Pro-Active and Responsive Facilitation by Interactive,

Single-Window Hub

and Virtuous Environmental





Government of India Ministry of Environment, Forest and Climate Change (Issued by the State Environment Impact Assessment Authority(SEIAA), Punjab)

To,

The Chief operating officer UNITECH LTD.

1306-1308, 13th floor, tower-B, signature tower, south city-1, gurugram-121007 -122007

Subject: Grant of Environmental Clearance (EC) to the proposed Project Activity under the provision of EIA Notification 2006-regarding

Sir/Madam.

This is in reference to your application for Environmental Clearance (EC) in respect of project submitted to the SEIAA vide proposal number SIA/PB/MIS/61949/2019 dated 27 Jul 2022. The particulars of the environmental clearance granted to the project are as below.

EC23B039PB161549 1. EC Identification No.

2. File No. SEIAA/PB/MIS/2022/EC(MOD)/01

3. **Project Type** Modernization 4.

Category

8(b) Townships and Area Development 5. Project/Activity including Schedule No. projects.

B1

6. Modernization of Residential Township Name of Project

7. Name of Company/Organization UNITECH LTD.

Punjab 8. **Location of Project** 9. **TOR Date** 08 Sep 2020

The project details along with terms and conditions are appended herewith from page no 2 onwards.

(e-signed) Dr. Rupanjali Karthik, IAS Date: 24/03/2023 **Member Secretary** SEIAA - (Punjab)

Note: A valid environmental clearance shall be one that has EC identification number & E-Sign generated from PARIVESH.Please guote identification number in all future correspondence.

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This has reference to your online proposal no. **SIA/PB/MIS/61949/2019** dated 28.04.2021 for environmental clearance to the above-mentioned project.

- 2) The State Environment Impact Assessment Authority, Punjab has examined the proposal for the expansion of Group Housing Project namely Modernization of Residential Township is located at sector- 97, 106 & 107, Mohali, Punjab. The project is being developed by M/s Unitech Limited. The project is covered under category 'B1' of activity 8(b): 'Township and Area Developments' projects as per the schedule appended to the EIA Notification 14.09.2006 and its subsequent amendments and requires appraisal at the State level.
- 3) 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-2, Environmental Impact Assessment, 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).
- 4) The details of the project, as per the application and documents/ presentation submitted by the project proponent and as informed during the meetings of SEAC/SEIAA are as under:

| Sr. No. | Item | Details | Color | | | |
|------------|--|--|--|--|---------------------------------------|--|
| 1. | Name and Location of the project | | rnization of Resid 107, Mohali, Pur | | is located at sector- 97, ech Limited | |
| | Project/activity | 8 (b) | | | | |
| | Category as per EIA Notification, 2006 | Catego | ry B1 | | | |
| 2. | Classification/Land use pattern as per Master Plan | The existing site is allocated for residential use as per the Master Plan of SAS Nagar, 2031. The same is enclosed with the application. | | | | |
| 3. | Cost of the project | Rs. 371.33 Crores | | | | |
| 4. | Total Plot Area, Built- | | | | | |
| | up Area, and Green area | S. No | Area | As per Earlier EC (m ²) | Total after Modernisation (m²) | |
| | | 1 | Plot Area | 1356000.0 | 1149470.114 | |
| | | 2 | Built up Area | - | 13,75,958.676 | |
| | | 3 | Green Area | - | 1,54,434.1349 | |
| | | | | | | |
| 5. | Proposal & Configuration | Proposa | al No- SIA/PB/MIS | 5/61949/201 | | |

| | | Config | uration: | | | |
|----------|---|---|--|---|--|--|
| | | Sno. | Particulars | As per E0 | C Af | ter modernization |
| | | 1 | Components | 1. Plotted Developmen Main Plots - 1275 no 2. Group Housing 3. Commerci Developmen 4. Institution | nt Dev Ma 2. G No 3. C Dev ial 4. In Dev | Plotted velopment in Plots - 1168 no Group Housing of Flats-1168 no Commercial velopment institutional velopment |
| 6. | Latitude & Longitude | The Lat | | gitude Inforn | nation of | the project has been |
| 1 | 7 | Corne | er Latit | ude | L | ongitude |
| | | A | 30°40'2 | 22.97"N | 76° | °40'19.26"E |
| | 12/ | В | 30°40'3 | 8.42"N | 76° | °40'35.72"E |
| | | С | 30°40'0 | 0.50"N | 76° | °41'14.84"E |
| | | D | 30°39'4 | 3.02"N | 76° | °40'47.19"E |
| 7. 8. | Estimated Population Water Requirements & | 34308 | Persons | | 3 | |
| 0. | source during Operation Phase | wate | c up of r requirement water Deman | d.: 5006 KLD | | Source |
| | 701 | Fresh Treate Flush Garde Coolin | Water (Dome ed water requ ing Water: 32 ening : 849 KLD ng : 100 KLD ellaneous : 10 I | stic): 3721 KL irement: 128! 6 KLD) | 5 KLD | Ground Water Treated water from inhouse STP |
| 9. | Disposal Arrangement of Wastewater | treated KLD ar project | d in the STP of nd 150 KLD al t premises. TI d wastewater | total 4490 KL ready install ne details of | D capaci ed) to be the disp | enerated which will be ty (Modular STP- of 75 e installed within the posal arrangement of et of STP are given as |

| | | Sr. | Season | Flushin | Green | Cooling | Misc | GMADA |
|-----|------------------------|--|---------------|-------------------------|--------------|-------------|-----------|--------------|
| | | No | | g (VLD) | Area | | | sewer |
| | | 1. | Summer | (KLD) 326 | (KLD) 849 | 100 | 10 | 1970 |
| | | 2. | Winter | 326 | 278 | 90 | 10 | 2550 |
| | | 3. | Rainy | 326 | 77 | 80 | 10 | 2760 |
| 10. | Rainwater recharging | | rater will be | | | | ı | |
| 10. | detail | | ready exist | _ | | _ | | • • • |
| | uctan | - | - | _ | | | | a from the |
| 11. | Solid waste generation | rooftop of the buildings after primary treatment. a) Solid Waste- 11,335 kg/day (Biodegradable-6801 kg/day Non | | | | | g/day Non | |
| | and its disposal | Biodegradable- 3401 kg/day and plastic waste of 1134- kg/day) | | | | · . | | |
| | | 2.50.08.00.00.00.00.00.00.00.00.00.00.00.00 | | | | | | |
| | | b) Sol | id wastes w | ill be appr | opriately | / segregate | ed at the | e source by |
| | | • | ding bins fo | | | | | · · |
| | | _ | iodegradab | - | | _ | = | |
| | 516 | for th | ne treatme | nt of biod | degradab | le compoi | nents of | f the solid |
| | 208 | waste | e. Recyclab | e waste | will be r | ecycled t | hrough | authorized |
| | | recycl | lers. Inert v | <mark>vaste</mark> will | be dispos | sed of as p | er the S | olid Waste |
| | | Mana | gement Ru | es, 2016. | | | | |
| 12. | Hazardous Waste & E- | Used | oil from DG | sets will b | oe given i | to register | ed recyc | lers and E- |
| | waste | | will be d | | f as per | the E-wa | ste (Ma | nagement) |
| | | Amen | dment Rule | es, 2022 | | | | |
| 13. | Energy Requirements | a) 34 | 1000 KVA e | nergy will | be requ | ired which | n will be | met from |
| | & Saving | | unjab State | | | | | |
| | | A A V | | | AMI (I /III) | | ting) & | 5 x 1010 |
| | 311/16 | b) DG sets of Capacity 2 x 62.5 kVA(existing) & 5 x 1010 (Proposed) will be installed with the adequate stack height | | | | | | |
| | 511 | c) The following measures will be adopted to save energy: | | | | | | |
| | | (i) Sc | olar panels l | nave been | propose | d which w | ill gener | ate 40 KW |
| | 5. | | power gen | | 10 | | _ | |
| | Str. Co. | (ii) Sc | olar energy | would be | provided | in the gro | up hous | sing part of |
| | 70 | th | e project w | hen it is o | perationa | al. | | |

- 5) As per the undertaking submitted by project proponent, the proposal neither requires approval/clearance under the Forest (Conservation) Act,1980 nor under the Wildlife (Protection) Act,1972. Also, no litigation is pending in respect of the land on which the project is to be developed.
- 6) 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 Environmental Management Plan (EMP) prepared and submitted by the consultant accredited by the Quality Council of India (QCI) / National Accreditation Board for Education and Training (NABET) on behalf of the project proponent in its 235th meeting held on 24.12.2022. 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.

- 7) 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 modernization of Residential Township is located at sector- 97, 106 & 107, Mohali, Punjab by M/s Unitech Limited as per the details mentioned in the application proposal & subsequent presentation /clarifications made by the project proponent and his consultant.
- 8) The case was considered by SEIAA in its 239th meeting held on 01.03.2023 wherein SEIAA observed that the case stands recommended by SEAC. The Authority looked into all the aspects of the project proposal in detail and was satisfied with the same. Therefore, the Authority decided to grant the Environmental Clearance for modernization of the Residential Township is located at sector- 97, 106 & 107, Mohali, Punjab by M/s Unitech Limited as per the details mentioned in the Form-2, EMP, conceptual plan and subsequent presentation /clarifications made by the project proponent and its consultant with proposed measures and subject to the conditions proposed by SEAC.
- 9) Accordingly, SEIAA, Punjab hereby accords Environmental Clearance (EC) 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 the terms and conditions as follows:

Special conditions:

- 1. No possession would be given or occupancy permitted by the project proponent till it obtains necessary permission for discharge of treated wastewater into the sewer line as per the capacity of the terminal STP of Mohali.
- 2. The project proponent shall start the plantation activities as proposed within six months' and shall complete the same within one year of the date of issuance of EC. For this purpose, indigenous tree species with height more than 8 ft and woody stems should be utilized for plantation purposes.

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 project proponent shall obtain 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.
- 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 (PPCB).
- 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) 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.
- viii) 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.
- ix) 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.
- x) The project proponent shall follow the Energy Conservation Building Code (ECBC)/ECBC-R prescribed by the Bureau of Energy Efficiency, Ministry of Power.
- xi) 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 the Department of Town and Country Planning or the Competent Authority under whose jurisdiction, the site falls.
- xii) 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 State Pollution Control Board (SPCB)/ Central Pollution Control Board (CPCB)/ Ministry of Environment, Forest and Climate Change (MoEF&CC) for such types of projects.
- xiii) 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 EC is being granted.

II. Air quality monitoring and preservation

- i) 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.
- ii) The project proponent shall draw up and implement a management plan 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 the rules made under the Environment (Protection) Act, 1986. The height of the 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 should be the preferred option. The location of the DG sets may be decided in consultation with PPCB.
- v) The 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.
- 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) All the topsoil excavated during construction activities should be stored for use in horticulture/landscape development within the project site.
- ix) Grinding and cutting of building material in open areas shall be prohibited. A wet jet shall be provided for grinding and stone cutting.
- x) Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
- xi) 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.
- xii) The diesel generator sets to be used during the construction phase shall conform to the norms and regulations prescribed under air and noise emission standards.
- xiii) For indoor air quality, the ventilation provisions as per the National Building Code of India shall be complied with.
- xiv) Roads leading to or at the construction site must be paved and blacktopped (i.e., metallic roads should be built and used).
- xv) Dust mitigation measures shall be displayed prominently at the construction site for easy public viewing.

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 water requirement for the project shall be 5006 KLD, out of which 3721 KLD shall be met through GMADA/ groundwater. Total freshwater use shall not exceed the proposed requirement as provided in the project details and other relevant details as under:

| Seasons | Total water | Total | Treated | Flushing | Green area | Into sewer |
|---------|-------------|-------------|------------|-------------|-------------|------------|
| | Requirement | wastewate | wastewater | water | requirement | |
| | | r generated | | requirement | | |
| Summer | 5006 KLD | 3321 KLD | 3255 KLD | 326 KLD | 849 KLD | 1970 KLD |
| Winter | 4425 KLD | 3320 KLD | 3254 KLD | 326 KLD | 278 KLD | 2550 KLD |
| Rainy | 4214 KLD | 3319 KLD | 3253 KLD | 326 KLD | 77 KLD | 2760 |

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.

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.
- v) The project proponent shall ensure a safe drinking water supply to the habitants. Adequate treatment facility for drinking water shall be provided, if required.
- vi) 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.
- vii) 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.
- viii) 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.
- ix) Installation of Reverse Osmosis (RO) 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.
- x) 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 plan/building plan so as to reduce the water consumption/groundwater abstraction.
- 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. The project proponent 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 | Black |
| c) | Untreated wastewater from Bathing/shower area, hand | Grey |
| | washing (Washbasin / sinks) and from Cloth Washing | |
| d) | Reject water streams from RO plants and AC condensate (this | White |
| | 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. | | |
|----|--|--------|------|
| e) | Treated wastewater (for reuse only for plantation purposes) | Green | |
| | from the STP treating black water | | |
| f) | Treated wastewater (for reuse for flushing purposes or any | Green | with |
| | other activity except plantation) from the STP treating | strips | |
| | greywater | | |
| g) | Stormwater | Orange | |

- xii) Water demand during construction should be reduced by the use of pre-mixed concrete, curing agents, and adopting other best practices.
- xiii) The Central Ground Water Authority (CGWA) provisions on rainwater harvesting should be followed. A rainwater harvesting plan needs to be designed where 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. As per the proposal submitted by the project proponent, 24 no. recharging pits will be provided for groundwater recharging as per the Central Ground Water Board (CGWB) norms. The groundwater shall not be withdrawn without approval from the Competent Authority.
- xiv) All recharge should be limited to shallow aquifers.
- xv) 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.
- xvi) 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.
- xvii) Sewage shall be treated in the Sewage Treatment Plant (STP) with tertiary treatment by providing ultra-filtration Technology. STP shall be installed in a phased manner i.e. 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.
- xviii) 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 STP shall be certified by an independent expert and a report in this regard shall be submitted to the MoEF&CC / SEIAA before the project is commissioned for operation. Excess treated water shall be discharged as per statutory norms notified by the MoEF&CC. Natural treatment systems shall be promoted.

- xix) Periodical monitoring of water quality of treated sewage shall be conducted.

 Necessary measures should be made to mitigate the odour problem from STP.
- xx) Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed 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 office area norms both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental pollution loads on the ambient 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 SEIAA as a part of the 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) 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.
- iii) Energy conservation measures like the installation of light-emitting diodes (LEDs) for lighting the common area and area outside the building should be an integral part of the project design and should be in place before project commissioning.
- iv) 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.
- v) 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 byelaws, whichever is higher.

VI. Waste Management

- 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 MSW 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. It 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 SPCB.
- 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, Autoclaved Aerated Concrete (AACs), fly ash, lime gypsum blocks, compressed earth blocks, and other environmental 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 waste from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Rules, 2016.
- xi) 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.

- xii) 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.
- xiii) 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 odour in and around the project premises.

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.
- 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 17200 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 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 MoEF&CC guidelines.
- iii) 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 as per land use pattern.
- viii) The project proponent shall submit the progress of developing the green belt in the six-monthly compliance report to be submitted to SEIAA.

VIII. Transport

- i) A comprehensive mobility plan, as per Ministry of Urban Development (MoUD) and Urban and Regional Development Plans Formulation and Implementation (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 the following 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 the 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. The traffic management plan shall be duly validated and certified by the State Urban Development department and the Public Works Department/ 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.
- 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 at the project site 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 SEIAA 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 Environmental Management Plan (EMP) and environmental conditions along with the responsibility matrix of the company shall be prepared and shall be duly approved by the Competent Authority. The year-wise funds earmarked for environmental protection measures shall be kept in a separate account and will not be diverted for any other purpose. The project proponent shall spend the minimum amount of Rs. 1322.40 Lacs as capital cost during construction phase and Rs. 57.0 lacs towards recurring cost in operation phase of the project including the environmental monitoring cost under the EMP of the proposed project and Rs. 278.0 lacs towards Additional Environmental Activities as per details given in the Table below:

Environment Management Plan (CONSTRUCTION PHASE)

| Sr. No. | Particulars | Already Spent (In Lacs) | Proposed to be spent | Total Capital Cost (Rs Lac) | Items Covered |
|---------|--|-------------------------------|----------------------|--------------------------------|--|
| 1 | Medical Cum First Aid | 4.0 | 8.0 | 12.0 | First aid medical facility with first aid kit |
| 2 | Toilets for workers | - | 10.0 | 10.0 | Toilets with septic tank |
| 3 | Wind breaking curtains | - | 10.0 | 10.0 | Wind breaking walls at vulnerable areas |
| 4 | Sprinklers for suppression of dust | - | 24.0 | 24.0 | Sprinklers, Pipeline, 8 no. anti smog guns |
| 5 | Sewage Treatment Plant | 92.0 | 400.0 | 492.0 | Construction of STP |
| 6 | Solid waste Management | 12.0 | 80.0 | 92.0 | Making arrangement for solid waste segregation & disposal |
| 7 | Green belt development | 60.0 | 40.0 | 100.0 | Landscaping & tree plantation |
| 8 | Rain water harvesting | 160.0 | 60.0 | 220.0 | Construction rain water harvesting well & channel |
| 9 | DG Stack & Acoustic Treatment | 4.0 | 16.0 | 20.0 | Installation of DG with acoustic enclosure and adequate stack height |
| 10 | Miscellaneous | 15.3 | 49.1 | 64.4 | Monitoring of environment parameter and any other expenses |
| 11 | Corporate Environmental Responsibility (CER) | D | 278.0 | 278.0 | funds allocated towards development of villages |
| | Total Cost | 347.3 | 975.1 | 1322.4 | |

| | EMP (OPERATION PHASE) | | | | | | |
|--------|--------------------------------------|--------------------------|---|--|--|--|--|
| Sr No. | Particulars | Recurring cost (Rs. Lac) | Items covered | | | | |
| 1 | Sewage Treatment Plant | | Operation & maintenance of sewage treatment plant including salary of operators | | | | |
| 2 | Solid Waste segregation & disposal | 7.5 | Colored Bins at appropriate Locations | | | | |
| 3 | Green Belt including Lawn's coverage | | Development of green belt, watering & manuring | | | | |
| 4 | DG Stack & Acoustic Treatment | 5.0 | Maintenance of DG and stack | | | | |

| 5 | Rain water harvesting | 4.5 | Cleaning of channels & harvesting pits |
|---|-----------------------|------|--|
| | TOTAL | 57.0 | |

Additional Environmental Activities as proposed by SEAC

| S.No. | Details | Rs. (In Cr) |
|-------|---|-------------|
| 1 | Additional Environmental Activities in the Raipur kalan village | 1.00 |
| 2 | Additional Environmental Activities in the Bhago Majra village | 1.78 |
| | Total Cost | 2.78 Crores |

Additional Environmental Activities in the Raipur kalan village:

| S.No. | Details | Rs. (In Cr) |
|-------|--|-------------|
| 1 | Rejuvenation of Pond 1 of size approx. 9333 m ² | 0.40 |
| а | Filtration by insta <mark>lling prim</mark> ary sedimentation tank | 0.10 |
| b | Aeration by installing secondary sedimentation tank with clarifier | 0.20 |
| С | Disinfection unit | 0.10 |
| 2 | Rejuvenation of Pond 2 of size approx. 4000 m ² | 0.20 |
| а | Filtration by installing primary sedimentation tank | 0.05 |
| b | Aeration by installing secondary sedimentation tank with clarifier | 0.10 |
| С | Disinfection unit | 0.05 |
| | Following characteristics of CPCB will be met out after treatment. BOD= 30 mg/l DO= >5 mg/l Fecal coliform (MPN/100 ml) = <1000 | |
| 3 | Plantation in public/community area | 0.10 |
| a | No. of trees to be planted = 1000 no. Cost for per tree = Rs. 500 Cost of 1000 trees= Rs 500 x 1000 | 0.05 |
| b | Cost for per tree guard = Rs. 500 Cost of 1000 tree guards= Rs 500 x 1000 | 0.05 |
| 4 | Providing of solar panels in the community centre/Dispensary/ | 0.30 |

| | Anganwadi / schools | | | |
|---|---|------|--|--|
| a | No. of solar panels to be installed = 60 of each 1 KW Total power generation = 60 KW Cost for per solar panel = Rs. 50,000 x 60 | 0.30 | | |
| | Total | | | |

Additional Environmental Activities in the Bhago Majra village

| S.No. | Details | Rs. (In Cr) |
|-------|---|-------------|
| 1 | Plantation in public/community area | 0.1 |
| а | No. of trees to be planted = 1000 no. Cost for per tree = Rs. 500 Cost of 1000 trees= Rs 500 x 1000 | 0.05 |
| b | Cost for per tree guard = Rs. 500 Cost of 1000 tree guards= Rs 500 x 1000 | 0.05 |
| 2 | Provision of solar panels in the community centre, Dispensary/ Anganwadi / schools and Solar street light along village periphery road | 0.60 |
| а | No. of solar panels to be installed = 120 of each 1 KW Total power generation = 120 KW Cost for per solar panel = Rs. 50,000 x 120 | 0.60 |
| 3 | Infrastructure development for usage of treated water of STPs | 0.40 |
| 4 | Provision of Roof top rainwater harvesting (RWH) and other water conservations activities in Primary School and Dispensary. | 0.68 |
| Total | | 1.78 |

The entire cost of the EMP will continue to be borne by the project proponent. Year-wise progress of implementation of the action plan shall be reported to the MoEF&CC /Regional Office/ 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 done as a part of the additional environmental activities in all the subsequent sixmonthly compliance reports till the completion of these activities.

XI. Validity

This EC will be valid for a period of ten years from the date of its issuance 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 change of land use, if obtained.
- iii) Within seven days of the issuance of EC, 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) that the project has been accorded Environmental Clearance alongwith the details of MoEF&CC/SEIAA website where it is displayed.
- iv) The copies of EC 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.
- v) The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the MoEF&CC at the Parivesh portal and submit a copy of the same to SEIAA.
- vi) The project proponent shall submit the environmental statement for each financial year in Form-V to the PPCB as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put the same on the website of the company.
- vii) 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.
- viii) The project authorities must strictly adhere to the stipulations made by the PPCB and the State Government.
- ix) The project proponent shall abide by all the commitments and recommendations made in the Environmental Impact Assessment (EIA)/Environmental Management Plan (EMP) report, commitments made during the public hearing and made to SEIAA / SEAC during its presentation.
- x) 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 MoEF&CC /SEIAA for clearance, a fresh reference shall be made to the MoEF&CC /SEIAA, as applicable, to assess the adequacy of conditions imposed and to include additional environmental protection measures required, if any.
- xi) The Regional Office, MoEF&CC, Chandigarh, PPCB and SEIAA/ SEAC members nominated for the purpose shall monitor the compliance of all 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.
- xii) This EC 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.

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 EC.
- 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 PPCB shall be obtained as applicable under the Bio-Medical Waste Management Rules 2016 as amended from time to time.
- iv) 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 EC 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.
- v) This EC is liable to be revoked without any further notice to the project proponent in case of failure to comply with condition (iv) above.
- vi) Concealing factual data or submission of false/fabricated data may result in revocation of this EC and attract action under the provisions of Environment (Protection) Act, 1986.
 - 10) 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 EC if the implementation of any of the above conditions is not found to be satisfactory.
 - 11) Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
 - All the stipulated conditions will 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, the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2016, the Public Liability Insurance Act, 1991 read with subsequent amendments, other applicable Acts/rules, and any

other orders passed by the Hon'ble Supreme Court of India/ High Courts/any other court of law related to the subject matter.

(Dr. Rupanjali Karthik, IAS)

Member Secretary, SEIAA

Through Parivesh Portal

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 : Mr. Nadeem Khan (Project Head)

b) Mobile No. : 98390-12295

c) Email Id : <u>nadeem.khan@unitechgroup.co</u>

d) Email ID of Env. Consultant : <u>info@perfactgroup.in</u>

- 4. The Deputy Commissioner, SAS Nagar.
- 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

(Dr. Rupanjali Karthik, IAS) Member Secretary, SEIAA

E-mail: seiaapb2017@gmail.com