


STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY PUNJAB

Ministry of Environment, Forest & Climate Change, Government of India

O/o Directorate of Environment & Climate Change

MGSIPA Complex, Sector 26,

Chandigarh-160019

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No. SEIAA/MS/2021/4175 Registered/E-Mail

Date: 20/05/2021

To

Sh. Deepak Goyal, (Senior General Manager)

M/s IOL Chemicals and Pharmaceuticals Limited,

V&P.O Fatehgarh Channa, Mansa Road, Trident Complex,

Dhaula, Barnala, Punjab-148101

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Subject: Environmental Clearance under EIA Notification 14.09.2006 for expansion of the existing Chemicals and APIs production unit namely "M/s IOL Chemicals and Pharmaceuticals LIMITED" from existing production capacity of 654.95 TPD to 890.35 TPD along with Cogeneration -17 MW to 29.75 MW located at Village- Fatehgarh Channa, Mansa Road, Trident Complex, Dhaula, Barnala, Punjab-148101 (Proposal No. SIA/PB/IND2/176029/2020)

This has reference to your online application bearing Proposal No. SIA/PB/IND2/176029/2020 for obtaining Environmental Clearance under EIA Notification 14.09.2006 for expansion of the existing chemicals and APIs production unit namely "M/s IOL Chemicals and Pharmaceuticals Limited" from existing production capacity of 654.95 TPD to 890.35 TPD along with Cogeneration -17 MW to 29.75 MW located at Village Fatehgarh Channa, Mansa Road, District Barnala, Punjab. As per EIA Notification, 14.09.2006 the project falls under "A" category but now, as per notification S.O. 1223 (E) dated 27.03.2020 & S.O. 3636 (E) dated 15.10.2020 issued by Ministry, "All proposals for projects or activities in respect of Active Pharmaceutical Ingredients (API) received up to the 30th March 2021, shall be appraised as Category 'B2' Projects to ensure drug availability or production to reduce the impact of Novel Coronavirus. The proposal has been appraised as per procedure prescribed under the provisions of EIA Notification 14.09.2006 on the basis of the mandatory documents enclosed with the application viz., Form-2, PFR, EMP, additional documents & subsequent presentation /clarifications made by the project proponent & his consultant to the observations of SEIAA and SEAC. The salient features of the project are as under: -

Sr. No	Items	Details
1.	Name & Location of the project	M/s IOL Chemicals and Pharmaceuticals Limited Village Fatehgarh Channa, Mansa Road District Barnala
2.	Category & Activity	Category B2,

		Activity 5(f), as per S.O. 1223(E) dated 27.03.2020 & S.O. 3636(E) dated 15.10.2020			
3.	Total cost of project after expansion	1220.83 Crores			
4.	Co-ordinates				
	Point	Latitude	Longitude		
	NW	30°18' 8.62" N	75°30'5.35" E		
	NE	30°18' 8.83" N	75°30'14.86" E		
	SE	30°17' 42.85" N	75°30'18.00" E		
	SW	30°17' 42.35" N	75°29'59.44" E		
5.	Classification/Land use pattern as per Master Plan	Industrial			
6.	Plot area details				
	Sr. No.	Particulars	Area in sqm (% w.r.t total area)		
	1	Production plants including ware house, utilities	123156 (27.2717%)		
	2	Administration, QC, R&D, HSE, Security and welfare facilities	2482 (0.5496%)		
	3	Open Areas, Roads, Pathway & Auxiliary	161106 (35.6754 %)		
	4	Scrap yards	2000 (0.4428 %)		
	5	Parking Area	8862 (1.962%)		
	6	Green belt/Plantation	153982 (34.097 %)		
	Total Area (Sq. m.)		451588 (100%)		
7.	Manpower requirement after expansion	2350 employees			
8.	Production Capacity of existing and proposed products				
	Sr. No	Name of the products	Existing capacity (TPD)	Proposed Capacity (TPD)	Total Capacity after Expansion (TPD)
	1	Ethyl Acetate	300	150	450
	2	Acetic Anhydride	70	0	70
	3	Ibuprofen	45	15	60
	4	Monochloroacetic Acid	40	20	60
	5	Acetyl Chloride	32	16	48
	6	Iso Butyl benzene	60	0	60
	7	Diclofenac Sodium	7	0	7
	8	Metformin Hydrochloride	40	10	50
	9	Fenofibrate	0.75	0	0.75
	10	Clopidogrel Bisulphate	1	0	1

11	Amlodipine	0.25	0	0.25
12	Lamotrigine	0.1	0.4	0.5
13	Phineramine Base	0.1	0	0.1
14	Ibuprofen Lysinate	0.5	0.5	1
15	Ursodeoxycholic Acid	0.25	0	0.25
16	Quetiapine	3	0	3
17	Dex - Ibuprofen	0.5	0	0.5
18	Gabapentin	5	0	5
19	Pantoprazole	1	0	1
20	losartan Potassium	1	0	1
21	Fexofenadine	0.5	0	0.5
22	Ibuprofen Sodium	2	0	2
23	CMIC Chloride	2	-2	0
24	DCMIC Chloride	0.5	-0.5	0
25	FCMIC Chloride	0.5	-0.5	0
26	MIBT	10	10	20
27	Propyl Acetate	20	0	20
28	Intermediates			
i)	HEEP	1	0	1
ii)	Methyl-2-amino-3-chloropropionate HCl	0.5	0	0.5
iii)	2-(2-(Aminothiazole-4-yl)-2-[2-(terbutoxycarbonyl)isopropoxyimino] acetic acid (ATTBA) Ceftazidime intermediate	0.25	0	0.25
iv)	2-chloro-3-cyanopyridine Mirtazapine intermediate	0.25	0	0.25
v)	4'-methyl-2-cyanobiphenyl (OTBN)	1	2	3
vi)	m-Phenoxybenzaldehyde	2	0	2
vii)	4-aminobenzamide	2	0	2
viii)	p-nitro benzoyl chloride	3	0	3
ix)	Vanillin	2	0	2
x)	2-Butyl-4-Chloro-5-Formylimidazole (BCFI)	0	2	2
29	Folic Acid	0	2	2
30	Dextromethorphan	0	1	1
31	Levitracetam	0	1	1
32	Apixaban	0	1	1

33	Mesalamine	0	1	1
34	Telmisartan	0	0.5	0.5
35	Acelofenac	0	2	2
36	Cytosine	0	1	1
37	MICA Ester	0	1	1
38	MAEM Ester	0	1	1
39	Oxcarbapazine	0	1	1
	Total	654.95	235.4	890.35
	Cogeneration (MW)	17	12.75	29.75

9. Details of technology proposed for control of effluents generated from project

Sr. No	Item	Technology to be adopted by new unit/ After expansion	Capacity of proposed technology
1	STP (2 Nos)	SBR/MBBR Technology	75 KL each
2	ETP	Biological Treatment	1500 KLD ETP followed by RO of 800 KLD & ROs of 500 KLD capacity each
3	ZLD Technology	MEE/MVR	MEE of 100 KLD with MVR of Capacity 300 KLD

10. Breakup of Water Requirements & its source in Operation Phase after expansion

Particulars	Quantity (KLD)		Total Quantity (after expansion) (KLD)
	Existing	Proposed	
Domestic	85	20	105
Process including equipment washing	620	205	825
Washing (Floor)	0	65	65
Boiler Feed	52	268	320
Cooling Tower	50	163	213
Fresh Water For Plantation	0	223	223
Sub total	807	944	1751
Recycled	993	665	1658
Greenbelt plantation from STP	73	12	85
Total	1873	1621	3494

The total water demand of the project will be 3494 KLD out of which fresh water demand will be 1751 KLD and remaining (1658 KLD) water demand will be met through treated waste water.

Sources of water: Bore well/Surface water

11. Waste water generation & its disposal Arrangement in Operation Phase (after expansion)				
Details		Total Quantity	Treatment	Disposal method
Industrial Effluent		1513 KLD	ETP (1500KLD) + RO +MEE (100 KLD) + MVR (300 KLD)	Low TDS effluent treated in ETP followed by RO and RO permeate recycled into cooling tower. RO reject & High TDS effluent is/will be treated in MVR/MEE and condensate recovery of MEE/MVR is being/will be reused in process and cooling tower. Concentrated stream will be sent to ATFD for further treatment. MEE salt will be disposed into TSDF
Domestic effluent		85 KLD	STP of 150 KLD with SBR Technology	Landscaping and plantation purposes
Total		1598 KLD	As above	
12. Details of Technology to control the emissions (After expansion)				
Sr. No	Stack attached to		Stack Height Meter (m)	Air Pollution control device
	Existing	Proposed		
1	Boiler 14 TPH	-	52	Cyclone
2	Boiler 32 TPH	-	60	ESP
3	Boiler 80 TPH	-	60	ESP
4	-	Boiler 80 TPH	60	ESP
5	Thermic Fluid Heater 1500000 KCal/Hour	-	28	Adequate Stack height as per PPCB norms
6	Thermic Fluid Heater 2000000 KCal/Hour 2 Nos	-	24	Adequate Stack height as per PPCB norms
7	Thermic Fluid Heater 200000 x 5 Nos Kcal/hour	-	16	Adequate Stack height as per PPCB norms
8	--	Thermic Fluid Heater 200000 x 4 Nos Kcal/hour	16	Adequate Stack height as per PPCB norms
9	DG set 2 X 1000 KVA	-	8.5(Above building height)	Adequate Stack height as per PPCB norms
10	--	DG Set 2 x 2250 KVA	31 meter	Adequate Stack height as per PPCB norms

11	DG set 625 KVA	-	8.0 meter (Above building height)	Adequate Stack height as per PPCB norms
12	--	Incinerator 2x 200 Kg/Hour	30 meter	Scrubbers and Adequate Stack height as per PPCB norms

13. Hazardous/Non-Hazardous Waste Generation details & their storage, utilization and its disposal. Copy of Agreement clearly mentioning the Quantity

Sr. No.	Details	Unit	Category	Existing generation	Total after expansion	Disposal Method
1	Distillation Residues	TPA	20.3	---	15.0 TPA	Sent to Authorized Dealer for Disposal or In house incineration
2	Distillation Residue	TPA	28.1	13.095	17.460 TPA	Sent to Authorized Dealer for Disposal or In house incineration
3	Mobile Oil	KLA	5.1	0.840	1.200 TPA	Sale to Authorized Recyclers
4	Spent Catalyst	TPA	28.2	1.200	2.00 TPA	Send to TSDF facility
5	Spent Carbon	TPA	28.3	----	4.500 TPA	Sent to Authorized Dealer for Disposal or In house incineration
6	Off specification products	TPA	28.4	-----	5.00 TPA	
7	Date Expired Products	TPA	28.5	0.500	5.00 TPA	Sent to Authorized Dealer for Disposal or In house incineration
8	Spent Solvents	TPA	28.6	----	40.0 TPA	Sent to Authorized Dealer for Disposal or In house incineration
9	Empty Barrels/Containers /Liners Contaminated with Hazardous Chemicals/Waste	TPA	33.1	36.500	45.620 TPA	Sale to Recyclers
10	Contaminated Cotton Rags or other Cleaning Materials	TPA	33.2	0.240	2.500 TPA	Sent to Authorized Dealer for Disposal or In house incineration
11 (a)	ETP Sludge (Incinerable)	TPA	35.3	8.860	18.000 TPA	Sent to Authorized Dealer for Disposal or In house

						incineration
(b)	ETP Sludge (TSDF)	TPA	35.3	0.00	17.000 TPA	Send to TSDF facility
12	Spent Carbon or Filter Medium	TPA	36.2	0.600	1.500 TPA	Send to TSDF facility
13	Sludge from Wet Scrubbers	TPA	37.1	---	0.625 TPA	Send to TSDF facility
14	Ash from Incinerator	TPA	37.2	---	30.0 TPA	Send to TSDF facility
15	MEE Residue	TPA	37.3	0.00 TPA	180.0 TPA	Send to TSDF facility
15	Domestic Waste	TPA	----	---	20.0 TPA	Given to nearby farmers as manure

14. Solid Waste generation and its mode of disposal

Details	Quantity after expansion	Disposal Method
Domestic Solid Waste	20.0 TPA	Used as manure/composting
Ash from boiler	75.0 TPD	(i) Explore for 20 TPD of silica recovery plant for the treatment of rice husk ash on pilot basis, depending upon its success, it will be upgraded to total rice husk generation. (ii) Tie up with brick manufacturing for making bricks from rice husk ash (iii) Explore to install in house fly ash brick manufacturing plant. (iv) Balance rice husk ash sent to low lying area for land filling in an Environmentally Sound Manner

15. Power Load & Source

- i) Existing- 17 MW; Proposed- 12.75 MW (Stand by); Total after expansion 29.75 MW.
Source: In house through Co-generation
- ii) Silent DG sets -Existing- 2625 kVA (2 X 1000 KVA and 1 X 625 kVA); Proposed-4500 kVA (2 X 2250 KVA); Total after expansion - 7125 kVA.

16. Environment Management Plan Budget details

Sr. No	Environmental protection measures	Proposed EMP Cost (Rs Lacs) Capital	Proposed EMP Cost (Rs Lacs/annum) Recurring
1	Air pollution control & Noise Pollution Monitoring	100	20
2	Water Pollution control	650	637.78
3	Solid and hazardous waste management	100	36.00

4	Environment monitoring and management	70	20
5	Occupational Health	70	20
6	Green belt & Rainwater Harvesting	50	1.5
7	Air Pollution Control Devices	350	10.0
	Total	1390	745.28

The case was considered by the SEAC in its 198th meeting held on 05.04.2021 and 199th meeting held on 23.04.2021, wherein, the Committee observed that the project proponent has provided adequate and satisfactory clarifications to the observations raised by it. Therefore, the Committee awarded 'Silver Grading' to the project proposal and decided to forward the case to the SEIAA with the recommendation to grant Environmental Clearance for expansion to the project proponent under EIA notification dated 14.09.2006 for the project, subject to certain conditions in addition to the proposed measures.

Thereafter, the case was considered by the SEIAA in its 181th meeting held on 10.05.2021. The SEIAA observed that the case stands recommended by SEAC. The Authority looked into all the aspects of the project proposal in detail and was satisfied with the same. Therefore, the Authority decided to grant the Environmental Clearance for expansion of Chemicals and API's manufacturing unit namely "M/s IOL Chemicals and Pharmaceuticals Limited" from existing production capacity of 654.95 TPD to 890.35 TPD along with Cogeneration -17 MW to 29.75 MW located at Village Fatehgarh Channa, Mansa Road, Trident Complex, Dhaula, Barnala, Punjab as per the details mentioned in Form-2, PFR, EMP, additional documents & subsequent presentations/ clarifications made by the project proponent and his Environmental Consultant, subject to certain amended conditions as agreed by the project proponent and other conditions as proposed by SEAC in addition to the proposed measures.

Accordingly, SEIAA, Punjab hereby accords Environmental Clearance for expansion for the above project under the provisions of EIA Notification dated 14.09.2006 & its subsequent amendments made vide notification dated 27.03.2020 & 15.10.2020 as B2 project, subject to proposed measures & strict compliance of terms and conditions as follows: -

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 Boiler stack 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 PM_{2.5} in reference to PM emission, and SO₂ and NO_x in reference to SO₂ 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 extent 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. Low TDS effluent to the tune of 1137 KLD will be generated from Process, Washing and Boiler sent to ETP for treatment, after treatment 1137 KLD Treated water and Cooling tower Blow Down @ 105 KLD sent in to RO Plant for further treatment. RO permeate will be utilized in cooling tower for reuse and RO Reject @ 220 KL along with High TDS 156 KL will be sent to MEE/MVR for treatment, and condensate of MEE/MVR will be reused in Cooling tower. The concentrate of the MEE will be sent to ATFD of capacity 50 Kg/hr.
- 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 1751 KLD. 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 from the 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 off after taking the necessary precautions for general safety and health aspects of people with the approval of competent authority. The project proponent will comply with the provisions of Construction & Demolition Waste Rules, 2016. Dust, smoke & debris prevention measures such as wheel washing, screens, barricading and debris chute shall be installed at the site

- during construction including plastic / tarpaulin sheet covers for trucks bringing in sand & material at the site.
- 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 off 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. Selection of plant species shall be as per the CPCB guide lines in consultation with the State Forest Department. As per the proposal, there are already 33777 plants in the premises and further 4886 more trees will be planted in phase manner.

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.

X. Environmental Management Plan

- i. As proposed, the project proponent shall adhere to the commitments made in the proposal for CSR activities for spending at least a minimum amount of Rs.284 lacs towards the capital cost and Rs 4.0 Lacs/annum towards recurring cost on the following CER activities:-

Sr No.	Activities Proposed	Cost (Rs. In Lacs)	
		Capital	Recurring (Rs. In Lacs)/ Year
1.	To provide tools and tackles required in the local skill development Center for vocational training	15	0.5
2.	Medical and Health facilities (i) Provision of Patient trolley bed, emergency bed, wheel Chair, ambulance to Govt hospital Barnala	150	0.5
	(ii) Conducting Medical health camp and given medicine in dispensaries of Village Fatehgarh Channa & Dhaula, and Handiaya	40	0.25
3.	Education (i) Renovation of toilets in govt. school, Village Fatehgarh Channa (nearby village), Provision of furniture in class rooms	20	0.5
	(ii) Providing smart class room in village govt. school	15	0.25
4.	Renovation of toilet at public place of Handiaya (NP)	1	-
5.	Women income Generating Programmes through the various economic activities - Cutting & Tailoring, Pickle & Sauces making, Soft Toys & Gem Jeweler, and Beautician Courses	15	
6.	Cleanliness of Ponds in near by Villages for Rain water harvesting	15	
7.	Plantation in Near By area	13	2

Total	284	4
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- ii. The amount to be spent on CER activities shall be proportionate to the amount spent on project & such activities shall run parallel to the project execution. All the activities shall be completed within three year from the issuance of Environmental Clearance.
- iii. 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. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iv. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- v. 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 competent authority. The year-wise funds earmarked for environmental protection measures shall be kept in separate accounts and not to be diverted for any other purpose. The project proponent shall spend the minimum amount of Rs 1390 Lacs towards the capital cost and Rs 745.28 Lacs/annum towards recurring cost in the construction & Operation phase of the project including the environmental monitoring cost. The entire cost of the environmental management plan will continue to be borne by the project proponent. Year-wise progress of implementation of the action plan shall be reported to the Ministry/Regional Office along with the Six-monthly Compliance Report.

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. 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, SO₂, NO_x (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 EIA /EMP report, and also that during their presentation to the SEAC and SEIAA.
- xiii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- xiv. 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.
- xv. The SEIAA/Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

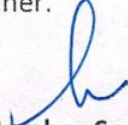
- xvi. The SEIAA/ Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xvii. The Regional Office of this Ministry or Punjab Pollution Control Board shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office and PPCB by furnishing the requisite data / information/monitoring reports.
- xviii. 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.
- xix. Any appeal against this EC 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.

XI. ADDITIONAL CONDITIONS:

- i. The Environmental Clearance is granted to the project subject to the condition that industry shall obtain change of land use for the industrial purposes and submit a copy of the same to SEIAA. In case, CLU 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 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.
- iv. 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.
- v. 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.
- vi. The project proponent shall practice rainwater harvesting to maximum possible extent. For this village ponds located at Villages-Dhoorkot, Pirtha patti Dhoorkot, Bhaini fatta, Bhathlan, Jhaloor, Uppli, Kotduna, Sekha, Pharwahi, Tehsil and District Barnala shall be adopted for desilting to recharge the rainwater. Pond water will percolate

through natural strata (without injection) to augment the ground water and remaining water shall be used for irrigation purposes by pumping method in the nearby fields.

- vii. The project proponent shall explore the possibility of setting up a silica recovery plant of 20 TPD capacity for the utilization of rice husk ash on pilot basis and submit its findings in this regard within 6 months time. Depending upon its success, project proponent shall further upgrade the silica recovery plant to utilize the total rice husk ash generation of their plant.
- viii. As discussed, the project proponent shall also explore the possibility of modification in the proposed/existing boilers for the utilization of crop residue as a fuel and submit its findings in this regard within 6 months time.
- ix. As volunteered by the project proponent, they shall undertake additional CSR activities to the tune of Rs 10 Lakhs for making bails of rice stubble for utilisation in power plants during the paddy harvesting season in 2021 in order to reduce the environmental degradation due to burning of stubble.
- x. 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.


Member Secretary

Endst. No. _____

Through E-mail

Date _____

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

1. The Secretary to Govt. of India, Ministry of Environment and Forest, Paryavaran Bhawan, CGO Complex, Lodhi Road, New Delhi.
2. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-office Complex, East Arjun Nagar, New Delhi.
3. The Chairman, Punjab Pollution Control Board, Vatavaran Bhawan, Nabha Road, Patiala.
4. The Chairman, Punjab State Power Corporation Ltd, the Mall, Patiala.
5. The Deputy Commissioner, Barnala
6. The Deputy Director General (C), Ministry of Environment, Forests & Climate Change, Northern Regional Office, Bays No. 24-25, Sector- 31-A, Chandigarh.
7. The Chief Town Planner, Department of Town & Country Planning, 6th Floor, PUDA Bhawan, Phase-8, Mohali.
8. The Joint Director, Ministry of Environment and Forest, Northern Regional Office, Bays No. 24-25, Sector-31A, Chandigarh. The detail of the authorized Officer of the project proponent is as under:

a) Name of the applicant : Mr. Deepak Goyal
Senior General Manager

b) Phone Number : +91-9878996161
c) Email Id : deepakgoyal@iolcp.com

9. Monitoring Cell, Ministry of Environment, Forests & Climate Change, Indira Paryavaran Bhavan, Jorbagh Road, New Delhi - 110003.


Member Secretary