Proceedings of the 245th meeting of the State Environment Impact Assessment Authority (SEIAA) held on 06.04.2023 (Thursday) in the Conference Hall No.02, 1st Floor of MGSIPA at 10:30 AM, MGSIPA Complex, Sector-26, Chandigarh through Hybrid Mode.

The meeting was attended by the following members:

1. Sh. H S Gujral,
   Chairman, SEIAA
2. Dr. Rupanjali Karthik, IAS,
   Member Secretary, SEIAA
   (Through Video Conference)
3. Dr. Adarsh Pal Vig, Member SEIAA -cum-
   Chairman, Punjab Pollution Control Board, Patiala

Er Nikhil Gupta, Environmental Engineer along with other supporting staff of SEIAA attended the meeting.

Item No. 01: Confirmation of the proceedings of the 241st , 242nd , 243rd and 244th meeting of the State Environment Impact Assessment Authority held on 16.03.2023, 24.03.2023, 31.03.2023 and 05.04.2023.

SEIAA was apprised that the proceedings of its 241st meeting held on 16.03.2023 were circulated through email on 21.03.2023. Further, the said proceedings were uploaded on Parivesh portal on 21.03.2023. The proceedings of 242nd meeting of SEIAA were circulated through email on 31.03.2023. No observations were received w.r.t 241st meeting of SEIAA and no further observations were received on the proceedings of the 242nd meeting of SEIAA. Further, the proceedings of the 243rd and 244th meetings held on 31.03.2023 and 05.04.2023 are under preparation. SEIAA noted the same and confirmed the proceedings of its 241st and 242nd meetings held on 16.03.2023 and 24.03.2023 respectively.

Item No. 02: Action taken on the proceedings of 239th ,240th, 241st, 242nd, 243rd and 244th meetings of State Environment Impact Assessment Authority held on 01.03.2023, 02.03.2023, 16.03.2023, 24.03.2023, 31.03.2023 and 05.04.2023.

SEIAA was apprised that necessary action on the decisions taken in its 239th, 240th, 241st, 242nd, 243rd and 244th meetings held on 01.03.2023, 02.03.2023, 16.03.2023, 24.03.2023, 31.03.2023 and 05.04.2023 respectively is being taken. It was noted that the backlog of meetings in respect of which requisite action is pending has increased and this pendency should be addressed urgently.

Item No. 245.02: Application for Environment Clearance under EIA notification dated 14.09.2006 for the expansion of API Bulk Drug Pharmaceutical manufacturing unit by "Vardhman Chemtech Pvt Ltd at Village Nimbua, PO Rampur Sainian, Derabassi, District SAS Nagar, Punjab, (Proposal No. SIA/PB/IND3/249003/2021).

Background

The industry was granted Environmental Clearance under EIA notification dated 14.09.2006 for the production of following 11 pharmaceutical products vide MoEF letter No. J-11011/312/2005-IA II (I) dated 09.01.2006 in the name of M/s Vardhman Chemtech Pvt Ltd.

Sr. No.	Name of Product	Product Qty
1.	Phenyl acetic acid	1.0 TPD
2.	Triethylamine	1.0 TPD
3.	Activated Manganese dioxide	0.50 TPD
4.	Sodium/Potassium Ethyl Hexonate	1.0 TPD
5.	Methyl aceto acetate	0.250 TPD
6.	Cloxacycline sodium monohydrate	0.400 TPD
7.	1,3-Dioxane 4- Acetic Acid-6- (Pynomethyl)-2,2 Dimethyl (1,1 dimethyl ethyl) Ester	0.025 TPD
8.	Benzene Butanamide 4- floro-(2-methyl-1-oxo-prpyl)-4-OXO-N_Beta-Diphenyl	0.025 TPD
9.	Dene Salts	0.500 TPD
10.	Mixed Solvents	1.0 TPD
11.	Ammonium Sulphate/ammonium Chloride	0.250 TPD

The industry was granted permission for Change in product mix from Punjab Pollution Control Board vide letter no. 4439 dated 12.08.2015 for the following products.

Sr. No.	Name of the products/bye products	Capacity (TPD)
1	CMIC Chloride	0.275
2	Ester for Amoxycillin	1.150
3	Ester for Ampicillin	0.70
4	Cloxacillin Sodium Monohydrate	0.65
5	Gabapentin	0.05
6	Amoxycillin Trihydrate	1.10

The industry was granted Consent to Operate under the provision of Water Act 1974 & Air Act 1981 in the name of M/s Vardhman Chemtech Pvt Ltd, Village Derabassi, SAS Nagar which is valid upto 31.03.2024.

The industry has submitted application for expansion under EIA notification dated 14.09.2006 for the manufacturing of following pharmaceutical products:

Sr. No.	Name of the products/bye products	Capacity (TPD)
1	CMIC Chloride	0.275
2	Ester for Amoxycillin	1.150
3	Ester for Ampicillin	0.70
4	Cloxacillin Sodium Monohydrate	0.65
5	Gabapentin	0.05
6	Amoxycillin Trihydrate	1.10
7	Ampicillin Trihydrate	0.675
8	Lavetriracetam	0.060
9	Sultanicillin	0.020
10	Rosuastin	0.080
11	Meropenam crude	0.060
12	Amikacin	7.0
13	Levofloxacin	0.20
14	Ofloxacin	0.100
	TOTAL PRODUCTION	**12.12 TPD**

The industry has submitted application form, Pre-feasibility report, Topo Sheet of 10 Km of buffer area, conceptual plan and other relevant documents through Parivesh Portal. The industry has also submitted copy of the certified compliance report issued by MoEF&CC.

The cost of expansion for the industrial project is Rs. 2 Crores. The industry has deposited Rs. 20,000/- vide UTR No. MMT/IMPS/136412601359 dated 30.12.2021. The fee deposited by the Project Proponent has been checked & verified by supporting staff SEIAA.

The Project is covered under Schedule 5(f) & Category 'B2' as per EIA Notification, 2006 in light of O.M dated 27.03.2020, 15.10.2020, & 16.07.2021. In the latest OM dated 16.07.2021, it has been clarified as under:

"All proposals for projects or activities in respect of Active Pharmaceutical Ingredients (API), received from 16th July, 2021 to 31st December, 2021, shall be appraised, as Category 'B2' projects, provided that any subsequent amendment or expansion or change in product mix, after the 31st December, 2021, shall be considered as per the provisions in force at that time."

Since, the project has applied for obtaining Environmental Clearance on 31.12.2021, the project can be considered as B2 category project.

The Project Proponent has undertaken that the information given in the application is true to the best of his knowledge and belief and no facts have been concealed therefrom. Further, he

is aware that in case any information is found to be false or misleading at any stage, the project will be rejected and clearance given, if any, to the project will be revoked at their risk and cost. The construction status report submitted by Punjab Pollution Control Board vide letter no. 1528 dated 04.03.2022 is as under:

It is intimated that vide e-mail dated 31.01.2020, SEIAA has sought the report w.r.t construction status, status of physical structures within 500 m radius of the site and compliance regarding siting criteria for this project.

The industry has submitted that they intends to shut down the production of one product i.e. Magnesium dioxide from the existing products and intends to manufacture additional products as mentioned in the application. Eventually, after grant of Environmental Clearance, the industry shall manufacture products as given in the application.

It is further intimated that vide notification no. 3/4/87-31B1/311 dated 09.01.1990 issued by Department of Industries, Government of Punjab, entire revenue estate of Village Nimbua is covered under FEZ area and the industry was established by virtue of its location in FEZ area and any kind of industry can established in the revenue estate of this village. Furthermore, the Punjab Regional & Town Planning & Development Board in its 26th meeting held on 27.05.2013 has decided as under:

"ਪੰਜਾਬ ਸਰਕਾਰ ਵੱਖ ਵੱਖ ਮਾਸਟਰ ਪਲਾਨਾਂ ਰੀਜਨ ਪਲਾਨ ਗਮਾਡਾਂ ਵਿੱਚ ਚੱਲ ਰਹੇ ਰੈਡ ਕੈਟਾਗਰੀ ਵਾਲੇ ਉਦਯੋਗ ਆਪਣੇ ਉਤਪਾਦਨ ਵਿੱਚ ਬਿਜਲੀ ਦਾ ਲੋਡ ਆਦਿ ਦੀ ਸਮਰਥਾ ਵਿੱਚ ਵਾਧਾ ਕੇਵਲ ਆਪਣੇ ਮੌਜੂਦਾ ਪਰਮਿਸੀਸ ਅਧੀਨ ਰਕਬੇ ਦੇ 50% ਰਕਬੇ ਤੱਕ ਹੀ ਕਰ ਸਕਣਗੇ।"

Further, the industry has not started any additional construction w.r.t proposed expansion project as verified during visit on 14.02.2022. It is pertinent to mention here that common Hazardous waste disposal facility falls within the 500m of the site."

Deliberations during 240th meeting of SEAC held on 20.02.2023.

The meeting was attended by the following:

(i) Sh. Sandeep Singh, Consultant, M/s. Chandigarh Pollution Testing Laboratory.

The Committee allowed the environmental consultant & Project Proponent to present the salient features of the application proposal. Thereafter, the environmental consultant present the case as under:

Sr. No.	Description	Details
1	**Basic Details**	
1.1	Name of Project & Project Proponent:	M/S Vardhman Chemtech Ltd Mr. Munish Kumar General Manager
1.2	Proposal:	SIA/PB/IND3/249003/2021

1.3	Location of Industry:	Village- Nimbua, PO Rampur Sainian, Derabassi, SAS Nagar
1.4	Details of Land area & Built up area:	Total land area – 18603.83 sq m
1.5	Category under EIA notification dated 14.09.2006	B2 As per S.O. 2859(E) dated: 16.07.2021 "All proposals for projects or activities in respect of Active Pharmaceutical Ingredients (API) received up to the 31st December 2021, shall be appraised as Category 'B2' Projects.
1.6	Cost of the project	Rs. 11.95 Cr. (After expansion of Rs. 2 Crores)
1.7	Compliance of Public Hearing Proceedings	NA
2.	**Site Suitability Characteristics**	
2.1	Whether site of the industry is suitable as per the provisions of Master Plan:	The Industry is an existing unit and has proposed to carryout expansion in the existing land area only.
2.2	Whether supporting document submitted in favour of statement at 2.1, details thereof: (CLU/building plan approval status)	The Industry is an existing unit and has proposed to carryout expansion in the existing land area only. The industry had been granted with Consents of Punjab Pollution Control Board and Environmental Clearance for the total land area of 5 acres.
3	**Forest, Wildlife and Green Area**	
3.1	Whether the industry required clearance under the provisions of Forest Conservation Act 1980 or not:	The industry has not submitted a self-declaration in the prescribed proforma.
3.2	Whether the industry required clearance under the provisions of Punjab Land Preservation Act (PLPA) 1900:	The industry has not submitted a self-declaration in the prescribed proforma.
3.3	Whether industry required clearance under the provisions of Wildlife Protection Act 1972 or not:	No wildlife sanctuary is involved in the vicinity or study area if the project site. Thus, the industry does not require clearance under the provisions of Wildlife Protection Act 1972.
3.4	Whether the industry falls within the influence of Eco-Sensitive Zone or not. (Specify the distance from the nearest Eco sensitive zone)	Not applicable
3.5	Green area requirement and proposed No. of trees:	Greenbelt will be developed in 7484.07 m2 area of the total area of the proposed project. Total 300 trees have already been planted and 822 plants will be planted.

4	**Water**	
4.1	Total fresh water requirement:	

S. NO.	DESCRIPTION	Fresh water requirement (Existing) (KLD)	Fresh water requirement (Proposed) (KLD) including existing	Source of Water
1	Process water	20	31.5	Fresh Water
2	Floor & Reactor Washings	1.5	2	Fresh Water
3	Boiler feed	25	40	RO Permeate = 16.9 Fresh Water = 23.1
4	Cooling Tower (makeup)	50	60	MEE Condensate = 39.16 Fresh Water=20.84
5	D.M Plant regeneration	2.5	4	Fresh Water
6.	Others	2.5	5	Fresh Water
7.	Domestic	5.0	11.0	Fresh Water
TOTAL		**106.5**	**153.5**	**Fresh = 97.44 KLD Recycled = 56.06 KLD**

4.2	Source:	Tubewell
4.3	Whether Permission obtained for abstraction/supply of the fresh water from the Competent Authority (Y/N) Details thereof	Application for permission for abstraction of ground water is filed with PWRDA.
4.4	Total water requirement for domestic purpose:	11.0 KLD
4.5	Total wastewater generation:	

(a) HTDS generation from existing and Proposed Products

Sr. No.	Quantity of wastewater generation from	Quantity of wastewater generation from manufacturing of additional	Total quantity of wastewater generation from the products to be

	manufacturing of existing products		products to be manufactured		manufactured after expansion	
1.	Source	Quantity (KLD)	Source	Quantity (KLD)	Source	Quantity (KLD)
2.	Process	18.6	Process	20.56	Process	39.16

(b) LTDS generation from existing and proposed products

Sr. No.	Quantity of wastewater generation from manufacturing of existing products		Quantity of wastewater generation from manufacturing of additional products to be manufactured		Total quantity of wastewater generation from the products to be manufactured after expansion	
	Source	Quantity (KLD)	Source	Quantity (KLD)	Source	Quantity (KLD)
1	Floor & Reactor washings	1.5	Floor & Reactor washings	0.5	Floor & Reactor washings	2
2	Boiler	1	Boiler	0.5	Boiler	1.5
3	Cooling tower	1.5	Cooling tower	0.5	Cooling tower	2.0
4	D.M Regeneration	2.5	D.M Regeneration	1.5	D.M Regeneration	4
5	Others	2.5	Others	2.5	Others	5
6	Domestic	4	Domestic	5.0	Domestic	9.0
	TOTAL	13.0	TOTAL	10.5	TOTAL	23.5

(c) Total wastewater generation from existing and proposed products

Sr. No.	Quantity of wastewater generation from manufacturing of existing products (KLD)			Total quantity of wastewater generation from the products to be manufactured after expansion (KLD)		
	Low TDS	High TDS	Total	Low TDS	High TDS	Total
1.	13	18.6	31.6	23.5	39.16	62.66

4.6	Treatment methodology for domestic wastewater: (STP capacity, technology & components)	Presently, low TDS industrial effluent generation is about 13 KLD, which will become 23.5 KLD after expansion, which will be treated in the ETP of capacity 30 KLD. The quantity of high TDS will increase from 18.6 KLD to 39.16 KLD after expansion, which will be treated in MEE of capacity of 50 KLD after neutralization.
4.7	Treatment methodology for industrial wastewater: *(ETP capacity, technology & components)*	ETP capacity – 30 KLD MEE capacity – 50 KLD
4.8	Details of utilization of treated wastewater into green area in summer, winter and rainy season:	Treated waste water will be used for plantation within the industrial premises
4.9	Utilization/Disposal of excess treated wastewater.	NA
4.10	**Cumulative Details:** i. The total water requirement of the industry shall be 153.5 KLD which shall be abstracted from ground. Out of the said quantity of water, 31.5 KLD of fresh water shall be utilized in the process, 2 KLD shall be utilized for washing purpose, 60 KLD shall be utilized in cooling tower, 40 KLD shall be utilized in boiler, 4 KLD shall be utilized as DM water, 11 KLD shall be utilized for domestic purpose and remaining 5 KLD shall be utilized for other purpose. ii. The total wastewater generation from the industry in form of HTDS shall be 30 KLD and LTDS shall be 23.5 KLD. The total quantity of effluent generated from cooling tower, boiler blow down, DM water, domestic purpose and floor washing & others shall be 2 KLD, 1.5 KLD, 4 KLD, 9 KLD, 2 KLD & 5 KLD respectively. iii. Entire quantity of 23.5 KLD of effluent generated from the industry except HTDS effluent shall be treated in the ETP of capacity 30 KLD. iv. The treated wastewater of total quantity of 23.5 KLD generated from ETP shall be further treated in RO, out of which 5.6 KLD of RO reject shall be sent to MEE for further treatment and remaining 16.9 KLD of RO permeate shall be utilized back in the process and other utilities (boiler makeup and cooling tower makeup). Furthermore, the total HTDS effluent of 35.6 KLD shall be treated in MEE of capacity 50 KLD thereby generating MEE condensate of 39.16 KLD. The MEE concentrate of quantity 5.34 KLD along shall be further treated in the ATFD. The condensate @ 2.5 KLD and slurry @ 1.84 KLD shall be generated from ATFD.	
4.11	Rain water harvesting proposal:	Outside: To compensate for withdrawal from groundwater, the industry has adopted one pond of area 17500 sqm at village, Haibatpur,

		Derabassi, SAS Nagar for carrying out rain water harvesting.

4.12 Details of machinery:

S.No.	Description	Existing	Proposed	After Expansion
1	Reactors	32 No.	12No.	44 No.
2	Cooling Tower	1x50 TR 1x100 TR 2x200 TR 2x250 TR 1x300 TR 1x500 TR	1x500 TR	1x50 TR 1x100 TR 2x200 TR 2x250 TR 1x300 TR 2x500 TR
3	Chilling Plant	1x126 TR 1x66 TR	-	1x126 TR 1x66 TR
4	Brine Plant	1x70TR 1x30TR	1x80 TR	1x70TR 1x30TR 1x80 TR
5	Solvent recovery Plant	5 No.	-	5 No.
6	Boiler	1x6 TPH 1x3TPH	-	1x6 TPH 1x3TPH
7	Transformer	1000 KVA (to be replaced)	1600 KVA	1600 KVA
8	Electricity Load	950 KW	500KW	1450 KW
9.	DG Sets	2x 500 KVA	1x500 KVA	3x 500 KVA
10	ETP	20 KLD (to be upgraded)	30 KLD	30 KLD
11	MEE	24 KLD (to be upgraded)	50 KLD	50 KLD

5 Air

5.1 Details of Air Polluting Machinery & Pollution load:

Particulars	Existing Products		Proposed Products	
Emissions	HCl mist from manufacturing of CMIC which is Intermediate of Cloxacillin and Ester which is intermediate of Amoxicillin and Ampicillin	Dispensing of raw material	Ammonia emissions from manufacturing of Amikacin	Dispensing of raw material
No. of stacks	1	1	1	1
Height of stack above	3m	3m	3m	3m

	roof level				
	Gas Volume (Nm^3/Hr)	1500	700	700	700
	Emission standards to be achieved (mg/Nm^3)	HCl mist=35	Hydrocarbon=25	Ammonia = 30	Hydrocarbon=25
	Load of Particulate Matter as PM (kg/day)	1.26	0.42	0.50	0.42

5.2	Measures to be adopted to contain particulate emission/Air Pollution	D.G. Set:- Canopy equipped DG set with adequate height will be installed Boiler:- Multicyclone as APCD followed by common two stage alkali scrubber shall be installed.
6	**Waste Management**	
6.1	Total quantity of solid waste generation	

Solid waste generation

Sr. No.	**Type of Waste**	**Generation (TPA)**		**Mode of Treatment & Disposal**
		Existing Products	**After proposed expansion**	
1.	Domestic Solid waste	6.6	8.25	Bio composting and it will be used as manure in Green Belt
2.	Fuel Ash	13.2	18	Will be sold out in the market for using fuel after blending with other fuel
Total		19.8	26.25	

6.2	Details of management and disposal of solid waste (Mechanical Composter/Compost pits)	**Domestic Solid Waste-** Bio composting and it will be used as manure in Green Belt **Fuel Ash-** Will be sold out in the market for using fuel after blending with other fuel
6.3	Details of management of Hazardous Waste.	

	Type of Waste	**Category (As per**	**Generation per day from (TPA)**		**Mode of**	

Sr. No.		Schedule)	Existing Products	After Expansion (Total)	Source of Generation	Storage	Mode of Treatment & Disposal
1	Residue and waste	28.1	18.97	18.97	Process	Drum Storage	Incineration at common TSDF
2	Spent Carbon	28.3	-	2	Process	Drum storage	Incineration at common TSDF
3.	Distillation Residue	36.1	7.6	88.46	Solvent Recovery Plant	Drum storage	Incineration at common TSDF
4	Discarded containers/barrels, Liners	33.3	200	500	Raw material usage	As such	Reuse/Sale to the authorized recycler
5.	Sludge from treatment of wastewater	34.3	431.97	607.2	MEE Residue	HDPE bags	Common TSDF

7	Energy Saving & EMP	LED's will be used.
7.1	Power Consumption:	1450 KW
7.2	Energy saving measures:	LEDs will be used

EMP

S. No.	Title	Capital Cost Rs. Lakh	Recurring Cost Rs. Lakh
1	MEE	100.0	35.0
	ETP	30	10.0
2	Air Pollution Control (Installation of APCD)	15.0	33.0
3	Noise Pollution Control	2.0	0.2
4	Landscaping/ Green Belt Development	6.8	2.1
5	Solid/Hazardous Waste Management	5.0	3.0
6	Environment Monitoring and Management	--	2.0

7	Occupational Health, Safety and Risk Management	10.0	3.0
8	RWH	10.0	1.5
9	Energy conservation	5.0	0.50
10	Miscellaneous	4.0	--
	TOTAL	**Rs 187.8**	**Rs 90.3**

CER ACTIVITIES

ACTIVITY	**Funds Allocated in Lakhs**
Providing toilets in Govt school	3.0
Providing lab equipments in govt school	5.0
Tree plantation in nearby villages	3.0
Water coolers in nearby govt school	2.0
TOTAL	Rs 10.0

No one on behalf of the industry was present during the meeting. Further, the Environmental Consultant of the industry requested the Committee to defer the case up to the next meeting.

The Committee appraised the application proposal and after detailed deliberations, SEAC decided to defer the case till the receipt of reply of the below mentioned observations:

(i) The industry shall submit self-declaration to the effect that the industry does not require clearance under the provisions of the Forest Conservation Act 1980 and Wildlife Protection Act 1972 in the prescribed format.

(ii) The industry shall provide the details regarding disposal of condensate and slurry generated from Agitated Thin Film Dryer (ATFD).

(iii) The Committee observed the reply submitted by the industry vide letter dated 16.06.2022, in response to observations made by Regional Office, MoEF&CC, Chandigarh vide letter No. 5-71/2006-RO(NZ)/331 dated 30.05.2022, was incomplete. The Project Proponent shall provide the compliance report in this regard.

(iv) The Committee observed that the total area of the industry as per application proposal is 18603.83 sqm, whereas, it is 22258 sqm as per the KML file. The industry shall clarify the same.

(v) The industry shall submit the compliance of the General Conditions applicable to the project.

(vi) The industry shall submit the details of the energy saving measures adopted for energy conservation.

Deliberations during 242nd meeting of SEAC held on 20.03.2023.

The meeting was attended by the following:

(i) Mr. Munish Kumar, GM-HR, M/s Vardhman Chemtech Pvt Ltd.
(ii) Sh. Sital Singh, Environmental Consultant, M/s. Chandigarh Pollution Testing Laboratory.
(iii) Sh. Sandeep Singh, Consultant, M/s. Chandigarh Pollution Testing Laboratory.
During meeting, the Committee allowed the industry to present of reply of the observations as under:

Sr. No.	Observation	Reply
1.	The industry shall submit self-declaration in the prescribed format to the effect that the industry does not require clearance under the provisions of the Forest Conservation Act1980 and Wildlife Protection Act 1972.	Self-declaration in the prescribed format to the effect that the industry does not require clearance under the provisions of the Forest Conservation Act 1980 and Wildlife Protection Act 1972 submitted.
2.	The industry shall provide the details regarding disposal of condensate and slurry generated from Agitated Thin Film Dryer (ATFD).	The water balance of the proposed expansion including the existing water requirement submitted. The MEE condensate of 2.5 KLD and slurry of 1.84 KLD shall be generated from ATFD. The condensate will be used in the cooling tower as makeup water. Further, the slurry to the tune of 1.84KLD to be produced from ATFD, is hazardous in nature and the same will be sent to common TSDF.
3.	The Committee observed the reply submitted by the industry vide letter dated16.06.2022, in response to observations made by Regional Office, MoEF&CC, Chandigarh vide letter No. 5-71/2006-RO(NZ)/331 dated 30.05.2022, was incomplete. The Project Proponent shall provide the compliance report in this regard.	The compliance report submitted to Additional Director, MoEF&CC.
4.	The Committee observed that the total area of the industry as per application proposal is 18603.83 sqm, whereas, it is 22258 sqm as per the KML file. The industry shall clarify the same.	Revised KML uploaded
5.	The industry shall submit the compliance of the General Conditions applicable to the project.	Pointwise compliance of general conditions submitted.
6.	The industry shall submit the details of the energy saving measures adopted for energy conservation.	Details of energy saving measures submitted.

The Committee was satisfied with the presentation and subsequent reply given by the industry and Environmental consultant. After deliberations, SEAC decided to award 'Silver Grading' to the project proposal under category B2, Activity 5 (f) and to forward the application to SEIAA

with the recommendations to grant Environmental Clearance for expansion of API Bulk Drug Pharmaceutical manufacturing unit by "Vardhman Chemtech Pvt Ltd at Village Nimbua, PO Rampur Sainian, Derabassi, District SAS Nagar, Punjab subject to the following conditions: -

I. Statutory compliance

i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.

ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.

iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (in case of the presence of schedule-I species in the study area)

iv. The project proponent shall obtain the necessary permission from the Central Ground Water Authority/ competent authority concerned, in case of drawl of ground water and also in case of drawl of surface water required for the project. In case of non-grant of permission by CGWA for ground water abstraction, the industry shall make alternative arrangements by using surface water or treated city sewage effluent after obtaining permission from competent authority.

v. The project proponent shall obtain Consent to Establish/Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the Punjab State pollution Control Board/ Committee.

vi. The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.

vii. The project proponent shall comply with the siting criteria, standard operating practices, code of practice and guidelines if any prescribed by the SPCB/CPCB/MoEF&CC for such type of units.

viii. The project proponent shall comply with the CLU conditions imposed by competent authority, if any

ix. The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.

II. Air quality monitoring and preservation

i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.

ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.

iii. The project proponent shall install a system to carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g., PM10 and PM2.5 in reference to PM emission, and SO_2 and NO_x in reference to $S0_2$ and NO_x emissions) within and outside the plant area (at least at four locations one for small units) within and three outside the plant area at an angle of 120°each), covering upwind and downwind directions.

iv. To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. Sulphur content should not exceed 0.5% in the coal for use in coal fired boilers to control particulate emissions within permissible limits (as applicable). The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.

v. Storage of raw materials, coal etc shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.

vi. National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608(E) dated 21st July, 2010 and amended from time to time shall be followed.

vii. The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be complied with

viii. The DG sets shall be equipped with suitable pollution control devices and the adequate stack height so that the emissions are in conformity with the extant regulations and the guidelines in this regard.

ix. 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, maintain the record for the same and all the mitigation measures should be taken to bring down the levels within the prescribed standards.

III. Water quality monitoring and preservation

i. The project proponent shall provide online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

ii. The total wastewater generated from the unit will be segregated into two streams i.e., High TDS and Low TDS streams for effective and proper treatment of the same.

iii. The effluent discharge shall conform to the standards prescribed under the Environment (Protection) Rules, 1986, or as specified by the State Pollution Control Board while granting Consent under the Air/Water Act, whichever is more stringent.

iv. Total fresh water requirement shall not exceed the quantity of 153.5 KLD as proposed in the proposal application. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard.

v. Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.

vi. The Company shall store the rainwater from the roof tops of the buildings and utilize the same for different industrial operations within the plant.

vii. Water demand during construction should be reduced by use of ready mixed concrete, curing agents and other best practices.

viii. Provide electromagnetic flow meter at intake of water supply at the borewell for abstraction of ground water if any, outlet of the ETP/STP and any pipeline to be used for re-using the treated wastewater back into the system and for horticulture purpose/green belt etc.

ix. 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.

x. 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.

xi. 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.

IV. Noise monitoring and prevention

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

ii. The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation.

iii. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time

V. Energy Conservation measures

i. The energy sources for lighting purposes shall preferably be LED based.

ii. The project proponent shall make efforts to ensure the reduction of overall power demand which may be met by solar system including the provision of solar water heating or through any other innovative environment friendly techniques.

VI. Waste management

i. All the topsoil excavated during construction activities should be stored for use in horticulture / landscape development within the project site.

ii. Disposal of muck during construction phase should not create any adverse effect on the neighbouring communities and be disposed of 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.

iii. 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.

iv. Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm and the solvent transfer through pumps.

v. Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.

vi. The Project proponent shall abide by the provisions of Solid Waste Management Rules, 2016 (amended from time to time), if applicable.

vii. The company shall undertake waste minimization measures as below: -

   a. Metering and control of quantities of active ingredients to minimize waste.
   b. Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
   c. Use of automated filling to minimize spillage.
   d. Use of Close Feed system into batch reactors.
   e. Venting equipment through vapour recovery system.
   f. Use of high-pressure hoses for equipment clearing to reduce wastewater generation

VII. Green Belt

i. The green belt shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc.

ii. The Project Proponent shall develop green belt in 33% of the total land area with native tree species (having canopy type structure and especially trees, and not grass) before the completion of the project. The greenbelt shall inter alia cover the entire periphery of the unit provided that the number of trees to be planted should not be less than one tree per 80 sqm of the total project area. The canopy trees shall also be planted around the parking area to provide shade to the parked vehicles.

iii. The project proponent shall plant tall saplings having height not less than 6 ft. The proponent shall make adequate provision of funds for raising the plantation and subsequent maintenance for three years in the Environment Management Plan.

iv. The project proponent shall submit the progress of developing the green belt in the six-monthly compliance report.

VIII. Safety, Public hearing and Human health issues

i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.

ii. The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Firefighting system shall be as per the norms.

iii. The PP shall provide Personal Protection Equipment (PPE) as per the norms of Factory Act.

iv. Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.

v. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

vi. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.

vii. There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places.

viii. A first aid room will be provided in the project both during construction and operation phase of the project.

IX. Validity of Environmental Clearance.

i. 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.

X. Environmental 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 for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. A copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.

ii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of a senior Executive, who will report directly to the head of the organization.

iii. Action plan for implementing 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 separate accounts and will not be diverted for any other purpose. The details of the activities to be carried out under EMP & CER are as under:

S. No.	Title	Capital Cost Rs. Lakh	Recurring Cost Rs. Lakh
1	MEE	100.0	35.0
	ETP	30	10.0
2	Air Pollution Control (Installation of APCD)	15.0	33.0
3	Noise Pollution Control	2.0	0.2
4	Landscaping/ Green Belt Development	6.8	2.1
5	Solid/Hazardous Waste Management	5.0	3.0
6	Environment Monitoring and Management	--	2.0

7	Occupational Health, Safety and Risk Management	10.0	3.0
8	RWH	10.0	1.5
9	Energy conservation	5.0	0.50
10	Miscellaneous	4.0	--
	TOTAL	**Rs 187.8**	**Rs 90.3**

CER activities:

ACTIVITY	**Funds Allocated in Lakhs**
Providing toilets in Govt school	3.0
Providing lab equipments in govt school	5.0
Tree plantation in nearby villages	3.0
Water coolers in nearby govt school	2.0
TOTAL	**Rs 10.0**

The entire cost of the environmental management plan will continue to be borne by the project proponent for the lifetime of the Project. Year-wise progress of implementation of the action plan shall be reported to the Ministry/Regional Office along with the Six-monthly Compliance Report.

iv. Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

XI. Miscellaneous

i. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department etc. shall be obtained, by project proponent from the competent authorities including Punjab Pollution Control Board and from other statutory bodies as applicable.

ii. 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.

iii. 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.

iv. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of

which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.

v. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.

vi. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.

vii. The project proponent shall monitor the criteria pollutants level namely; PM10, S02, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.

viii. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.

ix. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.

x. The project proponent shall inform the Regional Office of the Ministry and PPCB, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production/ operation by the project.

xi. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.

xii. The project proponent shall abide by all the commitments and recommendations made in the ElA /EMP report, commitment made during Public Hearing and also that during their presentation to the SEAC and SEIAA.

xiii. No further expansion or modifications in the project shall be carried out other than those permitted in this EC without prior approval of SEIAA. In case of deviation or alterations in the project proposal from those submitted to the Ministry/SEIAA for clearance, a fresh reference shall be made to the Ministry/SEIAA, as applicable, to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.

xiv. The Regional Office, MoEF&CC, Chandigarh, Punjab Pollution Control Board and SEIAA/ SEAC members nominated for the purpose shall monitor compliance of the

stipulated conditions. The project authorities should extend full cooperation to the officer(s) entrusted with this monitoring by furnishing the requisite data/ information/monitoring reports.

XII. ADDITIONAL CONDITIONS:

i. The Environmental Clearance is granted to the project subject to the condition that industry shall obtain change of land use/building plan approval for the industrial purposes and submit a copy of the same to SEIAA. In case, CLU/building plan approval has been rejected for industrial use for any reason, SEIAA will not be responsible for the cost incurred on the project.

ii. 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.

iii. The Project Proponent shall install online monitoring system at inlet as well as at the outlet of ETP for monitoring various environmental parameters.

iv. The project proponent shall make necessary arrangements for the recovery and reuse of steam condensate resulting from the indirect steam applications and shall not allow to discharge such effluents into drain.

v. The project proponent shall provide advanced scrubbing systems with proper neutralizing media to handle the acidic/alkaline emissions from storage, handling & processing activities. Wherever required, packed bed scrubbers will also be provided. The suction and scrubbing systems shall also be designed to handle the inherent odours from such units.

vi. The project proponent shall provide the Air Pollution Control Devices as proposed by the PPCB to control the emissions generated from the boiler within the prescribed parameter.

vii. The project proponent shall practice rainwater harvesting to maximum possible extent. For this the Project Proponent shall adopt nearest village pond for carrying out rain water harvesting.

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 rain water etc is not impeded or disrupted in any manner.

Deliberations during 245th meeting of SEIAA held on 06.04.2023.

The meeting was attended by the following:

(i) Sh. Rajiv Behl, GM-Production, M/s Vardhman Chemtech Pvt Ltd.
(ii) Sh. Sital Singh, Environmental Consultant, M/s. Chandigarh Pollution Testing Laboratory.

(iii) Sh. Sandeep Singh, Consultant, M/s. Chandigarh Pollution Testing Laboratory.

SEIAA allowed the project proponent to present the case. Environmental Consultant presented the salient features of the project. A copy of the presentation submitted by the project proponent was taken on record.

To a query by SEIAA, the project proponent informed that they had satisfactorily addressed all the observations made by the Regional Office of the MoEF&CC, Chandigarh on visit dated 31.03.2022. Further, the MoEF&CC has also submitted compliance report in this regard vide letter dated 16.02.2022. SEIAA observed that SEAC has also deliberated on the certified compliance report of the MoEF&CC and has sent the recommendations only after being satisfied with the same.

To another query by SEIAA, the project proponent informed that being well aware of the fact that hazardous materials are handled and processed in the unit, the requisite disaster management plan has been prepared and adequate drills are conducted on regular basis. They further informed that there has not been any untoward incident in the operation of their unit in the past 17 years since EC was first granted for the project.

The project proponent brought to notice that in the proceedings of SEAC's meeting, the details w.r.t the activities to be undertaken under Environmental Management Plan and additional environmental activities have not been recorded as per the presentation submitted by them to the SEAC. They therefore requested that the same may be modified as per their presentation. SEIAA looked into the matter and observed that as per the presentation made to SEAC as available on record, the EMP details as well as the details of the proposed additional environmental activities are not matching with the details as recorded by SEAC in its proceedings. SEIAA was satisfied with the request of the project proponent and decided to amend the EMP as well the details of additional environmental activities as under:

Environment Management Plan			
S. No.	**Title**	**Capital Cost** **Rs. Lakh (Existing+ Proposed)**	**Recurring Cost Rs. Lakh**
1	Multiple Effect Evaporator	100.0 (75.0+25.0)	35.0
2	Effluent Treatment Plant	30 (22.0+8.0)	10.0
3	Air Pollution Control (Installation of APCD)	15.0	33.0
4	Noise Pollution Control	2.0	0.2

5	Landscaping/ Green Belt Development	4.22	4.22 (for 3 years)
6	Solid/Hazardous Waste Management	5.0	3.0
7	Environment Monitoring and Management	--	2.0
8	Occupational Health, Safety and Risk Management	10.0	3.0
9	Rain Water Harvesting Pits	10.0	1.5
10	Energy conservation	5.0	0.50
11	Miscellaneous	4.0	--
12	Additional Environmental Activities	10.0	
	TOTAL	**Rs 185.22**	**Rs 92.42**

Details of Additional Environmental Activities

ACTIVITY	**Funds Allocated in Lakhs**
Rejuvenation of village pond- Haibatpur, Tehsil Dera Bassi, Distt. SAS Nagar	10.0
TOTAL	**Rs 10.0**

SEIAA was satisfied with the presentation and the mitigation measures proposed to be adopted for reducing the environment impact caused due to the proposed project.

After detailed deliberations, SEIAA decided to accept the recommendations of SEAC and grant Environmental Clearance for expansion of API Bulk Drug Pharmaceutical manufacturing unit by "Vardhman Chemtech Pvt Ltd at Village Nimbua, PO Rampur Sainian, Derabassi, District SAS Nagar, Punjab as per the details mentioned in Form 1, 1A, EMP, conceptual plan and subsequent presentation /clarifications made by the project proponent and his consultant with proposed measures and subject to following conditions:

I. Statutory compliance

i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.

ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.

iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report (in case of the presence of Schedule-I species in the study area).

iv. The project proponent shall obtain the necessary permission from the Central Ground Water Authority (CGWA)/ competent authority concerned, in case of drawl of ground water and also in case of drawl of surface water required for the project. In case of non- grant of permission by CGWA for ground water abstraction, the industry shall make alternative arrangements by using surface water or treated city sewage effluent after obtaining permission from Competent Authority.

v. The project proponent shall obtain Consent to Establish/Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the Punjab Pollution Control Board (PPCB)/ Committee.

vi. The project proponent shall obtain authorization under the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 as amended from time to time.

vii. The project proponent shall comply with the siting criteria, standard operating practices, code of practice and guidelines if any prescribed by the PPCB/Central Pollution Control Board (CPCB)/ Ministry of Environment, Forest and Climate Change (MoEF&CC) for such type of units.

viii. The project proponent shall comply with the Change of Land-use (CLU) conditions imposed by the Competent Authority, if any.

ix. The project proponent shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.

II. Air quality monitoring and preservation

i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to PPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier

specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.

ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.

iii. The project proponent shall install a system to carryout continuous ambient air quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g., PM10 and PM2.5 in reference to PM emission, and SO_2 and NO_x in reference to $S0_2$ and NO_x emissions) within and outside the plant area (at least at four locations one for small units) within and three outside the plant area at an angle of 120°each), covering upwind and downwind directions.

iv. To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the National Ambient Air Quality Standards (NAAQS). Sulphur content should not exceed 0.5% in the coal for use in coal fired boilers to control particulate emissions within permissible limits (as applicable). The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/PPCB guidelines.

v. Storage of raw materials, coal etc shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.

vi. The project proponent shall follow the National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608(E) dated 21st July, 2010 as amended from time to time.

vii. The project proponent shall comply with the NAAQS issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009.

viii. The Diesel Generator (DG) sets shall be equipped with suitable pollution control devices and the adequate stack height so that the emissions are in conformity with the extant regulations and the guidelines in this regard.

ix. Ambient air levels should conform to prescribed standards. Incremental pollution loads on the ambient air quality, should be periodically monitored during construction phase as well as operation & entire life phase as per the MoEF&CC guidelines. The project proponent shall maintain the record for the same and all the mitigation measures should be taken to bring down the levels within the prescribed standards.

III. Water quality monitoring and preservation

i. The project proponent shall provide for online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises [applicable in case of the projects achieving Zero Liquid Discharge (ZLD)].

ii. The total wastewater generated from the unit will be segregated into two streams i.e., High Total Dissolved Solids and Low Total Dissolved Solids streams for effective and proper treatment of the same.

iii. The effluent discharge shall conform to the standards prescribed under the Environment (Protection) Rules, 1986, or as specified by the PPCB while granting Consent under the Air/Water Act, whichever is more stringent.

iv. Total fresh water requirement shall not exceed the quantity of 153.5 KLD as proposed in the proposal application. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard.

v. Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.

vi. The project proponent shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the groundwater and utilize the same for different industrial operations within the plant.

vii. Water demand during construction should be reduced by use of ready mixed concrete, curing agents and other best practices.

viii. The project proponent shall provide electromagnetic flow meter at intake of water supply at the borewell for abstraction of ground water if any, outlet of the Effluent Treatment Plant (ETP)/ Sewage Treatment Plant (STP)and any pipeline to be used for re-using the treated wastewater back into the system and for horticulture purpose/green belt etc.

ix. The project proponent shall maintain record regarding groundwater abstraction, water consumption, its reuse and disposal on daily basis along with a record of readings of each such meter on daily basis.

x. 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.

xi. 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.

IV. Noise monitoring and prevention

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

ii. The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation.

iii. The ambient noise levels should conform to the standards prescribed under Environment (Protection) Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

V. Energy Conservation measures

i. The energy sources for lighting purposes shall preferably be light-emitting diode-based.

ii. The project proponent shall make efforts to ensure the reduction of overall power demand which may be met by solar system including the provision of solar water heating or through any other innovative environment friendly techniques.

VI. Waste management

i. All the topsoil excavated during construction activities should be stored for use in horticulture / landscape development within the project site.

ii. Disposal of muck during construction phase should not create any adverse effect on the neighbouring communities and be disposed of 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 and material at the site.

iii. 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.

iv. Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm and the solvent transfer through pumps.

v. Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed of to the Common Hazardous Waste Treatment, Storage and Disposal Facilities (TSDF).

vi. The Project proponent shall abide by the provisions of Solid Waste Management Rules, 2016 (amended from time to time), if applicable.

vii. The company shall undertake waste minimization measures as below: -

a. Metering and control of quantities of active ingredients to minimize waste.
b. Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
c. Use of automated filling to minimize spillage.
d. Use of Close Feed system into batch reactors.

e. Venting equipment through vapour recovery system.
f. Use of high-pressure hoses for equipment clearing to reduce wastewater generation

VII. Green Belt

i. The project proponent shall develop green belt in more than 33% of the total land area, mainly along the periphery, with native tree species (having canopy type structure and especially trees, and not grass) before the completion of the project. The greenbelt shall inter alia cover the entire periphery of the unit provided that the number of trees to be planted should not be less than one tree per 80 sqm of the total project area. The canopy trees shall also be planted along road sides and around the parking area to provide shade to the parked vehicles.

ii. The project proponent shall plant tall saplings having height not less than 6 ft. The proponent shall make adequate provision of funds for raising the plantation and subsequent maintenance for three years in the Environment Management Plan.

iii. The project proponent shall submit the progress of developing the green belt in the six-monthly compliance report.

VIII. Safety, Public hearing and Human health issues

i. Emergency preparedness plan based on the Hazard Identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.

ii. The unit shall make the arrangement for protection of possible fire hazards during the manufacturing process in material handling. Firefighting system shall be as per the norms.

iii. The project proponent shall provide Personal Protection Equipment (PPE) to the staff as per the norms of the Factories Act, 1948.

~~iv.~~ Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis.

v. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

vi. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act, 1948.

vii. There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places.

viii. A first aid room will be provided both during construction and operation phase of the project.

IX Validity of Environmental Clearance.

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

X Environmental 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 for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. A copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.

ii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of a senior executive, who will report directly to the head of the organization.

iii. 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 separate accounts and will not be diverted for any other purpose. The details of the activities to be carried out under EMP and additional environmental activities are as under:

Environment Management Plan			
S. No.	**Title**	**Capital Cost Rs. Lakh (Existing+ Proposed)**	**Recurring Cost Rs. Lakh**
1	Multiple Effect Evaporator	100.0 (75.0+25.0)	35.0
2	Effluent Treatment Plan	30 (22.0+8.0)	10.0
3	Air Pollution Control (Installation of APCD)	15.0	33.0
4	Noise Pollution Control	2.0	0.2

5	Landscaping/ Green Belt Development	4.22	4.22 (for 3 years)
6	Solid/Hazardous Waste Management	5.0	3.0
7	Environment Monitoring and Management	--	2.0
8	Occupational Health, Safety and Risk Management	10.0	3.0
9	Rain Water Harvesting Pit	10.0	1.5
10	Energy conservation	5.0	0.50
11	Miscellaneous	4.0	--
12	Additional Environmental Activities	10.0	--
	TOTAL	**Rs 195.22**	**Rs 92.42**

Details of Additional Environmental Activities

ACTIVITY	**Funds Allocated in Lakhs**
Rejuvenation in village pond- Haibatpur, Tehsil Dera Bassi, Distt. SAS Nagar	10.0
TOTAL	**Rs 10.0**

The entire cost of the environmental management plan will continue to be borne by the project proponent for the lifetime of the project. Year-wise progress of implementation of the action plan shall be reported to the Regional Office, MOEF&CC/ SEIAA along with the six-monthly compliance reports.

The project proponent shall also submit physical/financial progress along with utilization certificates and documentary evidence (including photographs and short video clips) of the works undertaken regarding additional environmental activities by the project proponent in all the subsequent six-monthly compliance reports till the completion of these activities.Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

iv. Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

XI. Miscellaneous

i. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department etc. shall be obtained, by project proponent from the Competent Authorities including PPCB and other statutory bodies as applicable.

ii. In case of any change(s) in the scope of the project, the project proponent would require a fresh appraisal by State Environment Impact Assessment Authority (SEIAA), Punjab.

iii. The environmental safeguards contained in the application of the promoter / mentioned during the presentation before SEIAA/State Expert Appraisal Committee (SEAC) should be implemented in letter and spirit.

iv. 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 along with the details of MoEF&CC website where it is displayed.

v. The copies of the 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 has to display the same for 30 days from the date of receipt.

vi. The project proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and update the same on half-yearly basis.

vii. The project proponent shall monitor the criteria pollutants level namely; PM10, S02, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.

viii. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on MoEF&CC's environmental clearance portal.

ix. The project proponent shall submit the environmental statement for each financial year in Form-V to PPCB as prescribed under the Environment (Protection) Rules, 1986, (amended from time to time) and publish on the company's website.

x. The project proponent shall inform the Regional Office of MoEF&CC and PPCB, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production/ operation by the project.

xi. The project proponent shall abide by all the commitments and recommendations made in the Environmental lmpact Assessment (EIA) report/EMP report, commitment made during public hearing and that during their presentation to the SEAC and SEIAA.

xii. 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 add additional environmental protection measures required, if any.

xiii. The Regional Office, MoEF&CC, Chandigarh, PPCB and SEIAA/ SEAC members nominated for the purpose shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer(s) entrusted with this monitoring by furnishing the requisite data/ information/monitoring reports.

XII. ADDITIONAL CONDITIONS:

i. This EC is granted to the project proponent subject to the condition that industry shall obtain change of land use (CLU) /building plan approval for the industrial purposes and submit a copy of the same to SEIAA. In case, CLU/building plan approval has been rejected for industrial use for any reason, SEIAA will not be responsible for the cost incurred on the project.

ii. 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.

iii. The project proponent shall install online monitoring system at inlet as well as at the outlet of ETP for monitoring various environmental parameters.

iv. The project proponent shall make necessary arrangements for the recovery and reuse of steam condensate resulting from the indirect steam applications and shall not allow to discharge such effluents into drain.

v. The project proponent shall provide advanced scrubbing systems with proper neutralizing media to handle the acidic/alkaline emissions from storage, handling & processing activities. Wherever required, packed bed scrubbers will also be provided. The suction and scrubbing systems shall also be designed to handle the inherent odours from such units.

vi. The project proponent shall provide the Air Pollution Control Devices (APCD) as proposed by the PPCB to control the emissions generated from the boiler within the prescribed parameter.

vii. The project proponent shall practice rainwater harvesting to maximum possible extent. For this the project proponent shall adopt nearest village pond for carrying out rain water harvesting.

viii. 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 rain water etc is not impeded or disrupted in any manner.

Item No. 245.03: Application for obtaining Environmental Clearance under EIA notification dated 14.09.2006 for new Chemical Manufacturing unit at Village Damanheri, Siel Chemical Complex, Tehsil Rajpura, District Patiala, Punjab by M/s Chemoro Industries Limited (Proposal No. SIA/PB/IND3/419316/2023).

Background

The industry was granted Terms of Reference (ToRs) vide SEIAA letter no. SEIAA/MS/2022/952 dated 21.09.2022 for new Chemical Manufacturing unit at Village Damanheri, Siel Chemical Complex, Tehsil Rajpura, District Patiala, Punjab

The industry has applied for Environmental Clearance under EIA notification dated 14.09.2006 for new Chemical Manufacturing unit for production of Chlorinated Paraffin Wax of 38,400 TPA, Hydrochloric Acid of 76,800 TPA, Sodium Hypochlorite of 4000 TPA and Calcium Chloride of 15000 TPA at Village Damanheri, Siel Chemical Complex, Tehsil Rajpura, District Patiala, Punjab. The Project is covered under category 5(f) of the schedule appended with the EIA notification-2006. The total cost of the project is Rs. 12 Crore.

The industry submitted the Online-Form, Compliance of the ToRs and other additional documents through Parivesh Portal. The industry has deposited fee i.e. Rs. 30,000/- vide UTR No. KKBKH22215969523 dated 03.08.2022 at the time of ToRs and presently industry has deposited Rs. 90,000/- vide RTGS no. KKBKH23030745497 dated 30.01.2023, as checked & verified by the supporting staff of SEIAA.

The construction status report submitted by Punjab Pollution Control Board vide letter no. 1797 dated 17.03.2023 is as under:
"The proposed site of the subject cited project was visited by officer of the Board on 03.03.2023 and it was observed that:

Sr. no.	***Points as desired by EE (SEIAA)***	***Comments***
1	*Construction status of the proposed project. Please send a clear-cut report as to whether construction for the proposed project has been started for the project except for securing the land.*	*The Project Proponent has already started construction of boundary wall of its proposed site of project. No other construction work has yet been started.*

2	*Status of physical structures within 500 m radius of the site including the status of industries, drain, river, and eco-sensitive structures if any.*	*The proposed site falls in M/S Seil Industrial Complex Village Damanheri, Khadauli and Sardargarh. In the said complex, the industries namely M/S Bodal Chemicals (Chlor-Alkali unit) and other Chlorinated Parafin Wax manufacturing units are located, which falls within 500meter radius of proposed site. Besides these, 2-3 rice shellers, one fodder feed manufacturing unit and 5-6 scattered residential houses falls within 500meter radius of proposed site However, no drain, river and eco-sensitive structure falls within 500- meter radius of proposed site.*
3	*Whether the site is meeting the prescribed criteria for setting up of such type of projects, please send the clear-cut recommendation.*	*The proposed site falls in M/S Seil Industrial Complex, Village Damanheri, Khadauli, Sardargarh. The said complex has been notified as industrial park vide MOU executed on 14.10.1993 between Govt. of Punjab and M/S Shri Ram Industrial Enterprises Limited.* *The general sitting criteria is applicable for such units as per Board's policy dated 30.04.2013. As the proposed site is located in notified industrial complex, thus site is meeting with the prescribed criteria for setting up of such type of units.*

The industry is required to obtain Consent to Establish (NOC) under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981 from the Board."

Deliberations during 242nd meeting of SEAC held on 20.03.2023.

The meeting was attended by the following:

(i) Mr. Sanket Sanora, CMD M/s Chemoro Industries Pvt Ltd.
(ii) Sh. Sital Singh, Environmental Consultant, M/s. Chandigarh Pollution Testing Laboratory.
(iii) Sh. Sandeep Singh, Consultant, M/s. Chandigarh Pollution Testing Laboratory.

The Committee allowed the Environmental Consultant & Project Proponent to present the salient features of the application proposal. Thereafter, the Environmental Consultant presented the case as under:

Sr. No.	Description	Details
1	**Basic Details**	
1.1	Name of Project & Project Proponent:	Project name: - Proposed Chemical Manufacturing unit namely M/s Chemoro Industries Pvt. Ltd. Name of Project proponent: Miss Vaishnavi (Director)
1.2	Proposal:	SIA/PB/IND3/419316/2023

1.3	Location of Industry:	Village- Damanheri, Siel Chemical Complex, Tehsil-Rajpura, District- Patiala, Punjab.
1.4	Details of Land area	10846 sqm
1.5	Category under EIA notification dated 14.09.2006	The project falls under S.No. 5(f) – Synthetic organic Chemicals industry
1.6	Cost of the project	Rs. 12 Crores
2.	**Site Suitability Characteristics**	
2.1	Whether site of the industry is suitable as per the provisions of Master Plan:	(i) The site of the industry has been shown in the proposed industrial zone in the Master Plan of Rajpura. (ii) The site falls in existing Industrial premises of SIEL Chemical complex (Bodal Chemicals limited)
2.2	Whether supporting document submitted in favour of statement at 2.1, details thereof: (CLU/building plan approval status)	(i) MoU executed between SIEL and State Govt on 14.10.1993 submitted. (ii) Conveyance deed executed between M/s Mawana Sugar Ltd and Bodal Chemical Ltd & SIEL Industrial Estate Ltd on 07.04.2021 submitted. (iii) A copy of the lease deed executed between Bodal Chemical Ltd and Chemoro Industries Ltd for leasing part of land area of 123.70 acres i.e. 2.698 acres submitted.
3	**Forest, Wildlife and Green Area**	
3.1	Whether the industry required clearance under the provisions of Forest Conservation Act 1980 or not:	No forest land is involved in the project. The industry has submitted self-declaration in the prescribed format.
3.2	Whether the industry required clearance under the provisions of Punjab Land Preservation Act (PLPA) 1900:	No, the industry does not require the clearance under the provisions of Punjab Land Preservation Act (PLPA) 1900. The industry has submitted self-declaration in the prescribed format.
3.3	Whether industry required clearance under the provisions of Wildlife Protection Act 1972 or not:	No wildlife sanctuary is involved in the vicinity or study area of the project site. The industry has submitted self-declaration in the prescribed format.
3.4	Distance of the industry from the Critically Polluted Area.	The nearest critical polluted area is Ludhiana which is 74 km from project location.

<table>
<tr><td>3.5</td><td>Whether the industry falls within the influence of Eco-Sensitive Zone or not. (Specify the distance from the nearest Eco sensitive zone)</td><td>The industry is not located in any notified eco-sensitive zone.</td></tr>
<tr><td>3.6</td><td>Green area requirement and proposed No. of trees:</td><td>3787.08 sqm and total No. 627 trees shall be planted.</td></tr>
<tr><td>4.</td><td colspan="2">Products & Raw Material Details</td></tr>
<tr><td>4.1</td><td colspan="2">Product Detail
<table>
<tr><th>Sr. No.</th><th>Description</th><th>Total</th></tr>
<tr><td>1.</td><td>Chlorinated paraffin</td><td>38,400 TPA</td></tr>
<tr><td>2.</td><td>Hydrochloric acids</td><td>76,800 TPA</td></tr>
<tr><td>3.</td><td>Sodium Hypochlorite</td><td>4000 TPA</td></tr>
<tr><td>4.</td><td>Calcium Chloride</td><td>15000TPA</td></tr>
</table>
Raw Material Details:
<table>
<tr><th>Sr. No.</th><th>Description</th><th>Total (TPA)</th></tr>
<tr><td>1.</td><td>HNP/NP/LNP</td><td>19,000</td></tr>
<tr><td>2.</td><td>Chlorine Gas</td><td>40,320</td></tr>
<tr><td>3.</td><td>Epoxy Plasticzer</td><td>384</td></tr>
<tr><td>4.</td><td>Water</td><td>81000</td></tr>
</table></td></tr>
<tr><td>5</td><td colspan="2">Water</td></tr>
<tr><td>5.1</td><td>Total fresh water requirement:</td><td>232 KLD</td></tr>
<tr><td>5.2</td><td>Source:</td><td>Bore well/Reservoir of Bodal Chemicals</td></tr>
<tr><td>5.3</td><td>Whether Permission obtained for abstraction/supply of the fresh water from the Competent Authority (Y/N) Details thereof</td><td>A copy of acknowledgement of the application submitted to PWRDA for abstraction of ground water submitted.</td></tr>
<tr><td>5.4</td><td>Total water requirement for domestic purpose:</td><td>7.0 KLD</td></tr>
</table>

5.4.1	Total wastewater generation:	No wastewater shall be generated from the process. 6.5 KLD from domestic & cooling water tank shall be generated.
5.4.2	Treatment methodology for domestic wastewater: (STP capacity, technology & components)	Septic tank shall be installed to treat the domestic effluent.
5.5	Disposal of treated wastewater.	Treated waste water will be used for plantation area of 3787.08 sqm within the industrial premises
5.6	Rain water harvesting proposal:	Roof top rainwater harvesting will be done.
5.7	Details of the water requirement, wastewater generation and treated wastewater utilization for three seasons.	
	Summer season (i) The total water requirement of the industry shall be 232 KLD, out of which 7 KLD shall be utilized for domestic purpose, 120 KLD shall be utilized into the process and remaining 105 KLD shall be utilized in the cooling tower. (ii) The total wastewater generation from the industry shall be 19.6 KLD, out of which 5.6 KLD shall be generated from domestic activity and 14 KLD shall be generated as cooling tower blow down. (iii) Against the requirement of 23 KLD in the green area of 3787.08 sqm in summer season, 21 KLD shall be utilized in the green area and remaining demand shall be met from the storage tank in which the treated wastewater of the winter and summer season shall be collected. **Winter season** (i) The total water requirement of the industry shall be 204 KLD, out of which 7 KLD shall be utilized for domestic purpose, 120 KLD shall be utilized into the process and remaining 77 KLD shall be utilized in the cooling tower. (ii) The total wastewater generation from the industry shall be 14.6 KLD, out of which 5.6 KLD shall be generated from domestic activity and 9 KLD shall be generated as cooling tower blow down. (iii) Against the requirement of 7 KLD in the green area of 4180 sqm in winter season, 7 KLD shall be utilized in the green area and the remaining quantity of 7.6 KLD shall be stored in the storage tank capacity of 18 KL. **Rainy season** (i) The total water requirement of the industry shall be 204 KLD, out of which 7 KLD shall be utilized for domestic purpose, 120 KLD shall be utilized into the process and remaining 77 KLD shall be utilized in the cooling tower.	

	(ii) The total wastewater generation from the industry shall be 14.6 KLD, out of which 5.6 KLD shall be generated from domestic activity and 9 KLD shall be generated as cooling tower blow down. (iii) Against the requirement of 1.4 KLD in the green area of 3787.08 sqm in rainy season, 1.4 KLD shall be utilized in the green area and the remaining quantity of 13.2 KLD shall be stored in the storage tank capacity of 18 KL.	
6	**Air**	
6.1	Details of Air Polluting machinery:	Single D.G. set of capacity 250 KVA shall be installed.
6.2	Measures to be adopted to contain particulate emission/Air Pollution	DG sets will be equipped with acoustic enclosure to minimize noise generation and adequate stack height for proper dispersion
7	**Waste Management**	
7.1	Total quantity of solid waste generation	There is no generation of Solid/Hazardous waste from the manufacturing process, except 0.01 KL of used oil from DG set.
7.2	Details of management and disposal of solid waste (Mechanical Composter/Compost pits)	Hazardous waste in the form of used oil from DG set will be generated which will be sold to authorized vendors as per The Hazardous & Other Wastes (Management & Transboundary Movement) Rules, 2016 and its amendments.
7.3	Details of management of Hazardous Waste.	Hazardous waste in the form of used oil from DG set will be generated which will be sold to authorized vendors as per The Hazardous & Other Wastes (Management & Transboundary Movement) Rules, 2016 and its amendments.
8	**Energy Saving & EMP**	
8.1	Power Consumption:	Total – 350 KW
8.2	Energy saving measures:	• LEDs have been proposed to be used instead of CFLs. • Solar panels have been proposed on the roof top of the project.
8.3	**EMP Details:**	

Sr. No.	Title	Capital Cost Rs. In lacs	Recurring Cost Rs. In Lacs
1.	Pollution Control during construction stage (Water, Sprinkler etc.)	5.0	0.5
2.	Air Pollution Control Measures	5.0	2.0

	3.	Water Pollution Control	5.0	2.0
	4.	Noise Pollution Control	5.0	5.0
	5.	Solid Waste Management	5.0	1.5
	6.	Occupational Health, Safety and Risk Management	5.0	5.0
	7.	Greenbelt Development (Plantation and maintenance)	5.4	5.4 for 3 Years
	8.	Environmental monitoring Program	-	1.15
	9.	CER activities	12.0	
		Total	**47.4 Lakhs**	**22.55 Lakhs**

After deliberations, SEAC decided to award **'Silver Grading'** to the project proposal under category B1, Activity 5 (f) and to forward the application to SEIAA with the recommendations to grant Environmental Clearance for new Chemical Manufacturing unit at Village Damanheri, Siel Chemical Complex, Tehsil Rajpura, District Patiala, Punjab by M/s Chemoro Industries Limited subject to the following conditions: -

I. Statutory compliance

i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.

ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.

iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (in case of the presence of schedule-I species in the study area)

iv. The project proponent shall obtain the necessary permission from the Central Ground Water Authority/ competent authority concerned, in case of drawl of ground water and also in case of drawl of surface water required for the project. In case of non-grant of permission by CGWA for ground water abstraction, the industry shall make alternative arrangements by using surface water or treated city sewage effluent after obtaining permission from competent authority.

v. The project proponent shall obtain Consent to Establish/Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the Punjab State pollution Control Board/ Committee.

vi. The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.

vii. The project proponent shall comply with the siting criteria, standard operating practices, code of practice and guidelines if any prescribed by the SPCB/CPCB/MoEF&CC for such type of units.

viii. The project proponent shall comply with the CLU conditions imposed by competent authority, if any

ix. The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.

II. Air quality monitoring and preservation

i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.

ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.

iii. The project proponent shall install a system to carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g., PM10 and PM2.5 in reference to PM emission, and SO_2 and NO_x in reference to $S0_2$ and NO_x emissions) within and outside the plant area (at least at four locations one for small units) within and three outside the plant area at an angle of 120°each), covering upwind and downwind directions.

iv. To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. Sulphur content should not exceed 0.5% in the coal for use in coal fired boilers to control particulate emissions within permissible limits (as applicable). The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.

v. Storage of raw materials, coal etc shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.

vi. National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608I dated [2]1st July, 2010 and amended from time to time shall be followed.

vii. The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated [1]6th November, 2009 shall be complied with

viii. The DG sets shall be equipped with suitable pollution control devices and the adequate stack height so that the emissions are in conformity with the extant regulations and the guidelines in this regard.

ix. 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, maintain the record for the same and all the mitigation measures should be taken to bring down the levels within the prescribed standards.

III. Water quality monitoring and preservation

i. The project proponent shall provide online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

ii. The total wastewater generated from the unit will be segregated into two streams i.e., High TDS and Low TDS streams for effective and proper treatment of the same.

iii. The effluent discharge shall conform to the standards prescribed under the Environment (Protection) Rules, 1986, or as specified by the State Pollution Control Board while granting Consent under the Air/Water Act, whichever is more stringent.

iv. Total fresh water requirement shall not exceed the quantity of 232 KLD as proposed in the proposal application. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard.

v. Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.

vi. The Company shall store the rainwater from the roof tops of the buildings and utilize the same for different industrial operations within the plant.

vii. Water demand during construction should be reduced by use of ready mixed concrete, curing agents and other best practices.

viii. Provide electromagnetic flow meter at intake of water supply at the borewell for abstraction of ground water if any, outlet of the ETP/STP and any pipeline to be used for re-using the treated wastewater back into the system and for horticulture purpose/green belt etc.

ix. 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.

x. 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.

xi. 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.

IV. Noise monitoring and prevention

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

ii. The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation.

iii. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time

V. Energy Conservation measures

i. The energy sources for lighting purposes shall preferably be LED based.

ii. The project proponent shall make efforts to ensure the reduction of overall power demand which may be met by solar system including the provision of solar water heating or through any other innovative environment friendly techniques.

VI. Waste management

i. All the topsoil excavated during construction activities should be stored for use in horticulture / landscape development within the project site.

ii. Disposal of muck during construction phase should not create any adverse effect on the neighbouring communities and be disposed of 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.

iii. 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.

iv. Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm and the solvent transfer through pumps.

v. Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.

vi. The Project proponent shall abide by the provisions of Solid Waste Management Rules, 2016 (amended from time to time), if applicable.

vii. The company shall undertake waste minimization measures as below: -

a. Metering and control of quantities of active ingredients to minimize waste.
b. Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
c. Use of automated filling to minimize spillage.
d. Use of Close Feed system into batch reactors.
e. Venting equipment through vapour recovery system.
f. Use of high-pressure hoses for equipment clearing to reduce wastewater generation

VII. Green Belt

i. The green belt shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc.

ii. The Project Proponent shall develop green belt in 33% of the total land area with native tree species (having canopy type structure and especially trees, and not grass) before the completion of the project. The greenbelt shall inter alia cover the entire periphery of the unit provided that the number of trees to be planted should not be less than one tree per 80 sqm of the total project area. The canopy trees shall also be planted around the parking area to provide shade to the parked vehicles.

iii. The project proponent shall plant tall saplings having height not less than 6 ft. The proponent shall make adequate provision of funds for raising the plantation and subsequent maintenance for three years in the Environment Management Plan.

iv. The project proponent shall submit the progress of developing the green belt in the six-monthly compliance report.

VIII. Safety, Public hearing and Human health issues

i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.

ii. The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Firefighting system shall be as per the norms.

iii. The PP shall provide Personal Protection Equipment (PPE) as per the norms of Factory Act.

iv. Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.

v. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

vi. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.

vii. There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places.

viii. A first aid room will be provided in the project both during construction and operation phase of the project.

IX Validity of Environmental Clearance.

i. 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.

X Environmental 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 for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. A copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.

ii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of a senior Executive, who will report directly to the head of the organization.

iii. Action plan for implementing 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 separate accounts and will not be diverted for any other purpose. The details of the activities to be carried out under EMP & CER are as under:

Sr. No.	Title	Capital Cost Rs. in lacs	Recurring Cost Rs. in Lacs
1.	Pollution Control during construction stage (Water, Sprinkler etc.)	5.0	0.5
2.	Air Pollution Control Measures	5.0	2.0
3.	Water Pollution Control	5.0	2.0
4.	Noise Pollution Control	5.0	5.0
5.	Solid Waste Management	5.0	1.5
6.	Occupational Health, Safety and Risk Management	5.0	5.0
7.	Greenbelt Development (Plantation and maintenance)	5.4	5.4 for 3 Years
8.	Environmental monitoring Program	-	1.15
9.	CER activities	12.0	
	Total	**47.4 Lakhs**	**22.55 Lakhs**

The entire cost of the environmental management plan will continue to be borne by the project proponent for the lifetime of the Project. Year-wise progress of implementation of the action plan shall be reported to the Ministry/Regional Office along with the Six-monthly Compliance Report.

iv. Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

XI. Miscellaneous

i. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department etc. shall be obtained, by project proponent from the competent authorities including Punjab Pollution Control Board and from other statutory bodies as applicable.

ii. 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.

iii. 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.

iv. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of

which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project propon'nt's website permanently.

v. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.

vi. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.

vii. The project proponent shall monitor the criteria pollutants level namely; PM10, S02, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.

viii. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.

ix. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.

x. The project proponent shall inform the Regional Office of the Ministry and PPCB, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production/ operation by the project.

xi. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.

xii. The project proponent shall abide by all the commitments and recommendations made in the ElA /EMP report, commitment made during Public Hearing and also that during their presentation to the SEAC and SEIAA.

xiii. No further expansion or modifications in the project shall be carried out other than those permitted in this EC without prior approval of SEIAA. In case of deviation or alterations in the project proposal from those submitted to the Ministry/SEIAA for clearance, a fresh reference shall be made to the Ministry/SEIAA, as applicable, to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.

xiv. The Regional Office, MoEF&CC, Chandigarh, Punjab Pollution Control Board and SEIAA/ SEAC members nominated for the purpose shall monitor compliance of the

stipulated conditions. The project authorities should extend full cooperation to the officer(s) entrusted with this monitoring by furnishing the requisite data/ information/monitoring reports.

XII. ADDITIONAL CONDITIONS:

i. The Environmental Clearance is granted to the project subject to the condition that industry shall obtain change of land use/building plan approval for the industrial purposes and submit a copy of the same to SEIAA. In case, CLU/building plan approval has been rejected for industrial use for any reason, SEIAA will not be responsible for the cost incurred on the project.

ii. 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.

iii. The Project Proponent shall install online monitoring system at inlet as well as at the outlet of ETP for monitoring various environmental parameters.

iv. The project proponent shall make necessary arrangements for the recovery and reuse of steam condensate resulting from the indirect steam applications and shall not allow to discharge such effluents into drain.

v. The project proponent shall provide advanced scrubbing systems with proper neutralizing media to handle the acidic/alkaline emissions from storage, handling & processing activities. Wherever required, packed bed scrubbers will also be provided. The suction and scrubbing systems shall also be designed to handle the inherent odours from such units.

vi. The project proponent shall provide the Air Pollution Control Devices as proposed by the PPCB to control the emissions generated from the boiler within the prescribed parameter.

vii. The project proponent shall practice rainwater harvesting to maximum possible extent. For this the Project Proponent shall adopt nearest village pond for carrying out rain water harvesting.

viii. 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 rain water etc is not impeded or disrupted in any manner.

Deliberations during 245th meeting of SEIAA held on 06.04.2023.

The meeting was attended by the following:

(i) Sh. Sanket Sanora, CMD M/s Chemoro Industries Pvt Ltd
(ii) Sh. Sital Singh, Environmental Consultant, M/s. Chandigarh Pollution Testing Laboratory.
(iii) Sh. Sandeep Singh, Consultant, M/s. Chandigarh Pollution Testing Laboratory

SEIAA allowed the project proponent to present the case. Environmental Consultant presented the salient features of the project. A copy of the presentation submitted by the project proponent was taken on record.

The project proponent further informed that in the proceedings of SEAC's meeting, the details w.r.t the activities to be undertaken under Environmental Management Plan and additional environmental activities have not been recorded as per the presentation submitted by them. They therefore requested that the same may be corrected in accordance with the presentation made by them. SEIAA looked into the matter and observed that as per the SEAC presentation available on record, the EMP details as well as the details of the proposed additional environmental activities are not matching with the details as recorded by SEAC in its proceedings. SEIAA was satisfied with the request of the project proponent and decided to amend the EMP as well as the details of additional environmental activities as under:

Environmental Management Plan			
S. No.	**Title**	**Capital Cost Rs. Lakh**	**Recurring Cost Rs. Lakh**
1	Pollution Control during construction stage (Water, Sprinkler etc.)	5.0	0.5
2	Air Pollution Control Measures	5.0	2.0
3	Water Pollution Control	5.0	2.0
4	Noise pollution Control	5.0	5.0
5	Solid Waste Management	5.0	1.5
6	Occupational Health, Safety and Risk Management	5.0	5.0
7	Greenbelt development (Plantation and maintenance)	6.7	6.7 lakhs for 3 years
8	Environmental monitoring Program	-	1.15
9	Additional Environmental Activities	12.0	-
	TOTAL	**48.7 Lakhs**	**23.85 lakhs**

Additional Environmental Activities

S.No.	Activity	Amount (Rs. Lakh)	Timeline
1.	Rejuvenation of Pond of Damanheri Village, Rajpura	12.0	Within one year after grant of EC.
Total		12.0	

SEIAA examined the relevant documents including EIA report and was satisfied with the presentation and the mitigation measures proposed to be adopted in the EMP for reducing the environment impact caused due to the proposed project.

After detailed deliberations, SEIAA decided to accept the recommendations of SEAC and grant Environmental Clearance for new Chemical Manufacturing unit at Village Damanheri, Siel Chemical Complex, Tehsil Rajpura, District Patiala, Punjab as per the details mentioned in Form 1, 1A, EMP, conceptual plan and subsequent presentation /clarifications made by the project proponent and his consultant with proposed measures and subject to following conditions:

I. Statutory compliance

i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.

ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.

iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report (in case of the presence of Schedule-I species in the study area).

iv. The project proponent shall obtain the necessary permission from the Central Ground Water Authority (CGWA)/ competent authority concerned, in case of drawl of ground water and also in case of drawl of surface water required for the project. In case of non- grant of permission by CGWA for ground water abstraction, the industry shall make alternative arrangements by using surface water or treated city sewage effluent after obtaining permission from Competent Authority.

v. The project proponent shall obtain Consent to Establish/Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention &

Control of Pollution) Act, 1974 from the Punjab Pollution Control Board (PPCB)/ Committee.

vi. The project proponent shall obtain authorization under the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 as amended from time to time.

vii. The project proponent shall comply with the siting criteria, standard operating practices, code of practice and guidelines if any prescribed by the PPCB/Central Pollution Control Board (CPCB)/ Ministry of Environment, Forest and Climate Change (MoEF&CC) for such type of units.

viii. The project proponent shall comply with the Change of Land-use (CLU) conditions imposed by the Competent Authority, if any.

ix. The project proponent shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.

II. Air quality monitoring and preservation

i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to PPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.

ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.

iii. The project proponent shall install a system to carryout continuous ambient air quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g., PM10 and PM2.5 in reference to PM emission, and SO_2 and NO_x in reference to $S0_2$ and NO_x emissions) within and outside the plant area (at least at four locations one for small units) within and three outside the plant area at an angle of 120°each), covering upwind and downwind directions.

iv. To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the National Ambient Air Quality Standards (NAAQS). Sulphur content should not exceed 0.5% in the coal for use in coal fired boilers to control particulate emissions within permissible limits (as applicable). The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/PPCB guidelines.

v. Storage of raw materials, coal etc shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.

vi. The project proponent shall follow the National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608(E) dated 21st July, 2010 as amended from time to time.

vii. The project proponent shall comply with the NAAQS issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009.

viii. The Diesel Generator (DG) sets shall be equipped with suitable pollution control devices and the adequate stack height so that the emissions are in conformity with the extant regulations and the guidelines in this regard.

ix. Ambient air levels should conform to prescribed standards. Incremental pollution loads on the ambient air quality, should be periodically monitored during construction phase as well as operation & entire life phase as per the MoEF&CC guidelines. The project proponent shall maintain the record for the same and all the mitigation measures should be taken to bring down the levels within the prescribed standards.

III. Water quality monitoring and preservation

i. The project proponent shall provide for online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises [applicable in case of the projects achieving Zero Liquid Discharge (ZLD).

ii. The total wastewater generated from the unit will be segregated into two streams i.e., High TDS and Low TDS streams for effective and proper treatment of the same.

iii. The effluent discharge shall conform to the standards prescribed under the Environment (Protection) Rules, 1986, or as specified by the PPCB while granting Consent under the Air/Water Act, whichever is more stringent.

iv. Total fresh water requirement shall not exceed the quantity of 232 KLD as proposed in the proposal application. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard.

v. Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.

vi. The project proponent shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the groundwater and utilize the same for different industrial operations within the plant.

vii. Water demand during construction should be reduced by use of ready mixed concrete, curing agents and other best practices.

viii. The project proponent shall provide electromagnetic flow meter at intake of water supply at the borewell for abstraction of ground water if any, outlet of the Effluent Treatment Plant (ETP)/ Sewage Treatment Plant (STP)and any pipeline to be used for re-using the treated wastewater back into the system and for horticulture purpose/green belt etc.

ix. The project proponent shall maintain record regarding groundwater abstraction, water consumption, its reuse and disposal on daily basis along with a record of readings of each such meter on daily basis.

x. 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.

xi. 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.

IV. Noise monitoring and prevention

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

ii. The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation.

iii. The ambient noise levels should conform to the standards prescribed under Environment (Protection) Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

V. Energy Conservation measures

i. The energy sources for lighting purposes shall preferably be light-emitting diode-based.

ii. The project proponent shall make efforts to ensure the reduction of overall power demand which may be met by solar system including the provision of solar water heating or through any other innovative environment friendly techniques.

VI. Waste management

i. All the topsoil excavated during construction activities should be stored for use in horticulture / landscape development within the project site.

ii. Disposal of muck during construction phase should not create any adverse effect on the neighbouring communities and be disposed of 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 and material at the site.

iii. 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.

iv. Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm and the solvent transfer through pumps.

v. Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed of to the Common Hazardous Waste Treatment, Storage and Disposal Facilities (TSDF).

vi. The Project proponent shall abide by the provisions of Solid Waste Management Rules, 2016 (amended from time to time), if applicable.

vii. The company shall undertake waste minimization measures as below: -

a. Metering and control of quantities of active ingredients to minimize waste.
b. Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
c. Use of automated filling to minimize spillage.
d. Use of Close Feed system into batch reactors.
e. Venting equipment through vapour recovery system.
f. Use of high-pressure hoses for equipment clearing to reduce wastewater generation

VII. Green Belt

i. The project proponent shall develop green belt in more than 33% of the total land area, mainly along the periphery, with native tree species (having canopy type structure and especially trees, and not grass) before the completion of the project. The greenbelt shall inter alia cover the entire periphery of the unit provided that the number of trees to be planted should not be less than one tree per 80 sqm of the total project area. The canopy trees shall also be planted along road sides and around the parking area to provide shade to the parked vehicles.

ii. The project proponent shall plant tall saplings having height not less than 6 ft. The proponent shall make adequate provision of funds for raising the plantation and subsequent maintenance for three years in the Environment Management Plan.

iii. The project proponent shall submit the progress of developing the green belt in the six-monthly compliance report.

VIII. Safety, Public hearing and Human health issues

i. Emergency preparedness plan based on the Hazard Identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.

ii. The unit shall make the arrangement for protection of possible fire hazards during the manufacturing process in material handling. Firefighting system shall be as per the norms.

iii. The project proponent shall provide Personal Protection Equipment (PPE) to the staff as per the norms of the Factories Act, 1948.

iv. Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis.

v. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

vi. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act, 1948.

vii. There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places.

viii. A first aid room will be provided both during construction and operation phase of the project.

IX Validity of Environmental Clearance.

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

X Environmental 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 for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. A copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.

ii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of a senior executive, who will report directly to the head of the organization.

iii. Action plan for implementing 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 separate accounts and will not be diverted for any other purpose. The details of the activities to be carried out under EMP & CER are as under:

Environmental Management Plan			
S. No.	**Title**	**Capital Cost Rs. Lakh**	**Recurring Cost Rs. Lakh**
1	Pollution Control during construction stage (Water, Sprinkler etc.)	5.0	0.5
2	Air Pollution Control Measures	5.0	2.0
3	Water Pollution Control	5.0	2.0
4	Noise pollution Control	5.0	5.0
5	Solid Waste Management	5.0	1.5
6	Occupational Health, Safety and Risk Management	5.0	5.0
7	Greenbelt development (Plantation and maintenance)	6.7	6.7 lakhs for 3 years
8	Environmental monitoring Program	-	1.15
9	Additional Environmental Activities	12.0	-
	TOTAL	**48.7 Lakhs**	**23.85 lakhs**

Details of Additional Environmental Activities

S.No.	**Activity**	**Amount (Rs. Lakh)**	**Timeline**
1.	Rejuvenation of Pond in Damanheri Village, Rajpura	12.0	Within one year after grant of EC.

Total	12.0	

The entire cost of the environmental management plan will continue to be borne by the project proponent for the lifetime of the Project. Year-wise progress of implementation of the action plan shall be reported to the Ministry/Regional Office along with the Six-monthly Compliance Report.

The project proponent shall also submit physical/financial progress along with utilization certificates and documentary evidence (including photographs and short video clips) of the works undertaken regarding additional environmental activities by the project proponent in all the subsequent six-monthly compliance reports till the completion of these activities.Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

iv. Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

XI. Miscellaneous

i. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department etc. shall be obtained, by project proponent from the Competent Authorities including PPCB and other statutory bodies as applicable.

ii. In case of any change(s) in the scope of the project, the project proponent would require a fresh appraisal by State Environment Impact Assessment Authority (SEIAA), Punjab.

iii. The environmental safeguards contained in the application of the promoter / mentioned during the presentation before SEIAA/State Expert Appraisal Committee (SEAC) should be implemented in letter and spirit.

iv. 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 along with the details of MoEF&CC website where it is displayed.

v. The copies of the 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 has to display the same for 30 days from the date of receipt.

vi. The project proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and update the same on half-yearly basis.

vii. The project proponent shall monitor the criteria pollutants level namely; PM10, S02, NOx (ambient levels as well as stack emissions) or critical sectoral parameters,

indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.

viii. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on MoEF&CC's environmental clearance portal.

ix. The project proponent shall submit the environmental statement for each financial year in Form-V to PPCB as prescribed under the Environment (Protection) Rules, 1986, (amended from time to time) and publish on the company's website.

x. The project proponent shall inform the Regional Office of MoEF&CC and PPCB, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production/ operation by the project.

xi. The project proponent shall abide by all the commitments and recommendations made in the Environmental lmpact Assessment (EIA) report/EMP report, commitment made during public hearing and that during their presentation to the SEAC and SEIAA.

xii. 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 add additional environmental protection measures required, if any.

xiii. The Regional Office, MoEF&CC, Chandigarh, PPCB and SEIAA/ SEAC members nominated for the purpose shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer(s) entrusted with this monitoring by furnishing the requisite data/ information/monitoring reports.

XII. ADDITIONAL CONDITIONS:

i. This EC is granted to the project proponent subject to the condition that industry shall obtain change of land use (CLU) /building plan approval for the industrial purposes and submit a copy of the same to SEIAA. In case, CLU/building plan approval has been rejected for industrial use for any reason, SEIAA will not be responsible for the cost incurred on the project.

ii. 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.

iii. The project proponent shall install online monitoring system at inlet as well as at the outlet of ETP for monitoring various environmental parameters.

iv. The project proponent shall make necessary arrangements for the recovery and reuse of steam condensate resulting from the indirect steam applications and shall not allow to discharge such effluents into drain.

v. The project proponent shall provide advanced scrubbing systems with proper neutralizing media to handle the acidic/alkaline emissions from storage, handling & processing activities. Wherever required, packed bed scrubbers will also be provided. The suction and scrubbing systems shall also be designed to handle the inherent odours from such units.

vi. The project proponent shall provide the Air Pollution Control Devices (APCD) as proposed by the PPCB to control the emissions generated from the boiler within the prescribed parameter.

vii. The project proponent shall practice rainwater harvesting to maximum possible extent. For this the project proponent shall adopt nearest village pond for carrying out rain water harvesting.

viii. 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 rain water etc is not impeded or disrupted in any manner.

Item No. 242.04: Application for obtaining Environmental Clearance for Residential Plotted Project namely "Connaught Estate" at HB No. 51, Rajpura Town, Rajpura, Patiala, Punjab by M/s Pamposh Town Planners Private Limited. (SIA/PB/INFRA2/417590/2023)

Background

The project proponent has applied for obtaining Environmental Clearance for Residential Plotted Project namely "Connaught Estate" at HB No. 51, Rajpura Town, Rajpura, Patiala, Punjab. The total land area of the project is 170718 sqm having built-up area of 1,48,398.05 sq.m. The Project is covered under category 8(a) of the schedule appended with the EIA Notification, 2006.

The project proponent has submitted the online form, Conceptual Plan, and other relevant documents through Parivesh Portal. The project proponent has deposited Rs. 2,97,000/- vide UTR no. PSIBR23031189704 dated 31.01.2023, as checked & verified by the supporting staff of SEIAA.

The construction status report submitted by Punjab Pollution Control Board vide letter no. 1794 dated 17.03.2023 is as under:

Sr. no.	***Points as desired by EE (SEIAA)***	***Comments***
1.	*Construction status of the proposed project. Please send a clear-cut report as to whether construction for the proposed project has been started for the project except for securing the land.*	*The site was visited by Asstt. Environmental Engineer of the Board on 07.03.2023 and it was observed that the Project Proponent is under the process of excavation work (good earth) at proposed site. Further, 1 porta cabin office has also been provided at the proposed site.*
2.	*Status of physical structures within 500 m radius of the site including the status of industries, drain, river, and eco-sensitive structures if any.*	*The proposed site is surrounded by residential area on one side, commercial area including Govt. buildings such as court complex, Rajpura and industrial estate comprising industries on other Side. Few small-scale industrial units fall within boundary 500 meters of proposed Site. No drain, river or eco sensitive structure falls within 500-meter radius of proposed site.*
3.	*Whether the site i the meeting prescribed criteria for setting up of*	*The site of the project falls in residential land use as per Master Plan, Rajpura as per the letter issued by Department of local Govt.*

	such type Please of projects. send the clear-cut recommendation.	*Punjab vide memo PB/CLU/PTA/RAJPU/1672 dated 21.092022.* *There is one air polluting unit namely M/S Raja Fats and Feeds pvt. Ltd. fall within 100 meters from the boundary of proposed residential colony-cum-commercial complex, 1 rice mill unit namely M/S Keshav Industries, KSM, Rajpura falls at distance of approx. 270 mtrs from proposed site of the project and other 1 rice mill namely Chawla Traders, KSM, Rajpura falls at distance of approx. 510 mtrs from proposed Site therefore the project is required to provide green belt of 15 meters along its boundary at that side.* *No MAH industry falls within 250 meters of the site of proposed residential colony-cum-commercial complex, Further, no cement plant /grinding unit falls within distance of 300 m, stone crushing/screening cum washing plant falls within distance of 500 m, hot mix plant falls within distance of 300 m, brick kiln falls within distance of 300 m, CBWTF foils within distance of 500 m, poultry farm falls within distance of 500 m, jaggery unit falls within distance of 200 m, retails outlet (petrol/ HSD) falls within 50m radius of proposed site. Therefore, the site of the project is suitable for establishment as the site of the project falls in residential land use area as per Master Plan, Rajpura and the letter issued Department of Local Govt Punjab vide memo PB/CLU/PTA/RAJPU/1672 dated 21.09.2022 subject to the special condition that the project shall develop green belt of 15 meters towards air polluting industry within 100 meters of the boundary of the project.*

Deliberations during 242nd meeting of SEAC held on 20.03.2023.

The meeting was attended by the following:

(i) Mr. Mandeep Sharma, Senior Manager M/s Pamposh Town Planner Pvt Ltd.
(ii) Mr. Sandeep Garg, Environmental Consultant M/s Eco Laboratories Pvt Ltd.

The Committee allowed the Environmental Consultant & project proponent to present the salient features of the application proposal. Thereafter, the Environmental Consultant presents the case as under:

Sr. No.	Description	Details
1	**Basic Details**	
1.1	Name of Project & Project Proponent:	Residential Plotted Project namely "Connaught Estate" by M/s Pamposh Town Planners Private Limited.
1.2	Proposal:	SIA/PB/INFRA2/417590/2023
1.3	Location of Project:	HB No. 51, Rajpura Town, Rajpura, Patiala, Punjab.
1.4	Details of Land area & Built up area:	Plot area: 1,70,718.00 m^2 Built up area: 1,48,398.05 m^2
1.5	Category under EIA notification dated 14.09.2006	The project falls under Schedule-8(a) i.e. Category B2- Building and Construction Project as the permissible built-up area of the project is 1,48,398.05 m^2.
1.6	Cost of the project	Rs. 92.50 Crores
2.	**Site Suitability Characteristics**	
2.1	Whether project is suitable as per the provisions of Master Plan:	The site falls in the residential zone as per the Master Plan of Rajpura.
2.2	Whether supporting document submitted in favour of statement at 2.1, details thereof: (CLU/building plan approval status)	Permission for change in land use accorded for 42.17 acres of land in the name of Pamposh Town Planners Pvt Ltd vide Memo No. PB/CLU/PTA/RAJPU/1672 dated 21.09.2022.
3	**Forest, Wildlife and Green Area**	
3.1	Whether the project required clearance under the provisions of Forest Conservations Act, 1980 or not:	No clearance is required under the provisions of the Forest Conservation Act 1980. The Project Proponent has submitted a self-declaration in the prescribed format.

3.2	Whether the project required clearance under the provisions of Punjab Land Preservation Act (PLPA), 1900.	The Project Proponent has submitted a self-declaration in the prescribed format.
3.3	Whether project required clearance under the provisions of Wildlife Protection Act, 1972 or not:	No clearance is required under the provisions of the Wildlife Protection Act 1972. The Project Proponent has submitted a self-declaration in the prescribed format.
3.4	Whether the project falls within the influence of Eco-Sensitive Zone or not.	No
3.5	Green area requirement and proposed No. of trees:	Total green area: 10612.61 sq. yards. Trees required @ 1 tree/ 80 m^2 of total plot area. Plot Area/80= 1,70,718/80= 2,134 trees Number of trees required = 2,134 trees Number of trees proposed = 2,213 Trees
4.	**Configuration & Population**	
4.1	Area bifurcation:	

Description	Area (in sq.m.)
Total Site Area	1,70,718.00 (42.17 acres)
Area under Residential Plots (@ 42.38%)	72358.45 (17.87 acres)
Area under Commercial Plots (@ 4.73%)	8073.51 (1.994 acres)
Area Under Green Park (@ 5.20%)	8876.72 (2.193 acres)
High School (@ 4.74%)	8096.65 (2 acres)
Club (@ 1.19%)	2030.02 (0.50 acre)
Religious Building (@ 0.05%)	92.01 (0.02 acre)
Area under Road (@ 25.15%)	42934.12 (10.60 acres)
Area under Parking (@ 5.67%)	9681.56 (2.39 acres)
Area under other Amenities/Services (@ 1.19%)	2038.61 (0.504 acres)
Reserved Area for Future Expansion (@ 9.68%)	16536.34 (4.084 acres)

Bifurcation of the built-up area as under:

S. No.	Block Name	Plot No.	No. of Plots	Plot Area (in sq.m.)	Total Plots Area (in sq.yds.)	Built-up Area (in sq.yds.)
1		A-1 - A-7	7	475.54	3981.25	5971.875
2		A-8	1	480.07	574.17	861.250
3		A-9 - A-16	8	475.54	4550.00	6825.000
4		A-17 - A-24	8	463.35	4433.33	6650.000
5		A-25, A-26	2	467.76	1118.89	1678.333
6		A-27 - A-34	8	463.35	4433.33	6650.000
7		A-35	1	285.67	341.67	563.750
8		A-36 - A-56	21	250.84	6300.00	10395.000
9	**A**	A-57	1	285.67	341.67	563.750
10		A-58 - A-69	12	250.84	3600.00	5940.000
11		A-70	1	256.57	306.86	506.319
12		A-71 - A-80	10	211.54	2530.00	4174.500
13		A-81	1	248.03	296.64	489.456
14		A-82 - A-89	8	250.84	2400.00	3960.000
15		A-90	1	235.04	281.11	463.832
16		A-91 - A-100	10	211.54	2530.00	4174.500
17		A-101	1	226.23	270.57	446.441
18		B-1 - B-12	12	212.17	3045.00	5024.250
19		B-13	1	221.74	265.21	437.590
20		B-14	1	250.78	299.94	494.895
21		B-15 - B-26	12	212.17	3045.00	5024.250
22		B-27 - B-48	22	167.22	4400.00	7700.000
23		B-49 - B-81	33	159.56	6297.50	11020.625
24		B-82	1	212.98	254.72	420.288
25		B-83	1	207.98	248.75	410.438
26		B-84	1	203.11	242.92	400.818
27	**B**	B-85	1	198.23	237.08	414.890
28		B-86	1	193.23	231.10	404.425
29		B-87	1	188.13	225.00	393.750
30		B-88	1	183.13	219.02	383.285
31		B-89	1	178.26	213.20	373.100
32		B-90	1	173.26	207.22	362.635
33		B-91	1	168.27	201.25	352.188
34		B-92	1	163.28	195.28	341.740
35		B-93 - B-109	17	167.22	3400.00	5950.000
36		B-110	1	189.10	226.16	395.782
37	**C**	C-1 - C-19	19	209.03	4750.00	7837.500

38		C-20 - C-21	2	204.36	488.83	806.575
39		C-22 - C-43	22	209.03	5500.00	9075.000
41		C-44	1	164.11	196.28	343.486
42		C-45 - C-67	23	125.42	3450.00	6037.500
43		C-68 - C-69	2	153.29	366.67	641.667
44		C-70 - C-92	23	125.42	3450.00	6037.500
45		C-93	1	164.11	196.28	343.486
46		C-94 - C-113	20	125.42	3000.00	5250.000
47		C-114 - C-115	2	153.29	366.67	641.667
48		C-116 - C-135	20	125.42	3000.00	5250.000
		TOTAL	**346**		**86,508.55**	**1,42,883.333 sq.yd. or 1,19,467.67 sq.m.**

Sr. No.	**SCOs/ SHOP**	**Size (in sq. yds.)**	**No.**	**Total Area (in sq. yds)**	**Permissible FAR**	**Built-up Area (in sq.yds.)**
1	SCO's 1-61	128.33	61	7,828.33	2.50	19,570.83
2	DSS's B1 - B38	48.00	38	1,824	1.60	2,918.40
	TOTAL		**99**	**9,652.33**		**22,489.23 sq.yds. (18,803.71 sq.m.)**

Besides above High School having built up area of 8096.65 sqm and club having built up area of 2030.02 sqm shall be constructed.

4.2 Population details

S. No.	**Description**	**No. of plots/Area**	**Criteria**	**Population (Persons)**
1.	Residential Plots	346 Plots (17.87 acres)	@ 15 persons per plot	5,190
2.	Commercial Plots (SCOs + Shops)	99 nos. (2.00 acres)	@ 100 persons per acre	200
3.	Public Buildings (School+ Club+ Temple)	2.52 acres	@ 100 persons per acre	252
Total Estimated Population				**5,642 Persons**

5 Water

5.1 Details of Water requirement, Wastewater generated and treated wastewater utilization:

S. No.	Details	Demand (KLD)
1.	Total water req.	721 KLD (Through Borewell)
2.	Flushing water req.	243 KLD
3.	Fresh Water Demand	721-243= 478 KLD
4.	Wastewater Generated (@ 80% of total water requirement)	577 KLD
5.	Treated water Generated (@ 98% of wastewater)	565 KLD
6.	Green area 2.19 acres (8,876.72 m^2)	
	• Summer (@ 5.5 lt./m^2/day)	49 KLD
	• Winter (@ 1.8 lt./m^2/day)	16 KLD
	• Monsoon (@ 0.5 lt./m^2/day)	4 KLD
7.	Excess treated wastewater shall be discharged into MC sewer	
	• Summer	273 KLD
	• Winter	306 KLD
	• Monsoon	318 KLD

The Project Proponent has submitted a copy of letter no. 5143 dated 14.02.2023 issued by EO, MC Rajpura wherein it has been mentioned as under:

ਆਪ ਜੀ ਨੂੰ ਸੂਚਿਤ ਕੀਤਾ ਜਾਦਾ ਹੈ ਆਪ ਜੀ ਦੇ ਪੈਜੈਕਟ ਨੂੰ ਸੀਵਰੇਜ ਦਾ ਕੁਨੈਕਸ਼ਨ ਦਿੱਤਾ ਜਾ ਸਕਦਾ ਹੈ ਅਤੇ 320 ਕੇ.ਐਲ.ਡੀ ਪਾਈ ਐਮ.ਸੀ ਦੇ ਸੀਵਰੇਜ ਵਿੱਚ ਛੱਡਿਆ ਜਾ ਸਕਦਾ ਹੈ। ਮੌਜੂਦਾ ਸੀਵਰੇਜ ਆਪ ਦੇ ਪੈਜੈਕਟ ਤੋ 500 M *ਤੱਕ ਵਿਛਾਇਆ ਜਾ ਚੁੱਕਾ ਹੈ ਅਤੇ ਲਗਭਗ ਦਸੰਬਰ 2025 ਪੂਰਾ ਕਰ ਦਿਤਾ ਜਾਵੇਗਾ। ਤੁਹਾਨੂੰ ਸੂਚਿਤ ਕੀਤਾ ਜਾ ਹੈ ਕਿ ਸੀਵਰ ਲਾਈਨ ਡਿਜ਼ਾਈਨ ਕਰਦੇ ਸਮੇਂ ਤੁਹਾਡੇ ਪ੍ਰੋਜੇਕਟ ਦੇ ਹਾਈਡ੍ਰੌਲਿਕ ਲੋਡ ਨੂੰ ਵਿਚਾਰਿਆ ਗਿਆ ਹੈ। ਸਰਕਾਰ ਦੀਆ ਹਦਾਇਤਾਂ ਅਨੁਸਾਰ ਮੁਕੰਮਲ ਹੋਣ ਦਾ ਸਰਟੀਫਿਕੇਟ ਅਤੇ ਲੋੜੀਂਦੇ ਖਰਚੇ ਸਮੇਂ-ਸਮੇਂ ਤੇ ਜਮ੍ਹਾਂ ਕਰਾਉਣ ਤੋਂ ਬਾਅਦ ਐਮ.ਸੀ ਨੂੰ ਕਨਾਟ ਅਸਟੇਟ ਨੂੰ ਸੀਵਰ ਕੁਨੈਕਸ਼ਨ ਦੇਣ ਵਿੱਚ ਕੋਈ ਇਤਰਾਜ਼ ਨਹੀਂ ਹੈ।*

5.2	Rain water harvesting proposal: -	24 Rain water recharging pits (8 pits with tripple bore) shall be provided for artificial rain water recharge within the project premises.
6	**Air**	
6.1	Details of Air Polluting machinery:	1 DG set of 100 KVA capacity.
6.2	Measures to be adopted to contain particulate emission/Air Pollution	DG set will be equipped with acoustic enclosure to minimize noise generation and adequate stack height for proper dispersion.
7	**Waste Management**	
7.1	Total quantity of solid waste generation	2,166 kg/day

7.2	Details of management and disposal of solid waste (Mechanical Composter/Compost pits)	2 composters of size 500 kg capacity each will be installed.
7.3	Details of management of Hazardous Waste.	Hazardous waste in the form of used oil from DG set will be generated which will be sold to authorized recycler as per The Hazardous & Other Wastes (Management & Transboundary Movement) Rules, 2016 and its amendments.
8	**Energy Saving & EMP**	
8.1	Power Consumption:	Total power demand for the proposed project will be 5300 KW which will be provided by Punjab State Power Corporation Limited (PSPCL). Individual plots owners will be responsible for providing power backup within their plot itself. 1 DG set of 100 KVA capacity will be provided as power back for essential services.
8.2	Energy saving measures:	Individual plot owner will be responsible for provision of energy efficient measures on their own. However, there will be provision of LEDs as well as solar lights in the common areas of the project by the project proponent.
8.3	Details of activities under Environment Management Plan (EMP) along with Corporate Environmental Responsibility (CER)	

Description	Capital (in Rs. Lakhs)	Recurring Cost (in Rs. Lakhs/annum)	Recurring Cost (in Rs. Lakhs/annum)
Waste water Management: Dual plumbing system, Sewage Treatment Plant of 700 KLD, SBR-UV	70	5	15
Air & Noise Pollution Management (Tarpaulin sheets, Acoustics enclosure for DG set)	5	1	1
Landscaping	25	5	10
Rainwater Recharging (8 RWR pits with dual bore)	25	2	8

	Environmental Monitoring: (Water sprinkling for dust control, Monitoring of DG sets as per PPCB Guidelines)	5	2	2
	Waste Management: (Collection of Solid Waste and disposal, (2 composters of size 500 kg each)	30	4	10
	Energy Conservation measures (LED lights, solar lights, etc.)	25	2	5
	TOTAL	**185**	**21**	**51**

8.4 Details of CER activities as under:

S. No.	Activities	Total Expenditure (in Lakhs)
1.	**Rejuvenation of village pond** Adoption of pond in Village Uppal Heri for pond rejuvenation and maintenance	85
2.	**Energy conservation** Installation of Solar Panel on the rooftop in Govt. High School located in village Rajpura Town	10
3.	**Rain water harvesting** Provision of rain water harvesting pit in Govt. High School located in village Rajpura Town	05
Total		**Rs. 100 Lakhs**

During meeting, the Committee perused the construction status report submitted by Punjab Pollution Control Board wherein it has been mentioned that the Project Proponent is under the process of excavation work (good earth) at proposed site. In this regard, the Project Proponent apprised the Committee that only minor excavation work for construction of pillars of main entrance gate as well as the temporary porta cabin has been done. The Project Proponent has submitted a copy of letter along with the undertaking and photographs depicting the same. The Committee took a copy of the said documents on record.

The Committee was satisfied with the presentation given by the Project Proponent and After detailed deliberations, SEAC decided to award 'Silver Grading' to the project proposal and to forward the application of the project proponent to SEIAA with the recommendation to grant Environmental Clearance for Residential Plotted Project namely “Connaught Estate” at HB No. 51, Rajpura Town, Rajpura, Patiala, Punjab by M/s Pamposh Town Planners Private Limited subject to the following specific & standard conditions as under: -

Specific Condition:

i) The project shall develop the green belt of 15m towards air polluting industry situated within 100m of the boundary of the project.

ii) The project proponent shall recharge surface water runoff of its project after providing proper treatment.

I. Statutory compliances:

i) The project proponent shall obtain all necessary clearances/ permissions from all relevant agencies including the town planning authority before commencement of work. All the construction shall be done in accordance with the local building bye laws.

ii) The approval of the Competent Authority shall be obtained for the structural safety of buildings due to earthquakes, adequacy of firefighting equipment, etc. as per the National Building Code including protection measures from lightning, etc.

iii) The project proponent shall obtain forest clearance under the provisions of the Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purposes is involved in the project.

iv) The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.

v) The project proponent shall obtain Consent to Establish / Operate under the provisions of the Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the Punjab Pollution Control Board.

vi) The project proponent shall obtain the necessary permission for the abstraction of groundwater/ surface water required for the project from the competent authority.

vii) A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.

viii) All other statutory clearances such as the approvals for storage of diesel from the Chief Controller of Explosives, Fire Department, and Civil Aviation Department shall be obtained, as applicable, by project proponents from the respective competent authorities.

ix) The provisions of the Solid Waste (Management) Rules, 2016, E-Waste (Management) Rules, 2016, Construction & Demolition Waste Rules,2016, and the Plastics Waste (Management) Rules, 2016 shall be followed.

x) The project proponent shall follow the ECBC/ECBC-R prescribed by Bureau of Energy Efficiency, Ministry of Power strictly.

xi) The project site shall conform to the suitability as prescribed under the provisions laid down under the master plan of the respective city/ town. For that, the project

proponent shall submit the NOC/ land use conformity certificate from Deptt. of Town and Country Planning or other concerned Authority under whose jurisdiction, the site falls.

xii) Besides the above, the project proponent shall also comply with siting criteria/guidelines, standard operating practices, code of practice, and guidelines if any prescribed by the SPCB/CPCB/MoEF&CC for such types of projects.

xiii) The project proponent shall construct the buildings as per the layout plan approved from the Competent Authority and in consonance of the project proposal for which this environment clearance is being granted.

II. Air quality monitoring and preservation

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

ii) A management plan shall be drawn up and implemented to contain the current exceedance in the ambient air quality at the site.

iii) The project proponent shall install a system to undertake Ambient Air Quality monitoring for common /criterion parameters relevant to the main pollutants released (e.g., PM10 and PM2.5) covering upwind and downwind directions during the construction period.

iv) Diesel power generating sets proposed as a source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel would be the preferred option. The location of the DG sets may be decided in consultation with Punjab Pollution Control Board.

v) Construction site shall be adequately barricaded before the construction begins. Dust, smoke and other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, and continuous dust/ wind-breaking walls all around the site (at least 3 m height or 1/3rd of the building height and maximum up to 10 m). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.

vi) No Excavation of soil shall be carried out without adequate dust mitigation measures in place.

vii) No loose soil or sand or construction and demolition waste or any other construction material that causes dust shall be left uncovered.

viii) No uncovered vehicles carrying construction material and waste shall be permitted.

ix) All the topsoil excavated during construction activities should be stored for use in horticulture/landscape development within the project site.

x) Grinding and cutting of building material in open areas shall be prohibited. A wet jet shall be provided for grinding and stone cutting.

xi) Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.

xii) All construction and demolition debris shall be stored at the site within the earmarked area and roadside storage of construction material and waste shall be prohibited. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules 2016.

xiii) The diesel generator sets to be used during the construction phase shall be low sulphur diesel type and shall conform to the norms and regulations prescribed under air and noise emission standards.

xiv) The gaseous emissions from the DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.

xv) For indoor air quality, the ventilation provisions as per the National Building Code of India shall be complied with.

xvi) Roads leading to or at the construction site must be paved and blacktopped (i.e., metallic roads should be built and used).

xvii) Dust Mitigation measures shall be displayed prominently at the construction site for easy public viewing.

xviii) Construction and Demolition Waste Processing and Disposal site shall be identified and required dust mitigation measures will be notified at the site

III. Water quality monitoring and preservation

i) The natural drainage system should be maintained for ensuring unrestricted flow of water.

ii) No construction shall be allowed which obstructs the natural drainage through the site, in wetland and water bodies. Check dams, bio-swales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rainwater.

iii) Buildings shall be designed to follow the natural topography as far as possible. Minimum cutting and filling should be done.

iv) The total water requirement for the project shall be 721 KLD, out of which 478 KLD shall be met through tubewell. Total freshwater use shall not exceed the proposed requirement as provided in the project details

v) Storage tank of adequate capacity shall be provided for the storage of treated wastewater and all efforts shall be made to supply the same for construction purposes.

vi) During the construction phase, the project proponent shall ensure that the wastewater generated from the labour quarters/toilets shall be treated and disposed of in an environment-friendly manner. The project proponent shall also exercise the option of modular bio-toilets or will provide proper and adequately designed septic tanks for the treatment of such wastewater and treated effluents shall be utilized for green area/plantation.

vii) The project proponent shall ensure a safe drinking water supply to the habitants. Adequate treatment facility for drinking water shall be provided, if required.

viii) The quantity of freshwater usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC and SEIAA along with six-monthly monitoring reports.

ix) A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration, and the balance of water available. This should be specified separately for groundwater and surface water sources, ensuring that there is no impact on other users.

x) At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape, etc. would be considered as pervious surface.

xi) Dual pipe plumbing shall be installed for supplying fresh water for drinking, cooking and bathing, etc. and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, air conditioning etc.

xii) Installation of R.O. plants in the project will be discouraged in order to reduce water wastage in form of RO reject. However, in case the requirement of installing RO plant is unavoidable, the rejected stream from the RO shall be separated and shall be utilized by storing the same within the particular component or in a common place in the project premises.

xiii) The project proponent shall also adopt the new/innovative technologies like low water discharging taps (faucet with aerators) /urinals with electronic sensor system

/waterless urinals/twin flush cisterns/ sensor-based alarm system for overhead water storage tanks and make them a part of the environmental management plans/building plans so as to reduce the water consumption/groundwater abstraction.

xiv) The project proponent will provide plumbing system for reuse of treated wastewater for flushing/other purposes etc. and will colour code the different pipelines carrying water/wastewater from different sources / treated wastewater as follows:

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

xv) Water demand during construction should be reduced by the use of pre-mixed concrete, curing agents, and adopting other best practices.

xvi) The CGWA provisions on rainwater harvesting should be followed. A rainwater harvesting plan needs to be designed where the recharge bores of minimum one recharge bore per 5,000 square meters of the plot area and a storage capacity of a minimum of one day of the total freshwater requirement shall be provided. In areas where groundwater recharge is not feasible, the rainwater should be harvested and stored for reuse. As per the proposal submitted by the project proponent, 24 no. recharging pits will be provided for groundwater recharging as per the CGWB norms. The groundwater shall not be withdrawn without approval from the Competent Authority.

xvii) All recharge should be limited to shallow aquifers.

xviii) No groundwater shall be used during the construction phase of the project. Only treated sewage/wastewater shall be used. A proper record in this regard should be maintained and should be available at the site.

xix) Any groundwater dewatering should be properly managed and shall conform to the approvals and the guidelines of the CGWA in the matter. Formal approval shall be taken from the CGWA for any groundwater abstraction or dewatering.

xx) The quantity of freshwater usage, water recycling, and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC, and SEIAA along with six-monthly Monitoring reports.

xxi) Sewage shall be treated in the STP with tertiary treatment by providing ultra-filtration Technology. STP shall be installed in a phased manner viz a viz in the module system designed in such a way so as to efficiently treat the wastewater with an increase in its quantity due to rise in occupancy. The treated effluent from STP shall be recycled/reused for flushing and gardening. No treated water shall be disposed of into the municipal stormwater drain.

xxii) No sewage or untreated effluent would be discharged through stormwater drains. Onsite sewage treatment with a capacity to treat 100% wastewater will be installed. The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry / SEIAA before the project is commissioned for operation. Treated wastewater shall be reused on-site for landscape, flushing, and other end-uses. Excess treated water shall be discharged as per statutory norms notified by the Ministry of Environment, Forest, and Climate Change. Natural treatment systems shall be promoted.

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

xxiv) Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed of as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.

IV. Noise monitoring and prevention

i) Ambient noise levels shall conform to the commercial area both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental pollution loads on the ambient air and noise quality shall be closely monitored during the construction phase. Adequate measures shall be made to reduce noise levels during the construction phase, so as to conform to the stipulated standards by CPCB/SPCB.

ii) A noise level survey shall be carried out as per the prescribed guidelines and a report in this regard shall be submitted to the Regional Officer of the Ministry as a part of a six-monthly compliance report.

iii) Acoustic enclosures for DG sets, noise barriers for ground-run bays, earplugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.

V. Energy Conservation measures

i) Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC.

ii) Outdoor and common area lighting shall be LED.

iii) Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased daylighting design and thermal mass, etc. shall be incorporated in the building design. Wall, window, and roof U-values shall be as per ECBC specifications.

iv) Energy conservation measures like the installation of LEDs for lighting the area outside the building should be an integral part of the project design and should be in place before project commissioning.

v) Solar, wind, or other Renewable Energy shall be installed to meet electricity generation equivalent to 1% of the demand load or as per the state level/ local building bye-laws requirement, whichever is higher.

vi) At least 30% of the rooftop area shall be used for generating Solar power for lighting in the apartments so as to reduce the power load on the grid. A separate electric meter shall be installed for solar power. Solar water heating shall be provided to meet 20% of the hot water demand of the commercial and institutional building or as per the requirement of the local building bye-laws, whichever is higher.

VI. Waste Management

i) A certificate from the competent authority handling municipal solid waste, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from the project shall be obtained.

ii) The Project Proponent shall install Mechanical Composter of adequate capacity to treat wet component of the Solid Waste.

iii) Disposal of muck during the construction phase should not create any adverse effect on the neighbouring communities and should be safely disposed of taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of the competent authority.

iv) Separate wet and dry bins must be provided in each unit and at the ground level for facilitating the segregation of waste. Solid waste shall be segregated into wet garbage and inert materials.

v) Organic waste compost/ Vermiculture pit/ Organic Waste Converter/Mechanical Composter within the premises must be installed for treatment and disposal of the solid waste.

vi) All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie-up must be done with the authorized recyclers.

vii) Any hazardous waste generated during the construction phase, shall be disposed of as per applicable rules and norms with the necessary approvals of the State Pollution Control Board.

viii) Use of environment-friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environmentally friendly materials.

ix) Fly ash should be used as a building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready-mixed concrete must be used in building construction.

x) Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Rules, 2016.

xi) Used CFLs and TFLs should be properly collected and disposed of or sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination.

VII. Green Cover

i) No naturally growing tree should be felled/transplanted unless exigencies demand. Where absolutely necessary, tree felling shall be with prior permission from the concerned regulatory authority. Old trees should be retained based on girth and age regulations as may be prescribed by the Forest Department.

ii) At least a single line plantation all around the boundary of the project as proposed shall be provided. The open spaces inside the plot should be suitably landscaped and covered with vegetation of indigenous species/variety. The project proponent shall ensure the planting of 2213 trees in the project area at the identified location, as the per proposal submitted, with plants of native species preferably having broad leaves. The size of the plant thus planted should not be less than 6 ft and each plant shall be protected with a fence and properly maintained. The project proponent shall make adequate provisions of funds to ensure maintenance of the plants for a further period of three years and thereafter, protected throughout the entire lifetime of the Project.

The species with heavy foliage, broad leaves, and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping. The plantation should be undertaken as per SEIAA guidelines.

iii) The Project Proponent shall develop a green belt with native tree species (having canopy type structure and especially trees, and not grass) before the completion of the project. The greenbelt shall inter alia cover the entire periphery of the unit provided that the number of trees to be planted should not be less than one tree per 80 sqm of the total land area. The canopy trees shall also be planted around the parking area to provide shade to the parked vehicles.

iv) Where the trees need to be cut with prior permission from the concerned local Authority, a compensatory plantation in the ratio of 1: 10 (i.e. planting of 10 saplings of the same species for every tree that is cut) shall be done and the newly planted saplings will be maintained for at least 5 years. Green belt development shall be undertaken as per the details provided in the project document.

v) Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during the plantation of the proposed vegetation on site.

vi) The project proponent shall not use any chemical fertilizer /pesticides /insecticides and shall use only Herbal pesticides/insecticides and organic manure in the green area.

vii) The green belt along the periphery of the plot shall achieve an attenuation factor conforming to the day and night noise standards prescribed for commercial land use.

viii) The project proponent shall submit the progress of developing the green belt in the six-monthly compliance report.

VIII. Transport

i) A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria.

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

   b) Traffic calming measures.

   c) Proper design of entry and exit points.

   d) Parking norms as per local regulations.

ii) Vehicles hired for bringing construction material to the site should be in good condition and should have a valid pollution check certificate, conform to applicable air and noise emission standards, and should be operated only during non-peak hours.

iii) A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 km radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on the cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies within this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.

iv) Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized.

IX. Human health issues

i) All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris, or working in any area with dust pollution shall be provided with dust masks.

ii) For indoor air quality, the ventilation provisions as per the National Building Code of India should be followed.

iii) An emergency preparedness plan based on the Hazard Identification and Risk Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, and medical health care, creche, etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

iv) Occupational health surveillance of the workers shall be done regularly.

v) A First Aid Room shall be provided in the project both during construction and operations of the project.

X. Environment Management Plan

i) The company shall have a well-laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violations of the environmental / forest/wildlife norms/conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stakeholders. A copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of the six-monthly report.

Description	Capital (in Rs. Lakhs)	Recurring Cost (in Rs. Lakhs/annum)	Recurring Cost (in Rs. Lakhs/annum)
Waste water Management: Dual plumbing system, Sewage Treatment Plant of 700 KLD, SBR-UV	70	5	15
Air & Noise Pollution Management (Tarpaulin sheets, Acoustics enclosure for DG set)	5	1	1
Landscaping	25	5	10
Rainwater Recharging (8 RWR pits with dual bore)	25	2	8
Environmental Monitoring: (Water sprinkling for dust control, Monitoring of DG sets as per PPCB Guidelines)	5	2	2
Waste Management: (Collection of Solid Waste and disposal, (2 composters of size 500 kg each)	30	4	10
Energy Conservation measures (LED lights, solar lights, etc.)	25	2	5
TOTAL	**185**	**21**	**51**

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 EMP and environmental conditions along with the responsibility matrix of the company shall be prepared and shall be duly approved by the competent authority as under:

S. No.	Activities	Total Expenditure (in Lakhs)
1.	**Rejuvenation of village pond** Adoption of pond in Village Uppal Heri for pond rejuvenation and maintenance	85
2.	**Energy conservation** Installation of Solar Panel on the rooftop in Govt. High School located in village Rajpura Town	10

3.	**Rain water harvesting** Provision of rain water harvesting pit in Govt. High School located in village Rajpura Town	05
Total		**Rs. 100 Lakhs**

XI. Validity

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

XII. Miscellaneous

i) The project proponent shall obtain a completion and occupancy certificate from the Competent Authority and submit a copy of the same to the SEIAA, Punjab before allowing any occupancy.

ii) The project proponent shall comply with the conditions of CLU, if obtained.

iii) The project proponent shall prominently advertise in at least two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEF&CC/SEIAA website where it is displayed.

iv) The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn have to publicly display the same for 30 days from the date of receipt.

v) The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on a half-yearly basis.

vi) The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the Ministry of Environment, Forest and Climate Change at the Environment Clearance portal and submit a copy of the same to SEIAA.

vii) The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put the same on the website of the company.

viii) The project proponent shall inform the Regional Office as well as SEIAA Punjab, the date of financial closure and final approval of the project by the concerned authorities,

commencing the land development work and start of production operation by the project.

ix) The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.

x) The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitments made during public hearing and also those made to SEIAA / SEAC during their presentation.

xi) No further expansion or modifications in the project shall be carried out other than those permitted in this EC without prior approval of SEIAA. In case of deviation or alterations in the project proposal from those submitted to the Ministry/SEIAA for clearance, a fresh reference shall be made to the Ministry/SEIAA, as applicable, to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.

xii) The Regional Office, MoEF&CC, Chandigarh, Punjab Pollution Control Board and SEIAA/ SEAC members nominated for the purpose shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer(s) entrusted with this monitoring by furnishing the requisite data/ information/monitoring reports.

xiii) This Environmental Clearance is granted subject to final outcome of pending related cases in the Hon'ble Supreme Court of India, Hon'ble High Courts, Hon'ble NGT and any other Court of Law as may be applicable to this project.

XIII. Additional Conditions

i) The approval is based on the conceptual plan/drawings submitted with the application. In case, there is variation in built-up area/green area/ any other details in the drawings approved by the competent authority, the Project Proponent shall obtain the revised Environmental Clearance.

ii) The Project Proponent shall ensure that the natural drainage channels in the project site including streams, drains, choes, creeks, rivulets, etc. are not disturbed so that the natural flow of rainwater, etc is not impeded or disrupted in any manner.

iii) Authorization from Punjab Pollution Control Board shall be obtained as applicable under the Bio-Medical Waste Management Rules 2016 as amended from time to time.

iv) The solid waste other than Bio-Medical Waste & Hazardous Waste (dry as well as wet garbage) generated should be properly collected and segregated before disposal to Municipal Authorities in accordance with the Solid Waste Management Rules, 2016. No municipal waste should be disposed off outside the premises in contravention of relevant rules and by-laws. Adequate measures should be taken to prevent any malodour in and around the Project premises.

v) In the event that the project proponent decides to abandon/close the Project at any stage, he shall submit an application in the prescribed form along with requisite documents through Parivesh to SEIAA for surrendering the Environmental Clearance as per the procedure prescribed in OM dated 29.03.2022 issued by the MoEF&CC. The project proponent shall be accountable for adherence/compliance of the EC conditions till such time as the project is finally closed by SEIAA, based upon the certified closure report of Integrated Regional Offices (IROs) of MoEF&CC, Chandigarh/PPCB.

vi) This Environmental Clearance is liable to be revoked without any further notice to the Project Proponent in case of failure to comply with condition (v) above.

vii) Concealing factual data or submission of false/fabricated data may result in revocation of this Environmental Clearance and attract action under the provisions of Environment (Protection) Act, 1986.

viii) The Project Proponent shall manage the solid waste generated from the project as per the sub-rule-7 of rule-4 of SWM Rules 2016.

ix) The Ministry reserves the right to stipulate additional conditions if found necessary. The Promoter Company in a time bound manner shall implement these conditions.

x) The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and other wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India/High Courts and any other Court of Law relating to the subject matter.

xi) Any appeal against this Environmental Clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

Deliberations during 245th meeting of SEIAA held on 06.04.2023.

The meeting was attended by the following:

(i) Mr. Mandeep Sharma, Senior Manager M/s Pamposh Town Planner Pvt Ltd.
(ii) Mr. Sandeep Garg, Environmental Consultant M/s Eco Laboratories Pvt Ltd.

SEIAA allowed the project proponent to present the case. Environmental Consultant presented the salient features of the project. A copy of the presentation submitted by the project proponent was taken on record.

SEIAA observed that the project proponent has proposed to plant 2213 trees in the project. To an observation of SEIAA, the project proponent agreed to plant at least 8 feet tall saplings with healthy growth and woody stems of indigenous tree species like Pilkin, Kachnar, kaner,

Gulmohar, Goolar, Arjun, Baheda, Simbal, Pipal, Banyan, Drek, Silver Oak, Jamun, Kadamb. SEIAA decided that a special condition would be imposed in this regard.

The project proponent further submitted that whereas the cost of the project is Rs. 100.50 crores, the same has been incorrectly recorded as Rs. 92.50 crores in the proceedings of the SEAC meeting and thus requested to correct the same. SEIAA checked the online application on the Parivesh Portal and observed that the cost of the project is Rs. 100.50 crores and decided to correct the same while issuing the EC letter.

SEIAA perused the relevant documents including the proposed EMP and was satisfied with the presentation and the mitigation measures proposed to be adopted for reducing the environment impact caused due to the proposed project.

After detailed deliberations, SEIAA decided to accept the recommendations of SEAC and grant Environmental Clearance for Residential Plotted Project namely "Connaught Estate" at HB No. 51, Rajpura Town, Rajpura, Patiala, Punjab as per the details mentioned in Form 1, 1A, EMP, conceptual plan and subsequent presentation /clarifications made by the project proponent and his consultant with proposed measures and subject to following conditions:

Specific Condition:

i) The project shall develop the green belt of 15m towards air polluting industry situated within 100m of the boundary of the project.
ii) The project proponent shall recharge surface water runoff of its project after providing proper treatment.
iii) The project proponent shall plant at least 8 feet tall saplings with healthy growth and woody stems of indigenous tree species like Pilkin, Kachnar, kaner, Gulmohar, Goolar, Arjun, Baheda, Simbal, Pipal, Banyan, Drek, Silver Oak, Jamun, Kadamb.

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.

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 shall be obtained, 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 Energy Conservation Building Code (ECBC)/ECBC-R prescribed by the Bureau of Energy Efficiency, Ministry of Power strictly.

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 environment clearance 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 rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel would be the preferred option. The location of the DG sets may be decided in consultation with Punjab Pollution Control Board.

v) Construction site shall be adequately barricaded before the construction begins. Dust, smoke and other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, and continuous dust/ wind-breaking walls all around the site (at least 3 m height or 1/3rd of the building height and maximum up to 10 m). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, 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.

xvi) Construction and Demolition Waste Processing and Disposal site shall be identified and required dust mitigation measures will be notified at the site.

III. Water quality monitoring and preservation

i) The natural drainage system should be maintained for ensuring unrestricted flow of water.

ii) No construction shall be allowed which obstructs the natural drainage through the site, in wetland and water bodies. Check dams, bio-swales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rainwater.

iii) Buildings shall be designed to follow the natural topography as far as possible. Minimum cutting and filling should be done.

iv) The total water requirement for the project shall be 721 KLD, out of which 478 KLD shall be met through tubewell. Total freshwater use shall not exceed the proposed requirement as provided in the project details. 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 will 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 R.O. plants in the project will be discouraged in order to reduce water wastage in the form of RO reject. However, in case the requirement of installing RO plant is unavoidable, the rejected stream from the RO shall be separated and shall be utilized by storing the same within the particular component or in a common place in the project premises.

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 washing (Washbasin / sinks) and from Cloth Washing	Grey
d)	Reject water streams from RO plants and AC condensate (this is to be implemented wherever centralized AC system and common RO has been proposed in the Project). Further, in case of individual houses/establishment this proposal may also be implemented wherever possible.	White
e)	Treated wastewater (for reuse only for plantation purposes) from the STP treating black water	Green
f)	Treated wastewater (for reuse for flushing purposes or any other activity except plantation) from the STP treating greywater	Green with strips
g)	Stormwater	Orange

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, 08 no. recharging pits (with triple bore) 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 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 Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry / SEIAA before the project is commissioned for operation. Treated wastewater shall be reused on-site for landscape, flushing, and other end-uses. Excess treated water shall be discharged as per statutory norms notified by the Ministry of Environment, Forest, and Climate Change. Natural treatment systems shall be promoted.

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 air and noise quality shall be closely monitored during the

construction phase. Adequate measures shall be made to reduce noise levels during the construction phase, so as to conform to the stipulated standards by CPCB/SPCB.

ii) A noise level survey shall be carried out as per the prescribed guidelines and a report in this regard shall be submitted to the SEIAA as a part of a six-monthly compliance report.

iii) Acoustic enclosures for DG sets, noise barriers for ground-run bays, earplugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.

V. Energy Conservation measures

i) Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC.

ii) Outdoor and common area lighting shall be LED.

iii) Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased daylighting design and thermal mass, etc. shall be incorporated in the building design. Wall, window, and roof U-values shall be as per ECBC specifications.

iv) Energy conservation measures like the installation of LEDs for lighting the area outside the building should be an integral part of the project design and should be in place before project commissioning.

v) Solar, wind, or other renewable energy shall be installed to meet electricity generation equivalent to 1% of the demand load or as per the state level/ local building bye-laws requirement, whichever is higher.

vi) At least 30% of the rooftop area shall be used for generating Solar power for lighting in the apartments so as to reduce the power load on the grid. A separate electric meter shall be installed for solar power. Solar water heating shall be provided to meet 20% of the hot water demand of the commercial and institutional building or as per the requirement of the local building byelaws, whichever is higher.

VI. Waste Management

i) A certificate from the competent authority handling municipal solid waste (MSW), indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from the project shall be obtained.

ii) The project proponent shall install mechanical composter of adequate capacity to treat wet component of the solid waste.

iii) Disposal of muck during the construction phase should not create any adverse effect on the neighbouring communities and should be safely disposed of taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of the Competent Authority.

iv) Separate wet and dry bins must be provided in each unit and at the ground level for facilitating the segregation of waste. Solid waste shall be segregated into wet garbage and inert materials.

v) Organic waste compost/ Vermiculture pit/ Organic Waste Converter/Mechanical Composter within the premises must be installed for treatment and disposal of the solid waste.

vi) All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie-up must be done with the authorized recyclers.

vii) Any hazardous waste generated during the construction phase, shall be disposed of as per applicable rules and norms with the necessary approvals of the State Pollution Control Board.

viii) Use of environment-friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include fly ash bricks, hollow bricks, 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.

VII. Green Cover

i) No naturally growing tree should be felled/transplanted unless exigencies demand. Where absolutely necessary, tree felling shall be with prior permission from the concerned regulatory authority. Old trees should be retained based on girth and age regulations as may be prescribed by the Forest Department.

ii) At least a single line plantation all around the boundary of the project as proposed shall be provided. The open spaces inside the plot should be suitably landscaped and covered with vegetation of indigenous species/variety. The project proponent shall ensure the planting of 2213 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 6 ft and each plant shall be protected with a fence and properly maintained. The project proponent shall make adequate provisions of funds to ensure maintenance of the plants for a further period of three years and thereafter, protected throughout the entire lifetime of the Project. The species with heavy foliage, broad leaves, and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping. The plantation should be undertaken as per MoEF&CC guidelines.

iii) The Project Proponent shall develop a green belt with native tree species (having canopy type structure and especially trees, and not grass) before the completion of the project. The greenbelt shall inter alia cover the entire periphery of the unit provided that the number of trees to be planted should not be less than one tree per 80 sqm of the total land area. The canopy trees shall also be planted around the parking area to provide shade to the parked vehicles.

iv) Where the trees need to be cut with prior permission from the concerned local authority, a compensatory plantation in the ratio of 1: 10 (i.e. planting of 10 saplings of the same species for every tree that is cut) shall be done and the newly planted saplings will be maintained for at least 5 years. Green belt development shall be undertaken as per the details provided in the project document.

v) Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during the plantation of the proposed vegetation on site.

vi) The project proponent shall not use any chemical fertilizer /pesticides /insecticides and shall use only herbal pesticides/insecticides and organic manure in the green area.

vii) The green belt along the periphery of the plot shall achieve an attenuation factor conforming to the day and night noise standards prescribed as per land use pattern.

viii) The project proponent shall submit the progress of developing the green belt in the six-monthly compliance report submitted 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.

e) Hierarchy of roads with proper segregation of vehicular and pedestrian traffic

f) Traffic calming measures

g) Proper design of entry and exit points

h) Parking norms as per local regulations

ii) Vehicles hired for bringing construction material to the site should be in good condition and should have a valid pollution check certificate, conform to applicable air and noise emission standards, and should be operated only during non-peak hours.

iii) A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 km radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on the cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies within this 05 kms radius of the site in different scenarios of space and time. The traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ Competent Authority for road augmentation and shall also have their consent to the implementation of components of the plan involving the participation of these departments.

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 MoEF&CC as a part of the six-monthly report.

ii) A separate Environmental Cell both at the project and company headquarters level, with qualified personnel shall be set up under the control of senior Executive, who will report directly to the head of the organization.

iii) Action plan for implementing 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 separate accounts and will not be diverted for any other purpose. The details of the activities to be carried out under EMP and other additional activities to be undertaken for amelioration of environment are as under:

Environment Management Plan			
Description	**Capital (in Rs. Lakhs)**	**Recurring Cost (in Rs. Lakhs/annum)**	**Recurring Cost (in Rs. Lakhs/annum)**
Waste water Management: Dual plumbing system, Sewage Treatment Plant of 700 KLD, SBR-UV	70	5	15
Air & Noise Pollution Management (Tarpaulin sheets, Acoustics enclosure for DG set, 3 no. Anti Smog guns)	14	5	1
Landscaping	25	5	10
Rainwater Recharging (8 RWR pits with dual bore)	25	2	8
Environmental Monitoring: (Water sprinkling for dust control, Monitoring of DG sets as per PPCB Guidelines)	5	2	2
Waste Management: (Collection of Solid Waste and disposal, (2 composters of size 500 kg each)	30	4	10
Energy Conservation measures (LED lights, solar lights, etc.)	25	2	5
Additional Environmental Activities	70	--	30 (Rs.5 Lakhs/year)
TOTAL	**264**	**25**	**81**

Details of Additional Environmental activities

S. No.	**Activities**	**Capital Cost (in Rs. Lakhs)**	**Recurring Cost (in Rs. Lakhs)**	**Recurring Cost (in Rs. Lakhs)**

		Construction Phase		Operational Phase
1.	**Rejuvenation of village pond** Adoption of pond in Village Uppal Heri for pond rejuvenation and maintenance	55	--	30 (Rs.5 Lakhs/annum for 6 years)
2.	**Energy conservation** Installation of Solar Panel on the rooftop in Govt. High School located in village Rajpura Town	10	--	
3.	**Rain water harvesting** Provision of rain water harvesting pit in Govt. High School located in village Rajpura Town	5	--	
Total		**70**		**30**

The entire cost of the environmental management plan will continue to be borne by the project proponent for the lifetime of the Project. Year-wise progress of implementation of the action plan shall be reported to the Ministry/Regional Office along with the Six-monthly Compliance Report.

The project proponent shall also submit physical/financial progress along with utilization certificates and documentary evidence (including photographs and short video clips) of the works undertaken regarding additional environmental activities by the project proponent in all the subsequent six-monthly compliance reports till the completion of these activities.Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out

XI. Validity

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

XII. Miscellaneous

i) The project proponent shall obtain a completion and occupancy certificate from the Competent Authority and submit a copy of the same to the SEIAA, Punjab before allowing any occupancy.

ii) The project proponent shall comply with the conditions of CLU, if obtained.

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

indicating that the project has been accorded environmental clearance and the details of MoEF&CC/SEIAA website where it is displayed.

iv) The copies of the environmental clearance shall be submitted by the project 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 upload the status of compliance of the stipulated environmental clearance conditions, including results of monitored data on their website and update the same on a half-yearly basis.

vi) The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the Ministry of Environment, Forest and Climate Change at the Parivesh portal and submit a copy of the same to SEIAA.

vii) The project proponent shall submit the environmental statement for each financial year in Form-V to the Punjab Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put the same on the website of the company.

viii) The project proponent shall inform the Regional Office as well as SEIAA Punjab, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation.

ix) The project authorities must strictly adhere to the stipulations made by the Punjab Pollution Control Board and the State Government.

x) 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.

xi) No further expansion or modifications in the project shall be carried out other than those permitted in this EC without prior approval of SEIAA. In case of deviation or alterations in the project proposal from those submitted to the Ministry/SEIAA for clearance, a fresh reference shall be made to the Ministry/SEIAA, as applicable, to assess the adequacy of conditions imposed and to include additional environmental protection measures required, if any.

xii) The Regional Office, MoEF&CC, Chandigarh, Punjab Pollution Control Board and SEIAA/ SEAC members nominated for the purpose shall monitor 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.

xiii) This Environmental Clearance is granted subject to the final outcome of related pending cases in the Hon'ble Supreme Court of India, Hon'ble High Courts, Hon'ble NGT and any other Court of Law as may be applicable to the project.

XIII. Additional Conditions

i) The approval is based on the conceptual plan/drawings submitted with the application. In case, there is variation in built-up area/green area/ any other details in the drawings approved by the Competent Authority, the project proponent shall obtain the revised Environmental Clearance.

ii) Authorization from Punjab Pollution Control Board shall be obtained as applicable under the Bio-Medical Waste Management Rules 2016 as amended from time to time.

iii) 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.

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 Environmental Clearance as per the procedure prescribed in OM dated 29.03.2022 issued by the MoEF&CC. The project proponent shall be accountable for adherence/compliance of the EC conditions till such time as the project is finally closed by SEIAA, based upon the certified closure report of Integrated Regional Offices (IROs) of MoEF&CC, Chandigarh/PPCB.

v) This Environmental Clearance 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 Environmental Clearance and attract action under the provisions of Environment (Protection) Act, 1986.