

# File No: 2024/EC/F/195

### **Government of India**

# Ministry of Environment, Forest and Climate Change (Issued by the State Environment Impact Assessment Authority(SEIAA), PUNJAB)





Dated 09/08/2024



To,

Sh. Mukesh Bhati

M/s R P S Suncity Promoters & Developers Pvt Ltd

Registered Office 10, Local Shopping Centre, Kalkaji, Delhi- 110019

suncitypromoters@rediffmail.com

**Subject:** 

Grant of EC under the provision of the EIA Notification 2006-regarding.

Sir/Madam,

This is in reference to your application for Grant of EC under the provision of the EIA Notification 2006- for project namely "Nature's Home" submitted to SEIAA, Punjab vide proposal number SIA/PB/INFRA2/483000/2024 dated 27/06/2024.

2. The particulars of the proposal are as below:

(i) EC Identification No. EC24C3801PB5539355N

(ii) File No. 2024/EC/F/195

(iii) Clearance Type EC (iv) Category B2

(v) **Project/Activity Included Schedule No.** 8(a) Building / Construction

(vii) Name of Project Nature's Home

(viii) Name of Company/Organization

M/s R P S Suncity Promoters & Developers Private

Limited

(ix) Location of Project (District, State)

Village Nahiyawala, Bathinda – Nahiyawala Road,

Tehsil Guniyana Mandi, Bathinda, Punjab

(x) Issuing AuthoritySEIAA(xii) Applicability of General Conditionsno(xiii) Applicability of Specific Conditionsyes

3) State Environment Impact Assessment Authority (SEIAA), Punjab has examined the proposal for establishment of Township Project namely "Nature's Home" at Village Nahiyawala, Bathinda –Nahiyawala Road, Tehsil Guniyana Mandi, Bathinda, Punjab by M/s R P S Suncity Promoters & Developers Pvt Ltd. for total land area @1,09,609 sqm., having Built-up area @ 98,957 sqm. The project is covered under category 8(a) 'Building & Construction Project'; Category 'B2' of the schedule appended with the EIA Notification dated 14.09.2006 and its subsequent amendments and requires

appraisal at the State level.

- 4) The proposal has been appraised as per the procedure prescribed under the provisions of EIA Notification 14.09.2006 based on mandatory documents enclosed with the online application viz Form-1, Environment Management Plan (EMP), conceptual plan, and additional documents and subsequent presentation /clarifications made by the project proponent and his consultant to the observations of State Environment Impact Assessment Authority (SEIAA) and State Expert Appraisal Committee (SEAC).
- 5) The details of the project, as per the application and documents/ presentation submitted by the project proponent and also as informed during the meetings of SEAC/SEIAA are as under:

Sr. No.	Item	Details	3			
	Name and Location of the project	Road,	hip Project namely "Natur Tehsil Guniyana Mandi, B opers Pvt Ltd		•	•
1.	Project/ activity	8 (a)				
	Category as per EIA Notification, 2006	Catego	ory B2			
2.	Nature of project	Fresh E	EC			
3.	Latitude & Longitude	Corner A B C D	Latitude 30° 18' 07.45" N 30° 18' 17.96" N 30° 18' 22.27" N 30° 18' 14.33" N 30° 18' 08.12" N		Longitude 74° 55' 44.13 74° 55' 40.56 74° 55' 33.69 74° 55' 29.38	5" E 2" E 9" E
4.	Change of Land Use	RD-03.	Master plan of Bathinda, t . A copy of land ownership has been submitted.		_	
5.	Cost of the project	Rs. 27.	.10 cr			
		The det S. NO.	tails of the total area is as to DESCRIPTION	under:	TOTAL AF	REA (IN SQM)
_	Total Plot Area,	A	Total Land Area		1,09,609	
6.	Built-up Area, and Green area	C D	Built-up area Green Area		98,957 6,920	
7.	Estimated Population	Above Popular	details are as per the concention details: oppulation 1485 persons.	eptual layout pl		
		Sr. No.	. Description		Area in Acres	Built-up Area in Sqmt
		1.	Residential Plotted		10.33	87817.80
0	Area Configuration Details	2.	Commercial Area		0.99	7011.12
8.		3.	Site Reserved for surplus Kanal Technology (School		1.3	4127.76
		Total			12.62	98,957/-

9. Water

Requirements &	Sr. No.		
source during		Description	Total
Operation Phase			
	1.	Total Water Demand	290
	2.	Fresh Water Demand	191
	3.	Total Wastewater generation	232
	4.	STP capacity	250

A total of 232 KLD domestic wastewater will be generated which will be treated in the STP of 250 KLD capacity based on MBR Technology followed by UF. The details of the disposal arrangement of treated wastewater @ 232 KLD available at the outlet of STP are given as under:

10.	Disposal Arrangement of Wastewater	Sr. No.	Season	Flushing (KLD)	Horticulture demand in an area of 6,920 sqm (KLD)	Into Sewer (KLD)
		1.	Summer	99	38	95
		2.	Winter	99	12	121
		3.	Rainy	99	3	130

11.	Rainwater recharging detail	Rainwater will be recharged by providing 27 no. of recharging pits
		a) 923 Kg/day
	Solid waste	b) Solid waste management area has been provided and earmarked in conceptual layout
12.	generation and its	plan attached along with application.
	disposal	c) Non-biodegradable waste (recyclable waste) will be disposed off through authorized
		recycler vendors. Inert waste will be dumped at authorized dumping site.
13.	Hazardous Waste & E-waste	Hazardous Waste in the form of used oil from DG set will be generated which will be managed & disposed off to authorized vendors as per the Hazardous & Other Wastes (Management & Transboundary Movement) Rules, 2016 and its amendments.
14.	Energy Requirements &	<ul> <li>a) 2500 KW connected power load will be required which will be met from PSPCL.</li> <li>b) Total 2x 240 KVA, 2x125 KVA sets will be installed equipped with canopy and adequate stack height.</li> </ul>
	Saving	c) Use of LEDs is proposed in all common areas and the residents shall be educated about the huge savings in their electricity bills, if they use the LED.

- 6) As per the undertaking submitted by the project proponent, no Forest land and no wildlife sanctuary is located in the vicinity of the project and as such, no NBWL permission is required. Further, no litigation is pending in respect of the land on which the project is to be developed.
- 7) The SEAC, constituted under the provision of the EIA Notification, 2006 and comprising of expert members/domain experts in various fields, has examined the proposal submitted by the project proponent in the desired form along with the EMP report prepared and submitted by the consultant accredited by the Quality Council of India (QCI)/ National Accreditation Board for Education and Training (NABET) NABET on behalf of the project proponent in its 301st meeting held on 29.07.2024. The SEAC noted that the project proponent has given an undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the report. If any part of the data/information submitted is found to be false/misleading at any stage, the project may be rejected and Environmental Clearance given, if any, may be revoked at the risk and cost of the project proponent.
- 8) SEAC noted that the project proponent has provided adequate and satisfactory clarifications to the observations raised by it. Therefore, SEAC decided to forward the case to the SEIAA with the recommendation to grant Environmental Clearance for Township project namely "Nature Homes" located at Village Nahiyawala, Bathinda, Punjab by M/s R P S Suncity Promoters & Developers Pvt Ltd for total land area @ 1,09,609 sqm. and built up area @ 98,957 sqm, as per the details mentioned in the application proposal & subsequent presentation /clarifications made by the project proponent and

his consultant.

- 9) The case was considered by SEIAA in its 306th meeting held on 01.08.2024 wherein SEIAA observed that the case stands recommended by SEAC. The Authority examined all the aspects of the project proposal in detail and was satisfied with the same. Therefore, the Authority decided to grant Environmental Clearance for Township project namely "Nature Homes" located at Village Nahiyawala, Bathinda, Punjab by M/s R P S Suncity Promoters & Developers Pvt Ltd for total land area @ 1,09,609 sqm. and built up area @ 98,957 sqm, as per the details mentioned in the Form-1, EMP, conceptual plan and subsequent presentation/clarifications made by the project proponent and its consultant with proposed measures and subject to conditions proposed by SEAC and certain additional conditions and amended conditions.
- 10) Accordingly, SEIAA, Punjab hereby accords Environmental Clearance to the aforesaid project under the provisions of EIA Notification dated 14.09.2006 and its subsequent amendments subject to proposed measures and strict compliance with terms and conditions as per **Annexure-1**.
- 11) The SEIAA reserves the right to stipulate additional conditions if found necessary at subsequent stages and the project proponent shall implement all the said conditions in a time-bound manner. SEIAA may revoke or suspend the environmental clearance if the implementation of any of the above conditions is not found to be satisfactory.
- 12) Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
- 13) This issues as per the decision taken by the Competent Authority.

#### Copy To

- 1. The Secretary to Govt. of India, Ministry of Environment and Forest, Paryavaran Bhawan, CGO Complex, Lodhi Road, New Delhi
- 2. The Secretary, Department of Science, Technology & Environment, Government of Punjab, Chandigarh.
- 3. The Regional Officer, Ministry of Environment, Forest and Climate Change, Integrated Regional Office, Bays No. 24-25, Sector 31-A, Dakshin Marg, Chandigarh-160030. The detail of the authorized officer of the project proponent is as under:

a) Name of the applicant : Sh. Mukesh Bhati (Authorized Signatory)

b) Mobile No. : 9815903092

c) Email Id : suncitypromoters@rediffmail.com

d) Email ID of Env. Consultant : cptleia@gmail.com

- 4. The Deputy Commissioner, Bathinda.
- 5. The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, Delhi.
- 6. The Member Secretary, Punjab Pollution Control Board, Vatavaran Bhawan, Nabha Road, Patiala, 147001.
- 7. The Secretary, Punjab Water Regulation and Development Authority, SCO 149-152, Sector 17-C, Chandigarh-160017.
- 8. The Chief Town Planner, Department of Town & Country Planning, 6th Floor, PUDA Bhawan, Phase-8, Mohali.
- 9. Monitoring Cell, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi-110003
- 10. Parivesh Portal/Record File

Annexure 1

Specific EC Conditions for (Building / Construction)

# 1. Special Condition

S. No	EC Conditions
1.1	The PP shall reserve land measuring 1.30 acre earmarked as School Site on the conceptual plan within its project, for developing plantations as per Karnal Technology methodology for disposal of excess treated wastewater until the sewer of the project is connected with sewer of MC, Bathinda and till the same is further connected with a fully operational and adequate capacity terminal STP

## 2. Additional / Amended Conditions

S. No	EC Conditions	
2.1	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	
2.2	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	
2.3	The solid waste other than Hazardous Waste (dry as well as wet garbage) generated should be properly collected and segregated before disposal to Municipal Authorities in accordance with the Solid Waste (Management) Rules, 2016. 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 odour in and around the project premises	
2.4	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	
2.5	This Environmental Clearance is liable to be revoked without any further notice to the project proponent in case of failure to comply with EC conditions.	
2.6	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	
2.7	SEIAA reserves the right to stipulate additional conditions if found necessary. The Promoter Company in a time bound manner shall implement these conditions	
2.8	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	

S. No	EC Conditions
2.9	The project proponent is required to plant indigenous tree species of minimum 8 feet height and healthy growth for development of green area
2.10	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

## $Standard\ EC\ Conditions\ for\ (Building\ /\ Construction)$

## 1. Statutory Compliance

S. No	EC Conditions		
1.1	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		
1.2	The project proponent shall obtain the approval of the Competent Authority 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		
1.3	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		
1.4	The project proponent shall obtain clearance from the National Board for Wildlife, if applicable		
1.5	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		
1.6	The project proponent shall obtain the necessary permission for the abstraction of groundwater/ surface water required for the project from the competent authority		
1.7	The project proponent shall obtain a certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project		
1.8	The project proponent shall obtain all other statutory clearances such as the approvals for storage of diesel from the Chief Controller of Explosives, Fire Department, and Civil Aviation Department, as applicable, from the respective competent authorities		
1.9	The project proponent shall follow 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		
1.10	The project proponent shall follow the Energy Conservation Building Code (ECBC) / Energy Conservation Building Code-Residential (ECBC-R) prescribed by the Bureau of Energy Efficiency, Ministry of Power strictly		

S. No	EC Conditions
1.11	The project site shall conform to the suitability as prescribed under the master plan of the respective city/ town. For that, the project proponent shall submit the NOC/ land use conformity certificate from Department of Town and Country Planning or the Competent Authority under whose jurisdiction, the site falls
1.12	Besides the above, the project proponent shall comply with siting criteria/guidelines, standard operating practices, code of practice, and guidelines if any prescribed by the Punjab Pollution Control Board (PPCB)/Central Pollution Control Board (CPCB)/Ministry of Environment Forest and Climate Change (MoEF&CC) for such types of projects
1.13	The project proponent shall construct the buildings as per the layout plan approved by the Competent Authority and in consonance of the project proposal for which this environment clearance is being granted

# 2. Air Quality Monitoring And Preservation

S. No	EC Conditions
2.1	The project proponent shall comply with the 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
2.2	The project proponent shall draw up and implement a management plan to contain the current exceedance in the ambient air quality at the site
2.3	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
2.4	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
2.5	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, murram, other construction materials and waste prone to causing dust pollution at the site as well as taking out debris from the site
2.6	No excavation of soil shall be carried out without adequate dust mitigation measures in place
2.7	No loose soil or sand or construction and demolition waste or any other construction material that causes dust shall be left uncovered
2.8	No uncovered vehicles carrying construction material and waste shall be permitted

S. No	EC Conditions
2.9	All the topsoil excavated during construction activities should be stored for use in horticulture/landscape development within the project site
2.10	Grinding and cutting of building material in open areas shall be prohibited. A wet jet shall be provided for grinding and stone cutting
2.11	Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust
2.12	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
2.13	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
2.14	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
2.15	For indoor air quality, the ventilation provisions as per the National Building Code of India shall be complied with
2.16	Roads leading to or at the construction site must be paved and blacktopped (i.e., metallic roads should be built and used)
2.17	Dust Mitigation measures shall be displayed prominently at the construction site for easy public viewing
2.18	Construction and Demolition Waste Processing and Disposal site shall be identified and required dust mitigation measures will be notified at the site

# 3. Water Quality Monitoring And Preservation

S. No	EC Conditions
3.1	The natural drainage system should be maintained for ensuring unrestricted flow of water
3.2	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
3.3	Buildings shall be designed to follow the natural topography as far as possible. Minimum cutting and filling should be done
3.4	The total freshwater use shall not exceed the proposed requirement as mentioned in the application proposal

S. No	EC Conditions
3.5	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
3.6	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 provide proper and adequately designed septic tanks for the treatment of such wastewater and treated effluents shall be utilized for green area/plantation
3.7	The project proponent shall ensure a safe drinking water supply to the habitants. Adequate treatment facility for drinking water shall be provided, if required
3.8	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
3.9	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 negative impact on other users
3.10	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
3.11	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
3.12	Installation of R.O. plants in the project will be discouraged in order to reduce water wastage in the 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
3.13	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
3.14	The project proponent will provide plumbing system for the 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  a) Fresh water  Blue  b) Untreated wastewater from Toilets/ urinal and from Kitchen  C) Untreated wastewater from Bathing/shower area, hand washing  Grey

S. No	EC Conditions
	(Washbasin / sinks) and from Cloth Washing  d) Reject water streams from RO plants and AC condensate (this is to be White 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.  e) Treated wastewater (for reuse only for plantation purposes) from the Green STP treating black water  f) Treated wastewater (for reuse for flushing purposes or any other Green with strips activity except plantation) from the STP treating greywater  g) Stormwater Orange
3.15	Water demand during construction should be reduced by the use of pre-mixed concrete, curing agents, and adopting other best practices
3.16	The Central Ground Water Authority (CGWA) provisions on rainwater harvesting should be followed. A rainwater harvesting plan needs to be designed where the 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
3.17	All recharge should be limited to shallow aquifers
3.18	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
3.19	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
3.20	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
3.21	The project proponent shall install STP with latest technology followed by UF and achieve BOD parameter less than or equal to 10 mg/l for its treated effluent to be used onto land for plantation. STP shall be installed in a phased manner viz a viz in the module system designed in 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
3.22	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

S. No	EC Conditions
	Climate Change. Natural treatment systems shall be promoted
3.23	Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP
3.24	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

## 4. Noise Monitoring And Prevention

S. No	EC Conditions
4.1	Ambient noise levels shall conform to residential area/commercial area/industrial area/silence zone both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental pollution loads on the ambient air and noise quality shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB.
4.2	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
4.3	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.

## **5. Energy Conservation Measures**

S. No	EC Conditions
5.1	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.
5.2	Outdoor and common area lighting shall be LED.
5.3	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 u-values shall be as per ECBC specifications.
5.4	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.
5.5	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.

S. No	EC Conditions
5.6	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

## 6. Waste Management

S. No	EC Conditions
6.1	A certificate from the competent authority handling municipal solid waste (MSW), indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from the project shall be obtained
6.2	The project proponent shall install mechanical composter of adequate capacity to treat wet component of the Solid Waste
6.3	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
6.4	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
6.5	Organic waste compost/ Vermiculture pit/ Organic Waste Converter/Mechanical Composter within the premises must be installed for treatment and disposal of the solid waste
6.6	All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie-up must be done with the authorized recyclers
6.7	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
6.8	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, Autoclaved Aerated Concrete (AACs) bricks, fly ash lime gypsum blocks, Compressed earth blocks, and other environmental friendly materials
6.9	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
6.10	Any waste from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Rules, 2016
6.11	Used Compact Fluorescent lamps (CFLs) and Tubular Fluorescent lamps (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

S. No	EC Conditions	
6.12	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	

## 7. Green Cover

S. No	EC Conditions
7.1	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
7.2	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 per the proposal submitted, with plants of native species preferably having broad leaves. The size of the plant thus planted should not be less than 8 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
7.3	The Project Proponent will plant 1500 saplings of indigenous tree species of at least 8 feet height and healthy growth. The plantation activity should be commenced at the earliest and completed within 1 year. The Project Proponent shall plant trees of indigenous specious preferably Chukrasia, Dek, Aam, Amaltas, Kachnar, Neem, Gulmohar, Jamun, Arjun, Tun by maintaining optimum distance from plant to plant
7.4	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
7.5	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
7.6	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
7.7	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
7.8	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

S. No	EC Conditions
7.9	The project proponent shall submit the progress of developing the green belt in the six-monthly compliance report

# 8. Transport

S. No	EC Conditions
8.1	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.
8.2	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.
8.3	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 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. 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 involving the participation of these departments
8.4	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

S. No	EC Conditions
9.1	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
9.2	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
9.3	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

#### S. No EC Conditions

funds earmarked for environmental protection measures shall be kept in separate account and will not be diverted for any other purpose. The details of the amount to be spent on the various environmental activities proposed in environmental plan and additional environmental activities are given in the tables given below:

**Table1: Environment Management Plan** 

S. No.		Construction Phase		<b>Operation Phase</b>
	Title	Capital	<b>Recurring Cost</b>	<b>Recurring Cost</b>
	line	Cost	(in Lakhs per	(in Lakhs per
		(in Lakhs)	Annum)	Annum)
1.	Medical Cum First Aid (Lumpsum)	2.0	1.0	
2.	Toilets for sanitation system		1.0	
	(Approximate No. of labour 70-80 persons requirement of toilets 1toilet for 25 workers as per guidelines. Total number of toilets 3.		F	
3.	Wind breaking curtains in an area of 27acres with periphery @ 1.5 Lacs per acre = 40.50 Lacs		4.0	
4.	Sprinklers for suppression of dust through tanker for roads (for trips per tanker/day @ Rs 1000 x 2 = 2000 For 320 days = 640000/year		4.0	
5.	Sewage Treatment Plant (SBR followed by UF 250 KLD)	120.0		8.0
6.	Solid Waste segregation & disposal Total MSW generated 923 KG/day wet waste 353 Kg/day and dry waste 554Kg/day (Mechanical Composter of 420 kg @ 15.00 Lacs		-	6.0
7.	Green Belt including grass coverage (Capital cost for plantation of trees (1500 Trees) i.e @ 700 per tree = Rs 1050000	10		15.0
8.	RWHP @ 1 Lac per RWHP (No. of RWH = 27)	28.0	, cess	4.0
9.	Smog gun 3 No. @ Rs 200000 Per Pcs	6.0	2.0	
	Total 8-Payment	Rs. 238.0 Lakhs	Rs. 12.0 Lakhs	Rs. 33.00 Lakhs

**Table 2: Additional Environment Activities** 

Sr.	Description	Amount
No.		(In
		lakhs)
1	Deposition of funds under Greening Punjab Mission through concerned DFO	27
	Total	27

The Project Proponent shall implement the EMP as prescribed in Table-1 and AEA plan as per Table-2 above. The AEA plan shall be implemented within 18 months.

The entire cost of the Environmental Management Plan (EMP) will continue to be borne by the project proponent for the lifetime of the project. Year-wise progress of implementation of the action

S. No	EC Conditions
	plan shall be reported to the Regional Office, MoEF&CC/ SEIAA along with the six-monthly compliance report.  The project proponent shall also submit physical/financial progress along with utilization certificates and documentary evidence (including photographs and short video clips) of the works undertaken in lieu of the additional environmental activities by the project proponent in all the subsequent six-monthly compliance reports till the completion of these activities

## 10. Human Health Issues

S. No	EC Conditions	
10.1	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.	
10.2	For indoor air quality the ventilation provisions as per National Building Code of India.	
10.3	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	
10.4	Occupational health surveillance of the workers shall be done on a regular basis.	
10.5	A First Aid Room shall be provided in the project both during construction and operations of the project.	

#### 11. Miscellaneous

11. Miscellaneous		
S. No	EC Conditions	
11.1	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	
11.2	The project proponent shall comply with the conditions of CLU, if obtained	
11.3	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 environmental clearance and the details of MoEF&CC/SEIAA website where it is displayed	
11.4	The copies of the environmental clearance shall be submitted by the project proponent 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	
11.5	The project proponent shall upload the status of compliance of the stipulated environmental clearance conditions, including results of monitored data on their website and update the same on a	

S. No	EC Conditions
	half-yearly basis
11.6	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
11.7	The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned Punjab Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put the same on the website of the company
11.8	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
11.9	The project authorities must strictly adhere to the stipulations made by the Punjab Pollution Control Board and the State Government
11.10	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitments made during the public hearing and made to SEIAA / SEAC during their presentation
11.11	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 include additional environmental protection measures required, if any
11.12	The Regional Office, MoEF&CC, Chandigarh, Punjab Pollution Control Board and SEIAA/ SEAC members nominated for the purpose shall monitor the compliance of all 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
11.13	This Environmental Clearance is granted subject to the final outcome of related pending 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 the project

e-Payments