



**STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY PUNJAB**  
**Ministry of Environment, Forest & Climate Change, New Delhi**

O/O Punjab Pollution Control Board,  
VatavaranBhawan, Nabha Road,  
Patiala – 147 001  
Telefax:- 0175-2215636

No. SEIAA/2018/1117

REGISTERED

Date : 23/1/18

To

Sh. Sohan Lal Garg, Executive Engineer-I (Amended Signatory)  
Punjab Small Industries & Export Corporation Limited,  
Plot no 18, Himalaya Marg, Udyog Bhawan,  
Sector-17, Chandigarh-160017

**Subject: Environmental clearance under EIA notification dated 14.09.2006 for establishment of Integrated Industrial Estates project namely "Hi Tech Cycle Valley" in the revenue estate of Village Dhanansu, Distt. Ludhiana by Punjab Small Industries & Export Corp. Ltd. Chandigarh (Proposal No. SIA/PB/NCP/19203/ 2017)**

This has reference to your online Proposal No. SIA/PB/NCP/19203/2017 for establishment of Integrated Industrial Estates namely "Hi Tech Cycle Valley" located in the revenue estate of Village Dhanansu, Distt. Ludhiana under category 7(c) submitted to the SEIAA for grant of Environmental Clearance under EIA notification dated 14.09.2006. The proposal has been appraised as per procedure prescribed under the provisions of said Notification on the basis of the mandatory documents enclosed with the application viz., Form-1, 1-A, conceptual plan, EIA report and the additional clarifications furnished in response to the observations of the SEAC. The brief detail of the project is as under: -

1.	Category/Item No. (in schedule)	7(c): Industrial estates/ parks/ complexes/ areas, export processing Zones (EPZs), Special Economic Zones (SEZs), Biotech Parks, Leather Complexes.																																										
2.	Name and Location of the project alongwith co-ordinates	Hi Tech Cycle Valley" in the revenue estate of Village Dhanansu, Distt. Ludhiana by Punjab Small Industries & Export Corp. Ltd. Chandigarh <table border="1"><thead><tr><th>Corner</th><th>Latitude</th><th>Longitude</th></tr></thead><tbody><tr><td>1</td><td>30°56'54.66"N</td><td>75°59'46.94" E</td></tr><tr><td>2</td><td>30°56'44.35"N</td><td>76°00'03.07" E</td></tr><tr><td>3</td><td>30°56'36.38"N</td><td>76°00'16.33" E</td></tr><tr><td>4</td><td>30°56'35.52"N</td><td>76°00'26.98" E</td></tr><tr><td>5</td><td>30°56'20.07"N</td><td>76°00'21.98" E</td></tr><tr><td>6</td><td>30°56'09.20"N</td><td>76°00'13.99" E</td></tr><tr><td>7</td><td>30°56'08.72"N</td><td>75°59'59.76" E</td></tr><tr><td>8</td><td>30°56'03.49"N</td><td>75°59'59.00" E</td></tr><tr><td>9</td><td>30°56'03.53"N</td><td>75°59'44.75" E</td></tr><tr><td>10</td><td>30°56'14.34"N</td><td>75°59'48.40" E</td></tr><tr><td>11</td><td>30°56'28.49"N</td><td>75°59'46.63" E</td></tr><tr><td>12</td><td>30°56'37.77"N</td><td>75°59'59.00" E</td></tr><tr><td>13</td><td>30°56'48.76"N</td><td>75°59'32.63" E</td></tr></tbody></table>	Corner	Latitude	Longitude	1	30°56'54.66"N	75°59'46.94" E	2	30°56'44.35"N	76°00'03.07" E	3	30°56'36.38"N	76°00'16.33" E	4	30°56'35.52"N	76°00'26.98" E	5	30°56'20.07"N	76°00'21.98" E	6	30°56'09.20"N	76°00'13.99" E	7	30°56'08.72"N	75°59'59.76" E	8	30°56'03.49"N	75°59'59.00" E	9	30°56'03.53"N	75°59'44.75" E	10	30°56'14.34"N	75°59'48.40" E	11	30°56'28.49"N	75°59'46.63" E	12	30°56'37.77"N	75°59'59.00" E	13	30°56'48.76"N	75°59'32.63" E
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3. **Total Plot area- 380.57 acres (with net scheme area@ 353.55 acres)**

Detail of Plots: -

Sr. No.	Category of plot	No. of plots	Area in acres
01	7.0 acres and above plots	04	51.27
02	2.0 acres and above plots	38	100.44
03	1.0 acres and above plots	14	23.22
04	2.0 kanal plot and above	135	30.21
05	1.0 kanal plot and above	18	2.20
	<b>Total</b>	<b>209</b>	<b>207.34</b>

Detail of areas: -

Sr. No.	Category of plot	Area in acres
01	Area under industrial plot	207.34
02	Area under commercial and convenient shop	3.0
03	Area under convention centre	12.76
04	Area under common amenities	15.50
05	Area under elect. Sub. Strn.	3.0
06	Area under water works	1.30
07	Area under disposal works	1.65
08	Area under green/open space	35.20
09	Area under common parking	1.00
10	Area under road + pathway	72.80
	<b>Total</b>	<b>353.39 acres</b> <b>i.e. 100%</b>

**Saleable area**

Sr. No.	Category of plot	Area in acres
01	Area under industrial plot	207.34
02	Area under commercial and convenient shop (40%)	1.20
03	Area under convention centre (40 % of 12.76 acs)	5.10
04	Area under common amenities	15.50
	<b>Total saleable</b>	<b>229.14 i.e. 65 %</b>

4. Population (when fully operation) 41417 persons

5. Project Cost Rs.500 Crore

6.	<b>Water Requirements &amp; source</b>					
	<b>Break up of water requirement</b>	<b>Quantity</b>	<b>Source</b>			
	Total water demand	9780 KLD				
	Process water demand	6060 KLD	4016 KLD treated RO water will be reused and remaining quantity will be met through Ground Water/ Surface water			
	Domestic water demand	3720 KLD	1326 KLD treated sewage water will be used for flushing and remaining quantity of water will be met through Ground Water/ Surface water			
	Flushing demand	1326 KLD	Treated sewage water for flushing			
	Horticulture water demand (Area 27.66 acres)	56-616 KLD	Treated sewage water			
	Demand for the plantation developed in an area of 24 acres as per Karnal Technology	1234-1794	Treated sewage water			
	Total Fresh water requirement	4438 KLD	Ground Water/ Surface water (9780-4016-1326 = 4438 KLD)			
	Fresh water for domestic needs	2394 KLD	Ground Water/ Surface water			
	Fresh water for process needs	2044 KLD	Ground Water/ Surface water			
7.	<b>Disposal arrangement of process Water</b> Effluent will be generated from all small industrial units which will be treated in CETP of 5 MLD based on ZLD technology equipped with two stage RO and MEE.					
8.	<b>Disposal Arrangement of Domestic Waste water</b> Total 3176 KLD waste water will be treated in the STP of capacity 4 MLD followed by the UF to be installed in the project premises. The reuse of treated waste water is as under: -					
	<b>S.No.</b>	<b>Season</b>	<b>For Flushing purposes (KLD)</b>	<b>Plantation as per Karnal Technology (24 acre)</b>	<b>Green Area 27.66 acre (KLD)</b>	<b>Total</b>
	1.	Summer	1326	1234	616	3176
	2.	Winter	1326	1649	201	3176
	3.	Rainy	1326	1794	56	3176
9.	Rain water recharging detail	Artificial Rain Water recharging shall be carried out by adopting 12 ponds located in the various villages to recharge the rain water @9,11,404 cum /annum. Rain water shall be recharged after providing adequate treatment to remove suspended matter, oil & grease etc. as per the CGWA guidelines. Groundwater recharging including rehabilitation of ponds shall be carried out based on Baba Seechewal Model.				

10.	Solid waste generation and its disposal	<p>a) Municipal Solid waste @ 10357 kg/day</p> <p>b) Solid wastes will be appropriately segregated (at source by providing bins) into Bio-degradable and non- bio-degradable components. Bio-degradable waste will be converted to manure using mechanical composter. The Non-Biodegradable waste will be handed to authorized waste pickers.</p> <p>c) Inert waste will be sent to Municipal dumping site.</p>															
11.	Hazardous Waste and E-waste	<table border="1" data-bbox="488 432 1209 931"> <thead> <tr> <th data-bbox="488 432 695 577">Hazardous Waste Category</th> <th data-bbox="695 432 810 577">Source</th> <th data-bbox="810 432 1007 577">Quantity</th> <th data-bbox="1007 432 1209 577">Disposal</th> </tr> </thead> <tbody> <tr> <td data-bbox="488 577 695 685">5.1 –Used or Spent Oil</td> <td data-bbox="695 577 810 685">DG sets</td> <td data-bbox="810 577 1007 685">1 KL/annum</td> <td data-bbox="1007 577 1209 685">To Authorized recycler</td> </tr> <tr> <td data-bbox="488 685 695 931">35.3- Chemical sludge from waste water treatment</td> <td data-bbox="695 685 810 931">CETP &amp; MEE</td> <td data-bbox="810 685 1007 931">1500 T/ annum</td> <td data-bbox="1007 685 1209 931">To Authorized TSDF site</td> </tr> </tbody> </table>	Hazardous Waste Category	Source	Quantity	Disposal	5.1 –Used or Spent Oil	DG sets	1 KL/annum	To Authorized recycler	35.3- Chemical sludge from waste water treatment	CETP & MEE	1500 T/ annum	To Authorized TSDF site			<p>E-waste will be disposed off as per the E-waste (Management) Amendment Rules, 2018.</p>
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5.1 –Used or Spent Oil	DG sets	1 KL/annum	To Authorized recycler														
35.3- Chemical sludge from waste water treatment	CETP & MEE	1500 T/ annum	To Authorized TSDF site														
12.	Energy Requirements & Saving	<p>Total Power requirement will be 21,000 KVA which will be provided by Punjab State Power Corporation Limited. Power Supply:1<sup>st</sup> Phase: 11 KVA substation, 2<sup>nd</sup> Phase: 66 KVA substation, Future expansion: 400 KVA substation. Power back up for common services: 4 DGs of 500 kVA and 5 DGs of 250 kVA capacity.</p> <p><b>Energy Saving</b></p> <p>(a) Energy conservation will be achieved through use of low energy consuming fixtures in the Industrial project.</p> <p>(b) PSIECL will put condition in the building approval about provision of installation of solar photo voltaic on 30% roof top area.</p> <p>(c) Solar street lights and Park lights shall be provided. The solar power plant will be provided over the rooftop of PSIEC owned buildings like skill development center and administration building.</p>															

13. Environment Management Plan along with Budgetary break up phase wise and responsibility to implement-  
PSIEC will be responsible for implementation of EMP during construction phase as well as operation phase. The budgetary requirements phase wise are as under:

**Budget for Environmental Management Plan during Construction Phase**

S.No	Title	Capital Cost (In lakhs)	Recurring Cost (in lakhs)
1.	Common Sewage Treatment Plant	1000	2
2.	Common Effluent Treatment Plant	4300	5
3.	Water Treatment Plant	300	1
4.	Horticulture & green belt development, Tree plantation & sprinkling	500	5
5.	Solar System	150	2
6.	Rain Water Harvesting	250	2
7.	Fire Fighting	200	2
8.	First Aid including medical check up	2	0.2
9.	Personal Protective Equipment's	2	0.2
10.	Sewage Treatment Plant (Packaged type STP 5 KLD)	7.5	0.3
11.	Continuous Monitoring Station	70	1.0
<b>Total amount</b>		<b>6781.5</b>	<b>20.7</b>

**Budget for Environmental Management Plan Operational Phase**

S.N o.	Title	Budget (In lakhs)
1.	Common Sewage Treatment Plant	5
2.	Common Effluent Treatment Plant	10
3.	Water Treatment Plant	2
4.	Horticulture & green belt development, Tree plantation & sprinkling	15
5.	Solar System	3
6.	Rain Water Harvesting	2.0
7.	Fire Fighting	2.0
<b>Total amount</b>		<b>39</b>

**Environment Monitoring Cost (EMP)**

In addition to above, an amount of Rs. 15.21 Lacs/annum shall be spent as recurring cost towards environment monitoring.

14.	CSR activities alongwith budgetary break up and responsibility to implement	PSIEC has proposed to carry out the following CSR activities by keeping a budgetary amount (2% of the project cost) which will be spent during five years after commencement of the project.
15	Other important facts	<ul style="list-style-type: none"> <li>➤ Entire area of the proposed project has been designated for the development of Industrial Estate as per the master plan approved by Department of Town &amp; Country Planning, Punjab.</li> <li>➤ Permission has been granted regarding diversion of forest land of 3.49 ha by the Forest Department for the construction of road which will act as an access to the project site by Chief Conservator of Forest (Centre) Ministry of Environment, Forest and Climate Change vide no. 9PBB313/2017-CHA dated 7th July, 2017 subject to certain conditions.</li> <li>➤ Punjab Small Industrial and Export Corporation Limited (PSIEC Ltd.) proposed to provide services such as water supply, waste management, sanitation etc. to the villages. Industrial Estate will have campuses for industries, Industrial plots, rehabilitation and resettlement facilities, commercial and institutional areas, multi-specialty hospital, etc. No category A or B industry will be allowed to established in the project site.</li> <li>➤ PSIEC submitted a copy of the minutes of the meeting held on 27.06.2017 wherein Executive Engineer, Sidhwan Canal Division was ready to provide canal water for the project at Commercial rate i.e. Rs. 6,95,558/- per year for 1 cusec for financial year 2018-2019 (except any modification / notification of the changes in rates by the Punjab Government).</li> <li>➤ PSIEC submitted a copy of revised landscape plan on 28.07.2018 vide drawing no. PSIEC/G.M/PLG/LP-20/2018 signed by the Chief Engineer, P.S.I.E.C., Chandigarh.</li> <li>➤ PSIEC submitted an undertaking to the effect that tree species, shrubs and herbs will be planted in three layers, within the project site based on "CPCB Guidelines of Green Belt" in the 15 m wide green buffer area along the boundary wall of the project and all the individual plot owners will develop 33% of their plot area as green/open area.</li> </ul>

The case was considered by the SEAC in 170<sup>th</sup> meeting held on 28.07.2018, wherein, the Committee observed that the project proponent has provided adequate and satisfactory clarifications of the observations raised by it, therefore, the Committee awarded '**Silver Grading**' to the project proposal and decided to forward the case to the SEIAA with the recommendation to grant environmental clearance to the project proponent under EIA notification dated 14.09.2006 subject to certain conditions in addition to the proposed measures.

Thereafter, the case was considered by the SEIAA in its 135<sup>th</sup> meeting held on 20.08.2018. The SEIAA observed that the case stands recommended by SEAC and the

Committee awarded 'Silver Grading' to the project proposal. 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 environmental clearance for establishment of Integrated Industrial Estates project namely "Hi Tech Cycle Valley" having total plot area 380.57 acres in the revenue estate of Village Dhanansu, Distt. Ludhiana by Punjab Small Industries & Export Corp. Ltd. Chandigarh, subject to the conditions as proposed by the SEAC, in addition to the proposed measures. Accordingly, SEIAA, Punjab hereby accords necessary environmental clearance for the above project under the provisions of EIA Notification dated 14.09.2006 and its subsequent amendments, subject to proposed measures & strict compliance of terms and conditions as follows:

### **PART-A – Specific Conditions:**

#### **I. Pre-Construction Phase**

- i) "Consent to establish" shall be obtained by the project proponent as well as the individual units in the industrial estate from Punjab Pollution Control Board under Air (Prevention & Control of Pollution) Act, 1981 and Water (Prevention & Control of Pollution) Act, 1974 and a copy of the same shall be submitted to the Ministry of Environment & Forests / State Level Environment Impact Assessment Authority before the start of any construction work at site.
- ii) All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase.
- iii) The approval of competent authority shall be obtained for structural safety of the buildings due to earthquakes, adequacy of firefighting equipment's etc. as per National Building Code including protection measures from lightning.
- iv) Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, disposal of waste water & solid waste in an environmentally sound manner, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- v) The project proponent shall impose a condition in their plot allotment letter to the effect that industry owner shall make agreement for disposal of Hazardous Waste with CTSDf, Nimbua.
- vi) The project proponent shall impose a condition in the allotment letter to the effect that the member units shall provide storage tanks for storage of effluent for monitoring the characteristics of effluent and to treat the same to meet the prescribed inlet norms before taking into the CETP for further treatment. Proper meters with recording facilities shall be provided to monitor the effluent quality and quantity to be sent to CETP.
- vii) The project proponent shall impose a specific condition in the allotment letter of larger plots having area more than 45 acres to the effect that adequate internalized parking facility for all kind of vehicles shall be provided within their individual premises to meet the parking requirement.

#### **II. Construction Phase:**

- i) CETP based on Zero discharge shall be located at the farthest point from the Buddha nallah in south direction of the project. The project proponent shall also make arrangements for connected industries to collect their waste water for treatment in CETP and to send back the treated water conveniently to the units as per their requirement for reuse.

- ii) The water requirement during construction shall be met through Private Mobile tankers as proposed by the project proponent. The project proponent shall use only treated sewage/wastewater for construction activities and no fresh water for this purpose will be used. A proper record in this regard should be maintained and available at site.
- iii) To achieve the Zero Liquid Discharge, waste water generated from different industrial operations should be properly collected, treated to the prescribed standards and then recycled or reused for the identified uses.
- iv) All the topsoil excavated during construction activities should be stored for use in horticulture / landscape development within the project site.
- v) Disposal of muck during construction phase should not create any adverse effect on the neighbouring communities and be disposed off after taking the necessary precautions for general safety and health aspects of people with the approval of competent authority. The project proponent will comply with the provisions of Construction & Demolition Waste Rules, 2016. Dust, smoke & debris prevention measures such as wheel washing, screens, barricading and debris chute shall be installed at the site during construction including plastic / tarpaulin sheet covers for trucks bringing in sand & material at the site.
- vi) Construction spoils, including bituminous material and other hazardous material, must not be allowed to contaminate watercourses. The dump sites for such material must be secured, so that they should not leach into the groundwater.
- vii) Vehicles hired for bringing construction material to the site and other machinery to be used during construction should be in good condition and should conform to applicable air emission standards.
- viii) Fly ash based construction material should be used in the construction as per the provisions of Fly Ash Notification of September, 1999 and as amended on August, 2003 and notification No. S.O. 2804 (E) dated 03.11.2009.
- ix) Water demand during construction should be reduced by use of ready mixed concrete, curing agents and other best practices.
- x) The project proponent shall ensure taking necessary steps on urgent basis to improve the living conditions of the labour at site. Proper provision for the housing of construction labor within the site with all necessary infrastructure and facilities such as health facility, sanitation facility, fuel/LPG for cooking, along with safe drinking water, medical camps, and toilets for women, creche for infants. The housing may be in the form of temporary structures to be removed after the completion of the project. Details of provisions should be submitted to PPCB at the time of obtaining CTE.
- xi) The project proponent shall provide electromagnetic flow meter at the outlet of the water supply, outlet of the STP and any pipeline to be used for re-using the treated wastewater back into the system for flushing and for horticulture purpose/green etc.
- xii) The project proponent shall provide electromagnetic flow meters at the inlet of CETP, at the reject of RO system leading to the MEE and at the permeate line leading back into the process water system & shall maintain the records for the same.
- xiii) The project proponent will provide dual plumbing system for reuse of treated domestic wastewater for flushing/ HVAC purposes etc. and colour coding of different pipe lines carrying water/wastewater/ treated wastewater as follows:
  - a) Fresh water : Blue
  - b) Untreated wastewater : Black



- c) Treated wastewater : Green  
(for reuse)
- d) Treated wastewater : Yellow  
(for discharge)
- e) Storm water : Orange

- xiv) Fixtures for showers, toilet flushing and drinking should be of low flow either by use of aerators or pressure reducing devices or sensor based control.
- xv) Separation of drinking water supply, treated sewage supply and treated permeate line leading back to the process water should be done by the use of different colors.
- xvi) The project proponent shall make efforts to ensure 10% reduction of overall power demand which shall be met by solar system including the provision of solar water heating /chilling etc.
- xvii) The project proponent shall install Solar Power Plant in the project for illuminating street lights and park lights by utilizing 30% of the rooftop area of the PSIEC owned buildings like common Facilitation Centre and waterworks and STPs buildings. All individual plot owners will also install solar energy based lighting and water lighting and heating systems and the same shall be incorporated in the terms and conditions of the agreement of the plot owners for implementation.
- xviii) For conservation of electricity and to reduce energy losses, the Project Proponent shall ensure that the electrical voltage is stepped down from 66 KV to 33/11 K.V and distributed at this level and finally brought to 440 volts. The project proponent shall ensure obtaining prior permission from the SE, PSPCL regarding power demand of 2 MVA.
- xix) For better environmental safeguards, the project proponent shall provide sufficient number of transformers of adequate capacities for environmentally sound power distribution.
- xx) The diesel generator sets to be used during construction phase should conform to the provisions of Diesel Generator Set Rules prescribed under the Environment (Protection) Act, 1986.
- xxi) The Project proponent shall abide by the provisions of Solid Waste Management Rules, 2016. The solid waste generated should be properly collected and segregated at site. The recyclable solid waste shall be sold out to the authorized vendors and inert waste shall be sent to disposal facility. The Bio-degradable solid waste shall be adequately treated as per the scheme submitted by the project proponent. Prior approval of competent authority should be obtained, if required.
- xxii) The project proponent shall construct well-managed collection system to store roof top rain water in rain water harvesting tank which will be re-utilized for Industrial and Firefighting purposes.
- xxiii) Artificial Rain Water recharging shall be carried out as proposed by adopting 12 ponds located in the Villages namely Doaba Bhaini, Sahibana, Mehlon, Kidana Khurd, Kidana Kalan, Khasi Khurd, Jiwanpur, Boothgarh to recharge the rain water @9,11,404 cum /annum i.e. double recharge will be done against the annual fresh water pumpage of 4,55,400 m<sup>3</sup> as required by CGWA for over exploited areas. Rain water shall be recharged only after providing adequate treatment to remove suspended matter, oil & grease etc. as per the CGWA guidelines and ensuring that rainwater being recharged is not contaminated with any chemicals, pesticides, insecticides, chemical fertilizer, etc. Groundwater Recharging System including rehabilitation of ponds on Baba Seechewal Model & its implementation and maintenance shall be done as per the plan submitted to SEIAA during the meeting.
- xxiv) Weep holes in the compound walls shall be provided to ensure natural drainage of rain water in the catchment area during the monsoon period.

- xxv) The project proponent shall make an arrangement for constructing 4 lane road as proposed for connecting the project site with NH95/NH5.
- xxvi) The project proponent shall ensure that Green Buffer in the form of Green belt based on "CPCB Guidelines of Green Belt" to a width of 15 meters is maintained along the periphery of its Industrial Area as proposed in the undertaking along with revised layout plan dated 28.07.2018. Further, all individual plot owners will also cover 33% of their plot area as green area and the same will be incorporated in the terms and conditions of the agreement of the plot owners for implementation. The Green belt / green buffer zone shall be developed on priority basis within the main area development project and micro irrigation will be adopted for fulfilling the irrigation requirement of the Green Buffer along the boundary wall of the project, for conservation of water resources and maintenance of Green Belt.
- xxvii) The project proponent shall ensure construction of 100 ft. road for connecting various important buildings and industrial units with the adjoining villages to enable easy access to the project by the local population.
- xxviii) The project proponent shall provide a Skill Development Facility for imparting various types of Development/ Capacity building training.
- xxix) The responses/commitments made to the issues raised during public hearing shall be complied with in letter and spirit, and action taken shall be submitted to the SEIAA, Punjab.
- xxx) Any hazardous waste generated during construction phase shall be applicable rules and norms with necessary authorization of the Punjab Pollution Control Board.
- xxxi) The project proponent shall install Online Continuous Monitoring System (OCMS) within the project premises, for continuous online monitoring of the environment related data and transfer of data to CPCB and PPCB servers.

### III. Operation Phase and Entire Life

- (i) "Consent to operate" shall be obtained from Punjab Pollution Control Board under Air (Prevention & Control of Pollution) Act, 1981 and Water (Prevention & Control of Pollution) Act, 1974 and a copy of the same shall be submitted to the Ministry of Environment & Forests / State Level Environment Impact Assessment Authority at the time of start of operation.
- (ii) The total water requirement for the project will be 9780 KLD which includes process water @6060 KLD & domestic water @3720 KLD. Demand of process water shall be met by through 4016 KLD treated RO water and the remaining through Sidhwan Canal/ Ground water. Demand of domestic water shall be met through 1326 KLD treated sewage water for flushing and the remaining through Sidhwan Canal/ ground water. The ground water abstraction should not be more than the quantity@1518 KLD for which application has been submitted to CGWB.
- (iii) a) The total domestic wastewater generation from the project will be 3176 KLD, which will be treated in STPs of capacity 4 MLD followed by UF to be installed within the project premises. As proposed, reuse of treated domestic wastewater and discharge of surplus treated wastewater @3176 KLD shall be as below:

S.No.	Season	For Flushing purposes (KLD)	Plantation as per Karnal Technology (24 acre)	Green Area 27.66 acre (KLD)
1.	Summer	1326	1234	616
2.	Winter	1326	1649	201
3.	Rainy	1326	1794	56

- b) Effluent will be generated from all small industrial units will be treated in CETP of 5 MLD based on ZLD technology equipped with two stage RO and MEE.
- c) Storage tank of adequate capacity shall be provided for the storage of treated wastewater and all efforts shall be made to re-use the same. Surplus treated wastewater shall be utilized for horticulture area/ plantation purposes to be developed as per Karnal technology.
- (iv) The project proponent shall ensure that the natural flow of run-off water be continued without any disturbance/obstruction.
- (v) The project proponent shall ensure safe drinking water supply to the habitants.
- (vi) A proper record regarding groundwater abstraction, water consumption, its reuse and disposal shall be maintained on daily basis and shall maintain a record of readings of each such meter on daily basis.
- (vii) Rainwater recharging system proposed by adopting 12 nos village ponds shall be operated and maintained properly as per CGWA guidelines.
- (viii) Solid wastes will be appropriately segregated (at source by providing bins) into Bio-degradable and non- bio-degradable components. Bio-degradable waste will be converted to manure using mechanical composter. The Non-Biodegradable waste will be handed to authorized waste pickers. Inert waste will be sent to Municipal dumping site. A proper record in this regard shall be maintained
- (ix) Hazardous waste/E-waste should be disposed off as per Rules applicable and with the necessary approval of the Punjab Pollution Control Board.
- (x) The project proponent will handle and dispose off the biomedical waste to be generated from the hospital to be established in the premises and obtain Authorization from Punjab Pollution Control Board, as per provision of Bio Medical (Management & Handling) Rules, 1998
- (xi) 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. Parking Space and Traffic Management Plan shall be followed as per guidelines laid under the Punjab Urban Planning and Development Building Rules, 2017 for all categories of usages within the project. Common parking area of 1.2 acres shall be provided to cater needs of small plot cluster having plot area less than 45 acres. Large plots having area more than 45 acres shall have their own independent adequate internalized parking arrangement for all kind of vehicles. The green belt along the periphery of the plot shall achieve attenuation factor conforming to the day and night noise standards prescribed for industrial land use.
- (xii) Solar power plant and other solar energy related equipments shall be operated and maintained properly.
- (xiii) A report on the energy conservation measures conforming to energy conservation norms should be prepared incorporating details about machinery of air conditioning, lifts, lighting, building materials, R & U Factors etc. and submitted to the respective Regional office of MoEF, the Zonal Office of CPCB and the SPCB/SEIAA in three months' time.

## **PART B – General Conditions :**

### **I. Pre-Construction Phase**

- a) This environmental clearance will be valid for a period of seven years from the date of its issue or till the completion of the project, whichever is earlier.
- b) The project proponent should advertise in at least two local newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded environmental clearance and copies of clearance letters are available with the Punjab Pollution Control Board. The advertisement should be made within seven days from the day of issue of the clearance letter and a copy of the same should be forwarded to the Regional Office, Ministry of Environment & Forests, Chandigarh and SEIAA, Punjab.

- c) The project proponent shall obtain permission from the CGWA for abstraction of groundwater & digging of borewell(s) and shall not abstract any groundwater without prior written permission of the CGWA, even if any borewell(s) exist at site.
- d) A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zilla Parishad/ Municipal Corporation, Urban local body and the local NGO, if any, from whom suggestions / representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.

## **II. Construction Phase**

- (a) The project proponent shall adhere to the commitments made in the Environment Management Plan for the construction phase and shall spend minimum amount of Rs. 6781.5 Lacs as capital cost & Rs.20.7 lacs as recurring cost as proposed in the EMP.

## **III. Operation Phase and Entire Life**

- a. The entire cost of the environmental management plan will continue to be borne by the project proponent and shall spend minimum amount of Rs. 39 lacs /annum as recurring cost as proposed in the EMP.
- b. The project proponent shall undertake the following activities under Corporate Environment Responsibility programme by keeping a budgetary amount (2% of the project cost i.e. 10 crore) which will be spent during five years after commencement of the project:
  - i) Providing training to the women for self-help to be self-dependent and to improve their skill and economic condition, Setting up Computer Literacy Centers.
  - ii) Training on subsidized rates will be given to the candidates of nearby villages.
  - iii) Health Checkups and Medical Camps Sanitation & Hygiene Awareness Camps once in every quarter of a year in the villages around the project site. Dispensary will be made available for the use of villagers.
  - iv) Providing uniforms and books to the school children, Spreading the light of education by providing scholarship or financial assistance to underprivileged children and meritorious students for their higher & technical education.
  - v) Organizing sports events & tournaments and providing financial aid to the eligible candidates for coaching and proper training.
  - vi) Providing maintenance & development of the public park(s) situated in the study area.
- c. The diesel generator sets to be provided shall conform to the provisions of Diesel Generator Set Rules prescribed under the Environment (Protection) Act, 1986. The exhaust pipe of DG set if installed must be minimum 10 m away from the building or in case it is less than 10 m away, the exhaust pipe shall be taken upto 3 m above the building.

### **PART-C – Conditions common for all the three phases i.e. Pre-Construction Phase, Construction Phase and Operation Phase & Entire Life:**

- i) The environmental clearance has been granted subject to "Category A Category B industry and/or any other project/activity except CETP requiring environmental clearance under EIA notification, 14.09.2006 will not be allowed to be established in the industrial area.
- ii) Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

- iii) A first aid room will be provided in the project both during construction and operation phase of the project.
- iv) Construction of the STP, CETP, solid waste, e-waste, hazardous waste, storage facilities tubewell, DG Sets, Utilities etc, earmarked by the project proponent on the layout plan, should be made in the earmarked area only. In any case the position/location of these utilities should not be changed later-on.
- v) The environmental safeguards contained in the application of the promoter / mentioned during the presentation before State Level Environment Impact Assessment Authority/State Expert Appraisal Committee should be implemented in letter and spirit.
- vi) Ambient air & noise levels should conform to prescribed standards both during day and night. Incremental pollution loads on the ambient air quality, noise especially during worst noise generating activities, water quality and soil should be periodically monitored during construction phase as well as operation & entire life phase as per the MoEF&CC guidelines and all the mitigation measures should be taken to bring down the levels within the prescribed standards.
- vii) All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, Forest (Conservation) Act, 1980 and Wildlife (Protection) Act, 1972 etc. shall be obtained, by project proponents from the competent authorities including Punjab Pollution Control Board and from other statutory bodies as applicable. The project proponent shall also obtain permission from the NBWL, if applicable.
- viii) The State Environment Impact Assessment Authority, Punjab reserves the right to add additional safeguards/ measures subsequently, if found necessary, and to take action including revoking of the environmental clearance under the provisions of the Environmental (Protection) Act, 1986, to ensure effective implementation of the suggested safeguards/ measures in a time bound and satisfactory manner.
- ix) A proper record showing compliance of all the conditions of environmental clearance shall be maintained and made available at site at all the times.
- x) The project proponent shall also submit half yearly compliance reports in respect of the stipulated prior environmental clearance terms & conditions including results of monitored data (both in hard & soft copies) to the respective Regional office of MoEF, the Zonal Office of CPCB, the SPCB and SEIAA, Punjab on 1<sup>st</sup> June and 1<sup>st</sup> December of each calendar year.
- xi) The environmental statement for each financial year ending 31st March in Form-V as mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions.
- xii) The project proponent shall submit action plan specifying the timeline for completion of activities under Corporate Social Environment Responsibility to the concerned Regional office of Punjab Pollution Control Board for the monitoring of the same, within 30 days from the date of issuance of the environmental clearance letter.
- xiii) Officials from the Regional Office of Ministry of Environment & Forests, Chandigarh / State Level Environment Impact Assessment Authority / State Level Expert Appraisal Committee / Punjab Pollution Control Board who would be monitoring the implementation of environmental safeguards should be given full cooperation, facilities and documents / data by the project proponents during their inspection. A complete set of all the documents submitted to State Environment Impact Assessment Authority should be forwarded to the APCCF, Regional Office of Ministry of Environment & Forests, Chandigarh.
- xiv) In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by State Environment Impact Assessment Authority, Punjab.

- xv) Environmental clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ Petition (Civil) No. 460 of 2004 as may be applicable to this project and decisions of any Competent Court, to the extent applicable.
- xvi) The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF&CC, SEIAA, Punjab the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels for all the parameters of NAAQM standards shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
- xvii) The inlet and outlet point of natural drain system should be maintained with adequate size of channel for ensuring unrestricted flow of water. The unpaved area shall be more than or equal to 20% of the recreational open spaces.
- xviii) Environmental Management Cell shall be formed during operation phase which will supervise and monitor the environment related aspects of the project.
- xix) The plantation should be provided as per SEIAA guidelines and as per notification dated 09.12.2016 issued by MoEF&CC, New Delhi.
- xx) 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.

  
Member Secretary (SEIAA)

**REGISTERED**

Endst. No. \_\_\_\_\_

Dated \_\_\_\_\_

A copy of the above is forwarded to the following for information & further necessary action please.

1. The Secretary to Govt. of India, Ministry of Environment and Forest, Paryavaran Bhawan, CGO Complex, Lodhi Road, New Delhi.
2. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-office Complex, East Arjun Nagar, New Delhi.
3. The Chairman, Punjab State Power Corporation Ltd, the Mall, Patiala.
4. The Deputy Commissioner, Ludhiana.
5. The Chairman, Punjab Pollution Control Board, Vatavaran Bhawan, Nabha Road, Patiala.
6. The Advisor (Environment), Ministry of Environment and Forest, Northern Regional Office, Bays No.24-25, Sector-31-A, Chandigarh. The detail of the authorized Officer of the project proponent is as under:
  - a) Name of the applicant Sh. Sohan Lal Garg, Executive Engineer-I (*Authorized Signatory*)
  - b) Mobile/Ph. Number 0172-2702301
  - c) Email ID psiec\_chd@yahoo.co.in
7. The Chief Town Planner, Department of Town & Country Planning, 6<sup>th</sup> Floor, PUDA Bhawan, Phase-8, Mohali
8. Monitoring Cell, Ministry of Environment and Forest, Paryavaran Bhawan, CGO Complex, Lodhi Road, New Delhi.
9. The Environmental Engineer (Computers), Punjab Pollution Control Board, Head Office, Patiala for displaying this document on the web site of the State Level Environment Impact Assessment Authority.

  
Member Secretary (SEIAA)