,00,000	4,00,000	<b>12,00,000</b>	

4	Ground Water	Depletion in water levels due to paving, increase run off factor	Development of ponds in nearby area. 01 Nos of pond will renovate at Village Uchana, Haryana Pond ID: 01HRKNLKNL0006UNCH131	5,00,000	5,00,000	5,00,000	<b>15,00,000</b>	
5	Rain Water Harvesting	Depletion in ground water in the aquifers underground	Increase number of rain water harvesting pits and ground water recharge pits (01 Nos of RWH pits will be constructed at Govt Sen. Sec. School, Uchana Haryana & 01 RHW pits inhouse at project site, Haryana Total 3 pits @ approx. Rs. 3,50,000 per pit.)	3,50,000	3,50,000	3,50,000	<b>10,50,000</b>	
6	Sewage Treatment Plant	Cross contamination of ground and surface water with illegal discharge of sewage water	Upgradation of Inhouse STP	4,00,000	4,00,000	4,00,000	<b>12,00,000</b>	
			Installation of Multi-effect Evaporation in inhouse arrangement at site itself	10,00,000	-	-	<b>10,00,000</b>	
7	Ecology	Impact on plants and trees in the vicinity of the plant & impact on Fauna	Distribution of free saplings to peripheral villager's preferably native plants. 2500 no's of free - plant saplings will be distributed to nearby Residential areas and households in near project itself in Sector-32 Karnal	85,000	80,000	85,000	<b>2,50,000</b>	
			Funds will be deposited with Forest Department for creating fodder resources in Reserve Forests	1,20,000	1,15,000	1,15,000	<b>3,50,000</b>	
8	Socio-Economic	Inflow of construction workers increase load on local infrastructure	Installation of lift in orphanage of The Desperate & Destitute Of India (MDD), Bal Bhawan Orphanage building, Rajiv Puram, Village ChhapraKhera Road, P. B. 13, Karnal, Haryana 132001	-	12,50,000	-	<b>12,50,000</b>	
			Midday meals in Mission To The orphan children and Desperate & Destitute kids of India (MDD), Bal Bhawan Orphanage building, Rajiv Puram, ChhapraKhera Road, P. B. 13, Karnal, Haryana - 132001	1,30,000	1,40,000	1,30,000	<b>4,00,000</b>	
			1) 10 no's of persons will be imparted training and provided for sewing machine operation at Mission To The Desperate & Destitute Of India (MDD), Bal Bhawan Building, Rajiv Puram, ChhapraKhera road P. B. 13, Karnal, Haryana 132001	-	-	68,750	<b>68,750</b>	
			Scholarship to meritorious students for education. (30 no's per year if meritorious students of local schools will be given scholarship)	1,65,000	1,65,000	1,70,000	<b>5,00,000</b>	99,000
			Provision of clean drinking water taps for public (04 nos. of drinking water coolers @ approx. 50,000 per water cooler will be provided. One Nos at Mortuary/Shamshan Ghat - Cremation Ground, Uchana, Haryana & One Nos at Govt. Sen. Sec. School, Uchana, Haryana & Two Nos at Project inhouse.	1,50,000	75,000	75,000	<b>3,00,000</b>	



			Providing books & computers in the following Govt. Girls. School to promote Beti Bachao Beti Padhao Abhiyan: 1. Govt. Girls Sr. Sec. School 3 Karnal, Railway Road, Chaudhary Colony, Karnal, Haryana 2. Govt. Girls High. School Urban Estate, Sector 13, Karnal, Haryana 132001, India	8,00,000	8,00,000	6,48,750	<b>22,48,750</b>	11,94,300
<b>Total</b>				<b>47,27,500</b>	<b>49,02,500</b>	<b>35,70,000</b>	<b>1,32,00,000</b>	<b>17,93,300</b>

2. Total budgetary provision with respect to Remediation plan and Natural & Community Resource Augmentation plan is rupees Rs.1,32,00,000/-. Therefore, project proponent shall be required to submit a bank guarantee of an amount of Rupees Rs.1,32,00,000/- towards Remediation plan and Natural and Community Resource Augmentation plan with the Haryana State Public Control Board prior to the grant of EC.
3. Remediation plan shall be completed in 3 years whereas bank guarantee shall be for 5 years. The bank guarantee shall be released after successful implementation of the EMP, followed by recommendations of the SEAC and approval of the regulatory authority/SEIAA.
4. Approval/permission of the CGWA/SGWA shall be obtained, if applicable before drawing ground water for the project activities. State Pollution Control Board (SPCB) concerned shall not issue Consent to Operate (CTO) till the project proponent obtains such permission.
5. The PP should submit the 6 monthly action taken report on the compliance of environmental conditions to the Regional Officer, MoEF&CC, Haryana State Pollution Control Board and Chairman, SEIAA.

The PP submitted the undertaking and further discussion was held on modification in EC and proposed revision in Remediation plan and Natural and Community Resource Augmentation plan and certain suggestion/observations were raised by the committee which were replied by the PP vide letter dated 09.07.2022 along with required undertaking. The reply was considered by the committee. The committee agrees with the revised in Remediation plan and Natural and Community Resource Augmentation plan.

After discussions and deliberations, the Committee was of the unanimous view that this case should be recommended to SEIAA for granting modification in EC and revision in Remediation plan and Natural and Community Resource Augmentation plan with cost assessment as proposed by PP.

**244.21 EC for Proposed Non Agro Warehouse project in the Revenue Estate of Village Dungarpur & Jainapur, Tehsil & District Palwal, Haryana having Built up area 78197.178sqm i.e. it falls under Category 8(a) as per EIA Notification and its amendments by M/s V Mart Retail Limited**

**Project Proponent : Sh. Deshraj**  
**Consultant : Ocea Enviro Management Solutions (India) Pvt. Ltd.**

The project was submitted to the SEIAA, Haryana vide online proposal No.SIA/HR/MIS/272352/2022 dated 13.06.2022 for obtaining Environmental Clearance under Category 8(a) of EIA Notification 14.09.2006. PP has submitted the DD on account of scrutiny fee for a sum of Rs.2,00,000/-.

The case was taken up in 244th meeting of SEAC held on 09.07.2022. The PP presented the case before the committee. The details of the project, as per the documents submitted by the project proponent, and also as informed during the presentation in the meeting are as under:-

<b>Name of Project: EC for Proposed Non Agro Warehouse project in the Revenue Estate of Village Dungarpur &amp;Jaindapur, Tehsil &amp; District Palwal, Haryana having Built up area 78197.178 sqm.i.e. it falls under Category 8(a) as per EIA Notification and its amendments by M/s V Mart Retail Limited</b>			
<b>Sr. No.</b>	<b>Particulars</b>		
1.	Online Proposal Number	SIA/HR/MIS/272352/2022 dated 13.06.2022	
2.	Latitude	28° 12' 10.502" N to 28° 12' 31.252" N	
3.	Longitude	77° 12' 45.632" E to 77° 12' 43.513" E	
4.	Plot Area	118900.51 sqm	
5.	Net Plot Area	115726.74 sqm	
6.	Proposed Ground Coverage	66384.382 sqm	
7.	Proposed FAR	74618.208 sqm	
8.	Non FAR Area	3578.970 sqm	
9.	Total Built Up area	78197.178 sqm	
10.	Total Green Area with %	17404.835 sqm (15.040%)	
11.	Rain Water Harvesting Pits (with size)	30 pits (86.40 cum each)	
12.	STP Capacity	81 KLD	
13.	Total Parking	17378.970 sqm (15.017%)	
14.	Organic Waste Converter	01 Nos	
15.	Maximum Height of the Building (m)	17.50 m (including ridge height)	
16.	Power Requirement	1587.60 KW	
17.	Power Backup	2 x 750 KVA DG sets	
18.	Total Water Requirement	122 KLD	
19.	Domestic Water Requirement	51 KLD	
20.	Fresh Water Requirement	51 KLD	
21.	Treated Water	71 KLD	
22.	Waste Water Generated	67.80 KLD	
23.	Solid Waste Generated	660 Kg/day	
24.	Biodegradable Waste	396 Kg/day	
25.	Number of Towers	03 Nos for Storage	
26.	Dwelling Units/ EWS	Nil	
27.	Basement	Nil	
28.	Community Center	Nil	
29.	Stories	Nil	
30.	R+U Value of Material used (Glass)	U = 3.3W/m <sup>2</sup> °C, R = 3.5 m <sup>2</sup> -°C/W	
31.	Total Cost of the project:	i) Land Cost	36 Cr.
		ii) Construction Cost	81 Cr.
		Total 117 Cr.	
32.	EMP Budget	2.42 Cr	
33.	Incremental Load in respect of:	PM 2.5	0.08 µg/m <sup>3</sup>
		PM 10	0.81 µg/m <sup>3</sup>
		SO <sub>2</sub>	2.90 µg/m <sup>3</sup>
		NO <sub>2</sub>	9.23 µg/m <sup>3</sup>
		CO	1.29 µg/m <sup>3</sup>
34.	Construction Phase:	Power Back-up	750 KVA DG Set
		Water Requirement & Source	20 KLD, Private Water Tankers
		STP (Modular)	10 KLD

### EMP BUDGET

<u>Description</u>	<u>During Construction Phase</u>		<u>During Operation Phase</u>		
	<u>Capital Cost (Lakhs)</u>	<u>Recurring Cost (Lakhs/Year)</u>	<u>Capital Cost (Lakhs)</u>		<u>Recurring Cost (Lakhs/Year)</u>
Water for Dust suppression	8.00	2.00	Waste Water Management (STP)	60.00	5.00
Waste Water Management	5.00	1.00	Solid Waste Management	8.0	0.50
Monitoring for Air, Water, Noise & Soil	0.00	2.00	Green Belt Development	15.00	2.0
PPE for workers & Health Care	2.00	0.5	Monitoring for Air, Water, Noise & Soil	0.00	1.00
Green Belt Development	4.00	0.5	RWH Pits	105.00	4.5
			Redevelopment of Pond, Dungarpur (Pond ID: 1HRPWLPWL0123DUNG007)	30.00	2.0
<b>Total</b>	<b>Rs 19.00</b>	<b>Rs. 6.0</b>		<b>Rs. 228.00</b>	<b>Rs. 15.00</b>

The discussion was held on CLU, Approved Zoning Plan, Energy Savings, Contour Map, Location and Capacity of STP, EMP Budget, and following observations were raised:

1. The PP shall submit revised tangible EMP details after increasing expenses to Rs.30 Lakh for development of a Pond to be adopted for rejuvenation maintenance.
2. PP shall submit an undertaking to the effect that no items shall be stored beyond threshold limit in warehouse.
3. PP shall submit timeline regarding implementation of green area plan, RWH plan
4. PP shall increase solar power upto to 10% of total power demand.

The PP submitted the reply of the above said observations alongwith the undertaking sought for vide letter dated 09.07.2022. The reply was considered by the committee.

After discussions and deliberations, the Committee rated this project with “**Gold Rating**” and was of the unanimous view that this case for granting Environmental Clearance under EIA Notification dated 14.09.2006 issued by the Ministry of Environment and Forest, Government of India should be recommended to the SEIAA with the following specific and general stipulations:

**A: Specific Conditions:**

1. The PP shall take the necessary approval from PESO, if applicable
2. The PP shall follow the compliance of Public Liability Insurance Act, 1991

3. The PP shall carry the isolated storage of each chemical to be stored with the existing precautions as per the MSHIC Rules, 1989 and abide by all conditions of MSDS.
4. The Approval of the Competent Authority shall be obtained for structural safety of building code due to earthquakes, adequacy of firefighting equipments etc. as per National Building Code including protection measures from lightening etc.
5. The PP shall ensure that total 2% of the cost of project shall be spent on EMP Budget. However, the amount and component shown in EMP table above shall also be included for the purpose of 2% amount. The EMP cost on Socio Economic activities shall be used before the commencement of the project & EMP recurring inside the project shall be implemented throughout the operation of the project.
6. The PP and consultant agree to display the First Aid measure, Fire Fighting Measure, Accidental Release measure, Exposure and control (Personal Measure) at the site.
7. The project proponent shall upload the status of compliance of the basic details (given in above tables), stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
8. Sewage shall be treated in the STP based on latest Technology with tertiary treatment i.e. Ultra Filtration. The Treated effluent from STP shall be recycled/ reused for flushing. DG cooling, Gardening and HVAC.
9. The PP shall comply with provisions of Occupational Safety health and working conditions Code 2019.
10. The PP shall maintain Redevelopment of Pond, Dungarpur (Pond ID: 1HRPWLPWL0123DUNG007) as proposed in EMP Budget
  1. The Project Proponent would devise a monitoring plan to the satisfaction of the State Pollution Control Board so as to continuously monitor the treated waste water being used for flushing in terms of faecal coli forms and other pathogenic bacteria.
  2. 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.
  3. Separate wet and dry bins must be provided for facilitating segregation of waste. Solid Waste shall be segregated into wet garbage and inert materials. Wet Garbage shall be composted in Organic waste convertor. Adequate area shall be provided for solid waste management within the premises which will include area for segregation, composting. The Inert waste from the project will be sent to solid waste dumping site through authorized vender.
  4. The PP shall implement the EMP and assess that the implemented EMP is adequate and periodic environmental audits shall be conducted and maintained the records of audit. These audits shall be followed by Corrective action plan to correct the various measures identified during the audits (CAP).
  5. Traffic management plan as submitted shall be implemented in letter and spirit. Apart, a detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 km radius of the project is marinated and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habilitation being carried out or purpose to be carried out by the project or other agencies in this 05kms radius of the site in different scenarios of space and time
  6. No tree cutting has been proposed in the instant project. A minimum of 1 tree for every 80sqm 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. 17404.835 sqm (15.040%) shall be provided for green area development.
  7. The PP shall provide the Anti-smog gun mounted on vehicle in the project for suppression of dust during construction phase and shall use the treated water, if feasible.
  8. The PP shall install the Eco Friendly Green Transformer based on ester oil to reduce the carbon footprint. The PP shall shift to gas based generator set when the gas is available.

- The PP shall install APCM for the DG set. The PP shall reduce the SO<sub>2</sub> load by 30% if HSD is used.
9. The PP shall not carry any construction below the HT Line passing through the project, if any.
  10. The PP shall not carry any construction above or below the Revenue Rasta, if any.
  11. The PP shall obtain the permission regarding withdrawal of ground water from CGWA/State water Authority, Haryana before the start of the project and also obtained the CTO from HSPCB after the approval from CGWA.
  12. The PP shall not allow parking of the vehicles on the roads or revenue Rasta outside the project area.
  13. The PP shall not give occupation or possession before the water supply and sewage connection permitted by the competent authority
  14. The PP shall develop the onsite and offsite emergency plan in consultation with the regulatory authority.
  15. The PP shall use 10% solar energy of total power demand.
  16. 30 Rain Water Harvesting recharge pits shall be provided for ground water recharging as per the CGWB norms.
  17. The PP shall install Digital water level recorder for monitoring the water recharge and carry out quarterly maintenance and cleaning of 30 RWH pits.
  18. The PP shall ensure the compliance of provisions of Plastic Waste Management (Amendment) Rules, 2022 relevant for the project.
  19. The PP may provide electric charging stations to facilitate electric vehicle commuters.
  20. PP shall submit timeline regarding implementation of green plan, RWH
  21. PP shall increase solar power upto to 5% of total power demand.
  22. The PP shall not allow establishment of any category A or B type industry in the project area.
  23. The PP shall carry out the quarterly awareness programs for the staff.
  24. Any change in stipulations of EC will lead to Environment Clearance void-ab-initio and PP will have to seek fresh Environment Clearance.
  25. The PP shall comply with provisions of Manufacturing storage and import of Hazardous chemical rules

**B. Statutory Compliance:**

- [1] The project proponent shall obtain all necessary clearance/permission from all relevant agencies including town planning authority for ground coverage, FAR and should be in accordance with zoning plan approved by Competent Authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.
- [2] 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.
- [3] 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.
- [4] The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- [5] 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 Haryana State Pollution Control Board.
- [6] The project proponent shall obtain the necessary permission for drawl of ground water /surface water required for the project from the competent authority.
- [7] 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.
- [8] 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.

- [9] The provisions of the Solid Waste (Management) Rules, 2016, e-Waste (Management) Rules, 2016, and the Plastics Waste (Management) Rules, 2016 and Batteries waste (Management Handling Rules 2001 as amended in 2020) shall be followed.
- [10] The project proponent shall follow the ECBC Act/ECBC, Rules prescribed by Bureau of Energy Efficiency, Ministry of Power strictly in addition of bylaws of the State Government.

## **I Air quality Monitoring and Preservation**

1. 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.
2. A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.
3. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM2.5) covering upwind and downwind directions during the construction period.
4. 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 ultra low Sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board
5. Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murrum and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
6. Sand, Murrum, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.
7. Wet jet shall be provided for grinding and stone cutting.
8. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
9. 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 Rules 2016.
10. The diesel generator sets to be used during construction phase shall be ultra-low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.
11. 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. Ultra-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.
12. For indoor air quality the ventilation provisions as per National Building Code of India.

## **II Water Quality Monitoring and Preservation**

1. 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.
2. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.

3. Total fresh water use shall not exceed the proposed requirement as provided in the project details.
4. 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.
5. 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.
6. At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.
7. 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.
8. 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.
9. 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.
10. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
11. The local bye-law provisions on rain water harvesting should be followed. If local byelaw 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 shall be provided for ground water recharging as per the CGWB norms.
12. 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.
13. All recharge should be limited to shallow aquifer.
14. No ground water shall be used during construction phase of the project.
15. 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.
16. 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.
17. 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.
18. No sewage or untreated effluent water would be discharged through storm water drains.
19. 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.
20. Periodical monitoring of water quality of treated sewage shall be conducted.

Necessary measures should be made to mitigate the odour problem from STP.

21. 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.

### **III Noise Monitoring and Prevention**

1. Ambient noise levels shall conform to residential area/commercial area 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.
2. 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.
3. 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 Energy Conservation measures**

1. Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency as per ECBC Act, 2017 read with ECBC Rules, 2018 shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC also which is no case shall be less than 25% as prescribed.
2. Outdoor and common area lighting shall be LED.
3. 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 R & U-values shall be as per ECBC specifications.
4. 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.
5. 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.
6. 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.
7. The PP will submit report indicating compliance of each parameter of ECBC requirement and submit quantification saving report for each component.

### **V Waste Management**

1. 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.
2. Disposal of muck during construction phase shall not create any adverse effect on the neighboring 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.



3. 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.
4. Organic Waste Converter within the premises with a minimum capacity of 0.5 kg/person/day must be installed. Leaves to be put in earmarked pits for converting them into compost to be used as manure.
5. All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.
6. 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.
7. 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.
8. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.
9. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Rules, 2016.
10. 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.

## **VI Green Cover**

1. 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).
2. A minimum of 1 tree (5' tall) 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.
3. 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.
4. 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.

## **VII 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.

## **VIII Human Health Issues**

1. 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.
2. For indoor air quality the ventilation provisions as per National Building Code of India.
3. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
4. 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.
5. Occupational health surveillance of the workers shall be done on a regular basis.
6. A First Aid Room shall be provided in the project both during construction and operations of the project.

## **IX Corporate Environment Responsibility**

1. The project proponent shall comply with the provisions as applicable, regarding Corporate Environment Responsibility for expansion and existing parts.
2. 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.
3. 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 to the head of the organization.
4. 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.

## **X Miscellaneous**

1. 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.
2. 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.

3. 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.
4. 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.
5. 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.
6. 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.
7. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
8. The project proponent shall abide by all the commitments and recommendations made in the form-IA, Conceptual Plan and also that during their presentation to the Expert Appraisal Committee.
9. No further expansion or modifications in the plan shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC)/SEIAA, Haryana. The project proponent shall seek fresh environmental clearance under EIA notification 2006 if at any stage there is change of area of this project.
10. Any change in planning of the approved plan will leads to Environment Clearance void-ab-initio and PP will have to seek fresh Environment Clearance
11. The PP should give unambiguous affidavit giving land promoters in accordance with your ownership and possession of land legal the case referred for Environment Clearance to SEIAA.
12. 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.
13. The Ministry/SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
14. The Ministry/SEIAA reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
15. 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.
16. 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.

**244.22 EC for Revision and Expansion of Warehouse and Industrial Shed located at Village Durina, Tehsil & District Jhajjar, Haryana by M/s Aaravalli Logistics Park Pvt. Ltd**

**Project Proponent :Sh.Saurabh Sahay**  
**Consultant : Grass Roots Research and Creation India (P) Ltd.**

The project was submitted to the SEIAA, Haryana vide online proposal No. SIA/HR/MIS/76630/2021 dated 06.05.2022 as per check list approved by the SEIAA/SEAC for obtaining Environmental Clearance under Category 8(b) of EIA Notification 14.09.2006.

The case was taken up in 244th meeting of SEAC, Haryana held on 09.07.2022 but the PP requested in letter writing dated 08.07.2022 to defer the case. The committee acceded with the request of PP and deferred the case.

**244.23 EC for Proposed Group Housing Buildings in Zone 10, DLF5 at Sector 54, Gurgaon, Haryana by M/s DLF Limited**

**Project Proponent :Shri Alok Kumar**  
**Consultant : Vardan Environet**

The EIA/EMP report in this case was submitted to the SEIAA, Haryana vide online proposal No. SIA/HR/MIS/76126/2022 dated 28.04.2022 for obtaining Environmental Clearance under Category 8(b) of EIA Notification 14.09.2006.

The case was taken up in 244<sup>th</sup> meeting of SEAC, Haryana and was to be taken up on 09.07.2022, however, PP made a written request for preponement of the case. The Committee acceded the request of PP and case was taken up on 08.07.2022.

- The project had received License from the Directorate of Town & Country Planning, Haryana with 6 Licenses for 7.574 Acres (License No. 38, 52, 53 of 1996 dated 16/04/1996 which is valid up to 15/04/2024, License No. 129, 131, of 1995 dated 29/12/1995 which is valid up to 28/12/2024 and License No. 02, of 2002 dated 25/10/2002 which is valid up to 24/10/2024)
- ToR was granted to the Project by SEIAA on 08.04.2022
- The PP submitted the copy of DD of Rs.2 lakh as scrutiny fees in favour of MS, SEIAA.

The details of the project, as per the documents submitted by the project proponent and also as informed during the presentation in the meeting are as under:-

**Table 1 SUMMARY OF FAR**

Sr. No.	Particulars		
1.	Permissible FAR	32122149.73 sqm	A
2.	EC obtained till date for earlier project upto the ground housing (The CREST) falling in DLF5 as per plan submitted	1975616.401 sqm	B
3.	Balance FAR for (A-B)	1146524.33 sqm	C
4.	Proposed FAR for the Group Housing Zone-10, DLF5	143937.51 sqm	D
5.	Net Balance FAR (C-D)	1002586.82 sqm	E

Table 2 – Basic Details

<b>Name of the Project: Proposed Group Housing Buildings in Zone 10, DLF 5, at Sector-54 Gurugram, Haryana by M/s DLF Limited</b>			
<b>Sr. No.</b>	<b>Particulars</b>		
1.	<b>Online Project Proposal Number</b>	<b>SIA/HR/MIS/76126/2022, Dated 28.04.2022</b>	
2.	Latitude	28°26'44.55"N	
3.	Longitude	77°06'48.93"E	
4.	Plot Area	30,653.317m <sup>2</sup> (7.574 acres)	
5.	Proposed Ground Coverage	6,369.381 m <sup>2</sup> (20.77%)	
6.	Proposed FAR	1,43,937.510 m <sup>2</sup>	
7.	Non FAR Area	89,440.488 m <sup>2</sup>	
8.	Total Built Up area	2,33,377.998 m <sup>2</sup>	
9.	Total Green Area with Percentage	9,195.995 m <sup>2</sup> (30% plot area)	
10.	Rain Water Harvesting Pits	8 Nos.	
11.	STP Capacity	DLF-5 Common STP of 15 MLD	
12.	Total Parking	1,615 ECS	
13.	Organic Waste Converter	Total 1 nos. of Organic waste converters of capacity 1,500 Kg/day	
14.	Maximum Height of the Building (till terrace)	109.350 m	
15.	Power Requirement	5,874 KW (DHBVN)	
16.	Power Backup	9 DG sets of total capacity 8,250 KVA (7×1,000 KVA + 2×625 KVA).	
17.	Total Water Requirement	391 KLD	
18.	Domestic Water Requirement	255 KLD	
19.	Fresh Water Requirement	255 KLD	
20.	Treated Water	136 KLD	
21.	Waste Water Generated	294 KLD	
22.	Solid Waste Generated	2,069 kg/day	
23.	Biodegradable Waste	1,241 kg/day	
24.	Number of Blocks	4 nos	
25.	No. of Floors for Blocks	S+33	
26.	Dwelling Units	520 nos	
27.	Service personnel units	50 nos	
28.	Basement	4 nos	
29.	Community Building	1483.404 m <sup>2</sup>	
30.	Stories	S+33 Floors	
31.	R+U Value of Material used (Glass)	U-Value: <2.8 W/m <sup>2</sup> K SHGC: <0.60	
32.	Total Cost of the project:	i) Land Cost ii) Construction Cost	1,076 Cr.
33.	EMP Cost/Budget	3,130.09 Lakhs	
34.	Incremental Load in respect of:	PM 2.5	0.00794 µg/m <sup>3</sup>
		PM 10	0.00983µg/m <sup>3</sup>
		SO <sub>2</sub>	0.0994 µg/m <sup>3</sup>
		NO <sub>2</sub>	0.0631 µg/m <sup>3</sup>
		CO	0.0000049 mg/m <sup>3</sup>
35.	Construction Phase	Power Back-up	Temporary Connection
		Water Requirement & Source	DLF Water Tanks+ STP WATER (common STP Plan DLF Phase V)
		STP (Modular)	5 KLD
		Anti-Smoke Gun	1

**Table 3 EMP**

<b>Total Project Cost:</b>	<b>107600</b>	<b>Lakhs</b>
<b>Total EMP Proposed Budget</b>	<b>3,130.09</b>	<b>Lakhs</b>

During Construction Phase				During Operation Phase			
Description	Capital Cost	Recurring Cost		Description	Capital Cost	Recurring Cost	
	(In Lakhs)	(In Lakhs for 3 Year)	Per Annum		(in Lakhs)	(In Lakhs for 10 Year)	Per Annum
Sanitation and Wastewater Management	2	3	1	Solid Waste Management	27	30	3
Mobile STP	3	6	2	(Dust bins & OWC)			
Disinfection / pest control	0	3	1				
Dust Mitigation Measures Including site barricading, water sprinkling and anti-smog gun, Wheel Washing	417	36	3	Green Belt Development	100	250	25
Traffic management	3	1.5	0.5	Monitoring for Air, Water, Noise & Soil	0	50	5
Waste Management	1.5	2	0.5				
PPE for workers & welfare	2	1.5	0.5	Rainwater harvesting system	48	15	1.5
Medical cum First Aid facility	2	1.5	0.5	DG Sets including stack height and acoustics	638.09	875	87.5
wheel washing	1	1.5	0.5	Sewerage Treatment plant	200	300	30
				Solar lighting / solar Panel (158.6kwp)	70	35	3.5
Monitoring / testing (air, noise, water, soil, stack emission, STP effluent, DG noise)	0	4.5	1.5				
<b>Total</b>	<b>431.5</b>	<b>60.5</b>	<b>11</b>	<b>Total</b>	<b>1083.09</b>	<b>1555</b>	<b>155.5</b>

The discussion was held on CLU, Approved Zoning Plan, Energy Savings, Contour Map, Location and Capacity of STP, EMP Budget, and following observations were raised:

1. The PP shall submit revised tangible EMP.
2. PP shall submit revised DG sets details.
3. PP shall submit revised Solar panel capacity.
4. PP shall submit layout of 476.6015 acres showing existing, proposed and balance area.
5. PP shall submit an Affidavit regarding tree cutting permission, nallah and water tank.
6. PP shall submit Green area planadding Miyawanki green cover.

The PP submitted the reply of the above said observations alongwith the undertaking and affidavit sought for vide letter dated 09.07.2022 in tabular form as under:

Sr. No.	Observations	Reply
1.	Revised EMP to be submitted.	Revised EMP is attached as <b>Annexure-1</b> .
2.	Revised DG sets details to be submitted.	We will install following DG set capacity at our project: 8,250 KVA (7×1,000 KVA+2×625
3.	Increase Solar panel capacity to be	We will provide 158.6 KWp of solar panel

	submitted.	capacity in our project
4.	Total Layout of 476.6015 Acres which shows existing, Proposed and Balance area to be submitted along with table form.	Total site layout plan which showing existing, proposed and balance area of site is attached as <b>Annexure-2.</b>
5.	Affidavit to be submitted regarding tree cutting permission, nallah and water tank and use of dual fuel in DG Set.	Affidavit regarding same is attached as <b>Annexure-3.</b>
6.	Green belt showing Miyawanki area to be submitted.	Green belt showing Miyawaki area is attached as <b>Annexure-4.</b>

The documents were placed before the committee. The committee after discussion considered the reply and rated this project with “**Gold Rating**” and was of the unanimous view that this case should be recommended to the SEIAA for granting Environmental Clearance under EIA Notification dated 14.9.2006 issued by the Ministry of Environment and Forest, Government of India with the following specific and general stipulations:

**A. Specific conditions:-**

1. Sewage shall be treated in the STP based on latest Technology to achieve standards ordered by NGT. The Treated effluent from STP shall be recycled /reused for flushing. DG cooling and Gardening
2. The PP shall also develop the Miyawaki Forest as proposed in the EMP with the capital cost and maintain the same. The Miyawaki forest shall be developed under the guidance of MD Forest Corporation Haryana.
3. PP shall submit revised Solar panel capacity as per HAREDA norms.
4. The Project Proponent would devise a monitoring plan to the satisfaction of the State Pollution Control Board so as to continuously monitor the treated waste water being used for flushing in terms of faecal coli forms and other pathogenic bacteria.
5. The PP shall ensure that total 2% of the cost of project shall be spent on EMP Budget. However, the amount and component shown in EMP table above shall also be included for the purpose of 2% amount. The EMP cost on Socio Economic activities shall be used before the commencement of the project & EMP recurring inside the project shall be implemented throughout the operation of the project. The PP shall establish Environment monitoring cell as per documents submitted.
6. The PP shall not carry out any construct above and below revenue rasta if passing through the project and ensure that permission of the competent authority shall be obtained before carry out any construction above or below the revenue rasta. The PP shall put notice board on the revenue rasta for the passer byes.
7. The project proponent shall upload the status of compliance of the basic details (given in above tables), stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
8. 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.
9. Separate wet and dry bins must be provided in each unit and at ground level for facilitating segregation of waste. Solid Waste shall be segregated into wet garbage and inert materials. Wet Garbage shall be composted in Organic waste convertor. Adequate area shall be provided for solid waste management within the premises which will include area for

segregation, composting. The Inert waste from the project will be sent to solid waste dumping site through authorized vender.

10. Traffic management plan as submitted shall be implemented in letter and spirit. Apart, a detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is marinated and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habilitation being carried out or purpose to be carried out by the project or other agencies in this 05kms radius of the site in different scenarios of space and time
11. No tree cutting has been proposed in the instant project. A minimum of 1 tree for every 80 sqm of land should be planted and maintained. The Existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping. As proposed 9,195.995 m<sup>2</sup>(30% plot area) shall be provided for Green Area development for whole project, excluding plot areas.
12. 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.
13. Consent to establish/operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of pollution) Act, 1981 and the Water (Prevention and control of pollution) Act, 1974.
14. The Approval of the Competent Authority shall be obtained for structural safety of building code due to earthquakes, adequacy of fire fightingequipments etc. as per National Building Code including protection measures from lightning etc.
15. The PP shall obtain the Fire NOC from the Competent Authority before taking the occupation of the building.
16. The PP shall install the Eco Friendly Green Transformer based on ester oil to reduce the carbon footprint. The PP shall shift to gas based generator set when the gas is available. The PP shall install APCM for the DG set. The PP shall reduce the So2 load by 30% if HSD is used. The DG sets will be operated for maximum 04 hours during power failure through Executing Agency
17. The PP shall not give occupation or possession before the water supply and sewage connection permitted by the competent authority.
18. The PP shall not give occupation or possession before the electricity connection permitted by the competent Authority.
19. The PP shall obtain the permission regarding withdrawal of ground water, if any from HWRA/CGWA before the start of the project and also obtained the CTO from HSPCB after the approval from HWRA/CGWA.
20. The PP shall carry out the quarterly awareness programs for the stakeholders of the project.
21. 08 Rain water harvesting recharge pits shall be provided for ground water recharging as per the CGWB norms
22. The PP shall install Digital water level recorder for monitoring the water recharge and carry out quarterly maintenance and cleaning of 08 RWH pits
23. The PP shall ensure the compliance of provisions of Plastic Waste Management (Amendment) Rules, 2022 relevant for the project.
24. The PP may provide electric charging stations to facilitate electric vehicle commuters.
25. The PP shall provide the Anti smog gun mounted on vehicle in the project for suppression of dust during construction & operational phase and shall use the treated water, if feasible.
26. The PP shall take all preventive measures including water sprinkles to control dust during construction and operational phase.
27. Any change in stipulations of EC will lead to Environment Clearance void-ab-initio and PP will have to seek fresh Environment Clearance.

**B. Statutory Compliance:**

- [1] The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority for ground coverage, FAR and should be in



accordance with zoning plan approved by Competent Authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.

- [2] 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.
- [3] The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for nonforest purpose involved in the project.
- [4] The project proponent shall obtain clearance from the National Board for Wildlife, if applicable. [5] 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 Haryana State Pollution Control Board.
- [6] The project proponent shall obtain the necessary permission for drawl of ground water /surface water required for the project from the competent authority.
- [7] 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.
- [8] 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.
- [9] The provisions of the Solid Waste (Management) Rules, 2016, e-Waste (Management) Rules, 2016, the Plastics Waste (Management) Rules, 2016 and Batteries waste (Management Handling Rules 2001 as amended in 2020) shall be followed.
- [10] The project proponent shall follow the ECBC Act/ECBC-Rules prescribed by Bureau of Energy Efficiency, Ministry of Power strictly in addition of bylaws of the State Government.

#### **I Air Quality Monitoring and Preservation**

- 1) 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.
- 2) A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.
- 3) The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM2.5) covering upwind and downwind directions during the construction period.
- 4) 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 ultra low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board
- 5) Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murrum and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
- 6) Sand, murrum, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.
- 7) Wet jet shall be provided for grinding and stone cutting.
- 8) Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.

- 9) 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 Rules 2016.
- 10) The diesel generator sets to be used during construction phase shall be ultra low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.
- 11) 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. Ultra 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.
- 12) For indoor air quality the ventilation provisions as per National Building Code of India.

## **II Water Quality Monitoring and Preservation**

- 1) 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.
- 2) Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.
- 3) Total fresh water use shall not exceed the proposed requirement as provided in the project details. The per capita supply should adhere to NBC 2016 and CGWA Notification dated 12.12.2018.
- 4) 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.
- 5) 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.
- 6) At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.
- 7) 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.
- 8) 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.
- 9) 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.
- 10) Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- 11) The local bye-law provisions on rain water harvesting should be followed. If local byelaw 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 pits shall be provided for ground water recharging as per the CGWB norms.
- 12) 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.

- 13) All recharge should be limited to shallow aquifer.
- 14) No ground water shall be used during construction phase of the project.
- 15) 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.
- 16) 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.
- 17) 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.
- 18) No sewage or untreated effluent water would be discharged through storm water drains.
- 19) 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.
- 20) Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.
- 21) 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.

### **III Noise Monitoring and Prevention**

- 1) Ambient noise levels shall conform to residential area/commercial area 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.
- 2) 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.
- 3) 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 Energy Conservation Measures**

- 1) Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency as per ECBC Act, 2017 read with ECBC Rules, 2018 shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC also which is in no case should be less than 25% as prescribed.
- 2) Outdoor and common area lighting shall be LED.

- 3) 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 R & U-values shall be as per ECBC specifications.
- 4) 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.
- 5) 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.
- 6) 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.
- 7) The PP will submit report indicating compliance of each parameter of ECBC requirement and submit quantification saving report for each component.

#### **V Energy Conservation Measures**

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- 7) The PP will submit report indicating compliance of each parameter of ECBC requirement and submit quantification saving report for each component.

#### **VI Waste Management**

- 1) 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.

- 2) Disposal of muck during construction phase shall not create any adverse effect on the neighboring 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.
- 3) 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.
- 4) Organic Waste Converter within the premises with a minimum capacity of 0.5 kg /person/day must be installed. Leaves to be put in earmarked pits for converting them into compost to be used as manure
- 5) All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.
- 6) Any hazardous waste generated during construction phase, shall be disposed of as per applicable rules and norms with necessary approvals of the State Pollution Control Board.
- 7) 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.
- 8) Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.
- 9) Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Rules, 2016.
- 10) 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**

- 1) 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).
- 2) A minimum of 1 tree (5' tall) 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.
- 3) 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.
- 4) 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**

- 1) 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.
- 2) 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.
  - 3) 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**

1. 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.
2. For indoor air quality the ventilation provisions as per National Building Code of India.
3. Emergency preparedness plan based on the Hazard Identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
4. 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.
5. Occupational health surveillance of the workers shall be done on a regular basis.
6. A First Aid Room shall be provided in the project both during construction and operations of the project.

#### **X Corporate Environment Responsibility**

- 1) The project proponent shall comply with the provisions of CER, as applicable.
- 2) 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.
- 3) 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 to the head of the organization.
- 4) Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

**XI Miscellaneous**

- 1) The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed.
- 2) 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.
- 3) 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.
- 4) 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.
- 5) 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.
- 6) 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.
- 7) The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- 8) The project proponent shall abide by all the commitments and recommendations made in the form-IA, Conceptual Plan and also that during their presentation to the Expert Appraisal Committee.
- 9) No further expansion or modifications in the plan shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC)/SEIAA, Haryana. The project proponent shall seek fresh environmental clearance under EIA notification 2006 if at any stage there is change of area of this project.
- 10) Any change in planning of the approved plan will leads to Environment Clearance voidab-initio and PP will have to seek fresh Environment Clearance
- 11) The PP should give unambiguous affidavit giving land promoters in accordance with your ownership and possession of land legal the case referred for Environment Clearance to SEIAA.
- 12) 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.
- 13) The Ministry/SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- 14) The Ministry/SEIAA reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- 15) 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.
- 16) 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.

**244.24 EC for Proposed Expansion of Affordable Group Housing Colony at Village Wazirpur, Sector 92, Gurugram, Haryana of land measuring 9.875 acres by M/s GLS infraprojectsPvt. Ltd**

**Project Proponent : None**  
**Consultant : Vardan Environet**

The project was submitted to the SEIAA, Haryana vide online proposal No. SIA/HR/MIS/275301/2022 dated 28.05.2022 as per check list approved by the SEIAA/SEAC for obtaining Environmental Clearance under Category 8(a) of EIA Notification 14.09.2006.

The case was taken up in 244th meeting of SEAC, Haryana held on 09.07.2022 but the PP requested in letter writing dated 01.07.2022 that due to unavoidable circumstance, they will not be able to attend the meeting and requested to consider the project in next upcoming SEAC Meeting. The committee acceded with the request of PP and deferred the case and shall be taken up in next meeting.

**244.25 EC for Mining of sand minor mineral from the riverbed of Yamuna River with 36,00,000 MTPA production capacity over an area of 94.09 Hectare located at Village- Dadsiya, Tehsil & District- Faridabad, Haryana by M/s Dev & Div Solutions Pvt. Ltd.**

**Project Proponent : Sh. Laxman Binani**  
**Consultant : Vardan Environet**  
**Shri Sanjay Simberwal, Mining Engineer on 09.07.2022 in Mining Cases**

The EIA/EMP report was submitted to the SEIAA, Haryana vide online proposal No. SIA/HR/MIN/77692/2021 dated 03.06.2022 as per check list approved by the SEIAA/SEAC for obtaining Environmental Clearance under Category 1(a) of EIA Notification 14.09.2006.

ToR is granted to the project on dated 27.12.2021. PP has submitted the DD on account of scrutiny fee for a sum of Rs.1,50,000/-

The case was taken up in 244th meeting of SEAC Haryana held on dated 09.07.2022. The PP presented the case before the committee.

The proposed project is for EC for Mining of Minor Mineral (Sand) at Village DadsiaKiranwali Unit, Tehsil & District Faridabad, Haryana production capacity of 36,00,000 TPA, over an area of 94.09 hectare by M/s Dev & Div Solutions Pvt. Ltd.

- This is a fresh Mining Lease area auctioned by Govt. of Haryana and Lol was issued vide letter no. DMG/HY/DadsiaKiranwali Unit/FBD/2021/3170 dated 16/08/2021 attached as Annexure II, no production is started yet.
- Mining Plan and Progressive Mine Closure Plan including Replenishment Study and other specific conditions as mentioned in the Enforcement & Monitoring Guidelines for Sand Mining issued by the Ministry of Environment, Forest & Climate Change during January, 2020 has been approved by Director General of Mines and Geology Department Haryana vide letter no DMG/HY/MP/DadsiyaFbd/2021/3270 dated 15.05.2022.
- All corners of the coordinates of ML area are superimposed on Toposheet of survey of India Toposheet (OSM) No. H43X6, H43X7, H43X10 & H43X11. Coordinates of the mine lease area given.



- Baseline data of study area within 10 Km radius of the project site was collected from October to December 2021 as per ToR letter approved from SEIAA.
- There is no involvement of forest land in the project area and the same has been confirmed by the DFO vide letter No. 378 on dated 21.06.2022.
- EB Study has been carried out in and around the lease area to study the wild life of the area. 1 species of Schedule I were recorded. The conservation plan has been prepared along with budgetary provision of Rs.10.00 Lakhs to conserve wildlife and the same has been submitted to DFO on dated 09.02.2022.
- The specific gravity of the sand is 2 and the same has been approved by the DMG Haryana which is mentioned at page no 27 of Approved mining plan
- A requested letter for the site visit of A Sub-Divisional Committee comprising of Sub Divisional Magistrate, Officers from Irrigation Department, State Pollution Control Boards or Committee, Forest Department, Geology or mining officer, revenue department shall visit the site and make recommendation on suitability of site for mining or prohibition thereof, has been submitted to mining department on dated 07.01.2022. The PP submitted that report of visit will be provided after the visit.
- Project Proponent has been carried out the pre monsoon and post monsoon replenishment study to ascertain the quantity of material replenished and the report is placed in record. Mining plan has been prepared on the basis of replenishment report and the same has been approved by the DMG/HY/MP/Dadsiyafbd/2021/3270 dated 16.05.2022.
- Total 113 persons will be required as technical and other supervisory staff in the project.
- The main fuel used in the mining operations is diesel. The total requirement of Diesel is 7720 LPD, out of which 13000 LPD is being used in Dumpers, 500 LPD is used in JCB, 300 liters is used in water tankers and 320 liters is required for other Light vehicles and 100 liters is required for maintenance purposes.
- This is a new mining area allotted to the applicant. Mining Contract has been allotted for a period of 10 years only. Mining area consist of 94.09 Ha.[81.44 hectares in riverbed for mining and 12.65 hectares for ancillary activities). Proposed Production = 36, 00,000 TPA Working days (Excluding 52 Sundays and 45 Rainy days) have been taken as 250 days per Annum. Daily Production = 14,400 MT/Day.
- There are sufficient reserves to continue the mining project for Ten (10) years, as mineral get replenished every year during monsoon, since according to LOI the period awarded for mining of sand is 10 years at the proposed rate of production 36,00,000 MTPA.

The details of the project, as per the documents submitted by the project proponent and also as informed during the presentation in the meeting are as under.

**Table-1 Basic Details**

<b>Name of the Project: Mining of sand minor mineral from the riverbed Yamuna river with 36,00,000 MT production capacity over an area of 94.09 hectare located at Village- DadsiaKiranwali, District- Faridabad, and State- Haryana proposed by M/s Dev &amp;Div Solutions Pvt. Ltd.</b>		
<b>1.</b>	<b>Online Proposal Number</b>	<b>SIA/HR/MIN/68086/2021</b>
<b>2.</b>	<b>Category/Item no. (in schedule):</b>	Category-B1, Sector I (a)
<b>3.</b>	<b>Area of the project</b>	Area- 94.09 ha
<b>4.</b>	<b>Date of Lol granted by</b>	Director, Mines & Geology, Haryana has issued the LOI vide Memo No.

	<b>Mines &amp; Geology Department, Haryana</b>	DMG/HY/Dadsia Unit/Fbd/2021/3170 Dated 16.08.2021 in favour of M/s Dev & Div Solutions Pvt. Ltd. over an area of 94.09 Hectares for a period of 10 Years.									
5.	<b>Date of approval of Mining plan granted by Mines &amp; Geology Department, Haryana</b>	Mining plan has been prepared and submitted to DMG for their approval.									
6.	<b>Location of Project</b>	Village- Dadsia Kiranwali unit, Tehsil & District- Faridabad, Haryana.									
7.	<b>Project Details Khasra No</b>	<p><b>Village Dadsia</b></p> <p>1//18 min, 22, 24min, 23</p> <p>3//10min, 11min, 12min, 18min, 19min, 20, 21, 22, 23min</p> <p>4//2, 3, 4, 5min, 6, 7, 8, 9, 12, 13, 14</p> <p>15/1, 15/2, 16, 17, 18, 19, 20, 21, 22</p> <p>23, 24, 25/1, 25/2</p> <p>5//25</p> <p>6//5min, 6min</p> <p>7//1, 2, 3, 4, 5, 6, 7, 8/1, 8/2, 9, 10min, 11min, 12min, 13</p> <p>14, 15, 16, 17, 18min, 19min, 23min, 24, 25</p> <p>8//1, 2, 3, 4, 7, 8, 9, 10, 11, 12, 13, 14, 15/1, 15/2, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25</p> <p>9//19min, 20min, 21, 22, min</p> <p>10//20/1min, 20/2min, 21, 22min, 23min</p> <p>11//1, 2, 3min, 7 min, 8, 9, 10, 11, 12, 13, 14, 15, min, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25</p> <p>12//1, 2, 3, 4, 5, 6, 7, 8, 9, 10min, 12min, 13min, 14, 15, 16min, 17min, 18min, 25min, 21//1, 2, 3, 8, 9, 10, 11, 12, 13, 18, 19, 20, 21min, 22min, 23min</p> <p><b>For Ancillary area</b></p> <p>24//8, 9, 10, 11, 12, 13, 18, 19, 20, 21, 22, 23,</p> <p>25//4, 5, 6, 7, 14, 15, 16, 17, 24, 25/1, 25/2</p> <p>30//4min, 5/1, 5/2, 6/1 min 31//1, 2, 3, 8, 9, 10, 12, 13</p> <p><b>Village Kirawali</b></p> <p>1/2/1 min, 1/6/2 min</p>									
8.	<b>Project Cost</b>	Rs. 9.00 Crores									
9.	<b>Water Requirement</b>	125 KLD									
10.	<b>Source of water</b>	Hired tankers From nearby villages.									
11.	<b>Environment Management Plan Budget</b>	3% of project cost									
12.	<b>Production</b>	36,00,000 TPA									
13.	<b>Corner Coordinates of the lease area</b>	<p><b>Latitude-</b> N "28° 28' 16.44" to N 28° 28' 10.45"</p> <p><b>Longitude-</b> E "E 77° 22' 19.02 to E 77° 22' 49.85"</p>									
14.	<b>Green belt/ plantation</b>	33% of total plot area									
15.	<b>Machinery required</b>	<p>Following equipment's are proposed to be deployed for the desired production</p> <table border="1"> <thead> <tr> <th>S.No.</th> <th>Equipment</th> <th>Nos</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>JCB</td> <td>10</td> </tr> <tr> <td>2</td> <td>Tippers/ Trucks</td> <td>50</td> </tr> </tbody> </table>	S.No.	Equipment	Nos	1	JCB	10	2	Tippers/ Trucks	50
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1	JCB	10									
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		3	Water Tanker	3	
		4	Light vehicles	4	
16.	<b>Power Requirement</b>	The mine will get dedicated power supply from Dakshin Haryana Bijli Vitaran Nigam (DHBVN).			
17.	<b>Power Back up</b>	Mining will be done in day time only.			
18.	<b>Incremental Load in respect of:</b>				
	i) <b>PM<sub>2.5</sub></b>	I. 0.04494 µg/m <sup>3</sup>			
	ii) <b>PM<sub>10</sub></b>	II. 0.76398 µg/m <sup>3</sup>			
	iii) <b>SO<sub>2</sub></b>	III. 0.00943 µg/m <sup>3</sup>			
	iv) <b>NO<sub>2</sub></b>	IV. 0.00725 µg/m <sup>3</sup>			
	v) <b>CO</b>	V. 0.000004 mg/m <sup>3</sup>			

**Table 2: Geological Reserves**

Sr no.	Nature of land	Lease area in hac.	Total proved Geological reserves MT = Area x depth x BD(A)	Ancillary Area in Hect.	Ancillary Area Geological Reserves in T(B)	Total reserves IN RIVERBED A-B=C
1	River bed	94.09	56,45,400 MT	12.00	7,59,000 MT	48,84,600 MT

**Table 3: Mineable Reserves**

Sr no.	Nature of land	Total riverbed area in ha.	Total proved Geological reserves MT = Area x depth x BD(A)	Blocked area of 50m strip after each km, 20% blocked in river banks, lease	Blocked area Geological Reserves in T (B)	Total reserves A-B=C	Minable Reserve
1	River bed	81.4	48,84,000 MT	16.28	9,76,800 MT	3,90,720 MT	39,00,000 MT

**Table 4: Five Years Proposed Production Details (Tons/annum)**

Production From River bed		
Year	Production proposed (TPA)	Area (ha) required per year
2021-22	36,00,000	60.00
2022-23	36,00,000	60.00
2023-24	36,00,000	60.00
2024-25	36,00,000	60.00
2025-26	36,00,000	60.00

**Table 5: Man Power Detail**

S. No.	Category	Numbers
1	Manager (I/II Class/Permit Manager)	1
2	Foreman/Mates	2
3	Skilled personnel	30
4	Semi-skilled personnel	70
5	Unskilled	10
<b>Total</b>		<b>113</b>

**Table 6 : Detail of Mining**

Sr. No.	Particulars	Details
1.	Method of Mining	Open Cast Semi-mechanized
2.	Geological Reserves	56,45,400 MT
3.	Mineable Reserves	39,00,000 MT
4.	Proposed Production	36,00,000 MT
5.	Elevation Range of the Mine Site	From 191 m to 196 m RL
6.	Bench Height	3 m in Riverbed
7.	Bench Width (Average)	Width of the bench around 20 m

**Table 7: EMP**

S. No.	Particulars	Capital Cost (in Lakhs) One time	Recurring cost In lakhs Per year	Total cost in Lakhs for 5 years
1.	Dust Suppression	0	3	15
2.	Environmental Monitoring – Air, Water, Noise and Soil	0	3	15
3.	Haul road and other roads construction and Maintenance	3	2	13
4.	Plantation	16	16	96
5.	Waste water & solid waste treatment (domestic waste)	2	1	7
6.	Pre-monsoon & post-monsoon survey for sedimentation in the river bed	0	4	16
7.	Rainwater recharging (outside the project site)	4	1	9
<b>Total</b>		<b>25</b>	<b>30</b>	<b>171</b>

The Committee discussed that the mining area proposed by the PP was 94.09 hectare. The total Geological reserve is 56,45,400 MT and total mineral able reserve is 13,68,600 MT. The Proposed production capacity is 39,00,000 MTPA. The Committee was of the view that PP shall use only Excavators for mining to ensure that the mining depth be maintained as 3.0 meters. No other heavy machinery like JCB Machine etc. shall be used for excavation/ digging which may adversely impacts the aquatic biota. The Committee deliberated that mining be allowed and PP shall get the scientific replenishment study conducted through digital mapping in respect of depth, tonnage on the basis of full year aforesaid and shall be submitted. The PP shall have to ensure that during the course of mining, leveled cross section is made (to the extent possible) so that replenishment studies in future are carried out with ease and transparency and depth of deposited material is measured. The DMG, Haryana shall ensure that leveled cross-section is made by the PP before the onset of next rainfall season and the same be communicated to SEIAA.

M/s Dev & Div Solutions Pvt. Ltd. participated in the e-auction held on 16.07.2021 after accepting terms & conditions and offered the highest bid of Rs.14,96,00,000 /- (Rupees Fourteen crores Ninety Six Lakhs only) per annum, against the reserve price of Rs.14,66,00,000/-, for obtaining the Mining Contract of Mineral Mine namely 'Dadsia-Kiranwali Unit' for extraction of sand having tentative area of 94.09 hectares. The State Government accepted the highest bid and Lol was issued on 16/08/2021 in their favour. The draft Mining Plan and Progressive Mine Closure Plan were approved on 29.09.2021.

The discussion was held on public hearing demand, conservation plan, replenishment study, plantation, EMP and STP. During discussion observations were raised to which the PP replied as under:

S. No.	Observations	Reply/ Document																																
1.	The PP shall submit the year wise details of planation.	<p>PP has planned to plant 80,000 sapling in the plan period and year wise detail of the same is given as below:</p> <table border="1"> <thead> <tr> <th>Year</th> <th>Saplins to be planted</th> <th>Survival (@ 80%)</th> <th>Species</th> <th>Place of Plantation</th> </tr> </thead> <tbody> <tr> <td>2021-22</td> <td>16,000</td> <td>12,800</td> <td rowspan="6">Neem, Peepal, Mango, Shisham, Sirish, Babool, Gulmohar, and other native species.</td> <td rowspan="6">Along the Haul roads, Govt. building, Panchayat land etc.</td> </tr> <tr> <td>2022-23</td> <td>16,000</td> <td>12,800</td> </tr> <tr> <td>2023-24</td> <td>16,000</td> <td>12,800</td> </tr> <tr> <td>2024-25</td> <td>16,000</td> <td>12,800</td> </tr> <tr> <td>2025-26</td> <td>16,000</td> <td>12,800</td> </tr> <tr> <td>Total</td> <td>80,000</td> <td>60,000</td> </tr> </tbody> </table>	Year	Saplins to be planted	Survival (@ 80%)	Species	Place of Plantation	2021-22	16,000	12,800	Neem, Peepal, Mango, Shisham, Sirish, Babool, Gulmohar, and other native species.	Along the Haul roads, Govt. building, Panchayat land etc.	2022-23	16,000	12,800	2023-24	16,000	12,800	2024-25	16,000	12,800	2025-26	16,000	12,800	Total	80,000	60,000							
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2.	The PP will plant Ayurvaedic plants and indigenous species of native plants along with the green belt plantation.	<p>PP will plant Ayurvaedic plants and indigenous species of native plants along with the green belt plantation and the list of plants is as below:</p> <table border="1"> <thead> <tr> <th>Sr. No.</th> <th>Scientific name</th> <th>Local name</th> <th>Family</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td><i>Azadiractaindica</i></td> <td>Neem</td> <td>Meliaceae</td> </tr> <tr> <td>2.</td> <td><i>Tinosporacordifolia</i></td> <td>Gilloh</td> <td>Menispermaceae</td> </tr> <tr> <td>3.</td> <td><i>Terminaliabelerica</i></td> <td>Bahera</td> <td>Combretaceae</td> </tr> <tr> <td>4.</td> <td><i>Terminalia arjuna</i></td> <td>Arjun</td> <td>Combretaceae</td> </tr> <tr> <td>5.</td> <td><i>Moringa oleifera</i></td> <td>Sohanjana</td> <td>Moringaceae</td> </tr> <tr> <td>6.</td> <td><i>Cassia fistula</i></td> <td>Amaltas</td> <td>Fabaceae</td> </tr> <tr> <td>7.</td> <td><i>Cuscutareflexa</i></td> <td>Akash bel</td> <td>Cosnopoluceae</td> </tr> </tbody> </table>	Sr. No.	Scientific name	Local name	Family	1.	<i>Azadiractaindica</i>	Neem	Meliaceae	2.	<i>Tinosporacordifolia</i>	Gilloh	Menispermaceae	3.	<i>Terminaliabelerica</i>	Bahera	Combretaceae	4.	<i>Terminalia arjuna</i>	Arjun	Combretaceae	5.	<i>Moringa oleifera</i>	Sohanjana	Moringaceae	6.	<i>Cassia fistula</i>	Amaltas	Fabaceae	7.	<i>Cuscutareflexa</i>	Akash bel	Cosnopoluceae
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3.	The PP shall submit the details of greenbelt coordinates.	<p>The coordinates of the proposed plantation is as below and the patch map for the same is submitted.</p> <table border="1"> <thead> <tr> <th>PATCH</th> <th>LATITUDE</th> <th>LONGITUDE</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>28° 28' 23.068" N – 28° 28' 34.224" N</td> <td>77° 23' 50.847" E – 77° 22' 28.867" E</td> </tr> <tr> <td>2</td> <td>28° 28' 5.503" N – 28° 28' 13.489" N</td> <td>77° 23' 50.236" E – 77° 22' 15.618" E</td> </tr> <tr> <td>3</td> <td>28° 27' 54.679" N – 28° 28' 6.498" N</td> <td>77° 22' 16.038" E – 77° 22' 29.260" E</td> </tr> </tbody> </table>	PATCH	LATITUDE	LONGITUDE	1	28° 28' 23.068" N – 28° 28' 34.224" N	77° 23' 50.847" E – 77° 22' 28.867" E	2	28° 28' 5.503" N – 28° 28' 13.489" N	77° 23' 50.236" E – 77° 22' 15.618" E	3	28° 27' 54.679" N – 28° 28' 6.498" N	77° 22' 16.038" E – 77° 22' 29.260" E																				
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4.	The PP shall submit the affidavit regarding the cost of the project.	<p>The total project cost of the project is Rs. 9.00 Crores. Cost of EMP (30 lakhs/year recurring cost and 25 lakhs is capital cost) will be 171 lakhs. CER Cost is 81 lakhs. Affidavit for the same is submitted.</p>																																
5.	The PP will carry out the replenishment study every year and shall submit same to the concerned department.	<p>PP will carry out the replenishment study every year from the authorized agency and Affidavit for the same is submitted.</p>																																
6.	Mining will be allowed upto a depth of 3m only or 2m above the ground water level.	<p>The mining will be done up to 3m depth only and 2m above the ground water, whichever comes first. Affidavit for the same is submitted.</p>																																
7.	PP will compensate the land owners as per the latest government applicable norms.	<p>PP will compensate the land owners as per mutual agreement basis. In cases where the amount of compensation is not mutually settled between the parties the compensation will be calculated as per the Notification of Mines and Geology Department, Haryana Government dated 03.05.2021. Affidavit for the same is submitted.</p>																																
8.	PP will submit action plan comply with of Public Hearing.	<p>PP will expend the budget as per the demand raised during the public hearing. Affidavit for the same is submitted.</p>																																
9.	PP will start mining after approval of Conservation plan.	<p>Mining will be only after the approval of Conservation plan for the wildlife department. Affidavit for the same is submitted.</p>																																
10.	PP will done plantation as per the Miyawaki methodology.	<p>Green belt will be developed in the ancillary area by using Miyawaki methodology. Affidavit for the same is submitted.</p>																																

Discussion was held on the documents submitted by PP alongwith required affidavits in response to the observations and found those in order. After detailed deliberations on the above said issues the Committee was of the unanimous view that this case should be recommended to the SEIAA for granting Environmental Clearance for one year and shall submit the scientific replenishment study within one year as per latest NGT guidelines will submit under EIA Notification under category B1, 1(a) dated 14.09.2006 issued by the Ministry of Environment and Forest, Government of India with the following specific and general stipulations:

**A: Specific Conditions:-**

1. The PP shall construct the pucca link roads connected to the main road at the mining site before the start of mining.
2. The PP will plant Ayurvedic plants and indigenous species of native plants along with the green belt plantation.
3. PP will done plantation as per the Miyawaki methodology.
4. PP will start mining after approval of Conservation plan.
5. PP will compensate the land owners as per the latest government applicable norms.
6. The PP shall construct the Haul roads of width 10 meters.
7. The PP shall submit the approved wildlife Conservation Plan from the Competent Authority before the start of the project. The PP agrees that Rs.20 lakhs shall be spent on Biodiversity Conservation of species towards wildlife conservation plan. The Budget of Wildlife activity plan on various specified activities shall be spent in consultation with Chief Wildlife Warden.
8. The PP shall comply with all the undertakings submitted to the SEAC/DGM.
9. The PP shall ensure that total 2% of the cost of project shall be spent on EMP Budget. However, the amount and component shown in EMP table above shall also be included for the purpose of 2% amount. The EMP cost on Socio Economic activities shall be used before the commencement of the project & EMP recurring inside the project shall be implemented throughout the operation of the project. The PP shall establish Environment monitoring cell as per documents submitted
10. The PP shall provide only one exit and one entry to the Mining Project area and all the mining shall be dispatched through E-billing-.
11. The PP shall maintain an un-mined block of 50 meters width after every block of 1000 meters over which mining is undertaken or at such distance as may be directed by the Director or any officer authorized by him.
12. The PP shall restrict mining within the central 3/4<sup>th</sup> width of the river/rivulet.
13. The PP shall not permit any mining in an area up to width of 500 meters from the active edges of embankments in case of River Yamuna, 250 mtrs. in case of Tangri, Markanda and Ghaggar and 100 mtrs. on either side of all other rivers/rivulets.
14. The PP agrees and submitted the undertaking that no Boulder, gravel shall be mined in the mining lease area.
15. The PP shall develop 33% area of the plot for Green Area development in the project area.
16. Separate wet and dry bins must be provided in each unit and at ground level for facilitating segregation of waste. Solid Waste shall be segregated into wet garbage and inert materials. Wet Garbage shall be composted in Organic waste convertor. Adequate area shall be provided for solid waste management within the premises which will include area for segregation, composting. The Inert waste from the project will be sent to dumping site.
17. The PP shall maintain the garland drains in the project area and catchment area for preserving overburden and dump mining.
18. Traffic management plan as submitted shall be implemented in letter and spirit. Apart, a detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms. radius of the project is marinated and improved upon after the implementation of the project.
19. The PP shall not carry out the mining below 3 meter depth in the project area as the replenishment study is not carried out.
20. The PP shall submit the scientific replenishment study for the project site in the river bed every year after the start of the mining at the project site.

21. The Project Proponent shall obtain all necessary clearance/permission from all relevant agencies before commencement of work.
22. Consent to establish/operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.
23. The PP shall take precautions to suppress the dust in and around the mining site. The PP shall use mixed cannon water sprinkle for dust suppression instead of conventional sprinkles for efficient dust suppression.
24. The PP shall also provide the Anti-smog gun mounted on truck in the project for suppression of dust and shall use the treated water, if feasible.
25. The PP shall create environment division unit in the project for implementing the conditions of Environment clearance.
26. The PP shall obtain the permission regarding withdrawal of ground water from CGWA before the start of the project and also obtained the CTO from HSPCB after the approval from CGWA.
27. The PP shall adhere to the approved mining plan and approved closure plan by the competent authority.
28. Action plan for the public hearing issues shall be complied in letter and spirit.
29. The Proponent will provide adequate sanitary facility in the form of mobile toilets to the labours engaged for the project work.
30. The Project proponent shall comply all the measures, conditions suggested in the approved mining plan with post closure mine plan, Environmental Management Plan (EMP) in a letter and spirit.
31. The PP shall restrict maximum mining depth 3 meters above the Ground Water Table.
32. Any change in stipulations of EC of the approved mining plan will lead to Environment Clearance void-ab-initio and PP will have to seek fresh Environment Clearance.

**B: Statutory Compliance:-**

1. This Environmental Clearance (EC) is subject to orders/ judgment of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, Common Cause Conditions as may be applicable.
2. The Project proponent complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India & Others before commencing the mining operations.
3. The State Government concerned shall ensure that mining operation shall not be commenced till the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department of Mining & Geology in strict compliance of Judgment of Hon'ble Supreme Court dated 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India & Ors.
4. This Environmental Clearance shall become operational only after receiving formal NBWL Clearance from MoEF&CC subsequent to the recommendations of the Standing Committee of National Board for Wildlife, if applicable to the Project.
5. This Environmental Clearance shall become operational only after receiving formal Forest Clearance (FC) under the provision of Forest Conservation Act, 1980, if applicable to the Project.
6. Project Proponent (PP) shall obtain Consent to Operate after grant of EC and effectively implement all the conditions stipulated therein. The mining activity shall not commence prior to obtaining Consent to Establish/Consent to Operate from the concerned State Pollution Control Board/Committee.
7. The PP shall adhere to the provision of the Mines Act, 1952, Mines and Mineral (Development & Regulation), Act, 2015 and rules & regulations made there under. PP shall adhere to various circulars issued by Directorate General Mines Safety (DGMS), Mines & Geology Department, Haryana and Indian Bureau of Mines from time to time.. Also adhere to Haryana Minor Mineral Concession, Stocking, Transportation of Minerals and Prevention of Illegal Mining Rules, 2012.

8. The Project Proponent shall obtain consents from all the concerned land owners, before start of mining operations, as per the provisions of MMDR Act, 1957 and rules made there under in respect of lands which are not owned by it.
9. The Project Proponent shall follow the mitigation measures provided in MoEF& CC Office Memorandum No. Z-11013/57/2014-IA.II (M), dated 29th October, 2014, titled "Impact of mining activities on Habitations-Issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area".
10. The Project Proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of surface water and from CGWA for withdrawal of ground water for the project.
11. A copy of EC letter will be marked to concerned Panchayat / local NGO etc. if any, from whom suggestion / representation has been received while processing the proposal.
12. State Pollution Control Board/Committee shall be responsible for display of this EC letter at its Regional office, District Industries Centre and Collector's office/ Tehsildar's Office for 30 days.
13. The Project Authorities should widely advertise about the grant of this EC letter by printing the same in at least two local newspapers, one of which shall be in vernacular language of the concerned area. The advertisement shall be done within 7 days of the issue of the clearance letter mentioning that the instant project has been accorded EC and copy of the EC letter is available with the State Pollution Control Board/Committee and web site of the Ministry of Environment, Forest and Climate Change ([www.parivesh.nic.in](http://www.parivesh.nic.in)). A copy of the advertisement may be forwarded to the concerned MoEF& CC Regional Office for compliance and record.
14. The Project Proponent shall inform the MoEF&CC for any change in ownership of the mining lease. In case there is any change in ownership or mining lease is transferred than mining operation shall only be carried out after transfer of EC as per provisions of the para 11 of EIA Notification, 2006 as amended from time to time.

#### **I. Air Quality Monitoring and Preservation**

1. The Project Proponent shall install a minimum of 3 (three) online Ambient Air Quality Monitoring Stations with 1 (one) in upwind and 2 (two) in downwind direction based on long term climatologically data about wind direction such that an angle of 120° is made between the monitoring locations to monitor critical parameters, relevant for mining operations, of air pollution viz. PM<sub>10</sub>, PM<sub>2.5</sub>, NO<sub>2</sub>, CO and SO<sub>2</sub> etc. as per the methodology mentioned in NAAQS Notification No. B-29016/20/90/PCI/I, dated 18.11.2009 covering the aspects of transportation and use of heavy machinery in the impact zone. The ambient air quality shall also be monitored at prominent places like office building, canteen etc. as per the site condition to ascertain the exposure characteristics at specific places. The above data shall be digitally displayed within 03 months in front of the main Gate of the mine site.
2. Effective safeguard measures for prevention of dust generation and subsequent suppression (like regular water sprinkling, metalled road construction etc.) shall be carried out in areas prone to air pollution wherein high levels of PM<sub>10</sub> and PM<sub>2.5</sub> are evident such as haul road, loading and unloading point and transfer points. The Fugitive dust emissions from all sources shall be regularly controlled by installation of required equipments/ machineries and preventive maintenance. Use of suitable water-soluble chemical dust suppressing agents may be explored for better effectiveness of dust control system. It shall be ensured that air pollution level conform to the standards prescribed by the MoEF& CC/Central Pollution Control Board.

#### **II. Water Quality Monitoring and Preservation**

1. In case, immediate mining scheme envisages intersection of ground water table, then Environmental Clearance shall become operational only after receiving formal clearance from CGWA. In case, mining operation involves intersection of ground water table at a



- later stage, then PP shall ensure that prior approval from CGWA and MoEF& CC is in place before such mining operations. The permission for intersection of ground water table shall essentially be based on detailed hydro-geological study of the area.
2. Regular monitoring of the flow rate of the springs and perennial Nallahs flowing in and around the mine lease shall be carried out and records maintain. The natural water bodies and or streams which are flowing in an around the village, should not be disturbed. The Water Table should be nurtured so as not to go down below the pre-mining period. In case of any water scarcity in the area, the Project Proponent has to provide water to the villagers for their use. A provision for regular monitoring of water table in open dug wall located in village should be incorporated to ascertain the impact of mining over ground water table. The Report on changes in Ground water level and quality shall be submitted on six-monthly basis to the Regional Office of the Ministry, CGWA and State Groundwater Department / State Pollution Control Board.
  3. Project Proponent shall regularly monitor and maintain records w.r.t. ground water level and quality in and around the mine lease by establishing a network of existing wells as well as new piezometer installations during the mining operation in consultation with Central Ground Water Authority/ State Ground Water Department. The Report on changes in Ground water level and quality shall be submitted on six-monthly basis to the Regional Office of the Ministry, CGWA and State Groundwater Department / State Pollution Control Board.
  4. The Project Proponent shall undertake regular monitoring of natural water course/ water resources/ springs and perennial Nallahs existing/ flowing in and around the mine lease and maintain its records. The project proponent shall undertake regular monitoring of water quality upstream and downstream of water bodies passing within and nearby/ adjacent to the mine lease and maintain its records. Sufficient number of gullies shall be provided at appropriate places within the lease for management of water. PP shall carryout regular monitoring w.r.t. pH and included the same in monitoring plan. The parameters to be monitored shall include their water quality vis-à-vis suitability for usage as per CPCB criteria and flow rate. It shall be ensured that no obstruction and/ or alteration be made to water bodies during mining operations without justification and prior approval of MoEF&CC. The monitoring of water courses/ bodies existing in lease area shall be carried out four times in a year viz. pre- monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January) and the record of monitored data may be sent regularly to Ministry of Environment, Forest and Climate Change and its Regional Office, Central Ground Water Authority and Regional Director, Central Ground Water Board, State Pollution Control Board and Central Pollution Control Board. Clearly showing the trend analysis on six-monthly basis.
  5. Quality of polluted water generated from mining operations which include Chemical Oxygen Demand (COD) in mines run-off; acid mine drainage and metal contamination in runoff shall be monitored along with Total Suspended Solids (TDS), Dissolved Oxygen (DO), pH and Total Suspended Solids (TSS). The monitored data shall be uploaded on the website of the company as well as displayed at the project site in public domain, on a display board, at a suitable location near the main gate of the Company. The circular No. J-20012/1/2006-IA.II (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change may also be referred in this regard.
  6. Project Proponent shall plan, develop and implement rainwater harvesting measures on long term basis to augment ground water resources in the area in consultation with Central Ground Water Board/State Groundwater Department. A report on amount of water recharged needs to be submitted to Regional Office MoEF&CC annually.
  7. Industrial waste water (workshop and waste water from the mine) should be properly collected and treated so as to conform to the notified standards prescribed from time to time. The standards shall be prescribed through Consent to Operate (CTO) issued by concerned State Pollution Control Board (SPCB). The workshop effluent shall be treated after its initial passage through Oil and grease trap.
  8. The water balance/water auditing shall be carried out and measure for reducing the consumption of water shall be taken up and reported to the Regional Office of the MoEF& CC and State Pollution Control Board/Committee.

### III. Noise and Vibration Monitoring and Prevention

1. The peak particle velocity at 500m distance or within the nearest habitation, whichever is closer shall be monitored periodically as per applicable DGMS guidelines.
2. The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/masks away from the villagers and keeping the noise levels well within the prescribed limits for day/night hours.
3. The Project Proponent shall take measures for control of noise levels below 85 dba in the work environment. The workers engaged in operations of HEMM, etc. should be provided with ear plugs /muffs. All personnel including laborers working in dusty areas shall be provided with protective respiratory devices along with adequate training, awareness and information on safety and health aspects. The PP shall be held responsible in case it has been found that workers/ personals/ laborers are working without personal protective equipment.

### IV. Mining Plan

1. The Project Proponent shall adhere to the working parameters of mining plan which was submitted at the time of EC appraisal wherein year-wise plan was mentioned for total excavation i.e. quantum of mineral, waste, over burden, inter burden and top soil etc.. No change in basic mining proposal like mining technology, total excavation, mineral & waste production, lease area and scope of working (viz. method of mining, overburden & dump management, O.B & dump mining, mineral transportation mode, ultimate depth of mining etc.) shall not be carried out without prior approval of the Ministry of Environment, Forest and Climate Change, which entail adverse environmental impacts, even if it is a part of approved mining plan modified after grant of EC or granted by State Govt. in the form to Short Term Permit (STP), Query license or any other name.
2. The Project Proponent shall get the Final Mine Closure Plan along with Financial Assurance approved from Indian Bureau of Mines/Department of Mining & Geology as required under the Provision of the MMDR Act, 1957 and Rules/ Guidelines made there under. A copy of approved final mine closure plan shall be submitted within 2 months of the approval of the same from the competent authority to the concerned Regional Office of the Ministry of Environment, Forest and Climate Change and SEIAA for record and verification.
3. The land-use of the mine lease area at various stages of mining scheme as well as at the end-of-life shall be governed as per the approved Mining Plan. The excavation vis-à-vis backfilling in the mine lease area and corresponding afforestation to be raised in the reclaimed area shall be governed as per approved mining plan. PP shall ensure the monitoring and management of rehabilitated areas until the vegetation becomes self-sustaining. The compliance status shall be submitted half-yearly to the MoEF&CC and its concerned Regional Office.

### V. Land Reclamation

1. The Overburden (O.B.) generated during the mining operations shall be stacked at earmarked OB dump site(s) only and it should not be kept active for a long period of time. The physical parameters of the OB dumps like height, width and angle of slope shall be governed as per the approved Mining Plan as per the guidelines/circulars issued by D.G.M.S w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of top soil/OB dumps. The topsoil shall be used for land reclamation and plantation.
2. The reject/waste generated during the mining operations shall be stacked at earmarked waste dump site(s) only. The physical parameters of the waste dumps like height, width and angle of slope shall be governed as per the approved Mining Plan as per the

- guidelines/circulars issued by DGMS w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of waste dumps.
3. The reclamation of waste dump sites shall be done in scientific manner as per the Approved Mining Plan cum Progressive Mine Closure Plan.
  4. The slope of dumps shall be vegetated in scientific manner with suitable native species to maintain the slope stability, prevent erosion and surface run off. The selection of local species regulates local climatic parameters and help in adaptation of plant species to the microclimate. The gullies formed on slopes should be adequately taken care of as it impacts the overall stability of dumps. The dump mass should be consolidated with the help of dozer/ compactors thereby ensuring proper filling/ leveling of dump mass. In critical areas, use of geo textiles/geo-membranes/clay liners/Bentonite etc. shall be undertaken for stabilization of the dump.
  5. The Project Proponent shall carry out slope stability study in case the dump height is more than 30 meters. The slope stability report shall be submitted to concerned regional office of MoEF&CC/SEIAA.
  6. Catch drains, settling tanks and siltation ponds of appropriate size shall be constructed around the mine working, mineral yards and Top Soil/OB/Waste dumps to prevent run off of water and flow of sediments directly into the water bodies (Nallah/ River/ Pond etc.). The collected water should be utilized for watering the mine area, roads, green belt development, plantation etc. The drains/ sedimentation sumps etc. shall be de-silted regularly, particularly after monsoon season, and maintained properly.
  7. Check dams of appropriate size, gradient and length shall be constructed around mine pit and OB dumps to prevent storm run-off and sediment flow into adjoining water bodies. A safety margin of 50% shall be kept for designing of sump structures over and above peak rainfall (based on 50 years data) and maximum discharge in the mine and its adjoining area which shall also help in providing adequate retention time period thereby allowing proper settling of sediments/silt material. The sedimentation pits/ sumps shall be constructed at the corners of the garland drains.
  8. The top soil, if any, shall temporarily be stored at earmarked site(s) within the mine lease only and should not be kept unutilized for long. The physical parameters of the top soil dumps like height, width and angle of slope shall be governed as per the approved Mining Plan and as per the guidelines framed by DGMS w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of dumps. The topsoil shall be used for land reclamation and plantation purpose.

## **VII. Transportation**

1. No Transportation of the minerals shall be allowed in case of roads passing through villages/ habitations. In such cases, PP shall construct a 'bypass' road for the purpose of transportation of the minerals leaving an adequate gap (say at least 200 meters) so that the adverse impact of sound and dust along with chances of accidents could be mitigated. All costs resulting from widening and strengthening of existing public road network shall be borne by the PP in consultation with nodal State Govt. Department. Transportation of minerals through road movement in case of existing village/ rural roads shall be allowed in consultation with nodal State Govt. Department only after required strengthening such that the carrying capacity of roads is increased to handle the traffic load. The pollution due to transportation load on the environment will be effectively controlled and water sprinkling will also be done regularly. Vehicular emissions shall be kept under control and regularly monitored. Project should obtain Pollution under Control (PUC) certificate for all the vehicles from authorized pollution testing centers.
2. The Main haulage road within the mine lease should be provided with a permanent water sprinkling arrangement for dust suppression. Other roads within the mine lease should be wetted regularly with tanker-mounted water sprinkling system. The other areas of dust generation like crushing zone, material transfer points, material yards etc. should invariably be provided with dust suppression arrangements. The air pollution control equipments like bag filters, vacuum suction hoods, dry fogging system etc. shall be installed at Crushers, belt-conveyors and other areas prone to air pollution. The belt

conveyor should be fully covered to avoid generation of dust while transportation. PP shall take necessary measures to avoid generation of fugitive dust emissions.

## **VII. Green Belt**

1. The Project Proponent shall develop greenbelt in 7.5m wide safety zone all along the mine lease boundary as per the guidelines of CPCB in order to arrest pollution emanating from mining operations within the lease. The whole Green belt shall be developed within first 5 years starting from windward side of the active mining area. The development of greenbelt shall be governed as per the EC granted irrespective of the stipulation made in approved mine plan.
2. The Project Proponent shall carryout plantation/afforestation in backfilled and reclaimed area of mining lease, around water body, along the roadsides, in community areas etc. by planting the native species in consultation with the State Forest Department/ Agriculture Department/ Rural development department/Tribal Welfare Department/Gram Panchayat such that only those species be selected which are of use to the local people. The CPCB guidelines in this respect shall also be adhered. The density of the trees should be around 2500 saplings per Hectare. Adequate budgetary provision shall be made for protection and care of trees.
3. The Project Proponent shall make necessary alternative arrangements for livestock feed by developing grazing land with a view to compensate those areas which are coming within the mine lease. The development of such grazing land shall be done in consultation with the State Government. In this regard, Project Proponent should essentially implement the directions of the Hon'ble Supreme Court with regard to acquisition of grazing land. The sparse trees on such grazing ground, which provide mid-day shelter from the scorching sun, should be scrupulously guarded/ protected against felling and plantation of such trees should be promoted.
4. The Project Proponent shall undertake all precautionary measures for conservation and protection of endangered flora and fauna and Schedule-I species during mining operation. A Wildlife Conservation Plan shall be prepared for the same clearly delineating action to be taken for conservation of flora and fauna. The Plan shall be approved by Chief Wild Life Warden of the State Govt. and implemented in consultation with the State Forest and Wildlife Department. A copy of Wildlife Conservation Plan and its implementation status (annual) shall be submitted to the Regional Office of the Ministry.

## **VIII. Public Hearing and Human Health Issues**

1. The Project Proponent shall appoint an Occupational Health Specialist for Regular as well as Periodical medical examination of the workers engaged in the mining activities, as per the DGMS guidelines. The records shall be maintained properly. PP shall also carryout Occupational health check-ups in respect of workers which are having ailments like BP, diabetes, habitual smoking, etc. The check-ups shall be undertaken once in six months and necessary remedial/ preventive measures be taken. A status report on the same may be sent to MoEF&CC Regional Office and DGMS on half-yearly basis.
2. The Project Proponent must demonstrate commitment to work towards 'Zero Harm' from their mining activities and carry out Health Risk Assessment (HRA) for identification workplace hazards and assess their potential risks to health and determine appropriate control measures to protect the health and wellbeing of workers and nearby community. The proponent shall maintain accurate and systematic records of the HRA. The HRA for neighborhood has to focus on Public Health Problems like Malaria, Tuberculosis, HIV, Anaemia, Diarrhoea in children under five, respiratory infections due to bio mass cooking. The proponent shall also create awareness and educate the nearby community and workers for Sanitation, Personal Hygiene, Hand washing, not to defecate in open, Women Health and Hygiene (Providing Sanitary Napkins), hazard of tobacco and alcohol use. The Proponent shall carryout base line HRA for all the category of workers and thereafter every five years.
3. The Proponent shall carry out Occupational health surveillance which be a part of HRA and include Biological Monitoring where practical and feasible, and the tests and investigations relevant to the exposure (e.g. for Dust a X-Ray chest; For Noise

Audiometric; for Lead Exposure Blood Lead, For Welders Full Ophthalmologic Assessment; for Manganese Miners a complete Neurological Assessment by a Certified Neurologist, and Manganese (Mn) Estimation in Blood; For Inorganic Chromium-Fortnightly skin inspection of hands and forearms by a responsible person. Except routine tests all tests would be carried out in a Lab accredited by NABH. Records of Health Surveillance must be kept for 30 years, including the results of and the records of Physical examination and tests. The record of exposure due to materials like Asbestos, Hard Rock Mining, Silica, Gold, Kaolin, Aluminum, Iron, Manganese, Chromium, Lead, Uranium need to be handed over to the Mining Department of the State in case the life of the mine is less than 30 years. It would be obligatory for the State Mines Departments to make arrangements for the safe and secure storage of the records including X-Ray. Only conventional X-Ray will be accepted for record purposes and not the digital one). X-Ray must meet ILO criteria (17 x14 inches and of good quality).

4. The Proponent shall maintained a record of performance indicators for workers which includes (a) there should not be a significant decline in their Body Mass Index and it should stay between 18.5 -24.9, (b) the Final Chest X-Ray compared with the base line X-Ray should not show any capacities ,(c) At the end of their leaving job there should be no Diminution in their Lung Functions Forced Expiratory Volume in one second (FEV1),Forced Vital Capacity (FVC), and the ratio) unless they are smokers which has to be adjusted, and the effect of age, (d) their hearing should not be affected. As a proof an Audiogram (first and last need to be presented), (e) they should not have developed any Persistent Back Pain, Neck Pain, and the movement of their Hip, Knee and other joints should have normal range of movement, (f) they should not have suffered loss of any body part. The record of the same should be submitted to the Regional Office, MoEF&CC annually along with details of the relief and compensation paid to workers having above indications.
5. The Project Proponent shall ensure that Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects.
6. Project Proponent shall make provision for the housing for workers/labors or shall construct labor camps within/outside (company owned land) with necessary basic infrastructure/ facilities like fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche for kids etc. The housing may be provided in the form of temporary structures which can be removed after the completion of the project related infrastructure. The domestic waste water should be treated with STP in order to avoid contamination of underground water.
7. The activities proposed in Action plan prepared for addressing the issues raised during the Public Hearing shall be completed as per the budgetary provisions mentioned in the Action Plan and within the stipulated time frame. The Status Report on implementation of Action Plan shall be submitted to the concerned Regional Office of the Ministry along with District Administration.

#### **IX. Corporate Environment Responsibility (CER)**

1. The activities and budget earmarked for Corporate Environmental Responsibility (CER)/EMPor as proposed by EAC should be kept in a separate bank account. The activities proposed for EMP shall be implemented in a time bound manner and annual report of implementation of the same along with documentary proof viz. photographs, purchase documents, latitude & longitude of infrastructure developed & road constructed needs to be submitted to Regional Office MoEF&CC annually along with audited statement.
2. Project Proponent shall keep the funds earmarked for environmental protection measures in a separate account and refrain from diverting the same for other purposes. The Year wise expenditure of such funds should be reported to the MoEF& CC and its concerned Regional Office.

## X. Miscellaneous

1. The Project Proponent shall prepare digital map (land use & land cover) of the entire lease area once in five years purpose of monitoring land use pattern and submit a report to concerned Regional Office of the MoEF& CC.
2. The Project Authorities should inform to the Regional Office regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.
3. The Project Proponent shall submit six monthly compliance reports on the status of the implementation of the stipulated environmental safeguards to the MOEF&CC & its concerned Regional Office, Central Pollution Control Board and State Pollution Control Board.
4. A separate 'Environmental Management Cell' with suitable qualified manpower should be set-up under the control of a Senior Executive. The Senior Executive shall directly report to Head of the Organization. Adequate number of qualified Environmental Scientists and Mining Engineers shall be appointed and submit a report to RO, MoEF& CC.
5. The concerned Regional Office of the MoEF& CC including other authorized organization shall randomly monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the MoEF& CC officer(s) including other authorized officer by furnishing the requisite data/information

**244.26 EC for Mining of sand minor mineral from the riverbed of Yamuna River with 24,00,000 MTPA production capacity over an area of 66.32 Hectare located at Village- Makhanpur, Tehsil & District- Faridabad, and State- Haryana by M/s Dev & Div Solutions Pvt. Ltd.**

**Project Proponent : Shri Laxman Binani**  
**Consultant : Vardan Environet**  
**Shri Sanjay Simberwal, Mining Engineer on 09.07.2022 in Mining Cases**

The EMP/EIA report was submitted to the SEIAA, Haryana vide online proposal No.SIA/HR/MIN/68081/2021 dated 10.06.2022 as per check list approved by the SEIAA/SEAC for obtaining Environmental Clearance under Category 1(a) of EIA Notification 14.09.2006.

The ToR was granted by SEIAA vide letter dated 27.12.2021. PP has submitted the DD on account of scrutiny fee for a sum of Rs.1,50,000/-

The case was taken up in 244<sup>th</sup> meeting of SEAC Haryana held on dated 9.07.2022. The PP presented the case before the committee.

The proposed project is for EC for Mining of Minor Mineral (Sand) from the riverbed of Yamuna river at Village Makhanpur Unit, Tehsil & District Faridabad, Haryana production capacity of 24,00,000 TPA, over an area of 66.32 hectare by M/s Dev&Div Solutions Pvt. Ltd.

- This is a fresh Mining Lease area auctioned by Govt. of Haryana and Lol was issued vide letter no. DMG/HY/Makhanpur Unit/FBD/2021/3176 dated 16/08/2021 attached as Annexure II, no production is started yet.
- Mining Plan and Progressive Mine Closure Plan including Replenishment Study and other specific conditions as mentioned in the Enforcement & Monitoring Guidelines for Sand Mining issued by the Ministry of Environment, Forest & Climate Change during January, 2020 has been approved by Director General of Mines and Geology Department Haryana vide letter no DMG/HY/MP/Makhanpur/2021/3266 dated 16.05.2022.
- All corners of the coordinates of ML area are superimposed on Toposheet of survey of India Toposheet (OSM) No. H43X7, H43X8, H43X11 & H43X12. Coordinates of the mine lease area given.

- Baseline data of study area within 10 Km radius of the project site was collected from October to December 2021 as per ToR letter approved from SEIAA.
- There is no involvement of forest land in the project area and the same has been confirmed by the DFO vide letter No. 457 on dated 05.07.2022.
- EB Study has been carried out in and around the lease area to study the wild life of the area. 1 species of Schedule I were recorded. The conservation plan has been prepared along with budgetary provision of Rs. 10.00 Lakhs to conserve wildlife and the same has been submitted to DFO.
- The specific gravity of the sand is 2 and the same has been approved by the DMG Haryana which is mentioned at page no 27 of Approved mining plan
- A requested letter for the site visit of A Sub-Divisional Committee comprising of Sub Divisional Magistrate, Officers from Irrigation Department, State Pollution Control Boards or Committee, Forest Department, Geology or mining officer, revenue department shall visit the site and make recommendation on suitability of site for mining or prohibition thereof, has been submitted to mining department on dated 07.01.2022. The PP submitted that report of visit will be provided after the visit.
- Project Proponent has been carried out the pre monsoon and post monsoon replenishment study to ascertain the quantity of material replenished and the report is placed in record. Mining plan has been prepared on the basis of replenishment report and the same has been approved by the DMG/HY/MP/Makhanpur/2021/3266 dated 16.05.2022.
- Total 113 persons will be required as technical and other supervisory staff in the project.
- The main fuel used in the mining operations is diesel. The total requirement of Diesel is 13340 LPD, out of which 12480 LPD is being used in Dumpers, 400 LPD is used in JCB, 200 liters is used in water tankers and 160 liters is required for other Light vehicles and 100 liters is required for maintenance purposes.
- This is a new mining area allotted to the applicant. Mining Contract has been allotted for a period of 10 years only. Mining area consist of 94.09 Ha.[54.32 hectares in riverbed for mining and 12.00 hectares for ancillary activities) Proposed Production = 24, 00,000 TPA Working days (Excluding 52 Sundays and 45 Rainy days) have been taken as 250 days per Annum. Daily Production = 9,600 MT/Day.
- There are sufficient reserves to continue the mining project for Seven (07) years, as mineral get replenished every year during monsoon, since according to LOI the period awarded for mining of sand is 07 years at the proposed rate of production 24,00,000TPA.

The details of the project, as per the documents submitted by the project proponent and also as informed during the presentation in the meeting are as under.

**Table-1**

<b>Name of the Project: Mining of sand minor mineral from the riverbed of Yamuna river with 24,00,000 MT production capacity over an area of 66.32 Hectare located at Village- Makhanpur unit, Tehsil- &amp; District- Faridabad, and State- Haryana proposed by M/s Dev&amp;Div Solutions Pvt. Ltd.</b>		
1.	Online Proposal Number	SIA/HR/MIN/68081/2021
2.	Category/Item no. (in schedule):	Category-B1, Sector I (a)
3.	Area of the project	Area- 66.32 ha

4.	Date of Lol granted by Mines & Geology Department, Haryana	LOI grant vide letter no. DMG/HY/Makhanpur Unit/FBD/2021/3176 dated 16/08/2021 in favor of M/s Dev&Div Solutions Pvt. Ltd.															
5.	Date of approval of Mining plan granted by Mines & Geology Department, Haryana	Mining plan has been prepared and submitted to DMG for their approval.															
6.	Location of Project	Village-Makhanpur unit, Tehsil & District- Faridabad, Haryana.															
7.	Project Details Khasra No	6//7Min, 12Min,13,14,17,18,19,20 min,21,22,23 7//16 min,17 min,22 min,23 min ,24 min,25 11//23 min,24 min,25 min 12//22 min, 23,24,25 13//4min,5min,6,7min,8 min,9 min,11 min,12 min,13,14,15,16,17,18,19,20,21,22,23,24,25min 14//1min,2min,3,4,5,6,7,8,9,10,11,12,13,14, min,15 min,18 min,19 min ,20,21min 15//1,2,3 min, 9 min,10 min 18//1,2,3 min,4 min,8 min,9 min,10 min,11 min 19//1,2,3,4,5,6,7,8,9,10,11,12,13,14 min,17 min ,18 min ,19,20 min 20//3,4,5,6,7,8,9,12,13,14,15,16,17,18,19,20,21,22,23,24,25, 22//5,6,7,8,12,13,14,15,16 min,17,18,19,20,21,22,23 23//1,2,3,4 min,5 min,8 min,9 min,10,11 min, 33//1,2,3,4 min,8 min,9,10,11,12,13 min,18 min,19, 20,21,22,23 min 36//1,2 min,10 min,11 min,20 min,21 min 47//1 min,10 min,11 min For Ancillary area 4//11,12,13,14,15,16,17,18,19,20,21,22,23,24,25 7//1,2,3,4,5,6,7,8,9,10,11,12,13,14,15															
8.	Project Cost	Rs. 7.00 Crores															
9.	Water Requirement	87 KLD															
10.	Source of water	Hired tankers From nearby villages.															
11.	Environment Management Plan Budget	Capital Cost Rs. 20 Lakhs, Recurring cost Rs. 27 Lakhs Total Rs: 151 Lakhs															
12.	Production	24,00,000 TPA															
13.	Corner Coordinates of the lease area	Latitude-N "28° 16' 18.96" to N "28° 15' 32.67" Longitude- E "77° 29' 24.98" to E "77° 28' 15.78"															
14.	Green belt/ plantation	33% of total plot area															
15.	Machinery required	Following equipment's are proposed to be deployed for the desired production <table border="1" data-bbox="771 1876 1263 2225"> <thead> <tr> <th>S.No.</th> <th>Equipment</th> <th>Nos</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>JCB</td> <td>08</td> </tr> <tr> <td>2</td> <td>Tippers/ Trucks</td> <td>40</td> </tr> <tr> <td>3</td> <td>Water Tanker</td> <td>2</td> </tr> <tr> <td>4</td> <td>Light vehicles</td> <td>2</td> </tr> </tbody> </table>	S.No.	Equipment	Nos	1	JCB	08	2	Tippers/ Trucks	40	3	Water Tanker	2	4	Light vehicles	2
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16.	Power Requirement	The mine will get dedicated power supply from Dakshin Haryana BijliVitaran Nigam (DHBVN).															
17.	Power Back up	Mining will be done only in day time.															
18.	Incremental Load in respect of: vi) PM <sub>2.5</sub>																



vii)	PM <sub>10</sub>	I.	0.0063µg/m <sup>3</sup>
viii)	SO <sub>2</sub>	II.	0.06055µg/m <sup>3</sup>
ix)	NO <sub>2</sub>	III.	0.00373µg/m <sup>3</sup>
x)	CO	IV.	0.00249µg/m <sup>3</sup>
		V.	0.0000017mg/m <sup>3</sup>

**Table 2: Geological Reserves**

Sr no.	Nature of land	Lease area in ha	Total proved Geological reserves MT = Area x depth x BD(A)	Ancillary Area in Hect.	Ancillary Area Geological Reserves in T(B)	Total reserves IN RIVER BED A-B=C
1	River bed	66.32	39,79,200 MT	12.00	7,20,000 MT	32,59,200 MT

**Table 3: Mineable Reserves**

Sr no.	Nature of land	Total river bed area in ha.	Total proved Geological reserves MT = Area x depth x BD(A)	Blocked area of 50m strip after each km, 20% blocked in river banks, lease	Blocked area Geological Reserves in T (B)	Total reserves A-B=C	Mineable Reserve
1	River bed	54.32	32,59,200 MT	13.58	8,14,800 MT	24,44,400 MT	24,00,000 MT

**Table 4: Five Years Proposed Production Details (Tons/annum)**

Production From River bed		
Year	Production proposed (TPA)	Area (ha) required per year
2021-22	24,00,000	40.00
2022-23	24,00,000	40.00
2023-24	24,00,000	40.00
2024-25	24,00,000	40.00
2025-26	24,00,000	40.00

**Table 5: Man Power Detail**

S. No.	Category	Numbers
1	Manager (I/II Class/Permit Manager)	1
2	Foreman/Mates	2
3	Skilled personnel	20
4	Operators	25

5	Semi-skilled personnel	40
6	Unskilled	10
Total		98

**Table 6 : Detail of Mining**

Sr. No.	Particulars	Details
1.	Method of Mining	Open Cast Semi-mechanized
2.	Geological Reserves	39,79,200 MT
3.	Mineable Reserves	24,44,400MT
4.	Proposed Production	24,00,000 MT
5.	Elevation Range of the Mine Site	From 185mRL to 192mRL
6.	Bench Height	3 m in Riverbed
7.	Bench Width (Average)	Width of the bench around 20 m

**Table 7: EMP**

S. No.	Particulars	Capital Cost (in Lakhs) One time	Recurring cost In lakhs Per year	Total cost in Lakhs for 5 years
1.	Dust Suppression	0	3	15
2.	Environmental Monitoring – Air, Water, Noise and Soil	0	3	15
3.	Haul road and other roads construction and Maintenance	3	2	13
4.	Plantation	11	13	76
5.	Waste water & solid waste treatment (domestic waste)	2	1	7
6.	Pre-monsoon & post-monsoon survey for sedimentation in the river bed	0	4	16
7.	Rainwater recharging (outside the project site)	4	1	9
<b>Total</b>		<b>20</b>	<b>27</b>	<b>151</b>

The Committee discussed that the mining area proposed by the PP was 94.09 hectare. The total Geological reserve is 39,79,200 MT and total mineral able reserve is 24,44,400 MT. The Proposed production capacity is 24,00,000 MTPA. The Committee was of the view that PP shall use only Excavators for mining to ensure that the mining depth be maintained as 3.0 meters. No other heavy machinery like JCB Machine etc. shall be used for excavation/ digging which may adversely impacts the aquatic biota. The Committee deliberated that mining be allowed and PP shall get the scientific replenishment study conducted through digital mapping in respect of depth, tonnage on the basis of full year aforesaid and shall be submitted. The PP shall have to ensure that during the course of mining, leveled cross section is made (to the extent possible) so that replenishment studies in future are carried out with ease and transparency and depth of deposited material is measured. The DMG, Haryana shall ensure that leveled cross-section is made by the PP before the onset of next rainfall season and the same be communicated to SEIAA.

M/s Dev&Div Solutions Pvt. Ltd. participated in the e-auction held on 16.07.2021 after accepting terms & conditions and offered the highest bid of Rs.9,98,00,000/- (Rupees Fourteen croresNinety Six Lakhs only) per annum, against the reserve price of Rs.9,78,00,000/-, for obtaining the

Mining Contract of Mineral Mine namely 'MakhanpurUnit' for extraction of sand having tentative area of 94.09 hectares. The State Government accepted the highest bid and Lol was issued on 16/08/2021 in their favour. The draft Mining Plan and Progressive Mine Closure Plan were approved on 29.09.2021.

The discussion was held on public hearing demand, conservation plan, replenishment study, plantation, EMP and STP. During discussion some observations were raised to which point wise reply after enclosing necessary documents, submitted by PP as under:

Sr. No.	Observations	Reply/ Document																																
1.	The PP shall submit the details of year wise planation.	<p>PP has plan to planted 55,000 sapling in the plan period and year wise detail of the same is given as below</p> <table border="1"> <thead> <tr> <th>Year</th> <th>Saplings to be planted</th> <th>Survival (@ 80%)</th> <th>Species</th> <th>Place of Plantation</th> </tr> </thead> <tbody> <tr> <td>2021-22</td> <td>11,000</td> <td>8,800</td> <td rowspan="6">Neem, Peepal, Mango, Shisham, Sirish, Babool, Gulmohar, and other native species.</td> <td rowspan="6">Along the Haul roads, Govt. building, Panchayat land etc.</td> </tr> <tr> <td>2022-23</td> <td>11,000</td> <td>8,800</td> </tr> <tr> <td>2023-24</td> <td>11,000</td> <td>8,800</td> </tr> <tr> <td>2024-25</td> <td>11,000</td> <td>8,800</td> </tr> <tr> <td>2025-26</td> <td>11,000</td> <td>8,800</td> </tr> <tr> <td>Total</td> <td>55,000</td> <td>44,000</td> </tr> </tbody> </table>	Year	Saplings to be planted	Survival (@ 80%)	Species	Place of Plantation	2021-22	11,000	8,800	Neem, Peepal, Mango, Shisham, Sirish, Babool, Gulmohar, and other native species.	Along the Haul roads, Govt. building, Panchayat land etc.	2022-23	11,000	8,800	2023-24	11,000	8,800	2024-25	11,000	8,800	2025-26	11,000	8,800	Total	55,000	44,000							
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3.	The PP shall submit the details of greenbelt coordinates.	<p>The coordinates of the proposed plantation is as below and the patch map for the same is submitted.</p> <table border="1"> <thead> <tr> <th>Patch</th> <th>Latitude</th> <th>Longitude</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>28° 15' 48.680" N – 28° 16' 20.302" N</td> <td>77° 28' 10.473" E – 77° 29' 26.818" E</td> </tr> <tr> <td>2</td> <td>28° 15' 36.234" N – 28° 16' 7.312" N</td> <td>77° 28' 16.118" E – 77° 29' 2.372" E</td> </tr> <tr> <td>3</td> <td>28° 16' 12.147" N – 28° 16' 17.742" N</td> <td>77° 29' 22.454" E – 77° 29' 42.293" E</td> </tr> <tr> <td>4</td> <td>28° 15' 56.123" N – 28° 16' 4.148" N</td> <td>77° 29' 3.227" E – 77° 28' 53.433" E</td> </tr> <tr> <td>5</td> <td>28° 15' 35.308" N – 28° 15' 36.181" N</td> <td>77° 28' 5.341" E – 77° 28' 8.144" E</td> </tr> </tbody> </table>	Patch	Latitude	Longitude	1	28° 15' 48.680" N – 28° 16' 20.302" N	77° 28' 10.473" E – 77° 29' 26.818" E	2	28° 15' 36.234" N – 28° 16' 7.312" N	77° 28' 16.118" E – 77° 29' 2.372" E	3	28° 16' 12.147" N – 28° 16' 17.742" N	77° 29' 22.454" E – 77° 29' 42.293" E	4	28° 15' 56.123" N – 28° 16' 4.148" N	77° 29' 3.227" E – 77° 28' 53.433" E	5	28° 15' 35.308" N – 28° 15' 36.181" N	77° 28' 5.341" E – 77° 28' 8.144" E														
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4.	The PP shall submit the affidavit regarding the cost of the project.	<p>The total project cost of the project is Rs. 7.00 Crores. Cost of EMP (20 lakhs/year recurring cost and 27 lakhs is capital cost) will be 151 lakhs. CER Cost is 65 lakhs. Affidavit for the same is submitted.</p>																																
5.	The PP will carry out the replenishment study every year and shall submit same to the concerned department.	<p>PP will carry out the replenishment study every year from the authorized agency and Affidavit for the same is submitted.</p>																																
6.	Mining will be allowed upto a depth of 3m only or 2m above the ground water level.	<p>The mining will be done up to 3m depth only and 2m above the ground water, whichever comes first. Affidavit for the same is submitted.</p>																																

7.	PP will compensate the land owners as per the latest government applicable norms.	PP will compensate the land owners as per mutual agreement basis. In cases where the amount of compensation is not mutually settled between the parties the compensation will be calculated as per the Notification of Mines and Geology Department, Haryana Government dated 03.05.2021. Affidavit for the same is submitted.
8.	PP will submit action plan comply with of Public Hearing.	PP will expend the budget as per the demand raised during the public hearing. Affidavit for the same is submitted.
9.	PP will start mining after approval of Conservation plan.	Mining will be only after the approval of Conservation plan for the concern department. Affidavit for the same is submitted.
10.	PP will done plantation as per the Miyawaki methodology.	Green belt will be developed in the ancillary area by using Miyawaki methodology. Affidavit for the same is submitted.

Discussion was held on the documents submitted by PP alongwith required affidavits in response to the observations and found those in order. After detailed deliberations on the above said issues the Committee was of the unanimous view that this case should be recommended to the SEIAA for granting Environmental Clearance for one year and shall submit the scientific replenishment study within one year as per latest NGT guidelines will submit under EIA Notification under category B1, 1(a) dated 14.09.2006 issued by the Ministry of Environment and Forest, Government of India with the following specific and general stipulations:

**A: Specific Conditions:-**

- 1) The PP shall construct the pucca link roads connected to the main road at the mining site before the start of mining.
- 2) The PP will plant Ayurvedic plants and indigenous species of native plants along with the green belt plantation.
- 3) PP will compensate the land owners as per the latest government applicable norms.
- 4) PP will done plantation as per the Miyawaki methodology.
- 5) The PP shall construct the Haul roads of width 10 meters.
- 6) The PP shall submit the approved wildlife Conservation Plan from the Competent Authority before the start of the project. The PP agrees that Rs.20 lakhs shall be spent on Biodiversity Conservation of species towards wildlife conservation plan. The Budget of Wildlife activity plan on various specified activities shall be spent in consultation with Chief Wildlife Warden.
- 7) The PP shall comply with all the undertakings submitted to the SEAC/DGM.
- 8) The PP shall ensure that total 2% of the cost of project shall be spent on EMP Budget. However, the amount and component shown in EMP table above shall also be included for the purpose of 2% amount. The EMP cost on Socio Economic activities shall be used before the commencement of the project & EMP recurring inside the project shall be implemented throughout the operation of the project. The PP shall establish Environment monitoring cell as per documents submitted
- 9) The PP shall provide only one exit and one entry to the Mining Project area and all the mining shall be dispatched through E-billing-.
- 10) The PP shall maintain an un-mined block of 50 meters width after every block of 1000 meters over which mining is undertaken or at such distance as may be directed by the Director or any officer authorized by him.
- 11) The PP shall restrict mining within the central 3/4<sup>th</sup> width of the river/rivulet.
- 12) The PP shall not permit any mining in an area up to width of 500 meters from the active edges of embankments in case of River Yamuna, 250 mtrs. in case of Tangri, Markanda and Ghaggar and 100 mtrs. on either side of all other rivers/rivulets.
- 13) The PP agrees and submitted the undertaking that no Boulder, gravel shall be mined in the mining lease area.
- 14) The PP shall develop 33% area of the plot for Green Area development in the project area.
- 15) Separate wet and dry bins must be provided in each unit and at ground level for facilitating segregation of waste. Solid Waste shall be segregated into wet garbage and

inert materials. Wet Garbage shall be composted in Organic waste convertor. Adequate area shall be provided for solid waste management within the premises which will include area for segregation, composting. The Inert waste from the project will be sent to dumping site.

- 16) The PP shall maintain the garland drains in the project area and catchment area for preserving overburden and dump mining.
- 17) Traffic management plan as submitted shall be implemented in letter and spirit. Apart, a detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms. radius of the project is marinated and improved upon after the implementation of the project.
- 18) The PP shall not carry out the mining below 3 meter depth in the project area as the replenishment study is not carried out.
- 19) The PP shall submit the scientific replenishment study for the project site in the river bed every year after the start of the mining at the project site.
- 20) The Project Proponent shall obtain all necessary clearance/permission from all relevant agencies before commencement of work.
- 21) Consent to establish/operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.
- 22) The PP shall take precautions to suppress the dust in and around the mining site. The PP shall use mixed cannon water sprinkle for dust suppression instead of conventional sprinkles for efficient dust suppression.
- 23) The PP shall also provide the Anti-smog gun mounted on truck in the project for suppression of dust and shall use the treated water, if feasible.
- 24) The PP shall create environment division unit in the project for implementing the conditions of Environment clearance.
- 25) The PP shall obtain the permission regarding withdrawal of ground water from CGWA before the start of the project and also obtained the CTO from HSPCB after the approval from CGWA.
- 26) The PP shall adhere to the approved mining plan and approved closure plan by the competent authority.
- 27) Action plan for the public hearing issues shall be complied in letter and spirit.
- 28) The Proponent will provide adequate sanitary facility in the form of mobile toilets to the labours engaged for the project work.
- 29) The Project proponent shall comply all the measures, conditions suggested in the approved mining plan with post closure mine plan, Environmental Management Plan (EMP) in a letter and spirit.
- 30) The PP shall restrict maximum mining depth 3 meters above the Ground Water Table.
- 31) Any change in stipulations of EC of the approved mining plan will lead to Environment Clearance void-ab-initio and PP will have to seek fresh Environment Clearance.

**B: Statutory Compliance:-**

1. This Environmental Clearance (EC) is subject to orders/ judgment of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, Common Cause Conditions as may be applicable.
2. The Project proponent complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated 2nd August,2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India &Others before commencing the mining operations.
3. The State Government concerned shall ensure that mining operation shall not be commenced till the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department of Mining & Geology in strict compliance of Judgment of Hon'ble Supreme Court dated 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India &Ors.
4. This Environmental Clearance shall become operational only after receiving formal NBWL Clearance from MoEF&CC subsequent to the recommendations of the Standing Committee of National Board for Wildlife, if applicable to the Project.

5. This Environmental Clearance shall become operational only after receiving formal Forest Clearance (FC) under the provision of Forest Conservation Act, 1980, if applicable to the Project.
6. Project Proponent (PP) shall obtain Consent to Operate after grant of EC and effectively implement all the conditions stipulated therein. The mining activity shall not commence prior to obtaining Consent to Establish/Consent to Operate from the concerned State Pollution Control Board/Committee.
7. The PP shall adhere to the provision of the Mines Act, 1952, Mines and Mineral (Development & Regulation), Act, 2015 and rules & regulations made there under. PP shall adhere to various circulars issued by Directorate General Mines Safety (DGMS), Mines & Geology Department, Haryana and Indian Bureau of Mines from time to time.. Also adhere to Haryana Minor Mineral Concession, Stocking, Transportation of Minerals and Prevention of Illegal Mining Rules, 2012.
8. The Project Proponent shall obtain consents from all the concerned land owners, before start of mining operations, as per the provisions of MMDR Act, 1957 and rules made there under in respect of lands which are not owned by it.
9. The Project Proponent shall follow the mitigation measures provided in MoEF& CC Office Memorandum No. Z-11013/57/2014-IA.II (M), dated 29th October, 2014, titled "Impact of mining activities on Habitations-Issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area".
10. The Project Proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of surface water and from CGWA for withdrawal of ground water for the project.
11. A copy of EC letter will be marked to concerned Panchayat / local NGO etc. if any, from whom suggestion / representation has been received while processing the proposal.
12. State Pollution Control Board/Committee shall be responsible for display of this EC letter at its Regional office, District Industries Centre and Collector's office/ Tehsildar's Office for 30 days.
13. The Project Authorities should widely advertise about the grant of this EC letter by printing the same in at least two local newspapers, one of which shall be in vernacular language of the concerned area. The advertisement shall be done within 7 days of the issue of the clearance letter mentioning that the instant project has been accorded EC and copy of the EC letter is available with the State Pollution Control Board/Committee and web site of the Ministry of Environment, Forest and Climate Change ([www.parivesh.nic.in](http://www.parivesh.nic.in)). A copy of the advertisement may be forwarded to the concerned MoEF& CC Regional Office for compliance and record.
14. The Project Proponent shall inform the MoEF&CC for any change in ownership of the mining lease. In case there is any change in ownership or mining lease is transferred than mining operation shall only be carried out after transfer of EC as per provisions of the para 11 of EIA Notification, 2006 as amended from time to time.

#### **I Air Quality Monitoring and Preservation**

1. The Project Proponent shall install a minimum of 3 (three) online Ambient Air Quality Monitoring Stations with 1 (one) in upwind and 2 (two) in downwind direction based on long term climatologically data about wind direction such that an angle of 120° is made between the monitoring locations to monitor critical parameters, relevant for mining operations, of air pollution viz. PM<sub>10</sub>, PM<sub>2.5</sub>, NO<sub>2</sub>, CO and SO<sub>2</sub> etc. as per the methodology mentioned in NAAQS Notification No. B-29016/20/90/PCI/I, dated 18.11.2009 covering the aspects of transportation and use of heavy machinery in the impact zone. The ambient air quality shall also be monitored at prominent places like office building, canteen etc. as per the site condition to ascertain the exposure characteristics at specific places. The above data shall be digitally displayed within 03 months in front of the main Gate of the mine site.
2. Effective safeguard measures for prevention of dust generation and subsequent suppression (like regular water sprinkling, metalled road construction etc.) shall be carried out in areas prone to air pollution wherein high levels of PM<sub>10</sub> and PM<sub>2.5</sub> are

evident such as haul road, loading and unloading point and transfer points. The Fugitive dust emissions from all sources shall be regularly controlled by installation of required equipments/ machineries and preventive maintenance. Use of suitable water-soluble chemical dust suppressing agents may be explored for better effectiveness of dust control system. It shall be ensured that air pollution level conform to the standards prescribed by the MoEF& CC/Central Pollution Control Board.

## II Water Quality Monitoring and Preservation

1. In case, immediate mining scheme envisages intersection of ground water table, then Environmental Clearance shall become operational only after receiving formal clearance from CGWA. In case, mining operation involves intersection of ground water table at a later stage, then PP shall ensure that prior approval from CGWA and MoEF& CC is in place before such mining operations. The permission for intersection of ground water table shall essentially be based on detailed hydro-geological study of the area.
2. Regular monitoring of the flow rate of the springs and perennial Nallahs flowing in and around the mine lease shall be carried out and records maintain. The natural water bodies and or streams which are flowing in an around the village, should not be disturbed. The Water Table should be nurtured so as not to go down below the pre-mining period. In case of any water scarcity in the area, the Project Proponent has to provide water to the villagers for their use. A provision for regular monitoring of water table in open dug wall located in village should be incorporated to ascertain the impact of mining over ground water table. The Report on changes in Ground water level and quality shall be submitted on six-monthly basis to the Regional Office of the Ministry, CGWA and State Groundwater Department / State Pollution Control Board.
3. Project Proponent shall regularly monitor and maintain records w.r.t. ground water level and quality in and around the mine lease by establishing a network of existing wells as well as new piezometer installations during the mining operation in consultation with Central Ground Water Authority/ State Ground Water Department. The Report on changes in Ground water level and quality shall be submitted on six-monthly basis to the Regional Office of the Ministry, CGWA and State Groundwater Department / State Pollution Control Board.
4. The Project Proponent shall undertake regular monitoring of natural water course/ water resources/ springs and perennial Nallahs existing/ flowing in and around the mine lease and maintain its records. The project proponent shall undertake regular monitoring of water quality upstream and downstream of water bodies passing within and nearby/ adjacent to the mine lease and maintain its records. Sufficient number of gullies shall be provided at appropriate places within the lease for management of water. PP shall carryout regular monitoring w.r.t. pH and included the same in monitoring plan. The parameters to be monitored shall include their water quality vis-à-vis suitability for usage as per CPCB criteria and flow rate. It shall be ensured that no obstruction and/ or alteration be made to water bodies during mining operations without justification and prior approval of MoEF&CC. The monitoring of water courses/ bodies existing in lease area shall be carried out four times in a year viz. pre- monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January) and the record of monitored data may be sent regularly to Ministry of Environment, Forest and Climate Change and its Regional Office, Central Ground Water Authority and Regional Director, Central Ground Water Board, State Pollution Control Board and Central Pollution Control Board. Clearly showing the trend analysis on six-monthly basis.
5. Quality of polluted water generated from mining operations which include Chemical Oxygen Demand (COD) in mines run-off; acid mine drainage and metal contamination in runoff shall be monitored along with Total Suspended Solids (TDS), Dissolved Oxygen (DO), pH and Total Suspended Solids (TSS). The monitored data shall be uploaded on the website of the company as well as displayed at the project site in public domain, on a display board, at a suitable location near the main gate of the Company. The circular No. J-20012/1/2006-IA.II (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change may also be referred in this regard.

6. Project Proponent shall plan, develop and implement rainwater harvesting measures on long term basis to augment ground water resources in the area in consultation with Central Ground Water Board/State Groundwater Department. A report on amount of water recharged needs to be submitted to Regional Office MoEF&CC annually.
7. Industrial waste water (workshop and waste water from the mine) should be properly collected and treated so as to conform to the notified standards prescribed from time to time. The standards shall be prescribed through Consent to Operate (CTO) issued by concerned State Pollution Control Board (SPCB). The workshop effluent shall be treated after its initial passage through Oil and grease trap.
8. The water balance/water auditing shall be carried out and measure for reducing the consumption of water shall be taken up and reported to the Regional Office of the MoEF& CC and State Pollution Control Board/Committee.

### **III Noise and Vibration Monitoring and Prevention**

1. The peak particle velocity at 500m distance or within the nearest habitation, whichever is closer shall be monitored periodically as per applicable DGMS guidelines.
2. The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/masks away from the villagers and keeping the noise levels well within the prescribed limits for day/night hours.
3. The Project Proponent shall take measures for control of noise levels below 85 dba in the work environment. The workers engaged in operations of HEMM, etc. should be provided with ear plugs /muffs. All personnel including laborers working in dusty areas shall be provided with protective respiratory devices along with adequate training, awareness and information on safety and health aspects. The PP shall be held responsible in case it has been found that workers/ personals/ laborers are working without personal protective equipment.

### **IV Mining Plan**

1. The Project Proponent shall adhere to the working parameters of mining plan which was submitted at the time of EC appraisal wherein year-wise plan was mentioned for total excavation i.e. quantum of mineral, waste, over burden, inter burden and top soil etc.. No change in basic mining proposal like mining technology, total excavation, mineral & waste production, lease area and scope of working (viz. method of mining, overburden & dump management, O.B & dump mining, mineral transportation mode, ultimate depth of mining etc.) shall not be carried out without prior approval of the Ministry of Environment, Forest and Climate Change, which entail adverse environmental impacts, even if it is a part of approved mining plan modified after grant of EC or granted by State Govt. in the form to Short Term Permit (STP), Query license or any other name.
2. The Project Proponent shall get the Final Mine Closure Plan along with Financial Assurance approved from Indian Bureau of Mines/Department of Mining & Geology as required under the Provision of the MMDR Act, 1957 and Rules/ Guidelines made there under. A copy of approved final mine closure plan shall be submitted within 2 months of the approval of the same from the competent authority to the concerned Regional Office of the Ministry of Environment, Forest and Climate Change and SEIAA for record and verification.
3. The land-use of the mine lease area at various stages of mining scheme as well as at the end-of-life shall be governed as per the approved Mining Plan. The excavation vis-à-vis backfilling in the mine lease area and corresponding afforestation to be raised in the reclaimed area shall be governed as per approved mining plan. PP shall ensure the monitoring and management of rehabilitated areas until the vegetation becomes self-sustaining. The compliance status shall be submitted half-yearly to the MoEF&CC and its concerned Regional Office.

### **V Land Reclamation**



1. The Overburden (O.B.) generated during the mining operations shall be stacked at earmarked OB dump site(s) only and it should not be kept active for a long period of time. The physical parameters of the OB dumps like height, width and angle of slope shall be governed as per the approved Mining Plan as per the guidelines/circulars issued by D.G.M.S w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of top soil/OB dumps. The topsoil shall be used for land reclamation and plantation.
2. The reject/waste generated during the mining operations shall be stacked at earmarked waste dump site(s) only. The physical parameters of the waste dumps like height, width and angle of slope shall be governed as per the approved Mining Plan as per the guidelines/circulars issued by DGMS w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of waste dumps.
3. The reclamation of waste dump sites shall be done in scientific manner as per the Approved Mining Plan cum Progressive Mine Closure Plan.
4. The slope of dumps shall be vegetated in scientific manner with suitable native species to maintain the slope stability, prevent erosion and surface run off. The selection of local species regulates local climatic parameters and help in adaptation of plant species to the microclimate. The gullies formed on slopes should be adequately taken care of as it impacts the overall stability of dumps. The dump mass should be consolidated with the help of dozer/ compactors thereby ensuring proper filling/ leveling of dump mass. In critical areas, use of geo textiles/geo-membranes/clay liners/Bentonite etc. shall be undertaken for stabilization of the dump.
5. The Project Proponent shall carry out slope stability study in case the dump height is more than 30 meters. The slope stability report shall be submitted to concerned regional office of MoEF&CC/SEIAA.
6. Catch drains, settling tanks and siltation ponds of appropriate size shall be constructed around the mine working, mineral yards and Top Soil/OB/Waste dumps to prevent run off of water and flow of sediments directly into the water bodies (Nallah/ River/ Pond etc.). The collected water should be utilized for watering the mine area, roads, green belt development, plantation etc. The drains/ sedimentation sumps etc. shall be de-silted regularly, particularly after monsoon season, and maintained properly.
7. Check dams of appropriate size, gradient and length shall be constructed around mine pit and OB dumps to prevent storm run-off and sediment flow into adjoining water bodies. A safety margin of 50% shall be kept for designing of sump structures over and above peak rainfall (based on 50 years data) and maximum discharge in the mine and its adjoining area which shall also help in providing adequate retention time period thereby allowing proper settling of sediments/silt material. The sedimentation pits/ sumps shall be constructed at the corners of the garland drains.
8. The top soil, if any, shall temporarily be stored at earmarked site(s) within the mine lease only and should not be kept unutilized for long. The physical parameters of the top soil dumps like height, width and angle of slope shall be governed as per the approved Mining Plan and as per the guidelines framed by DGMS w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of dumps. The topsoil shall be used for land reclamation and plantation purpose.

## **VI Transportation**

1. No Transportation of the minerals shall be allowed in case of roads passing through villages/ habitations. In such cases, PP shall construct a 'bypass' road for the purpose of transportation of the minerals leaving an adequate gap (say at least 200 meters) so that the adverse impact of sound and dust along with chances of accidents could be mitigated. All costs resulting from widening and strengthening of existing public road network shall be borne by the PP in consultation with nodal State Govt. Department. Transportation of minerals through road movement in case of existing village/ rural roads shall be allowed in consultation with nodal State Govt. Department only after required strengthening such that the carrying capacity of roads is increased to handle the traffic load. The pollution due to transportation load on the environment will be effectively controlled and water sprinkling will also be done regularly. Vehicular emissions shall be

kept under control and regularly monitored. Project should obtain Pollution under Control (PUC) certificate for all the vehicles from authorized pollution testing centers.

2. The Main haulage road within the mine lease should be provided with a permanent water sprinkling arrangement for dust suppression. Other roads within the mine lease should be wetted regularly with tanker-mounted water sprinkling system. The other areas of dust generation like crushing zone, material transfer points, material yards etc. should invariably be provided with dust suppression arrangements. The air pollution control equipments like bag filters, vacuum suction hoods, dry fogging system etc. shall be installed at Crushers, belt-conveyors and other areas prone to air pollution. The belt conveyor should be fully covered to avoid generation of dust while transportation. PP shall take necessary measures to avoid generation of fugitive dust emissions.

## **VII. Green Belt**

1. The Project Proponent shall develop greenbelt in 7.5m wide safety zone all along the mine lease boundary as per the guidelines of CPCB in order to arrest pollution emanating from mining operations within the lease. The whole Green belt shall be developed within first 5 years starting from windward side of the active mining area. The development of greenbelt shall be governed as per the EC granted irrespective of the stipulation made in approved mine plan.
2. The Project Proponent shall carryout plantation/afforestation in backfilled and reclaimed area of mining lease, around water body, along the roadsides, in community areas etc. by planting the native species in consultation with the State Forest Department/ Agriculture Department/ Rural development department/Tribal Welfare Department/Gram Panchayat such that only those species be selected which are of use to the local people. The CPCB guidelines in this respect shall also be adhered. The density of the trees should be around 2500 saplings per Hectare. Adequate budgetary provision shall be made for protection and care of trees.
3. The Project Proponent shall make necessary alternative arrangements for livestock feed by developing grazing land with a view to compensate those areas which are coming within the mine lease. The development of such grazing land shall be done in consultation with the State Government. In this regard, Project Proponent should essentially implement the directions of the Hon'ble Supreme Court with regard to acquisition of grazing land. The sparse trees on such grazing ground, which provide mid-day shelter from the scorching sun, should be scrupulously guarded/ protected against felling and plantation of such trees should be promoted.
4. The Project Proponent shall undertake all precautionary measures for conservation and protection of endangered flora and fauna and Schedule-I species during mining operation. A Wildlife Conservation Plan shall be prepared for the same clearly delineating action to be taken for conservation of flora and fauna. The Plan shall be approved by Chief Wild Life Warden of the State Govt. and implemented in consultation with the State Forest and Wildlife Department. A copy of Wildlife Conservation Plan and its implementation status (annual) shall be submitted to the Regional Office of the Ministry.

## **VIII. Public Hearing and Human Health Issues**

1. The Project Proponent shall appoint an Occupational Health Specialist for Regular as well as Periodical medical examination of the workers engaged in the mining activities, as per the DGMS guidelines. The records shall be maintained properly. PP shall also carryout Occupational health check-ups in respect of workers which are having ailments like BP, diabetes, habitual smoking, etc. The check-ups shall be undertaken once in six months and necessary remedial/ preventive measures be taken. A status report on the same may be sent to MoEF&CC Regional Office and DGMS on half-yearly basis.
2. The Project Proponent must demonstrate commitment to work towards 'Zero Harm' from their mining activities and carry out Health Risk Assessment (HRA) for identification workplace hazards and assess their potential risks to health and determine appropriate control measures to protect the health and wellbeing of workers and nearby community. The proponent shall maintain accurate and systematic records of the HRA. The HRA for neighborhood has to focus on Public Health Problems like Malaria, Tuberculosis, HIV,

Anaemia, Diarrhoea in children under five, respiratory infections due to bio mass cooking. The proponent shall also create awareness and educate the nearby community and workers for Sanitation, Personal Hygiene, Hand washing, not to defecate in open, Women Health and Hygiene (Providing Sanitary Napkins), hazard of tobacco and alcohol use. The Proponent shall carryout base line HRA for all the category of workers and thereafter every five years.

3. The Proponent shall carry out Occupational health surveillance which be a part of HRA and include Biological Monitoring where practical and feasible, and the tests and investigations relevant to the exposure (e.g. for Dust a X-Ray chest; For Noise Audiometric; for Lead Exposure Blood Lead, For Welders Full Ophthalmologic Assessment; for Manganese Miners a complete Neurological Assessment by a Certified Neurologist, and Manganese (Mn) Estimation in Blood; For Inorganic Chromium-Fortnightly skin inspection of hands and forearms by a responsible person. Except routine tests all tests would be carried out in a Lab accredited by NABH. Records of Health Surveillance must be kept for 30 years, including the results of and the records of Physical examination and tests. The record of exposure due to materials like Asbestos, Hard Rock Mining, Silica, Gold, Kaolin, Aluminum, Iron, Manganese, Chromium, Lead, Uranium need to be handed over to the Mining Department of the State in case the life of the mine is less than 30 years. It would be obligatory for the State Mines Departments to make arrangements for the safe and secure storage of the records including X-Ray. Only conventional X-Ray will be accepted for record purposes and not the digital one). X-Ray must meet ILO criteria (17 x14 inches and of good quality).
4. The Proponent shall maintained a record of performance indicators for workers which includes (a) there should not be a significant decline in their Body Mass Index and it should stay between 18.5 -24.9, (b) the Final Chest X-Ray compared with the base line X-Ray should not show any capacities ,(c) At the end of their leaving job there should be no Diminution in their Lung Functions Forced Expiratory Volume in one second (FEV1),Forced Vital Capacity (FVC), and the ratio) unless they are smokers which has to be adjusted, and the effect of age, (d) their hearing should not be affected. As a proof an Audiogram (first and last need to be presented), (e) they should not have developed any Persistent Back Pain, Neck Pain, and the movement of their Hip, Knee and other joints should have normal range of movement, (f) they should not have suffered loss of any body part. The record of the same should be submitted to the Regional Office, MoEF&CC annually along with details of the relief and compensation paid to workers having above indications.
5. The Project Proponent shall ensure that Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects.
6. Project Proponent shall make provision for the housing for workers/labors or shall construct labor camps within/outside (company owned land) with necessary basic infrastructure/ facilities like fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche for kids etc. The housing may be provided in the form of temporary structures which can be removed after the completion of the project related infrastructure. The domestic waste water should be treated with STP in order to avoid contamination of underground water.
7. The activities proposed in Action plan prepared for addressing the issues raised during the Public Hearing shall be completed as per the budgetary provisions mentioned in the Action Plan and within the stipulated time frame. The Status Report on implementation of Action Plan shall be submitted to the concerned Regional Office of the Ministry along with District Administration.

#### **IX. Corporate Environment Responsibility (CER)**

1. The activities and budget earmarked for Corporate Environmental Responsibility (CER)/EMPor as proposed by EAC should be kept in a separate bank account. The activities proposed for EMP shall be implemented in a time bound manner and annual report of implementation of the same along with documentary proof viz. photographs, purchase documents, latitude & longitude of infrastructure developed & road

constructed needs to be submitted to Regional Office MoEF&CC annually along with audited statement.

2. Project Proponent shall keep the funds earmarked for environmental protection measures in a separate account and refrain from diverting the same for other purposes. The Year wise expenditure of such funds should be reported to the MoEF& CC and its concerned Regional Office.

#### **X. Miscellaneous**

1. The Project Proponent shall prepare digital map (land use & land cover) of the entire lease area once in five years purpose of monitoring land use pattern and submit a report to concerned Regional Office of the MoEF& CC.
2. The Project Authorities should inform to the Regional Office regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.
3. The Project Proponent shall submit six monthly compliance reports on the status of the implementation of the stipulated environmental safeguards to the MOEF&CC & its concerned Regional Office, Central Pollution Control Board and State Pollution Control Board.
4. A separate 'Environmental Management Cell' with suitable qualified manpower should be set-up under the control of a Senior Executive. The Senior Executive shall directly report to Head of the Organization. Adequate number of qualified Environmental Scientists and Mining Engineers shall be appointed and submit a report to RO, MoEF& CC.
5. The concerned Regional Office of the MoEF& CC including other authorized organization shall randomly monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the MoEF& CC officer(s) including other authorized officer by furnishing the requisite data/information.

#### **244.27 ToR under violation category for the Expansion of Commercial Project 'AIPL Joy Street' at Sector 66, Gurugram, Haryana by M/s Landmark Apartments Private Limited**

**Project Proponent : None**  
**Consultant : Vardan Environet**

The project was submitted to the SEIAA, Haryana vide online proposal No. SIA/HR/MIS/78164/2022 dated 10.06.2022 as per check list approved by the SEIAA/SEAC for obtaining ToR (Violation) under Category 8(a) of EIA Notification 14.09.2006.

The case was taken up in 244th meeting of SEAC, Haryana held on 09.07.2022 but the PP requested in writing dated 05.07.2022 to defer the case. The committee acceded with the request of PP and deferred the case.

#### **244.28 EC for new Chemical Manufacturing Unit of Formaldehyde and Resin/Glue at Plot No.- 238, Phase-II, Sector-30A, Industrial Estate, Manakpur, Tehsil Bilaspur, District Yamuna Nagar, Haryana by M/s Mak Leon Organics Private Limited**

**Project Proponent : Shri Sunil Kumar**  
**Consultant : Chandigarh Pollution Testing Laboratory –EIA Division**

The EIA/EMP report was submitted to the SEIAA, Haryana vide online proposal No. SIA/HR/IND3/76131/2021 dated 30.04.2022 as per check list approved by the SEIAA/SEAC for obtaining Environmental Clearance under Category 5(f) of EIA Notification 14.09.2006. ToR was granted to the

project by SEIAA on 30.12.2021. PP has submitted the DD on account of scrutiny fee for a sum of Rs.50,000/-

The case was taken up in 244<sup>th</sup> meeting of SEAC, Haryana held on 09.07.2022. The PP presented the case and submitted the details as under:

<b>Name of the Project: Proposed Project for Manufacturing of Formaldehyde- 200 TPD and Resin/Glue- 25 TPD at Plot No. 238, Phase-II, Sector-30A, Industrial Estate, Manakpur, Tehsil &amp; District- Yamuna Nagar, Haryana by M/s Mak Leon Organics Private Limited</b>			
<b>Sr. No.</b>	<b>Particulars</b>		
1.	Online Proposal Number	SIA/HR/IND3/76131/2021	
2.	Latitude	<b>Points</b>	<b>Latitude</b>
		A	30°11'28.30"N
		B	30°11'28.29"N
		C	30°11'26.30"N
			<b>Longitude</b>
		D	77°19'44.35"E
			77°19'44.35"E
			77°19'45.50"E
			77°19'44.42"E
3.	Plot Area	0.18 Ha.	
4.	Net Plot Area	0.18 Ha.	
5.	Total Built Up area	NA	
6.	Total Green Area with %	0.0625 Ha. (34.7%)	
7.	Rain Water Harvesting Pits (with size)	1 rectangular recharge tank (48m <sup>3</sup> )	
8.	Power Requirement	400KW	
9.	Power Backup	1 DG Set (380 KVA)	
10.	Total Water Requirement	306 KLD	
11.	Domestic Water Requirement	2.5 KLD	
12.	Fresh Water Requirement	306 KLD	
13.	Waste Water Generated	25 KLD	
14.	Treatment method	MEE of 2kl/hr	
15.	Total Cost of the project:	Rs. 4.85 Crores	
16.	EMP Budget	Rs. 173.2 Lakhs	
17.	Incremental Load in respect of:	PM 10	1.55µg/m <sup>3</sup>
18.	Construction Phase:	1. Power Back-up	1 D.G. Set- 380 KVA
		2. Water Requirement & Source	Treated water from HSIIDC
19.	Manpower	13	

### Environment Management Plan

<b>Sr. No.</b>	<b>Details</b>	<b>Capital Cost (In lac)</b>	<b>Recurring Cost (In Lacs/annum)</b>
1.	APCD	5.0	0.5
2.	MEE	150	40.0
3.	Green belt development with maintenance plan	1.6	1.6 (Maintenance for three years)
4.	Occupational hazard and safety	8.0	0.3
5.	Environment Monitoring	0.3	0.4
6.	Solid Waste Management	0.8	0.25
7.	Energy Conservation	1.0	3.0
8.	Disaster and Risk Management	5.0	1.5
9.	Miscellaneous	1.5	0.1
<b>Total</b>		<b>173.2</b>	<b>47.65</b>

### Boiler Details

S. No.	Particular	Details
1.	Type of Fuel	LPG
2.	Capacity of Boiler	600 kg/hr.
3.	Stack Height	11m

### Raw Material

Sr. No.	Raw Materials	Quantity	Source
1.	Methanol	450 MTPD	Kandla port- Gujrat 1067km (M/s B.K. Sales Corporation) through tanker
2.	Water (D.M. Water)	550	Ground water
3.	Air	900	Boiler

Detailed discussion was held on points such as raw material to be used during the operation phase, storage of chemicals, Disaster Management, environmental sound storage and handling of Methanol & Formaldehyde, fire hazard and ZLD and certain observations were raised as follows:

1. PP shall submit SoP for environmentally sound storage and handling of Methanol to be used for production of formaldehyde.
2. PP shall submit SoP of disaster management.
3. PP shall submit SoP for health and safety.
4. PP shall submit control of Fire Hazard.
5. PP shall submit undertaking that treatment system shall be based on ZLD

The PP submitted reply of the above mentioned observations in writing and also submitted undertaking which were found in order.

After deliberations the Committee was of the unanimous view that this case for granting Environmental Clearance under EIA Notification dated 14.09.2006 issued by the Ministry of Environment and Forest, Government of India should be recommended to the SEIAA with the following specific and general stipulations:

#### **Specific Conditions:-**

1. The PP shall get the mandatory registration of boiler as per the Boiler Act 1923 and rules 1950 from the Chief Boiler Inspector.
2. The PP shall ensure effective functioning of safety, drain valve, monitoring instruments of critical parameter through regular checks and maintain the record for it.
3. The PP shall ensure the compliance of safety provisions for the transportation of methanol and formaldehyde from the source of procurement and to the sale point
4. The PP shall display the emergency information panel at front and back or both sides of the vehicle while transportation as per the Central motor vehicle rules 1989.
5. The PP shall ensure all the safety measures for the workers at the project site and also ensure that methanol and formaldehyde shall not be misused/consumed by the workers as these chemicals are highly dangerous and could lead to blindness or even death.
6. The PP shall ensure that the underground tanks constructed for the purpose of storage of methanol shall comply with the existing provisions of the safety measures and shall be

- safely transmitted through full proof method of safety into the reactors.
7. The PP shall ensure that no leakage shall take place from the underground tanks as the leakage destroys the underground water
  8. The PP shall obtain authorization for boilers and their renewal from time to time from competent Authority.
  9. The PP should install sensors to measure the methanol vapors in the project area and also ensure the installation of online monitoring system for fugitive emission i.e. CH<sub>3</sub>OH, VOC, CCO, CO<sub>2</sub>, NO<sub>x</sub>, SO<sub>x</sub> etc and connect to server of CPCB/HSPCB. Continuous online (24X7) monitoring system for stack emissions shall be installed for Measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
  10. The PP agrees that they will shift to the gas based generator set as and when the gas is available and HSD will be used presently in the DG set and appropriate APCM will be used in the generator sets.
  11. The PP shall take the floor wash, chemicals spill etc. of the project to the ETP and shall be properly treated before being used and also ensure that these spills shall not be mixed with rain water. Effluent shall be treated in the ETP and should adhere to the HSPCB/CPCB Guidelines.
  12. The PP shall ensure the zero liquid discharge shall be undertaken and the effluent of ETP shall be used inside the factory, no waste/treated water shall be discharged outside the premises.
  13. Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.
  14. Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.
  15. To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be maintained through stack of adequate height as per CPCB/SPCB guidelines.
  16. Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.
  17. Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm and the solvent transfer through pumps.
  18. Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.
  19. The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.
  20. Separate wet and dry bins must be provided at ground level for facilitating segregation of waste. Solid Waste shall be segregated into wet garbage and inert materials. Wet Garbage shall be composted. Adequate area shall be provided for solid waste management within the premises which will include area for segregation, composting. The Inert waste from the project will be sent to dumping site.
  21. No tree cutting has been proposed in the instant project. A minimum of 1 tree for every 80 sqm of land should be planted and maintained. The Existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping. As proposed 0.0625 Ha. (34.7%) shall be provided for green area development.
  22. 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.
  23. The Approval of the Competent Authority shall be obtained for structural safety of building code due to earthquakes, adequacy of firefighting equipments etc. as per National Building Code including protection measures from lightning etc.

24. The company shall undertake waste minimization measures as below:-
  - (a) Metering and control of quantities of active ingredients to minimize waste.
  - (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
  - (c) Use of automated filling to minimize spillage.
  - (d) Use of Close Feed system into batch reactors.
  - (e) Venting equipment through vapour recovery system.
  - (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
25. For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
26. The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.
27. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
28. There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places.
30. Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
31. 1 Rectangular Rain water tank shall be provided as per the CGWB norms.
32. The PP shall ensure the compliance of provisions of Plastic Waste Management (Amendment) Rules, 2022 relevant for the project.
33. The PP may provide electric charging stations to facilitate electric vehicle commuters.
32. Any change in stipulations of EC will lead to Environment Clearance void-ab-initio and PP will have to seek fresh Environment Clearance.

**A. 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 recommendation 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-1 species in the study area).
- iv. The project proponent shall obtain Consent to establish/operate under the provision of air (Prevention & Control 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 authorization under the Hazardous and other Waste Management Rules, 2016 as attended from time to time.
- vi. The company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989, as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MJVA), 1989.

**1. 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 system from time to time according to equipment supplier specification through labs recognized 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 recognized under Environment (Protection) Act, 1986.
- iii. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM25 in reference to PM emission, and SO2 and NOX in reference to SO2 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. To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. Sulphur content should not exceed 0.5% in the coal for use in coal fired boilers to control particulate emissions within Permissible limits (as applicable). The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- v. Storage of raw materials, coal etc shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- vi. National Emission Standard for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608 (E) dated 21st July, 2010 and amended form time to time shall be followed.
- vii. The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R No. 826 (E) dated 16th November,2009 shall be complied with

## **2. Water quality monitoring and preservation:**

- i. The project proponent shall provide online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises (applicable in case of the projects achieving ZLD).
- ii. As already committed by the project proponent. Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises (applicable in case of the projects achieving the ZLD).
- iii. The effluent discharge shall conform to the standards prescribed under the Environment (Protection) Rules, 1986, or as specified by the State Pollution Control Board while granting Consent under the Air/Water Act, whichever is more stringent.
- iv. Total fresh water requirement shall not exceed the proposed quantity or as specified by the Committee. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard.
- v. Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.
- vi. The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial operations within the plant.
- vii. The DG sets shall be equipped with suitable pollution control devices and the adequate stack height so that the emissions are in conformity with the extant regulations and the guidelines in this regard.

## **3. Noise monitoring and prevention:**

- i. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.

- ii. The overall noise levels in and around the plant areas shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation.
- iii. The ambient noise levels should conform to the standards prescribed under E (P) A Rules, 1986, viz. 75dB (A) during day time and 70 dB (A) during night time.

#### **4. Energy Conservation measures**

- i. The energy sources for lighting purposes shall preferably be LED based
- ii. The PP will follow guidelines of ECBC required for industrial projects

#### **5. Waste management**

- i. Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm and the solvent transfer through pumps.
- iii. Process organic residue and spent carbon, if any, shall be sent to cement industries, ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.
- iv. The company shall undertake waste minimization measures as below:-
  - a. Metering and control of quantities of active ingredients to minimize waste.
  - b. Reuse of by-products from the process as raw materials or as raw material substitutes in the other process.
  - c. Use of automated filling to minimize spillage.
  - d. Use of Close Feed system into batch reactors.
  - e. Venting equipment through vapors recovery system.
  - f. Use of high pressure houses for equipment clearing to reduce wastewater generation.

#### **6. Green Belt:**

- i. The green belt of 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.

#### **7. Safety, 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. The PP shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms of Factory Act.
- 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 structure to be removed after the completion of the project.
- iv. Occupational health surveillance of the worker shall be done on a regular basis and records maintained as per the Factories Act.

#### **8. Corporate Environment Responsibility:**

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any

infringements/deviation/violation of the environmental/forest/wildlife norms/conditions and /or shareholders/stake stakeholders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of the six-monthly report.

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

## 9. 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 monitor the criteria pollutants level namely: PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub> (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- viii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State government.
- ix. The project proponent shall abide by the 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 stipulate 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 (Presentation & Control of Pollution), Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, The Environment (Protection) Act, 1986. Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other order 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.

**244.29 EC for Expansion of Residential Plotted Colony at Village Dhunela & Berka, Sector 29, 30, 32 & 33, Sohna, Gurgaon, Haryana by M/s ST. Patricks Realty Private Limited**

**Project Proponent : Mr. Saurabh Bhardwaj**  
**Consultant : Perfact Enviro Solutions Pvt. Ltd.**

The project was submitted to the SEIAA, Haryana vide online proposal No. SIA/HR/MIS/78040/2022 dated 11.06.2022 as per check list approved by the SEIAA/SEAC for obtaining Environmental Clearance under Category 8(b) of EIA Notification 14.09.2006.

The case was taken up in 244th meeting of SEAC, Haryana held on 09.07.2022. The PP presented the case before the committee:

- The proposed project is an Expansion of Residential Plotted Colony at Village-Dhunela & Berka, Sector-29, 30, 32 & 33, Tehsil-Sohna, District-Gurgaon, Haryana by M/s St. Patricks Realty Private Limited.
- Previous EC was granted to the project on 20.04.2021
- The Certified Compliance Report is dated 31.05.2022
- Terms of reference were granted by SEIAA vide ToR letter no. SEIAA(137) HR/2022/736 dated 08.04.2022.
- The PP has submitted the copy of DD for Rs. 2.0 lakh in favor of MS, SEIAA on 11.03.2022 vide DD no. 860650 in compliance of Haryana Government, Environment & Climate Change Department Notification No. DE&CCH/3060 dated 14.10.2021.
- The details of the project, as per the documents submitted by the project proponent, and also as informed during the presentation in the meeting are as under:

**Table 1: Basic Details**

Sr. No.	Particulars	Existing (As per EC Granted)	Proposed	Total after Expansion
	<b>Online Project Proposal Number</b>	SIA/HR/MIS/78040/2022		
1.	Latitude	28°17'4.97"N		
2.	Longitude	77° 4'17.59"E		

3.	Plot Area	601,695.296 sqm.	193,273.8867 sqm.	794,969.1822 sqm.
4.	Net Plot Area	581,076.722 sqm.	166,798.2505 sqm.	747,874.9726 sqm.
5.	Proposed Ground Coverage	-	-	-
6.	Proposed FAR	-	-	-
7.	Non FAR Area	-	-	-
8.	Total Built Up area	1,040,256 sqm.	4,73,039 sqm.	1,513,295 sqm.
9.	Total Green Area with Percentage	181,877.01 sqm. (31.30 %)	52,956 sqm.	234,833 sqm. (31.40 %)
10.	Rain Water Harvesting Pits	74	42	116
11.	STP Capacity	3000 KLD	1000	4000 KLD
12.	Total Parking	611	-	611
13.	Organic Waste Converter	-	-	2
14.	Maximum Height of the Building (m)	15	0	15
15.	Power Requirement	11097	6028	17,125
16.	Power Backup	1 x 900, 8 x 700, 3 x 600, 2 x 1000 (Standby), 1 x 800, 2 x 500, 1 x 400, 1 x 300, 2 x 630	11 x 750 KVA	1 x 900, 8 x 700, 3 x 600, 2 x 1000 (Standby), 1 x 800, 2 x 500, 1 x 400, 1 x 300, 2 x 630, 750 KVA x 11
17.	Total Water Requirement	2424	1271	3695
18.	Domestic Water Requirement	1315	384	1699
19.	Fresh Water Requirement	1315	384	1699
20.	Treated Water	-	-	1857
21.	Waste Water Generated	-	-	2063
22.	Solid Waste Generated	11262 kg/day	3168 kg/day	14430 kg/day
23.	Biodegradable Waste	-	-	8,658 kg/day
24.	Number of Towers	-	-	-
25.	Dwelling Units/ EWS	No. of Plots- 1473	No. of Plots- 440	No. of Plots- 1913 (EWS-383, NPNL-479, Plots-1051)
26.	Salable Units	1473	440	1913
27.	Basement	2	0	2
28.	Community Center	1 No.	0	1 No.
29.	Stories	S+4	-	S+4
30.	R+U Value of Material used (Glass)	Not applicable.		
31.	Total Cost of the project:	i) Land Cost ii) Construction Cost	808 Cr.	400.13 Cr. 1208 Cr.
32.	CER	181 Lakhs		
33.	EMP Cost/Budget	Capital cost after Expansion: 2,547 Lakhs Recurring Cost after Expansion: 1,208 Lakhs/year		
34.	Incremental Load in respect of:	0.763 µg/m <sup>3</sup>		
	i) PM 2.5			
	ii) PM 10	2.02 µg/m <sup>3</sup>		
	iii) SO <sub>2</sub>	2.95 µg/m <sup>3</sup>		

	iv) NO <sub>2</sub>	4.43 µg/m <sup>3</sup>	
	v) CO	0.016 mg/m <sup>3</sup>	
35.	Construction Phase:	i) Power Back-up	2 x 500 kVA & 1 x 300 kVA
		ii) Water Requirement & Source	Water Requirement - 26 KLD Source: STP treated water
		iii) STP (Modular)	Septic tank followed by a soak pit
		iv) Anti-Smoke Gun	Will be installed

**Table 2: Construction Status**

Component	Construction status till June 2022
Civil Construction (Structural Work, Brick Work & Plaster Work)	-Structural work of 328 no. of plots has been completed -Brick Work of – 326 plots complete -Plaster Work – 319 plots complete
Electrical Work	95% completed on developed plots
Sewage Treatment Plant, RainWater Harvesting	STP - One STP of 300 KLD installed RWH – Total 38 RWH pits constructed at the site and the same are operational
DG Room, LT Panel Room	2 x 500 kVA & 1 x 300 kVA already installed
Landscaping work	Under development
Part CTO for area	Built up area 43420.86 m <sup>2</sup>

**Table 3: EMP BUDGET  
Capital Cost**

Description	Cost Already spent (in lakh) In Existing part	Cost To be spent (Rs in Lakh) in proposed part	Total Cost (in Lakhs) After expansion	Timeline
Landscaping	750	23.33	773.33	18 months
Water Management - STP	970	43.80	1,014	24 months
DG Stack & Acoustic Treatment	230	18.00	248	24 months
Solid Waste Management	120	20.00	140	24 months
Rain Water Harvesting	159	31.83	191	24 months
Social Activities	131	50.00	181	36 months
<b>Total</b>	<b>2,360</b>	<b>186.96</b>	<b>2,547</b>	

**Recurring Cost:**

Description	Total Cost (in Lakhs) as per Earlier EC	Proposed to be spent (in Lakhs)	Total Cost (in Lakhs)
Landscaping	30	300	330

<b>Water Management (STP &amp; RWH)</b>	50	400	450
<b>Air Management (DG Stack &amp; Acoustic Treatment)</b>	5	200	205
<b>Environment Monitoring</b>	2	50	52
<b>Solid Waste Management</b>	12	50	62
<b>Miscellaneous</b>	5	105	110
<b>Total</b>	<b>104</b>	<b>1,105</b>	<b>1,208</b>

The committee raised the following observations:

- The PP shall submit an affidavit for use of surplus STP treated effluent and implementation schedule of tangible EMP
- The PP shall submit a Landscape plan showing blockwise green areas to be proposed along with the dimension of each block.

The PP submitted the reply of above said observations vide letter dated 09.07.2022 as Annexure-I and Annexure-II including affidavit in response to the observations. The reply was discussed by the committee.

After discussion and detailed deliberation, the committee rated this project with **“Gold Rating”** and was of the unanimous view that this case for granting Environmental Clearance under EIA Notification dated 14.9.2006 issued by the Ministry of Environment and Forest, Government of India should be recommended to the SEIAA with the following specific and general stipulations:

**A. Specific conditions:-**

1. Sewage shall be treated in the modular STP based on latest Technology to achieve standards ordered by NGT. The Treated effluent from STP shall be recycled /reused for flushing. DG cooling and Gardening
2. The PP should provide separate services across the revenue rasta passing through project.
3. The Project Proponent would devise a monitoring plan to the satisfaction of the State Pollution Control Board so as to continuously monitor the treated waste water being used for flushing in terms of faecal coli forms and other pathogenic bacteria.
4. The PP shall ensure that total 2% of the cost of project shall be spent on EMP Budget. However, the amount and component shown in EMP table above shall also be included for the purpose of 2% amount. The EMP cost on Socio Economic activities shall be used before the commencement of the project & EMP recurring inside the project shall be implemented throughout the operation of the project. The PP shall establish Environment monitoring cell as per documents submitted.
5. The PP shall not carry out any construct above and below revenue rasta, if passing through the project and ensure that permission of the competent authority shall be obtained before carry out any construction above or below the revnuerasta. The PP shall put notice board on the revenue rasta for the passer byes.
6. The project proponent shall upload the status of compliance of the basic details (given in above tables), stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
7. 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.
8. Separate wet and dry bins must be provided in each unit and at ground level for facilitating segregation of waste. Solid Waste shall be segregated into wet garbage and inert materials. Wet Garbage shall be composted in Organic waste convertor. Adequate area shall be provided for solid waste management within the premises which will include area for segregation, composting. The Inert waste from the project will be sent to solid waste dumping site through authorized vender.
  9. Traffic management plan as submitted shall be implemented in letter and spirit. Apart, a detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is marinated and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habilitation being carried out or purpose to be carried out by the project or other agencies in this 05kms radius of the site in different scenarios of space and time
  10. No tree cutting has been proposed in the instant project. A minimum of 1 tree for every 80sqm of land should be planted and maintained. The Existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping. As proposed 234,833 sqm.(31.40 % of total plot area)shall be provided for Green Area development for whole project, excluding plot areas.
  11. 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.
  12. Consent to establish/operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of pollution) Act, 1981 and the Water (Prevention and control of pollution) Act, 1974.
  13. The Approval of the Competent Authority shall be obtained for structural safety of building code due to earthquakes, adequacy of fire fighting equipments etc. as per National Building Code including protection measures from lightening etc.
  14. The PP shall obtain the Fire NOC from the Competent Authority before taking the occupation of the building.
  15. The PP shall install the Eco Friendly Green Transformer based on ester oil to reduce the carbon footprint. The PP shall shift to gas based generator set when the gas is available. The PP shall install APCM for the DG set. The PP shall reduce the So2 load by30% if HSD is used. The DG sets will be operated for maximum 04 hours during power failure through Executing Agency
  16. The PP shall not give occupation or possession before the water supply and sewage connection permitted by the competent authority.
  17. The PP shall not give occupation or possession before the electricity connection permitted by the competent Authority.
  18. The PP shall obtain the permission regarding withdrawal of ground water, if any from HWRA/CGWA before the start of the project and also obtained the CTO from HSPCB after the approval from HWRA/CGWA.
  19. The PP shall carry out the quarterly awareness programs for the stakeholders of the project.
  20. 116Rain water harvesting recharge pits shall be provided for ground water recharging as per the CGWB norms.
  21. The PP shall install Digital water level recorder for monitoring the water recharge and carry out quarterly maintenance and cleaning of 116RWH pits.
  22. The PP shall ensure the compliance of provisions of Plastic Waste Management (Amendment) Rules, 2022 relevant for the project.
  23. The PP may provide electric charging stations to facilitate electric vehicle commuters.
  24. The PP shall provide the Anti smog gun mounted on vehicle in the project for suppression of dust during construction & operational phase and shall use the treated water, if feasible.



25. The PP shall take all preventive measures including water sprinkles to control dust during construction and operational phase.
26. Any change in stipulations of EC will lead to Environment Clearance void-ab-initio and PP will have to seek fresh Environment Clearance.

## **B. Statutory Compliance:**

- [1] The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority for ground coverage, FAR and should be in accordance with zoning plan approved by Competent Authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.
- [2] 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 lightning etc.
- [3] 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.
- [4] The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- [5] 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 Haryana State Pollution Control Board.
- [6] The project proponent shall obtain the necessary permission for drawl of ground water /surface water required for the project from the competent authority.
- [7] 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.
- [8] 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.
- [9] The provisions of the Solid Waste (Management) Rules, 2016, e-Waste (Management) Rules, 2016, the Plastics Waste (Management) Rules, 2016 and Batteries waste (Management Handling Rules 2001 as amended in 2020) shall be followed.
- [10] The project proponent shall follow the ECBC Act/ECBC-Rules prescribed by Bureau of Energy Efficiency, Ministry of Power strictly in addition of bylaws of the State Government.

### **I Air Quality Monitoring and Preservation**

1. 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.
2. A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.
3. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM2.5) covering upwind and downwind directions during the construction period.
4. 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 ultra lowsulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board
5. Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murrum and other

construction materials prone to causing dust pollution at the site as well as taking out debris from the site.

6. Sand, murrum, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.
7. Wet jet shall be provided for grinding and stone cutting.
8. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
9. 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 Rules 2016.
10. The diesel generator sets to be used during construction phase shall be ultra lowsulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.
11. 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. Ultra 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.
12. For indoor air quality the ventilation provisions as per National Building Code of India.

## **II Water Quality Monitoring and Preservation**

1. 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.
2. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.
3. Total fresh water use shall not exceed the proposed requirement as provided in the project details. The per capita supply should adhere to NBC 2016 and CGWA Notification dated 12.12.2018.
4. 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.
5. 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.
6. At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.
7. 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.
8. 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.
9. 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.
10. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
11. The local bye-law provisions on rain water harvesting should be followed. If local byelaw 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 pits shall be provided for ground water recharging as per the CGWB norms.
12. 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.

13. All recharge should be limited to shallow aquifer.
14. No ground water shall be used during construction phase of the project.
15. 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.
16. 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.
17. 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.
18. No sewage or untreated effluent water would be discharged through storm water drains.
19. 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.
20. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.
21. 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.

### **III Noise Monitoring and Prevention**

1. Ambient noise levels shall conform to residential area/commercial area 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.
2. 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.
3. 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 Energy Conservation Measures**

1. Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency as per ECBC Act, 2017 read with ECBC Rules, 2018 shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC also which is in no case should be less than 25% as prescribed.
2. Outdoor and common area lighting shall be LED.
3. 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 R & U-values shall be as per ECBC specifications.

4. 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.
5. 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.
6. 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.
7. The PP will submit report indicating compliance of each parameter of ECBC requirement and submit quantification saving report for each component.

## **V Waste Management**

1. 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.
2. Disposal of muck during construction phase shall not create any adverse effect on the neighboring 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.
3. 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.
4. Organic Waste Converter within the premises with a minimum capacity of 0.5 kg /person/day must be installed. Leaves to be put in earmarked pits for converting them into compost to be used as manure.
5. All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.
6. Any hazardous waste generated during construction phase, shall be disposed of as per applicable rules and norms with necessary approvals of the State Pollution Control Board.
7. 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.
8. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.
9. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Rules, 2016.
10. 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.

## **VI Green Cover**

1. 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).
2. A minimum of 1 tree (5' tall) 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.

3. 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.
4. 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.

## **VII Transport**

1. 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.
  - i. Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
  - ii. Traffic calming measures.
  - iii. Proper design of entry and exit points.
  - iv. Parking norms as per local regulation.
2. 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.
3. 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.

## **VIII 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.

## **IX Corporate Environment Responsibility**

- i. The project proponent shall comply with the provisions of CER, as applicable.
- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/ deviation/ violation of the environmental/ forest/ wildlife norms/ conditions. The company shall have defined system of reporting infringements/ deviation/ violation of the environmental/ forest/ wildlife norms/ conditions and/ or shareholders/ stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.

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

## **X Miscellaneous**

- i. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- v. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vi. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- vii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- viii. The project proponent shall abide by all the commitments and recommendations made in the form-IA, Conceptual Plan and also that during their presentation to the Expert Appraisal Committee.
- ix. No further expansion or modifications in the plan shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC)/SEIAA, Haryana. The project proponent shall seek fresh environmental clearance under EIA notification 2006 if at any stage there is change of area of this project.
- x. Any change in planning of the approved plan will leads to Environment Clearance void-ab-initio and PP will have to seek fresh Environment Clearance
- xi. The PP should give unambiguous affidavit giving land promoters in accordance with your ownership and possession of land legal the case referred for Environment Clearance to SEIAA.
- xii. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xiii. The Ministry/SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiv. The Ministry/SEIAA reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xvi. The above conditions shall be enforced, inter-alia under the provisions of the Water

(Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

**244.30 EC under Violation for Project “Corporate Office” at Plot No. 13, Sector 32, Urban Estate Gurugram-II, Haryana by M/s Padmini Technologies Ltd.**

**Project Proponent :Pawan Kumar Garg**  
**Consultant : Perfect Enviro Solutions Pvt. Ltd.**

The project was submitted to the SEIAA, Haryana vide online proposal No. SIA/HR/MIS/278481/2022 dated 17.06.2022 as per check list approved by the SEIAA/SEAC for obtaining Environmental Clearance under Category 8(a) of EIA Notification 14.09.2006.

The case was taken up in 244th meeting of SEAC, Haryana held on 09.07.2022. The PP presented the case before the committee:

- The project is “Corporate Office Complex” which is located at Plot No. 13, Urban Estate Gurugram-II, Haryana developed by M/s Padmini Technologies Ltd.
- The Terms of reference were granted by SEIAA vide ToR letter no. SEIAA(139)/HR/2022/849 dated 28.04.2022
- The PP submitted the copy of DD for Rs. 1,50,000 in favor of MS, SEIAA
- The details of the project, as per the documents submitted by the project proponent, and also as informed during the presentation in the meeting are as under:-

**Table 1: Basic Details**

S. No.	Particulars	Unit	Existing Details	Total
	<b>Online Project Proposal Number</b>		SIA/HR/MIS/278481/2022	
1.	Latitude		28°26'41.88"N	
2.	Longitude		77° 2'25.57"E	
3.	Plot Area	m <sup>2</sup>	8343.75	
4.	Net Plot Area	m <sup>2</sup>	8343.75	
5.	Proposed Ground Coverage	m <sup>2</sup>	2189.527	2189.527
6.	Proposed FAR	m <sup>2</sup>	13657.826	13657.826
7.	Non FAR Area	m <sup>2</sup>	1134.751	1134.751
9.	Total basement area	m <sup>2</sup>	13196.25	13196.25
10.	Total Built Up area	m <sup>2</sup>	27988.827	27988.827
11.	Total Green Area with Percentage	m <sup>2</sup>	1668.75 (20% the plot area)	1668.75 (20% the plot area)
12.	Rain Water Harvesting Pits	No.	-	2 (Dia-4.3 m & Depth- 5.6 m)
13.	STP Capacity	KLD	-	85
14.	Total parking Provision	ECS	308	308
15.	Organic Waste Converter	No.	-	1 no.
16.	Maximum Height of the Building (upto terrace level)	m	52.1	52.1
17.	Power Requirement	kW	1799.76	1799.76

18.	Power Backup	kVA	2x750 & 1x1010	2x750 & 1x1010
19.	Total Water Requirement	KLD	-	115
20.	Domestic Water Requirement	KLD	-	25
21.	Fresh Water Requirement	KLD	-	25
22.	Treated Water	KLD	-	51
23.	Waste Water Generated	KLD	57	57
26.	Solid Waste Generated	kg/day	389	389
26.	Biodegradable Waste	kg/day	158	158
27.	Number of Towers	No.	1	1
28.	Dwelling Units/ EWS/Servant Unit	No.	-	-
29.	Salable Units	No.	-	-
30.	Basement	No.	3	3
31.	Community building/Club	No.	-	-
32.	Stories	No.	3B + G + 9	3B + G + 9
33.	R+U Value of Material used (Glass)		-	U = 1.8 Watt / Sq m K R= 0.56 Sq m K/Watt
34.	Total Cost of the project:	Land Cost Construction Cost	Rs. (in Crores)	Rs. 60.134 Crores
35.	CER		-	Rs.10 Lakhs
36.	EMP Cost/Budget	lakhs	-	Capital cost- Rs 124 lakhs Recurring cost- Rs. 18.7 Lakhs
37.	Incremental Load in respect of:	PM <sub>2.5</sub> PM <sub>10</sub> SO <sub>2</sub> NO <sub>2</sub> CO	- - - - -	52.6 122.84 9.36 27.42 0.69
38.	Construction Phase:	Power Back-up Water Requirement & Source STP (Modular) Anti-Smoke Gun	- - - -	DG sets of capacity 1x125 kVA <b>Source of water was</b> through treated water of STP of nearby area/HUDA STP treated water <b>Water requirement-</b> 15 KLD (9 KLD for labours 6 KLD Water for construction activities) About - 7 KLD of the waste water generated was discharged to septic tanks via soak pit Sprinkling was done



**Construction Status:**

The corporate office building has been operational since 12.09.2016. with **Consent to Operate (Air)** dated 12.09.2016 valid upto 31.03.2021 and **Consent to Operate (Water)** dated 12.9.2016 valid upto 31.3.2021. The construction has been completed.

**Table 2:EMP CAPITAL Cost**

Sr No	Description	Already Spent Cost (Rs. in Lakhs)	Proposed Cost (Rs. in Lakhs)	Total Cost (Rs. in Lakhs)	Timeline
1	Landscaping	10	-	10	
2	Sewage Treatment Plant	40	-	40	
3	DG Stack & Acoustic Treatment	15	-	15	
4	Solid Waste Management	2	16	18	12 months
5	RWH	04	-	04	
6	Solar	20	-	20	
7	Miscellaneous	2	-	02	
8	Social Activities	-	10	10	12 months
9	Wildlife activity Plan	-	05	05	12 months
	<b>Total</b>	93	31	<b>124</b> <b>(2.06 % of total project cost)</b>	

**Table 3:Recurring Cost**

S No.	Description	Total Recurring Cost (Rs In Lakhs/ year)
1	Landscaping	6
2	Water Management	4
3	Air Management	1.2
4	Environment Monitoring	2
5	Solid Waste Management	3.5
6	Solar Power	0.5
7	Miscellaneous	1.5
	<b>Total</b>	<b>18.7</b>

- Damage assessment has been done by consultant as per Clause no 12.a (ii) of SoP dated 7th July 2021. Cost for damage assessment (Cost on Remediation of Environmental damages, Cost towards Natural Resource augmentation, Cost towards Community Resource augmentation) and **1% penalty and 0.25 % of Total Turnover penalty as per SOP 7th July 2021, Clause no 12.a(ii) is given below:**



Table 5: Remediation Plan and Cost

S.No.	Environmental Component	Remediation Proposed	Further Remarks	Rate	Qty	Total Cost	Year I	Year II	Year III
1	Air Environment	Distribution of Air purifier in consultation with local municipality for dust suppression in the on Delhi - Jaipur Expressway (72 M wide) & CH Baktawar Road near Medanta hospital	Air Purifier (Wayu Purifier with Clean Air Dispersion Rate 600 m/hr) along with Maintenance cost - 5 year @ 2000/month	₹180,000	1	₹180,000	₹60,000	₹60,000	₹60,000
		Installation of 3 Sprinkler system in Islampur village (1 km) and 3 in Jharsa village in consultation with Panchayat	Sprinkler- 6 no. @ Rs. 1000/per pc (velocity :4.6 m/sec Flow rate:3.11 GPM )	₹1,000	6	₹6,000	₹6,000	₹0	₹0
			Twin Filtration system - @ Rs. 15000/pc	₹15,000	3	₹45,000	₹45,000	₹0	₹0
			Pump -@ Rs. 15000/pc	₹15,000	2	₹30,000	₹30,000	₹0	₹0
			Water Distributing Pipeline - 500 m@ Rs 220/m	₹220	500	₹110,000	₹110,000	₹0	₹0
		Health Check-up	Health Check-up camp in jharsa and Islampur village	₹200,000	1	₹200,000	₹66,667	₹66,667	₹66,667
		Plantation in Nearby on sector 32 road (8 M wide) in consultation with MCG	Plant -100 @ 2000 (including Maintenance)	₹2,000	100	₹200,000	₹66,667	₹66,667	₹66,667
		Installation of Anti Smog Gun on Delhi - Jaipur Expressway (72 m wide) & CH Baktawar Road near Medanta hospital (32 m wide)	will be used to reduce the air pollution in near by area in peak pollution time	₹800,000	1	₹800,000	₹800,000	₹0	₹0
			TOTAL COST	-		₹1,571,000	₹1,184,333	₹193,333	₹193,333

2	Water Environment	Toilets	Installation of Toilets in 848 Nr. Govt. Girl's Primary School Jharsa in consultation with school authority	₹300,000	1	₹300,000	₹150,000	₹0	₹150,000
		Procurement RO Plant & installation in 848 Nr. Govt. Girl's Primary School Jharsa in consultation with school authority	RO Plant-1 no. (1000 LPH) @ 150,000/ per unit	₹150,000	1	₹150,000	₹75,000	₹75,000	₹0
			Installation of Rs. 5000/ per plant	₹5,000	1	₹5,000	₹2,500	₹2,500	₹0
		3 no. of Rain Water Harvesting pits in 848 Nr. Govt. Girl's Primary School Jharsa in consultation with school Authorities 2 pits in Islampur Village area	RWH-2 no (dia-3.6 & depth-2.5) @ 3,25,000/per RWH (including raw material, labour, profit, construction, pipeline)	₹325,000	2	₹650,000	₹216,667	₹216,667	₹216,667
		Maintenance of RWH	RWH-2 no. before monsoon and after monsoon for 5 year @Rs12000/ year/ RWH (5year x 5 pits)	₹12,000	2	₹24,000	₹8,000	₹8,000	₹8,000
		<b>TOTAL COST</b>					₹1,129,000	₹452,167	₹302,167
3	Soil Environment	Land reclamation of nearby area	Park Development in consideration with Municipal Corporation Gurgaon in Islampur Village	₹200,000	1	₹200,000	₹66,667	₹66,667	₹66,667

			TOTAL COST			₹200,000	₹66,667	₹66,667	₹66,667
4	Waste Management	Organic Waste Converter	2 OWC installation of capacity 300 kg/day in consideration with Municipal Corporation Gurgaon	₹800,000	2	₹1,600,000	₹1,600,000	₹0	₹0
			TOTAL COST			₹1,600,000	₹1,600,000	₹0	₹0
5	Noise Environment	Distribution of Personnel protection equipments to the health department for construction workers in near by sites	100,000	-	-	₹100,000	₹0	₹100,000	₹0
		Awareness program for Noise in Jharsa&Islampur village	100,000	-	-	₹100,000	₹0	₹50,000	₹50,000
		TOTAL COST				₹200,000	₹0	₹150,000	₹50,000
6	Ecological Environment	Plantation in on CH Baktawarsingh Road which is 32 m wide and Delhi -Jaipur Expressway which is 72 m wide in consultation with Municipal Corporation of Gurgaon	121 trees @ Rs. 2000/tree	₹2,000	116	₹232,000	₹77,333	₹77,333	₹77,333
		Development of sector 39 public park	In consideration with Municipal Corporation of Gurgaon.	-	-	₹300,000	₹300,000	₹0	₹0
		TOTAL COST				₹532,000	₹377,333	₹77,333	₹77,333
<b>COST OF REMEDIATION</b>						<b>₹5,232,000</b>	<b>₹3,680,500</b>	<b>₹789,500</b>	<b>₹762,000</b>

Natural Resource & Community Resource Augmentation Plan & Budgetary Provision

S.No.	Component	Activity Proposed	Further Remarks	Rate	Quantity	Total Cost	Year I	Year II	Year III
1	Natural Augmentation	Providing Solar Lighting in the Islampur village	Solar Provision	₹105,000	4	₹420,000	₹140,000	₹140,000	₹140,000
			<b>TOTAL COST</b>			<b>₹420,000</b>	<b>₹140,000</b>	<b>₹140,000</b>	<b>₹140,000</b>
2	Community Welfare (Final score: 0.1) i.e. 5% of total damage	Infrastructure Development in Govt. Senior Secondary School, Jharsa village, sec-39 Gurgaon	Distribution of computers, books, digital tools etc.	₹362,000	1	₹362,000	₹120,667	₹120,667	₹120,667
<b>TOTAL COST</b>						<b>₹362,000</b>	<b>₹120,667</b>	<b>₹120,667</b>	<b>₹120,667</b>
<b>COST OF NATURAL AUGMENTATION AND COMMUNITY</b>						<b>₹782,000</b>	<b>₹260,667</b>	<b>₹260,667</b>	<b>₹260,667</b>

### Cost Summary

S.No.	ITEM	Total Cost	Year I	Year II	Year III
1	Cost on remediation plan based on damage assessment due to violation	₹5,232,000	₹3,680,500	₹789,500	₹762,000
2	Natural Resource	₹420,000	₹140,000	₹140,000	₹140,000
3	Community Resources Augmentation plan	₹362,000	₹120,667	₹120,667	₹120,667
<b>TOTAL COST TO BE SPENT</b>		<b>₹6,014,000</b>	<b>₹3,941,167</b>	<b>₹1,050,167</b>	<b>₹1,022,667</b>

Total Summarised Cost on Environmental Damage, Natural resource, community augmentation (% contribution w.r.t. total project cost)

S.No.	Particular	Cost in INR (lacs)	% of total project cost	Timeline
	Project Cost	₹6,013.4	100	-
1	Cost on Remediation of Environmental damages	₹52.32	0.87	In 5 years
2	Cost towards Natural Resource augmentation	4.2	0.07	In 5 years
3	Cost towards Community Resource augmentation	3.62	0.06	In 5 years
<b>Total Damage Cost Proposed- A</b>		<b>₹60.14</b>	<b>1.00</b>	
4	<b>1% penalty as per SOP 7th July 2021, Clause no 12.a(ii)</b>	60.13	1.00	
	0.25 % of Total Turnover as per SOP 7th July 2021, Clause no 12.a(ii)	25.3512	0.25	
<b>Total Penalty as per SOP 7th July 2021-B</b>		<b>85.49</b>	<b>-</b>	
<b>Total cost-(A+B)</b>		<b>145.63</b>		

The PP submitted an Affidavit in response to the observations for Total Summarized Cost on Environmental Damage, Natural Resource, Community Augmentation (% contribution w.r.t. total project cost).

After detailed deliberations, the Committee decided to recommend the case to SEIAA for grant of Environmental Clearance under violation category of EIA Notification dated 14.09.2006 issued by the Ministry of Environment and Forest, Government of India subject to the following specific conditions in addition to all standard conditions applicable for such projects:

**A. Specific conditions:-**

- SEAC recommended for an amount of Rs.145.63 lakhs towards Remediation Plan, Natural and Community Resource Augmentation plan, 1% penalty in addition to 0.2% of total turn over as per table given above and to be spend within a span of three years as per the details given.
- Total budgetary provision with respect to Remediation plan and Natural & Community Resource Augmentation plan is rupees ₹60.14 lakhs. Therefore, project proponent shall be required to submit a bank guarantee of an amount of Rupees ₹60.14 lakhs

towards Remediation plan and Natural and Community Resource Augmentation plan with the Haryana State Pollution Control Board prior to the grant of EC.

3. The PP will have to deposit 85.49 lakhs with SEIAA for 1% penalty as per SOP 7th July 2021, Clause no 12.a(ii) and 0.25 % of Total Turnover as per SOP 7th July 2021, Clause no 12.a(ii).
4. Remediation plan shall be completed in 3 years and bank guarantee will be of equivalent period. The bank guarantee shall be released after successful implementation of the EMP, followed by recommendations of the SEAC and approval of the regulatory authority/SEIAA.
5. The PP should submit the 6 monthly action taken report on the compliance of environmental conditions to the Regional Officer, MoEF&CC, Haryana State Pollution Control Board and Chairman, SEIAA.
6. The PP shall bear the cost of remedial plan and will be responsible to maintain and manage the same.
7. The PP shall also submit the details of status of development of Green plan, species planted, survival status along with existing trees species wise and also maintain the record date wise along with digital mapping.
8. The PP shall also maintain the record of trees/plants to be planted as per the Remediation plan and Natural and Community Resource Augmentation plan along with digital mapping, latitude, longitude details.
9. The PP shall submit the prosecution details filled by HSPCB in environment court Kurukshetra under EP act, 1986 before the meeting of SEIAA as prosecution has been sanctioned by Chairman, HSPCM vide letter dated 11.08.2021.
10. The PP shall not start construction and development works without getting EC under violation Act/provisions of notification.
11. Sewage shall be treated in the STP based on latest Technology with tertiary treatment i.e. Ultra Filtration to achieve standards ordered by NGT. The Treated effluent from STP shall be recycled /reused for flushing. DG cooling and Gardening
12. The PP shall spent Rs. 5Lakhs on various wildlife conservation activities like artificial nests on the trees, digging of ponds and construction of feeding platforms through Environment Management Plan
13. The Project Proponent would devise a monitoring plan to the satisfaction of the State Pollution Control Board so as to continuously monitor the treated waste water being used for flushing in terms of faecal coli forms and other pathogenic bacteria.
14. 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.
15. Separate wet and dry bins must be provided in each unit and at ground level for facilitating segregation of waste. Solid Waste shall be segregated into wet garbage and inert materials. Wet Garbage shall be composted in Organic waste convertor. Adequate area shall be provided for solid waste management within the premises which will include area for segregation, composting. The Inert waste from the project will be sent to dumping site.
16. Traffic management plan as submitted shall be implemented in letter and spirit. Apart, a detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is marinated and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habilitation being carried out or purpose to be carried out by the project or other agencies in this 05kms radius of the site in different scenarios of space and time
17. The PP is required to plant 10 times trees at the project site and compensatory tree plantation will be done @1:10. No tree cutting has been proposed in the instant project. A minimum of 1 tree for every 80sqm of land should be planted and maintained. The Existing trees will be counted for this purpose. The landscape planning should include



plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping. As proposed 1668.75 (20% the plot area) shall be provided for green area development.

18. The PP shall not carry any construction below the 220KV HT Line passing through the project
19. 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.
20. The PP shall install the Eco Friendly Green Transformer based on ester oil to reduce the carbon footprint. The PP shall shift to gas based generator set when the gas is available. The PP shall install APCM for the DG set. The PP shall reduce the SO<sub>2</sub> load by 30% if HSD is used
21. Consent to establish/operate for the expansion project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of pollution) Act, 1981 and the Water (Prevention and control of pollution) Act, 1974.
22. The Approval of the Competent Authority shall be obtained for structural safety of building code due to earthquakes, adequacy of fire fighting equipments etc. as per National Building Code including protection measures from lightening etc.
23. The PP shall not carry any construction above or below the Revenue Rasta, if any
24. The PP shall not carry any construction below the HT Line passing through the project, if any.
25. The PP shall obtain the Fire NOC from the Competent Authority before taking occupation of the building.
26. The PP shall not give occupation or possession before the water supply and sewage connection permitted by the competent authority.
27. The PP shall not give occupation or possession before the electricity connection permitted by the competent Authority.
28. The PP shall obtain the permission regarding withdrawal of ground water from CGWA before the start of the project and also obtained the CTO from HSPCB after the approval from CGWA.
29. The PP shall carry out the quarterly awareness programs for the stakeholders of the commercial colony/project.
30. 02 Rain Water Harvesting pits shall be provided for rainwater usages as per the CGWB norms.
31. The PP shall install Digital water level recorder for monitoring the water recharge and carry out quarterly maintenance and cleaning of 02 RWH pits
32. The PP shall ensure the compliance of provisions of Plastic Waste Management (Amendment) Rules, 2022 relevant for the project.
33. The PP may provide electric charging stations to facilitate electric vehicle commuters.
34. The PP shall take all preventive measures including water sprinkles to control dust during construction and operational phase.
35. The State Government/SPCB to take action against the project proponent under the provisions of the Section 15 read with Section 19 of the Environment (Protection) Act, 1986, and no OC, Consent to Operate or Consent to Establish shall be granted for violation part of the project.
36. The Project Proponent shall be required to submit a bank guarantee equivalent to the amount of remediation plan and natural and community resource augmentation plan with the SPCB prior to the grant EC. The quantum shall be recommended by the SEAC and finalized by the regulatory authority. The bank guarantee shall be released after successful implementation of the EMP, followed by recommendations of the SEAC and approval of the regulatory authority.
37. Detailed SoP dated 07.07.2021 regarding grant of EC to violation cases to be considered the action on merits. The action may be initiated under Section 15 read with Section 19 of the EP Act, 1986 against all violations.
38. The PP should submit compliance report of existing building from the Competent Authority.

39. Any change in stipulations of EC will lead to Environment Clearance void-ab-initio and PP will have to seek fresh Environment Clearance.

**B. Statutory compliance:**

- [1] The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority for ground coverage, FAR and should be in accordance with zoning plan approved by Competent Authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.
- [2] 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.
- [3] 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.
- [4] The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- [5] 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 Haryana State Pollution Control Board.
- [6] The project proponent shall obtain the necessary permission for drawl of ground water /surface water required for the project from the competent authority.
- [7] 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.
- [8] 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.
- [9] The provisions of the Solid Waste (Management) Rules, 2016, e-Waste (Management) Rules, 2016, and the Plastics Waste (Management) Rules, 2016 shall be followed.
- [10] The project proponent shall follow the ECBC Act/ECBC-Rules prescribed by Bureau of Energy Efficiency, Ministry of Power strictly in addition of bylaws of the State Government.

**I Air Quality Monitoring and Preservation**

- i. Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.
- ii. A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.
- iii. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM25) 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 ultra low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board
- v. Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building

- under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murrum and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
- vi. Sand, murrum, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.
  - vii. Wet jet shall be provided for grinding and stone cutting.
  - viii. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
  - ix. All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules 2016.
  - x. The diesel generator sets to be used during construction phase shall be ultra 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. Ultra 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.

## **II 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. The per capita supply should adhere to NBC 2016 and CGWA Notification dated 12.12.2018.
- iv. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.
- v. A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.
- vi. At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.
- vii. Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.
- viii. Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.
- ix. Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.
- x. Water demand during construction should be reduced by use of pre-mixed concrete,

- curing agents and other best practices referred.
- xi. The local bye-law provisions on rain water harvesting should be followed. If local byelaw 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 pits 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.

### **III Noise Monitoring and Prevention**

- i. Ambient noise levels shall conform to residential area/commercial area 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.

#### **IV Energy Conservation Measures**

- i. Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency as per ECBC Act, 2017 read with ECBC Rules, 2018 shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC also which is in no case should be less than 25% as prescribed.
- 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 R & 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.
- vii. The PP will submit report indicating compliance of each parameter of ECBC requirement and submit quantification saving report for each component.

#### **V 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 neighboring 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 Converter within the premises with a minimum capacity of 0.5 kg /person/day must be installed. Leaves to be put in earmarked pits for converting them into compost to be used as manure.
- v. All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.
- vi. Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.
- vii. Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials.
- viii. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.
- ix. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition 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.

## **VI 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 (5' tall) for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.
- iii. Where the trees need to be cut with prior permission from the concerned local Authority, compensatory plantation in the ratio of 1:10 (i.e. planting of 10 trees for every 1 tree that is cut) shall be done and maintained. Plantations to be ensured species (cut) to species (planted). Area for green belt development shall be provided as per the details provided in the project document.
- iv. Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.

## **VII 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.
  - i. Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
  - ii. Traffic calming measures.
  - iii. Proper design of entry and exit points.
  - iv. 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.

## **VIII 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.

## **IX Corporate Environment Responsibility**

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F. No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/ deviation/ violation of the environmental/ forest/ wildlife norms/ conditions. The company shall have defined system of reporting infringements/ deviation/ violation of the environmental/ forest/ wildlife norms/ conditions and/ or shareholders/ stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

## **X Miscellaneous**

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

- authorities, commencing the land development work and start of production operation by the project.
- vii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
  - viii. The project proponent shall abide by all the commitments and recommendations made in the form-IA, Conceptual Plan and also that during their presentation to the Expert Appraisal Committee.
  - ix. No further expansion or modifications in the plan shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC)/SEIAA, Haryana. The project proponent shall seek fresh environmental clearance under EIA notification 2006 if at any stage there is change of area of this project.
  - x. Any change in planning of the approved plan will leads to Environment Clearance void-ab-initio and PP will have to seek fresh Environment Clearance
  - xi. The PP should give unambiguous affidavit giving land promoters in accordance with your ownership and possession of land legal the case referred for Environment Clearance to SEIAA.
  - xii. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
  - xiii. The Ministry/SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
  - xiv. The Ministry/SEIAA reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
  - xv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
  - xvi. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

**244.31 EC for Expansion of Group Housing Colony at Sector 48, Gurugram, Haryana by M/s Sweta Estates Pvt Ltd**

**Project Proponent : Mr. Saurabh Bhardwaj**  
**Consultant : Gaurang Environmental Solutions Pvt. Ltd.**

The EIA/EMP report was submitted to the SEIAA, Haryana vide online proposal No. SIA/HR/MIS/68360/2015 dated 03.06.2022 for obtaining Environmental Clearance under Category 8(b) of EIA Notification 14.09.2006.

The PP has submitted scrutiny fee amounting to Rs.2,00,000/- vide DD No.507024 dated 26.11.2021 in compliance of Haryana Government, Environment & Climate Change Department Notification No. DE&CCH/3060 dated 14.10.2021. The case was taken up in 244th meeting of SEAC held on 09.07.2022. The PP presented the case before the committee and submitted as under:

- The proposed project is for Expansion of Group Housing Colony at Sector 48, Gurugram, Haryana by M/s Sweta Estates Pvt Ltd



- Earlier EC has been granted to the project by MoEF&CC vide 21-148/2017-IA-III dated 29.08.2017.
- Licence has been issued Licence No. 2 of 1995 dated 10.03.1995, Licence No. 35-37 of 1996 dated 17.04.1996 and Licence No. 117-119 of 2004 dated 16.08.2004 valid till 09.03.2025, 16.04.2024 and 15.08.2024 respectively from Town and Country planning.
- CTE has been granted to the existing project vide letter dated 18.10.2017 valid till 28.08.2024 and CTO has also been granted to the existing project vide letter 29.09.2021 valid till 30.09.2023
- The compliance report has been received from RO MoEF&CC vide letter dated 11.08.2021
- TOR was granted by SEIAA, Haryana vide letter no. SEIAA(133)/HR/2021/15 dated 03.01.2022.
- No wildlife sanctuary falls within 10km of the project site

The details of the project, as per the documents submitted by the project proponent and also as informed during the presentation in the meeting are as under:-

**Table 1 : Basic Details**

<b>Name of the Project :Expansion of Group Housing Colony at Sector 48, Gurugram, Haryanaby M/s Sweta Estates Pvt Ltd</b>				
<b>Sr. No.</b>	<b>Particulars</b>	<b>As per Existing EC</b>	<b>Modification &amp; Expansion</b>	<b>Total</b>
1.	Online Proposal Number	SIA/HR/MIS/68360/2015		
2.	Latitude	28° 25' 11.30" N		
3.	Longitude	77° 2' 18.04" E		
4.	Total Plot Area	1,91,893.533sq. m (47.418 acres)	-	1,91,893.533sq. m (47.418 acres)
5.	Net Plot Area	-	-	-
6.	Proposed Ground Coverage	11.23% of plot area 21,309.10 sq. m	+ 6,594.57 sq. m.	14.54% of plot area 27,903.670 sq. m
7.	Proposed FAR	3,35,813.683 sq. m	+ 5,732.314 sq. m.	3, 41,545.997 sq. m
8.	Non FAR Area	2,26,328.056 sq.m.	+3,094.327 sq. m	2,29,422.383 sq.m.
9.	Built up area	5,62,141.739 sq. m	+ 8,826.641 sq.m	5,70,968.38 sq. m.
10.	Total Green Area with Percentage	57,700 sq. m (30% of plot area)	+ 47,518.1 sq. m	1,05,218.10 sq. m (54.831% of plot area)
11.	Rain Water Harvesting Pond	45 Pits	-	45 Pits
12.	STP Capacity	1,375 KLD	+ 275 KLD	1,650 KLD
13.	Total Parking	3,566 ECS	+ 198 ECS	3,764 ECS
14.	Organic Waste Converter	-	1	1
15.	Maximum height & number of floors (in meter)	125.95 m 2B+G+32	+ 4.95 m + 2 Floor	130.90 m 2B + G+34
16.	Power Requirement	13,290 KW	-	13,290 KW
17.	Power Backup	19 nos. DG set of total capacity 24,110 Kva (11 x 1010 Kva + 4 x 1250 Kva + 4 x 2000 Kva)	-	19 nos. DG set of total capacity 24,110 Kva
18.	Total Water Requirement (KLD)	1,770 KLD	+499 KLD	2,269 KLD
19.	Domestic Water Requirement (KLD)	891 KLD	+172 KLD	1063 KLD
20.	Fresh Water Requirement (KLD)	891 KLD	+172 KLD	1063 KLD

21.	Recycled/Treated Water Requirement (KLD)	879 KLD	+ 327 KLD	1206 KLD
22.	Waste Water Generated (KLD)	1,118 KLD	+ 228 KLD	1,346 KLD
23.	Solid Waste Generated ( kg/day)	3,935 kg/day	+ 1,716 kg/day	5,651 kg/day
24.	Biodegradable Waste ( kg/day)	2754 kg/day	1030 kg/day	3784 kg/day
25.	Number of Residential Towers (Excluding EWS Tower)	28 no's	-	28 no's
26.	Dwelling Units/ EWS	Dwelling Units: 1,685 Nos. EWS: 310 Nos. Servant Units: 170 Nos.	Dwelling Units: +378 Nos. EWS: +56 Nos. Servant Units: +47 Nos.	Dwelling Units: 2,063 Nos. EWS: 366 Nos. Servant Units: 217 Nos.
27.	Salable Units	-	-	-
28.	Community center (No. and area)	3	-	3
29.	Stories (Tower wise)	B1 to B9: G+16 A tol : G +16 J to P: G+19/G+17 THE ROOM: G + 17 $\alpha$ and $\beta$ : G+32 EWS: G+12	B1 to B9: G+16 A tol : G +16 J to P: G+19 / G +17 THE ROOM: G + 17 $\alpha$ and $\beta$ : G+34 EWS: G+12	B1 to B9: G+16 A tol : G +16 J to P: G+19 / G +17 THE ROOM: G + 17 $\alpha$ and $\beta$ : G+34 EWS: G+12
30.	R+U Value of Material used	U-Value : Wall : $\leq 2.5$ (W/m <sup>2</sup> K) Roof : $\leq 1.2$ (W/m <sup>2</sup> K)		
31.	Total Cost of the project:	Rs. 394.40 crores	+ 620 Crores	Rs. 1014.4 crores
32.	EMP Budget (per year)	i) Capital Cost	1,010 Lakh	
		ii) Recurring cost (per year)	59.50 Lakh	
33.	Incremental Load in respect of:	i) PM 2.5	0.00064 $\mu\text{g}/\text{m}^3$	
		ii) PM 10	0.00072 $\mu\text{g}/\text{m}^3$	
		iii) SO <sub>x</sub>	0.00103 $\mu\text{g}/\text{m}^3$	
		iv) NO <sub>x</sub>	0.0083 $\mu\text{g}/\text{m}^3$	
		v) CO	0.0048400 mg/m <sup>3</sup>	

Table 2: EMP BUDGET

S. No	Capital Cost		Recurring Cost	
	Item	Rs. In Lakhs	Item	Rs in Lakh/year
1.	STP	200	Effluent & water quality monitoring & O and M Costs & maintenance	30
2.	Stack attached to DG set	00	Stack emission & ambient air monitoring	6
3.	Solid waste management	20	Solid waste handling treatment & disposal	6
4.	Rainwater harvesting system	60	Maintenance of RWH	4
5.	Storm water drainage system	250	Maintenance of drainage	2.5
6.	Landscaping	400	Maintenance of green area	8
7.	Solar power within the project site	50		

8.	Development of Miyawaki Forest outside the project boundary & surrounded area	10	Maintenance of Miyawaki Forest outside the project boundary & surrounded area	3
9.	Social	20		
	<b>Total</b>	<b>1010</b>	<b>Total</b>	<b>59.50</b>

The discussion was held on green area details, timeline for greenbelt development, EMP budget, D.G set location and capacity, EMP budget and certain observations were raised :-

1. The PP shall submit the existing and proposed green area details.
2. The PP shall submit the proposed list of trees.
3. The PP shall submit the timeline for development of greenbelt.
4. The PP shall revise the capacity and number of D.G sets, if feasible.
5. The PP shall submit the revised EMP Budget.

The PP submitted the reply of above said observations vide letter dated 09.07.2022.

The documents were placed before the committee. The committee after discussion considered the reply and rated this project with **“Gold Rating”** and was of the unanimous view that this case for granting Environmental Clearance under EIA Notification dated 14.9.2006 issued by the Ministry of Environment and Forest, Government of India should be recommended to the SEIAA with the following specific and general stipulations:

**A. Specific conditions:-**

- 1) Sewage shall be treated in the STP based on latest Technology to achieve standards ordered by NGT. The Treated effluent from STP shall be recycled /reused for flushing. DG cooling and Gardening
- 2) The Project Proponent would devise a monitoring plan to the satisfaction of the State Pollution Control Board so as to continuously monitor the treated waste water being used for flushing in terms of faecal coli forms and other pathogenic bacteria.
- 3) The PP shall ensure that total 2% of the cost of project shall be spent on EMP Budget. However, the amount and component shown in EMP table above shall also be included for the purpose of 2% amount. The EMP cost on Socio Economic activities shall be used before the commencement of the project & EMP recurring inside the project shall be implemented throughout the operation of the project. The PP shall establish Environment monitoring cell as per documents submitted.
- 4) The project proponent shall upload the status of compliance of the basic details (given in above tables), stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- 5) 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.
- 6) Separate wet and dry bins must be provided in each unit and at ground level for facilitating segregation of waste. Solid Waste shall be segregated into wet garbage and inert materials. Wet Garbage shall be composted in Organic waste convertor. Adequate area shall be provided for solid waste management within the premises which will include area for segregation, composting. The Inert waste from the project will be sent to solid waste dumping site through authorized vender.

- 7) Traffic management plan as submitted shall be implemented in letter and spirit. Apart, a detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is marinated and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habilitation being carried out or purpose to be carried out by the project or other agencies in this 05kms radius of the site in different scenarios of space and time
- 8) No tree cutting has been proposed in the instant project. A minimum of 1 tree for every 80sqm of land should be planted and maintained. The Existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping. As proposed 1,05,218.10 sq.m (54.831% total plot area) shall be provided for Green Area development for whole project, excluding plot areas.
- 9) 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.
- 10) Consent to establish/operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of pollution) Act, 1981 and the Water (Prevention and control of pollution) Act, 1974.
- 11) The Approval of the Competent Authority shall be obtained for structural safety of building code due to earthquakes, adequacy of fire fighting equipments etc. as per National Building Code including protection measures from lightening etc.
- 12) The PP shall obtain the Fire NOC from the Competent Authority before taking the occupation of the building.
- 13) The PP shall install the Eco Friendly Green Transformer based on ester oil to reduce the carbon footprint. The PP shall shift to gas based generator set when the gas is available. The PP shall install APCM for the DG set. The PP shall reduce the So2 load by 30% if HSD is used. The DG sets will be operated for maximum 04 hours during power failure through Executing Agency
- 14) The PP shall not give occupation or possession before the water supply and sewage connection permitted by the competent authority.
- 15) The PP shall not give occupation or possession before the electricity connection permitted by the competent Authority.
- 16) The PP shall obtain the permission regarding withdrawal of ground water, if any from HWRA/CGWA before the start of the project and also obtained the CTO from HSPCB after the approval from HWRA/CGWA.
- 17) The PP shall carry out the quarterly awareness programs for the stakeholders of the project.
- 18) 45 Rain water harvesting recharge pits shall be provided for ground water recharging as per the CGWB norms
- 19) The PP shall install Digital water level recorder for monitoring the water recharge and carry out quarterly maintenance and cleaning of 45RWH pits
- 20) The PP shall ensure the compliance of provisions of Plastic Waste Management (Amendment) Rules, 2022 relevant for the project.
- 21) The PP may provide electric charging stations to facilitate electric vehicle commuters.
- 22) The PP shall provide the Anti smog gun mounted on vehicle in the project for suppression of dust during construction & operational phase and shall use the treated water, if feasible.
- 23) The PP shall take all preventive measures including water sprinkles to control dust during construction and operational phase.
- 24) Any change in stipulations of EC will lead to Environment Clearance void-ab-initio and PP will have to seek fresh Environment Clearance.

**B. Statutory Compliance:**

- 1) The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority for ground coverage, FAR and should be in accordance with zoning plan approved by Competent Authority before commencement

of work. All the construction shall be done in accordance with the local building byelaws.

- 2) 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.
- 3) The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for nonforest purpose involved in the project.
- 4) The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- 5) 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 Haryana State Pollution Control Board.
- 6) The project proponent shall obtain the necessary permission for drawl of ground water /surface water required for the project from the competent authority.
- 7) 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.
- 8) 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.
- 9) The provisions of the Solid Waste (Management) Rules, 2016, e-Waste (Management) Rules, 2016, the Plastics Waste (Management) Rules, 2016 and Batteries waste (Management Handling Rules 2001 as amended in 2020) shall be followed.
- 10) The project proponent shall follow the ECBC Act/ECBC-Rules prescribed by Bureau of Energy Efficiency, Ministry of Power strictly in addition of bylaws of the State Government.

#### **I Air Quality Monitoring and Preservation**

- i. Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.
- ii. A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.
- iii. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM2.5) 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 ultra lowsulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board
- v. Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murrum and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
- vi. Sand, murrum, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.
- vii. Wet jet shall be provided for grinding and stone cutting.
- viii. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
- ix. All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules 2016.

- x. The diesel generator sets to be used during construction phase shall be ultra 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. Ultra 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.

## **II 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. The per capita supply should adhere to NBC 2016 and CGWA Notification dated 12.12.2018.
- iv. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.
- v. A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.
- vi. At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.
- vii. Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.
- viii. Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.
- ix. Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.
- x. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- xi. The local bye-law provisions on rain water harvesting should be followed. If local byelaw 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 pits 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.

### **III Noise Monitoring and Prevention**

- i. Ambient noise levels shall conform to residential area/commercial area 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.

### **IV Energy Conservation Measures**

- i. Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency as per ECBC Act, 2017 read with ECBC Rules, 2018 shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC also which is in no case should be less than 25% as prescribed.
- 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 R & 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.
- vii. The PP will submit report indicating compliance of each parameter of ECBC requirement and submit quantification saving report for each component.

## **V 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 neighboring 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 Converter within the premises with a minimum capacity of 0.5 kg /person/day must be installed. Leaves to be put in earmarked pits for converting them into compost to be used as manure
- 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 of as per applicable rules and norms with necessary approvals of the State Pollution Control Board.
- vii. Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials.
- viii. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.
- ix. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition 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.

## **VI 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 (5' tall) for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.
- iii. Where the trees need to be cut with prior permission from the concerned local Authority, compensatory plantation in the ratio of 1:10 (i.e. planting of 10 trees for



every 1 tree that is cut) shall be done and maintained. Plantations to be ensured species (cut) to species (planted). Area for green belt development shall be provided as per the details provided in the project document.

- iv. Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.

## **VII 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.

## **VIII 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.

## **IX Corporate Environment Responsibility**

- i. The project proponent shall comply with the provisions of CER, as applicable.
- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/ deviation/ violation of the environmental/ forest/ wildlife norms/ conditions. The company shall have defined system of reporting infringements/ deviation/ violation of the environmental/ forest/ wildlife norms/ conditions and/ or shareholders/ stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.

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

## **X Miscellaneous**

- i. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- v. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vi. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- vii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- viii. The project proponent shall abide by all the commitments and recommendations made in the form-IA, Conceptual Plan and also that during their presentation to the Expert Appraisal Committee.
- ix. No further expansion or modifications in the plan shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC)/SEIAA, Haryana. The project proponent shall seek fresh environmental clearance under EIA notification 2006 if at any stage there is change of area of this project.
- x. Any change in planning of the approved plan will leads to Environment Clearance void-ab-initio and PP will have to seek fresh Environment Clearance
- xi. The PP should give unambiguous affidavit giving land promoters in accordance with your ownership and possession of land legal the case referred for Environment Clearance to SEIAA.
- xii. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xiii. The Ministry/SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiv. The Ministry/SEIAA reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

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

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