

**Item No. 255.13: Application for Environmental Clearance for development of Residential Township Project namely “LEO’Z GREEN CITY” at Bathinda , Tehsil & District-Bathinda, Punjab by M/s LEO’Z COUNTY (Proposal no. SIA/PB/INFRA2/439712/2023).**

The Project Proponent was granted Terms of Reference vide letter No. SEIAA/MS/2023/321 dated 10.02.2023 for carrying out the EIA study for establishment of residential housing project. The total land area and built up area of the project as per the application of ToR are as under:

<b>Sr. No.</b>	<b>Description</b>	<b>As per the conceptual plan</b>
1.	Area	149.28 acres
2.	Built up area	876016.6 sqm

The Project Proponent has submitted final EIA report after incorporating the compliance of ToR and other relevant documents through Parivesh Portal. The project is covered under category 8 (b) of the schedule appended with the EIA notification dated 14.09.2006. The Project Proponent is required to deposit Rs. 876016.6/- against which, the Project Proponent had deposited Rs. 400464/- vide UTR No. PUNBH22364042600 dated 30.12.2022 and Rs. 475553/- vide UTR No. PUNBH22365477212 dated 31.12.2022, as checked & verified by the supporting staff of SEIAA.

SEIAA vide e-mail dated 09.08.2023 requested Punjab Pollution Control Board to furnish the latest construction status report. Further, the latest construction status report vide letter No. 2534 dated 11.08.2023 furnished by Punjab Pollution Control Board is as under:

*“The site of the project was visited by the officer of the Board on 10.08.2023 and it was observed that: -*

- 1. The project proponent has secured the land and has started the construction of boundary wall at site. The Boundary wall construction was underway during visit along the periphery of the proposed site of the project. No other construction activity was ongoing at site.*
- 2. There is no industry, drain, river, and eco-sensitive structures within 500 m of the site. There is no MAH unit within 500 m of the site. There is no industry within 100 m of the site and the site is majorly surrounded by agricultural fields. There is an educational institute, medical institute-cum-hospital, hospital, commercial & residential projects etc. and a canal water irrigation channel within 500 m radius of the site.*
- 3. The project proponent has obtained change of land use from the Department of Town and Country Planning, Puda Bhawan, SAS Nagar, Mohali vide memo no. 1873 CTP(PB) SP-432 (B) dated 02.06.2023 (copy attached) for land area of 50.2416 acres at village Naruana and Jodhpur Romana, Tehsil & District Bathinda and for 99.1349 acres from the Deptt. of*

Local Government through Commissioner, MC, Bathinda vide letter no. PB/CLU/BTI/BATHI/2900 dated 16.01.2023 for the establishment of residential colony.”

**Deliberations during 255<sup>th</sup> meeting of SEAC held on 14.08.2023.**

The meeting was attended by the following:

- (i) Mr. Aseen Garg, Manager M/s LEO’s Z County.
- (ii) Mr. Deepak Gupta, Environmental Advisor.
- (iii) Dr. Ranjna Sharma, Environmental Consultant M/s. Chandigarh Pollution Testing Laboratory.
- (iv) Sh. Sital Singh, Environmental Consultant, M/s. Chandigarh Pollution Testing Laboratory.

SEAC allowed the Environmental Consultant of the Promoter Company to present the reply before the Committee as under:

Sr. No.	Description	Details																																	
<b>1</b>	<b>Basic Details</b>																																		
1.1	Name of Project & Project Proponent:	Residential Township Project namely “ LEO’Z GREEN CITY” by M/s LEO’Z COUNTY.																																	
1.2	Proposal:	SIA/PB/INFRA2/429960/2023																																	
1.3	Location of Project:	Bathinda, Tehsil & District- Bathinda , Punjab																																	
1.4	Details of Land area & Built up area:	<p><b>Project area: 60.43 Ha and built-up area will be 876016.60 Sqm</b></p> <p>The details of the area as per the approved layout plan are as under:</p> <table border="1"> <thead> <tr> <th>DESCRIPTION</th> <th>ACRES</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>RESIDENTIAL AREA</td> <td>56.128</td> <td>44.66</td> </tr> <tr> <td>COMMERCIAL AREA</td> <td>6.895</td> <td>5.49</td> </tr> <tr> <td>TOTAL SALEABLE AREA</td> <td>63.022</td> <td>50.15</td> </tr> <tr> <td>PARK AREA</td> <td>6.286</td> <td>5.00</td> </tr> <tr> <td>GREEN BELT</td> <td>0.596</td> <td>0.47</td> </tr> <tr> <td>PUBLIC UTILITIES</td> <td>5.965</td> <td>4.75</td> </tr> <tr> <td>PARKING AREA</td> <td>9.756</td> <td>7.76</td> </tr> <tr> <td>TOTAL AREAS</td> <td></td> <td></td> </tr> <tr> <td>ROAD</td> <td>40.045</td> <td>31.87</td> </tr> <tr> <td><b>NET AREA AVAILABLE FOR PLANNING</b></td> <td><b>125.669</b></td> <td><b>100</b></td> </tr> </tbody> </table>	DESCRIPTION	ACRES	%	RESIDENTIAL AREA	56.128	44.66	COMMERCIAL AREA	6.895	5.49	TOTAL SALEABLE AREA	63.022	50.15	PARK AREA	6.286	5.00	GREEN BELT	0.596	0.47	PUBLIC UTILITIES	5.965	4.75	PARKING AREA	9.756	7.76	TOTAL AREAS			ROAD	40.045	31.87	<b>NET AREA AVAILABLE FOR PLANNING</b>	<b>125.669</b>	<b>100</b>
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1.5	Category under EIA notification dated 14.09.2006	8(b)																														
1.6	Total Cost of the project	98.99 Cr.																														
<b>2.</b>	<b>Site Suitability Characteristics</b>																															
2.1	Whether project is suitable as per the provisions of Master Plan:	<p>The Department of Local Govt vide memo no. PB/CLU/BTI/BATHI/2900 dated 16.01.2023 granted permission for Change of Land Use for the land measuring 401181.36 sqm (99.13 acres) located at Bathinda Dabwali Road, Opposite AIIMS Hospital, Bathinda.</p> <p>Further, Directorate of Town &amp; Country Planning vide memo No. 1873 CTP(PB) SP-432(B) dated 02.06.2023 granted permission for Change of Land use for the land area measuring 50.2416 acres.</p>																														
2.2	Whether supporting document submitted in favour of statement at 2.1, details thereof: (CLU/building plan approval status)	Layout plan approved by Municipal Town Planner; Assistant Town Planner & Building Inspector submitted for the total area of 125.6 acres.																														
<b>3</b>	<b>Forest, Wildlife and Green Area</b>																															

3.1	Whether the project required clearance under the provisions of Forest Conservations Act 1980 or not:	A copy of letter addressed to Additional Chief Secretary, Forest, Govt of Punjab mentioning in principal approval for diversion of 0.0665 Ha Forest land for non-forestry purpose submitted.																
3.2	Whether the project required clearance under the provisions of Punjab Land Preservation Act (PLPA), 1900.	Project is not covered under PLPA, 1900. However, not submitted in prescribed format.																
3.3	Whether project required clearance under the provisions of Wildlife Protection Act 1972 or not?	No. The project does not require clearance under Wildlife Protection Act 1972. However, not submitted in prescribed format.																
3.4	Whether the project falls within the influence of Eco-Sensitive Zone or not.	No. The project does not fall within any eco-sensitive zone.																
3.5	Green area requirement and proposed No. of trees:	Total green area: 25446 Sqm Proposed trees to be planted: 7800 nos.																
4.	Population details	20703 persons The details of the population and water requirement as per the area components are as under: <table border="1" data-bbox="613 1276 1416 1768"> <thead> <tr> <th>S.no</th> <th>Activity</th> <th>Persons</th> <th>KLD</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Plots 1091 @ 15 Persons/plot =16365 persons</td> <td>16365 @ 135 ltr/person/day</td> <td>2209</td> </tr> <tr> <td>2</td> <td>Plots for SCO 227 @ 6 persons/shop =1362 persons</td> <td>1362 @ 45 ltr/person/day</td> <td>61</td> </tr> <tr> <td>3</td> <td>EWS for 6.614 Acres=2976 persons</td> <td>2976 @135 lpcd</td> <td>402</td> </tr> </tbody> </table>	S.no	Activity	Persons	KLD	1	Plots 1091 @ 15 Persons/plot =16365 persons	16365 @ 135 ltr/person/day	2209	2	Plots for SCO 227 @ 6 persons/shop =1362 persons	1362 @ 45 ltr/person/day	61	3	EWS for 6.614 Acres=2976 persons	2976 @135 lpcd	402
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		4	Domestic water required		2672
			Flushing Green area	19341@45 ltr/person/day	870 140
<b>5</b>	<b>Water</b>				
5.1	Total fresh water requirement:	1802 KLD			
5.2	Source:	Bore wells			
5.3	Whether Permission obtained for abstraction/supply of the fresh water from the Competent Authority (Y/N) Details thereof	No. Permission from PWRDA is not required as water demand will be utilized exclusively for Drinking and Domestic use.			
5.4	Total wastewater generation:	2137 KLD			
5.5	Treatment methodology: (STP capacity, technology & components)	2137 KLD of wastewater will be generated from the project which will be treated in proposed STP of 2200 KLD capacity based on MBBR Technology followed by UF.			
5.6	Treated wastewater for flushing purpose:	870 KLD			
5.7	Treated wastewater for green area in summer, winter and rainy season:	Summer: 140 KLD Winter:46 KLD Monsoon:13 KLD			
5.8	Utilization/Disposal of excess treated wastewater.	Summer: 1127 KLD Winter:1221 KLD Monsoon:1254 KLD Excess treated water will be disposed of to MC sewer. Permission for connection of sewer line of residential colony vide letter No. 3532 dated 18.07.2023 submitted.			

5.9	Cumulative Details:						
	<b>S. No</b>	<b>Total water Requirement</b>	<b>Total wastewater generated</b>	<b>Treated wastewater</b>	<b>Flushing water requirement</b>	<b>Green area requirement</b>	<b>Into sewer</b>
	1.	2672 KLD	2137 KLD	2137 KLD	870 KLD	Summer: 140 KLD Winter: 46 KLD Monsoon: 13 KLD	Excess will be disposed to MC sewer.  Summer: 1127 KLD Winter: 1221 KLD Monsoon: 1254 KLD
5.10	Rain water harvesting proposal:	54 Rain Water Recharging pits have been proposed for artificial rain water recharging within the project premises.					
6	Air						
6.1	Details of Air Polluting machinery:	2 DG set of 3x 125, 1x 250 KVA capacity will be installed for essential services such as STP, borewell, etc.					
6.2	Measures to be adopted to contain particulate emission/Air Pollution	DG set will be equipped with acoustic enclosure to minimize noise generation and adequate stack height for proper dispersion.					
7	<b>Waste Management</b>						
7.1	Total quantity of solid waste generation	8008 Kg/day					
7.2	Whether Solid Waste Management layout plan by earmarking the location as well as area designated for installation of	Solid waste management area has been provided and earmarked in conceptual layout plan submitted along with application. Biodegradable waste will be composted by use of 1 Composter of 2000 kg /day. Recyclable component will be disposed of					



Total	Rs. 371.50 Lakhs	Rs. 13 Lakhs	Rs.102.0 Lakhs
Further, Rs. 0.99 Cr i.e., 1% of total project cost has been reserved for undertaking Additional Environment activities.			

During meeting, the Committee observed that the Project Proponent has not submitted the complete details regarding the compliance of ToR issued vide SEIAA letter no. SEIAA/MS/2023/321 dated 10.02.2023. The Committee asked the Project Proponent to submit the pointwise compliance of ToR issued to the project. The Project Proponent submitted the pointwise compliance of ToR. The Committee satisfied with the same.

The Committee further observed that the Project Proponent has not submitted land ownership documents pertaining to land area of 149 acres. In this regard, the Project Proponent submitted the Circle Revenue Officer documents certifying the land area of 149 acres falling in the ownership of the Promoter Company. The Committee perused the same and took a copy of the same on record.

Further, the Committee asked the Project Proponent to submit the details of trees proposed to be planted within the project. The Project Proponent submitted the same.

The Committee was satisfied with the presentation given by the Project Proponent and after detailed deliberations, the Committee decided to award 'Silver Grading' to the project proposal and decided to forward the application of the project proponent to SEIAA with the recommendation to grant Environmental Clearance for development of Residential Township Project namely "LEO'Z GREEN CITY" at Bathinda, Tehsil & District-Bathinda, Punjab, subject to the following standard conditions:

**I. Statutory compliances:**

- i) The project proponent shall obtain all necessary clearances/ permissions from all relevant agencies including the town planning authority before commencement of work. All the construction shall be done in accordance with the local building bye laws.
- ii) The approval of the Competent Authority shall be obtained for the structural safety of buildings due to earthquakes, adequacy of firefighting equipment, etc. as per the National Building Code including protection measures from lightning, etc.
- iii) The project proponent shall obtain forest clearance under the provisions of the Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purposes is involved in the project.



- iv) The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- v) The project proponent shall obtain Consent to Establish / Operate under the provisions of the Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the Punjab Pollution Control Board.
- vi) The project proponent shall obtain the necessary permission for the abstraction of groundwater/ surface water required for the project from the competent authority.
- vii) A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
- viii) All other statutory clearances such as the approvals for storage of diesel from the Chief Controller of Explosives, Fire Department, and Civil Aviation Department shall be obtained, as applicable, by project proponents from the respective competent authorities.
- ix) The provisions of the Solid Waste (Management) Rules, 2016, E-Waste (Management) Rules, 2016, Construction & Demolition Waste Rules, 2016, and the Plastics Waste (Management) Rules, 2016 shall be followed.
- x) The project proponent shall follow the ECBC/ECBC-R prescribed by Bureau of Energy Efficiency, Ministry of Power strictly.
- xi) The project site shall conform to the suitability as prescribed under the provisions laid down under the master plan of the respective city/ town. For that, the project proponent shall submit the NOC/ land use conformity certificate from Deptt. of Town and Country Planning or other concerned Authority under whose jurisdiction, the site falls.
- xii) Besides the above, the project proponent shall also comply with siting criteria/guidelines, standard operating practices, code of practice, and guidelines if any prescribed by the SPCB/CPCB/MoEF&CC for such types of projects.
- xiii) The project proponent shall construct the buildings as per the layout plan approved from the Competent Authority and in consonance of the project proposal for which this environment clearance is being granted.

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

- i) Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.

- ii) A management plan shall be drawn up and implemented to contain the current exceedance in the ambient air quality at the site.
- iii) The project proponent shall install a system to undertake 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 a source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel would be the preferred option. The location of the DG sets may be decided in consultation with Punjab Pollution Control Board.
- v) Construction site shall be adequately barricaded before the construction begins. Dust, smoke and 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, and continuous dust/ wind-breaking walls all around the site (at least 3 m height or 1/3rd of the building height and maximum up to 10 m). 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) No Excavation of soil shall be carried out without adequate dust mitigation measures in place.
- vii) No loose soil or sand or construction and demolition waste or any other construction material that causes dust shall be left uncovered.
- viii) No uncovered vehicles carrying construction material and waste shall be permitted.
- ix) All the topsoil excavated during construction activities should be stored for use in horticulture/landscape development within the project site.
- x) Grinding and cutting of building material in open areas shall be prohibited. A wet jet shall be provided for grinding and stone cutting.
- xi) Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
- xii) All construction and demolition debris shall be stored at the site within the earmarked area and roadside storage of construction material and waste shall be prohibited. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules 2016.

- xiii) The diesel generator sets to be used during the construction phase shall be low sulphur diesel type and shall conform to the norms and regulations prescribed under air and noise emission standards.
- xiv) The gaseous emissions from the DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.
- xv) For indoor air quality, the ventilation provisions as per the National Building Code of India shall be complied with.
- xvi) Roads leading to or at the construction site must be paved and blacktopped (i.e., metallic roads should be built and used).
- xvii) Dust Mitigation measures shall be displayed prominently at the construction site for easy public viewing.
- xviii) Construction and Demolition Waste Processing and Disposal site shall be identified and required dust mitigation measures will be notified at the site

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

- i) The natural drainage system should be maintained for ensuring unrestricted flow of water.
- ii) No construction shall be allowed which obstructs the natural drainage through the site, in 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.
- iii) Buildings shall be designed to follow the natural topography as far as possible. Minimum cutting and filling should be done.
- iv) The total freshwater use shall not exceed the proposed requirement as mentioned in the application proposal.
- v) Storage tank of adequate capacity shall be provided for the storage of treated wastewater and all efforts shall be made to supply the same for construction purposes.
- vi) During the construction phase, the project proponent shall ensure that the wastewater generated from the labour quarters/toilets shall be treated and disposed of in an environment-friendly manner. The project proponent shall also exercise the option of modular bio-toilets or will provide proper and adequately designed septic tanks for the

treatment of such wastewater and treated effluents shall be utilized for green area/plantation.

- vii) The project proponent shall ensure a safe drinking water supply to the habitants. Adequate treatment facility for drinking water shall be provided, if required.
- viii) 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 and SEIAA along with six-monthly monitoring reports.
- ix) 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 of water available. This should be specified separately for groundwater and surface water sources, ensuring that there is no impact on other users.
- x) 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.
- xi) Dual pipe plumbing shall be installed 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, air conditioning etc.
- xii) Installation of R.O. plants in the project will be discouraged in order to reduce water wastage in form of RO reject. However, in case the requirement of installing RO plant is unavoidable, the rejected stream from the RO shall be separated and shall be utilized by storing the same within the particular component or in a common place in the project premises.
- xiii) The project proponent shall also adopt the new/innovative technologies like low water discharging taps (faucet with aerators) /urinals with electronic sensor system /waterless urinals/twin flush cisterns/ sensor-based alarm system for overhead water storage tanks and make them a part of the environmental management plans/building plans so as to reduce the water consumption/groundwater abstraction.
- xiv) The project proponent will provide plumbing system for reuse of treated wastewater for flushing/other purposes etc. and will colour code the different pipelines carrying water/wastewater from different sources / treated wastewater as follows:

Sr. No	Nature of the Stream	Color code
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a)	Fresh water	Blue
b)	Untreated wastewater from Toilets/ urinal and from Kitchen	Black
c)	Untreated wastewater from Bathing/shower area, hand washing (Washbasin / sinks) and from Cloth Washing	Grey
d)	Reject water streams from RO plants and AC condensate (this is to be implemented wherever centralized AC system and common RO has been proposed in the Project). Further, in case of individual houses/establishment this proposal may also be implemented wherever possible.	White
e)	Treated wastewater (for reuse only for plantation purposes) from the STP treating black water	Green
f)	Treated wastewater (for reuse for flushing purposes or any other activity except plantation) from the STP treating greywater	Green with strips
g)	Stormwater	Orange

- xv) Water demand during construction should be reduced by the use of pre-mixed concrete, curing agents, and adopting other best practices.
- xvi) The CGWA provisions on rainwater harvesting should be followed. A rainwater harvesting plan needs to be designed where the recharge bores of minimum one recharge bore per 5,000 square meters of the plot area and a storage capacity of a minimum of one day of the total freshwater requirement shall be provided. In areas where groundwater recharge is not feasible, the rainwater should be harvested and stored for reuse. The groundwater shall not be withdrawn without approval from the Competent Authority.
- xvii) All recharge should be limited to shallow aquifers.
- xviii) No groundwater shall be used during the construction phase of the project. Only treated sewage/wastewater shall be used. A proper record in this regard should be maintained and should be available at the site.
- xix) Any groundwater 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 groundwater abstraction or dewatering.
- xx) 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, and SEIAA along with six-monthly Monitoring reports.

- xxi) Sewage shall be treated in the STP with tertiary treatment by providing ultra-filtration Technology. STP shall be installed in a phased manner viz a viz in the module system designed in such a way so as to efficiently treat the wastewater with an increase in its quantity due to rise in occupancy. The treated effluent from STP shall be recycled/reused for flushing and gardening. No treated water shall be disposed of into the municipal stormwater drain.
- xxii) No sewage or untreated effluent would be discharged through stormwater drains. Onsite sewage treatment with a capacity to treat 100% wastewater will 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 / SEIAA before the project is commissioned for operation. Treated wastewater shall be reused on-site for landscape, flushing, and other end-uses. Excess treated water shall be discharged as per statutory norms notified by the Ministry of Environment, Forest, and Climate Change. Natural treatment systems shall be promoted.
- xxiii) Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.
- xxiv) Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed of as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.

#### **IV. Noise monitoring and prevention**

- i) Ambient noise levels shall conform to the 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 the construction phase. Adequate measures shall be made to reduce noise levels during the construction phase, so as to conform to the stipulated standards by CPCB/SPCB.
- ii) A noise level survey shall be carried out as per the prescribed guidelines and a report in this regard shall be submitted to the Regional Officer of the Ministry as a part of a six-monthly compliance report.
- iii) Acoustic enclosures for DG sets, noise barriers for ground-run bays, earplugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.

#### **V. Energy Conservation measures**

- i) Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC.
- ii) Outdoor and common area lighting shall be LED.
- iii) Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased daylighting design and thermal mass, etc. shall be incorporated in the building design. Wall, window, and roof U-values shall be as per ECBC specifications.
- iv) Energy conservation measures like the installation of LEDs for lighting the area outside the building should be an 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) At least 30% of the rooftop area shall be used for generating Solar power for lighting in the apartments so as to reduce the power load on the grid. A 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.

## **VI. Waste Management**

- i) A certificate from the competent authority handling municipal solid waste, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from the project shall be obtained.
- ii) The Project Proponent shall install Mechanical Composter of adequate capacity to treat wet component of the Solid Waste.
- iii) Disposal of muck during the construction phase should not create any adverse effect on the neighbouring communities and should be safely disposed of taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of the competent authority.
- iv) Separate wet and dry bins must be provided in each unit and at the ground level for facilitating the segregation of waste. Solid waste shall be segregated into wet garbage and inert materials.

- v) Organic waste compost/ Vermiculture pit/ Organic Waste Converter/Mechanical Composter within the premises must be installed for treatment and disposal of the solid waste.
- vi) All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie-up must be done with the authorized recyclers.
- vii) Any hazardous waste generated during the construction phase, shall be disposed of as per applicable rules and norms with the necessary approvals of the State Pollution Control Board.
- viii) 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 environmentally friendly materials.
- ix) Fly ash should be used as a 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.
- x) Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Rules, 2016.
- xi) Used CFLs and TFLs should be properly collected and disposed of or sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination.

## **VII. Green Cover**

- i) No naturally growing tree should be felled/transplanted unless exigencies demand. Where absolutely necessary, tree felling shall be with prior permission from the concerned regulatory authority. Old trees should be retained based on girth and age regulations as may be prescribed by the Forest Department.
- ii) At least a single line plantation all around the boundary of the project as proposed shall be provided. The open spaces inside the plot should be suitably landscaped and covered with vegetation of indigenous species/variety. The project proponent shall ensure the planting of trees in the project area at the identified location, as the per proposal submitted, with plants of native species preferably having broad leaves. The size of the plant thus planted should not be less than 6 ft and each plant shall be protected with a fence and properly maintained. The project proponent shall make adequate provisions of funds to ensure maintenance of the plants for a further period of three years and thereafter, protected throughout the entire lifetime of the Project. 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. The plantation should be undertaken as per SEIAA guidelines.

- iii) The Project Proponent shall develop a green belt with native tree species (having canopy type structure and especially trees, and not grass) before the completion of the project. The greenbelt shall inter alia cover the entire periphery of the unit provided that the number of trees to be planted should not be less than one tree per 80 sqm of the total land area. The canopy trees shall also be planted around the parking area to provide shade to the parked vehicles.
- iv) Where the trees need to be cut with prior permission from the concerned local Authority, a compensatory plantation in the ratio of 1: 10 (i.e. planting of 10 saplings of the same species for every tree that is cut) shall be done and the newly planted saplings will be maintained for at least 5 years. Green belt development shall be undertaken as per the details provided in the project document.
- v) 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 the plantation of the proposed vegetation on site.
- vi) The project proponent shall not use any chemical fertilizer /pesticides /insecticides and shall use only Herbal pesticides/insecticides and organic manure in the green area.
- vii) The green belt along the periphery of the plot shall achieve an attenuation factor conforming to the day and night noise standards prescribed for commercial land use.
- viii) The project proponent shall submit the progress of developing the green belt in the six-monthly compliance report.

## **VIII. Transport**

- i) A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria.
  - a) Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
  - b) Traffic calming measures.
  - c) Proper design of entry and exit points.
  - d) Parking norms as per local regulations.

- ii) Vehicles hired for bringing construction material to the site should be in good condition and should have a valid pollution check certificate, conform to applicable air and noise emission standards, and should 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 km radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on the cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies within this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.
- iv) Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized.

**IX. Human health issues**

- i) All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris, or working in any area with dust pollution shall be provided with dust masks.
- ii) For indoor air quality, the ventilation provisions as per the National Building Code of India should be followed.
- iii) An emergency preparedness plan based on the Hazard Identification and Risk 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, and medical health care, creche, etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- iv) Occupational health surveillance of the workers shall be done regularly.
- v) A First Aid Room shall be provided in the project both during construction and operations of the project.

**X. Environment Management Plan**

- i) The company shall have a well-laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe standard operating procedures to have proper checks and balances and to bring into focus any

infringements/deviation/violations 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 / stakeholders. A copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of the six-monthly report.

- ii) A separate Environmental Cell both at the project and company headquarters level, with qualified personnel shall be set up under the control of senior Executive, who will report directly to the head of the organization.
- iii) An action plan for implementing following activities under EMP and environmental conditions along with the responsibility matrix of the company shall be prepared and shall be duly approved by the competent authority.

S. No.	Title	Construction Phase		Operation Phase
		Capital Cost (in Lakhs)	Recurring Cost (in Lakhs per Annum)	Recurring Cost (in Lakhs per Annum)
1.	Medical Cum First Aid	0.50	1.5	-
2.	Toilets for workers	3.0	0.5	-
3.	Wind breaking curtains	5.0	4.0	-
4.	Sprinklers for suppression of dust	12.0	5.0	-
5.	Sewage Treatment Plant	200.0	---	8.0
6.	Solid waste Management	50.0	--	9.0
7.	Green belt development	80.0	--	80
8.	Rain water harvesting	15.0	--	5.0
9.	Smog Gun	6.0	2.0	-
Total		Rs. 371.50 Lakhs	Rs. 13 Lakhs	Rs.102.0 Lakhs

Further, Rs. 0.99 Cr i.e., 1% of total project cost has been reserved for undertaking Additional Environment activities.

**XI. Validity**

- i) This environmental clearance will be valid for a period of ten years from the date of its issue as per MoEF & CC, GoI notification No. S.O. 1807 (E) dated 12.04.2022 or till the completion of the project, whichever is earlier.

**XII. Miscellaneous**

- i) The project proponent shall obtain a completion and occupancy certificate from the Competent Authority and submit a copy of the same to the SEIAA, Punjab before allowing any occupancy.
- ii) The project proponent shall comply with the conditions of CLU, if obtained.
- iii) The project proponent shall prominently advertise in at least 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.
- iv) 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 have to publicly display the same for 30 days from the date of receipt.
- v) 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 a half-yearly basis.
- vi) 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 the Environment Clearance portal and submit a copy of the same to SEIAA.
- vii) 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 the same on the website of the company.

- viii) The project proponent shall inform the Regional Office as well as SEIAA Punjab, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- ix) The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- x) The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitments made during public hearing and also those made to SEIAA / SEAC during their presentation.
- xi) No further expansion or modifications in the project shall be carried out other than those permitted in this EC without prior approval of SEIAA. In case of deviation or alterations in the project proposal from those submitted to the Ministry/SEIAA for clearance, a fresh reference shall be made to the Ministry/SEIAA, as applicable, to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.
- xii) The Regional Office, MoEF&CC, Chandigarh, Punjab Pollution Control Board and SEIAA/ SEAC members nominated for the purpose shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer(s) entrusted with this monitoring by furnishing the requisite data/ information/monitoring reports.
- xiii) This Environmental Clearance is granted subject to final outcome of pending related cases in the Hon'ble Supreme Court of India, Hon'ble High Courts, Hon'ble NGT and any other Court of Law as may be applicable to this project.

### **XIII. Additional Conditions**

- i) The approval is based on the conceptual plan/drawings submitted with the application. In case, there is variation in built-up area/green area/ any other details in the drawings approved by the competent authority, the Project Proponent shall obtain the revised Environmental Clearance.
- ii) The Project Proponent shall ensure that the natural drainage channels in the project site including streams, drains, choes, creeks, rivulets, etc. are not disturbed so that the natural flow of rainwater, etc is not impeded or disrupted in any manner.
- iii) Authorization from Punjab Pollution Control Board shall be obtained as applicable under the Bio-Medical Waste Management Rules 2016 as amended from time to time.

- iv) The solid waste other than Bio-Medical Waste & Hazardous Waste (dry as well as wet garbage) generated should be properly collected and segregated before disposal to Municipal Authorities in accordance with the Municipal Solid Waste (Management & Handling) Rules, 2000. No municipal waste should be disposed off outside the premises in contravention of relevant rules and by-laws. Adequate measures should be taken to prevent any malodour in and around the Project premises.
- v) In the event that the project proponent decides to abandon/close the Project at any stage, he shall submit an application in the prescribed form along with requisite documents through Parivesh to SEIAA for surrendering the Environmental Clearance as per the procedure prescribed in OM dated 29.03.2022 issued by the MoEF&CC. The project proponent shall be accountable for adherence/compliance of the EC conditions till such time as the project is finally closed by SEIAA, based upon the certified closure report of Integrated Regional Offices (IROs) of MoEF&CC, Chandigarh/PPCB.
- vi) This Environmental Clearance is liable to be revoked without any further notice to the Project Proponent in case of failure to comply with condition (v) above.
- vii) 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.
- viii) The Project Proponent shall manage the solid waste generated from the project as per the sub-rule-7 of rule-4 of SWM Rules 2016.
- ix) The Ministry reserves the right to stipulate additional conditions if found necessary. The Promoter Company in a time bound manner shall implement these conditions.
- x) 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.
- xi) Any appeal against this Environmental Clearance 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.