Proceedings of 186th meeting of State Expert Appraisal Committee held on 26.12.2019 (Thursday) at 10:30 am in the Conference Hall No 2, at 1st Floor, MGSIPA Complex, Sector-26, Chandigarh.

The following members were present: -

Sr. No.	Name of SEAC Member	Designation in SEAC
1.	Er. Yogesh Gupta	Chairman
2.	Er. Pardeep Garg	Secretary
3.	Dr. Adarsh Pal Vig	Member
4.	Er. Nirmal Singh Kahlon	Member
5.	Sh. A.K Bhatia	Member
6.	Dr. Pawan Krishan	Member
7.	Sh. V.K Singhal	Member
8.	Sh. Deepak Sethi	Member

At the outset, Secretary SEAC, welcomed the members of the State Expert Appraisal Committee (SEAC) and informed that detailed agenda of the meeting, has already been circulated through e-mail. It was also apprised to SEAC that Er. Gurdinder Singh, Member SEAC has appointed as ombudsman, Electricity Punjab vide notification no PSERC/Secy/Reg 144 dated 08.12.2019 and cannot undertake any other part time and honorary work. As such, he has resigned from the post of Member, SEAC, Punjab with effect from 07.12.2019. He was associated with present SEAC since November 2017 and was also Member in the previous SEAC for its full term of 3 years. All the members of SEAC appreciated the work done by Er. Gurdinder Singh, Member SEAC. His guidance has helped the SEAC to decide many tedious and important issues amicably. The Chairman SEAC, asked the Secretary SEAC, to take the same on the record and take further necessary action. Thereafter, the agenda was taken up for consideration.

Item No .01 Confirmation of the proceedings of 185h meeting of State Level Expert Appraisal Committee held on 21.09.2019.

The proceedings of 185th meeting of State Level Expert Appraisal Committee held on 29.11.2019 were circulated to all the members of SEAC vide email dated 20.12.2019. No observation was received from any of the member. SEAC noted the same and confirmed the proceedings.

Item No. 02: Action taken on the proceedings of 184th and 185th meeting of State Level Expert Appraisal Committee held on 21.09.2019 and 29.11.2019 respectively.

SEAC was apprised that the Action taken on the proceedings of 184th and 185th meeting of State Level Expert Appraisal Committee held on 21.09.2019 and 29.11.2019 respectively are being taken and same will be placed in the next meeting of SEAC. SEAC noted the same and asked to place the same in the next meeting.

ItemNo.186.01 Application for Environmental Clearance under EIA notification dated 14.09.2006 for the establishment of residential project namely "Eastern Park" village Bholapur, Chandigarh Road, Ludhiana by M/s Gaurav Land Developers And Colonizers Pvt. Ltd. (Proposal No. SIA/PB/MIS/115414 /2019).

SEAC observed as under:

The project proponent has applied for obtaining Environmental Clearance under EIA notification dated 14.09.2006 for the establishment of residential Project namely "Eastern Park" village Bholapur, Chandigarh Road, Ludhiana.

The project proponent was raised EDS online on 18.09.2019 and the details of the same are given as under:

Sr No	Requirement as per the checklist where inadequacies were marked	Reply submitted by the Project Proponent
1.	Whether the project falls in the critical polluted area notified by MoEF&CC.	Area within MC limits of Ludhiana city falls in critically polluted area. The project is outside the present municipal limits of Ludhiana city. The project category does not attract "General Conditions"
2.	Various documents to be submitted along with the EC are listed as under:	a) The project does not involve diversion of any forest land b) The project is not covered under the PLPA, 1900 c) There is no eco-sensitive area within 10 km of the project boundary
3.	a) Properly filled Form 1 & 1A along with signed declaration b) Brief Description of the project (Annexure-A) c) Co-ordinates of all the corners of the project	Submitted

4.	a) Copy of Master Plan of the area showing land use pattern of the proposed site. b) Undertaking regarding conforming of site to the siting guidelines framed by PPCB	a) Copy of Master Plan of LPA Ludhiana, showing land use of the site, has been submitted b) The project has been granted CLU by the competent authority. Besides, the project has also been accorded CTE by the PPCB
5.	Drawing showing plumbing systems for use of fresh, treated wastewater and hot water, i.e., colour coding of the different lines is as under	Submitted
6.	Construction Phase a) Max. Water Requirement (kLD), Source of the Water and treatment facility Operation Phase b) Provision of module system kept during installation of STP c) Max. recycling/reuse of treated water and disposal.	**Construction phase** Construction water requirement (<5 kLD) – use of treated wastewater to be sourced from nearby STP/ETP Domestic water requirement (~10 kLD, for workers) – use of ground water **Operation phase** The complex will generate ~660 KLD of domestic wastewater when fully inhabited. The wastewater treatment facility will be provided in 3 modules of ~250±10% to cater to gradual pace of inhabitation. Treated wastewater reuse potential will be ~210-240 kLD (depending on season) and treated wastewater disposal requirement will be ~420-450 KLD.
7.	The project proponent shall submit a copy of acknowledgement along with set of application filed to CGWA /Competent Authority for obtaining permission for abstraction of ground water.	A copy of online application for obtaining permission from CGWA, for abstraction of groundwater, has been submitted.
8.	Detail of water bodies near the proposed project and impact on drainage if any.	There is no surface water body within 3 km of the project site. The site is located in flat-featureless terrain with no natural drain-line getting affected by the site.
9.	Action plan for green belt development a) Percentage of the area to be developed. b) Maintenance plan for 3 years indicating cost to be incurred	Proposed green cover of the site is ~8800 m^2 (including parks, incidental green area, along roads/pavements and inner periphery), ~28.4%. A dedicated horticulture staff will be deployed for effective maintenance and upkeep of the green area. An amount of ~R400000.00 per year will be earmarked for this purpose.

10.	Traffic Circulation System and connectivity with a view to ensure adequate parking, conflict free movements	Submitted
11.	The project proponent is required to submit the following information on the email seiaapb2019@gmail.com :- a) Synopsis of the project (Annexure-A) in pdf file and MS word format b) A copy of presentation in PPT format.	Submitted

The project proponent was again raised EDS online on 16.10.2019 and the details of the same are given as under:

Sr. No.	Requirement as per the checklist where inadequacies were marked	Reply
1.	Provide proper KML file	Submitted
2.	CTE by PPCB as per reply to the EDS raised earlier	Copy of CTE granted by the PPCB has been submitted.
3.	Treatment facility during Construction Phase	During construction phase, there will be generation of domestic sewage @~8 KLD, which shall be treated through a conventional twin-compartment septic tank.
4.	The project proponent shall submit a copy of acknowledgement along with set of application filed to CGWA /Competent Authority for obtaining permission for abstraction of ground water.	A copy of online application for obtaining permission from CGWA, for abstraction of groundwater has been submitted.

SEAC was apprised that Environmental Engineer, PPCB, RO-3, Ludhiana vide letter no. 2340 dated 27.11.2019 has intimated that the site was visited by the AEE of RO-3, Ludhiana and observed that the proposed site was an open plot and front side was barricaded with metal sheets. No construction had been started yet. The way to the said plot is through existing colony i.e. M/s Garden City. There exist residential colonies in around 500 m radius. One industry namely M/s Harisar Ply Board is at a distance of around 350 m (Approx.) towards Chandigarh Road and FCI godown towards village Bholapur at distance of 200 m (Approx). As per the said report, the site was meeting with the siting guidelines framed for the residential projects.

The case was considered by SEAC in its 186th meeting held on 26.12.2019 and the same was attended by the following on behalf of the project proponent:

1. Sh. Vidhu Mangal, Director of the promoter company.
2. Sh. Sumitana Dutta (FAE) and Sh. Sandeep Singh (FAE), M/s CPTL, Mohali, Environmental Consultant of the promoter company.

SEAC allowed the project proponent to present the salient features of the project and the Environmental Consultant presented the same as under:

Sr No.	**Item**	**Details**
1	Online Proposal No.	SIA/PB/MIS/115414/2019
2	Name and Location of the project	The Eastern Park developed by M/s Garav Basera Village Bholapur, Adjoining Garden City, Chandigarh Road, Tehsil Ludhian East, Distt. Ludhiana (Punjab)
4	Project/activity covered under item of scheduled to the EIA Notification, 14.09.2006	Category 8(a) Built-up area > 20000 m^2 and <150000 m^2
5	Whether the project is in critical polluted area or not.	The project category does not attract "General Conditions"
6	Does the project involve diversion of forest land. If yes, a. Extent of the forest land. b. Status of the forest clearance.	No
7	a. Is the project covered under PLPA,1900, if No but located near to PLPA area then the project proponent is required to submit NOC from the concerned DFO to the effect that project area does not fall under the provision of PLPA Act, 1900.	No
	b. Is the project covered under PLPA,1900, if yes then Status of the NOC w.r.t PLPA,1900.	
8	If the project falls within 10 km of eco- sensitive area/ National park/Wild Life Sanctuary. If yes, a. Name of eco- sensitive area/ National park/Wild Life Sanctuary and distance from	No

	the project site. b. Status of clearance from National Board for Wild Life (NBWL).	
9	Classification/Land use pattern as per Master Plan	Residential
10	Cost of the project	Rs 93 crores (approx..)

11	Total Plot area, Built-up Area and Green area	Total land area (net)	30935 m^2 (7.64 acres)
		Total built-up area, m^2	95277.5 m2
		Area under parks/ play grounds/green area, m^2	8800 m^2 (28.4%)
12	Population (when fully operational)	4750 Nos	
13	Water Requirements & source in Construction Phase	Construction water requirement (<5 kLD) – use of treated wastewater to be sourced from nearby STP/ETP Domestic water requirement (~10 kLD, for workers) – use of ground water	
14	Break up of Water Requirements & source in Operation Phase (Summer, Rainy, Winter):		

15

S. No.	Season	Fresh Water	Reuse water		Total KLD
		Domestic	For Flushing purposes KLD	Green Area KLD	
1.	Summer	680	200	40	920
2.	Winter	680	200	20	900
3.	Rainy	680	200	10	890

	Source of Water	Groundwater/ Treated waste water
16	Treatment & Disposal arrangements of waste water in Construction Phase	Septic tank Disposal onto land for irrigation
17	Disposal Arrangement of Waste water in Operation Phase	Total = 660 KLD

S. No	Season	For Flushing purpose s (KLD)	Green Area sqm (KLD)	Irrigation of plantation (KLD)
1.	Summer	200	40	Nil
2.	Winter	200	20	Nil
3.	Rainy	200	10	Nil

18	Solid waste generation and its disposal	a) 2000 kg/day a) Segregation at source into recyclable, bio- degradable and non-recyclable rejects Recyclable component – supplied through authorized recycler Bio-degradable component – stabilization through on-site mechanical composter and used as manure Non-recyclable component – disposal through MC, Ludhiana (NOC obtained)
19	Hazardous Waste & E- Waste	Spent oil @~300 kg/year – to be disposed through authorized recycler
20	Energy Requirements & Saving	~6600 kVA 13% energy will be saved by taking various measures such as :_ i) Solar based common lighting ~2% ii) Roof-top solar (PV) power (~230 kWp potential) ~5% iii) Use of LED based common lighting ~3% iv) Energy efficiency in receiving/ distribution ~1% v) High efficiency motors/transformers ~0.5% vi) Miscellaneous architectural features/HVAC ~1.5%
21	Environment Management Plan along with Budgetary break up phase wise and responsibility to implement	**Construction:** Submitted **Operation:** Submitted Capital cost of EMP = INR 170,00,000.00 Operational cost of EMP = INR 47,00,000.00 per year
22	CER activities along with budgetary break up and responsibility to implement	i) Educational & skill development of under-privileged and drop-out children (INR ~15 lacs) ii) Development of access roads to Village Bholapur (INR ~25 lacs) iii) Plantation work in Village Bholapur (INR ~1.5 lacs) iv) Medical camps/medicine distribution (INR ~3 lacs) v) Pathway lighting for the village

		community & its maintenance (INR ~5 lacs) vi) Cleanliness drives & water management awareness camps (INR ~2.5 lacs) vii) Regular maintenance of village pond (INR ~4 lacs) viii) Gross CSER Commitment = (INR ~56 lacs)

SEAC raised the following queries to the project proponent to which he replied as under:_

Sr. No	**Observations**	**Reply**
1	Water balance calculations are required to be revised considering actual water consumption and STP is to be designed considering 200 l/p/day wastewater generation.	The project proponent agreed to submit the revised water balance calculation.
2	What is the proposal for disposal of the treated wastewater? i) Is there any provision of sewer in the area? ii) The project proponent is required to submit proper proposal for discharge of treated wastewater.	The treated wastewater will be utilized onto land of area of about 9.256 acres for plantation as per Karnal Technology. i) The sewer line of the area falls at a distance of about 700 m from the project site. ii) The project proponent sought time to submit reply.
3	Submit the rainwater recharging plan as per the CGWA norms	The project proponent sought time to submit reply
4	How many tubewells are proposed by the project proponent.	There is one existing borewell. Another new borewell will be provided to meet with the demands in future and for that the application has been submitted in CGWA.
5	Whether permission has been obtained from the concerned department for development of access road to village Bholapur under CER activity	No such permission has been obtained.
6	The CER activities proposed by the project proponent are general and not specific.	The project proponent agreed to submit the revised CER.

After detailed deliberations, SEAC decided to defer the case and asked the project proponent to submit the reply to the aforesaid observations.

Item No. 186.02 Application for obtaining environmental clearance under EIA notification dated 14.09.2006 for the development of Integrated Township namely "Mohali Hills" at Sectors-98, 99, 105, 106, 108, 109 and 110, SAS Nagar, Mohali, Punjab developed by M/s EMAAR MGF Land Ltd. (Proposalno. SIA/PB/NCP/25837 /2017).

SEAC observed that:

History of the case

M/s Emaar MGF Land Private Ltd. had applied for issuance of TOR under EIA notification dated 14.09.2006 for area development project namely "Mohali Hills" at Sector-98, 99, 105, 106, 108, 109 & 110, SAS Nagar (Mohali), Punjab. The project is covered under category 8 (b) of the Schedule appended to the said notification. Earlier the project was accorded EC by MoEF, Govt. of India vide letter no. 21-171/2007-IA.III dated 18.06.2008 for developing an integrated township in an area of 888.50 acre at Sector 98, 105, 108 & 109, SAS Nagar, Mohali. Out of this, initially development work was planned for 601.5 acre as mentioned in the MoEF letter. The work was started on site but due to recession in the market and financial crisis project could not be completed and construction work was stopped at the site. Thereafter, the planning has been finalized for 625.35 acre out of the total land of 888.50 acre at Sector-98, 99, 105, 106, 108, 109 & 110, SAS Nagar (Mohali). Further, the Northern Regional office of MoEF, Chandigarh vide letter no. 5-131/2008-RO(NZ) dated 08.02.2012 has clarified that geographical features of the sectors are identical but only the nomenclature of the sectors has been changed. The details of the project are as under: -

- The total plot area of the project will be 625.35 acre in the revenue estate of Sector- 98, 108 & 109, SAS Nagar (Mohali), Punjab. The breakup of area is as Area under park is 42.83 acre, area under facilities 43.20 acre, area under roads is 166 acre, Area under residential (plotted + group housing) is 242.03 acre, area under commercial is 7.01 acre. Thus, the net planned area is 501.07 acre. Area under EWS is 31.27 acre. Area under commercial and mix land use is 49.12 acre, reserved area is 43.89 acre. Thereby, total area becomes 625.35 acre.
- The total built up area of the project will be 861844.852 sqm.
- The total cost of the project including land and development cost is Rs. 2108.286 crore.
- The layout plan of the project has been approved by Department of Town & Country Planning, Punjab vide letter no. 8167/MTR-2 dated 15.012.2014.
- The project consists of the following: -
    a) Residential plots i.e. 178 plots in Sector-98, 115 plots in Sector-99, 169 plots in Sector-104, 461 plots in Sector-105, 77 plots in Sector-106, 808 plots in Sector- 108, 1375 plots in Sector-109 & 09 plots in Sector-110. The total area under Residential plots is 224.11 acre.
    b) Group Housing in Sector 105 & 109 with area 14.08 acre and 3.84 respectively. The total area of Group housing is 17.92

acre.

c) Area under Commercial is 0.83 acre in Sector-98, 6.18 acre in Sector-105. The total area is 7.01 acre.
d) The area under EWS is 2.42 acre in Sector -99, 1.11 acre in Sector-104, 7.57 acre in Sector-109 and 20.17 acre in Sector-110.
e) Public facilities like Schools, Community Centre, Health Centre, Dispensary, Religious Building, Post Office and Crèche.

- Total population will be 65,629 persons.
- The total water requirement will be 13,744 KLD which includes fresh water requirement as 10,584 KLD. The total waste water generation will be 11,374 KLD which will be treated in existing three STPs of capacity 100 KLD, 100 KLD, 10 KLD & proposed two STPs of capacity 3.7 MLD & 7.6 MLD.

The water balance detail for the Sectors 98, 99, 104, 105 & 106 is as under:

- The domestic demand will be 4558 KLD which includes fresh water @3500 KLD. The waste water generated @3646 KLD will be treated in existing STP of capacity 100 KLD and proposed STP of capacity 3.7 MLD. The treated water @3573 KLD will be utilized i.e. in summer season, the project proponent has proposed to utilize 1058 KL/day of treated wastewater for flushing purpose, 419 KLD will be utilized for horticulture purposes & 2096 KLD will be discharged into GMADA sewer. In winter season, 1058 KL/day of treated wastewater for flushing purpose, 137 KLD will be utilized for horticulture purposes & 2378 KLD will be discharged into GMADA sewer. In rainy season, 1058 KL/day of treated wastewater for flushing purpose, 38 KLD will be utilized for horticulture purposes & 2584 KLD will be discharged into GMADA sewer, the wet weather flow @109 KLD has been considered in the rainy season.

- The water balance detail for the Sectors 108, 109 & 110 is as under: The domestic demand will be 9186 KLD which includes fresh water @7084 KLD. The waste water generated @7349 KLD will be treated in existing STP of capacity 100 KLD, 10 KLD and proposed STP of capacity 7.6 MLD. The treated water @7202 KLD will be utilized i.e. in summer season, the project proponent has proposed to utilize 2102 KL/day of treated wastewater for flushing purpose, 535 KLD will be utilized for horticulture purposes & 4565 KLD will be discharged into GMADA sewer. In winter season, 2102 KL/day of treated wastewater for flushing purpose, 175 KLD will be utilized for horticulture purposes & 4925 KLD will be discharged into GMADA sewer. In rainy season, 2102 KL/day of treated wastewater for flushing purpose, 49 KLD will be utilized for horticulture purposes & 5316 KLD will be discharged into GMADA sewer, the wet weather flow @270 KLD has been considered in the rainy season.
- The 8 number of recharging pits in Sector 108, 6 number recharging pits in Sector 109 have already been constructed and 6 number recharging pits in Sector 108 and 8 number recharging pits in Sector 109 have been proposed. Further, 8 number recharging pits have

been constructed and 8 number recharging pits have been proposed in Sector 105 to recharge ground water.

- Total power requirement for the project will be 65106 KVA which will be provided by PSPCL. The project proponent has proposed to install 13 nos. of Silent DG sets as a backup with total capacity of 11330 KVA and the breakup is (2x380 + 2x500 + 7x1010 + 2x1250) KVA.
- Solid waste generation from the project will be 28,750 Kg/day.
- The project proponent submitted the proposed Terms of Reference (TORs).

Sh. Malvinder Singh, Member (SEAC) and Dr. S.S. Virdi Member (SEAC) were requested vide email dated 16.02.2017 to check the latest status of construction at site and submit the report so that further action in the matter can be taken. The site has been visited by SEAC members on 21.02.2017. It has been informed by the visiting members telephonically that visit report is being prepared and will be placed before SEAC during the meeting.

The case was considered by SEAC in its 155th meeting held on 23.02.2017, which was attended by the following on behalf of project proponent:

(i) Sh. Shishir Lal, Head - SEC, of the promoter company.

(ii) Ms. Priyanka Anand, Manager-EIA, M/s EQMS India Pvt. Ltd., Environment Consultant of the project proponent.

On perusal of visit report received from visiting SEAC Members, the SEAC observed that there is no construction undertaken by the project proponent at the project site however, the construction activity was going on the plotted sites in sector 98. The visiting ***SEAC members categorically stated that the project proponent is complying with conditions of environmental clearance previously granted by MoEF.***

However, the SEAC further observed that total plot area is 625.35 acre which is more than 150 hectare. As per amendment dated 09.12.2016 in Schedule-I of EIA notification dated 14.09.2006, the projects having development area ≥ 150 hectare or built up area ≥3 lacs sqm have been categorized as category A projects and are to be appraised and decided by the MoEF & CC, New Delhi. As such, the competency to appraise and decide the present case lies with MoEF

After deliberations, the SEAC decided to recommend to SEIAA that the project proponent be asked to apply to MoEF & CC, New Delhi and the present application be rejected.

The case was considered by SEIAA in its 120th meeting held on 16.03.2017,which was attended by the following on behalf of project proponent:

(i) Sh. Shishir Lal, Head - SEC, of the promoter company.

(ii) Ms. Priyanka Anand, Manager-EIA, M/s EQMS India Pvt. Ltd., Environment Consultant of the project proponent

The SEIAA observed that total plot area is 625.35 acre which is more than 150 hectare. As per amendment dated 09.12.2016 in Schedule-I of EIA notification dated 14.09.2006, the projects having development area ≥ 150 hectare or built up area ≥3 lacs sqm have been categorized as A

projects and are to be appraised and decided by the MoEF & CC, New Delhi.

The present Environment Clearance application filed by the project proponent online with SEIAA Punjab is required to be transferred to MoEF&CC, New Delhi but there is no provision in the online web portal to transfer the Environment Clearance application by SEIAA, Punjab to MoEF&CC, New Delhi. The application has to be decided as otherwise it will keep reflecting in the pending Environment Clearance applications/ cases. The SEIAA observed that it has no other option except to reject the Environment Clearance application in order to clear it from the web portal. After detailed deliberations, the SEIAA decided as under: -

(i) Reject the application for issuance of TOR under EIA notification dated 14.09.2006 for area development project i.e. Integrated Township namely "Mohali Hills" in the revenue estate of Sector-98, 99, 105, 106, 108, 109 &110, SAS Nagar (Mohali), Punjab developed by M/s Emaar MGF Land Private Ltd as there is no provision on the web portal (www.environmental clearance.nic.in) to transfer the same by SEIAA to MoEF&CC, New Delhi and there is no option left with SEIAA to decide/clear the pending application from web portal except rejecting it.

(ii) Project proponent be informed to apply fresh application to MoEF & CC, New Delhi.

Accordingly, both decisions of the SEIAA have been conveyed vide letter no. 223 dated 21.03.2017 to the project proponent.

Thereafter, fresh application having proposal no. IA/PB/NCP/63474/2017 was submitted online to the MoEF&CC on 25.03.2017 for obtaining Terms of References for the project under category 8 (b) i.e. Township & area development project of the EIA Notification, 14.09.2006. The case was accepted by MoEF&CC on on 11.05.2017. Thereafter, ToR was issued on 13.06.2017. EIA Report along with other documents as per TOR was submitted to MoEF&CC GOI on 19.09.2017.

MoEF&CC has issued OM dated 03.04.2018 wherein, following has been decided for compliance with immediate effect: -

1. All pending applications before the Environmental Cell shall be considered by the respective State Environment Impact Assessment Authority (SEIAA) in different States/UTs.
2. All proposals relating to category A of item 8(b) of the schedule to the EIA Notification, 14.09.2006 Notification, 2006, received in the Ministry in pursuance of the Notification dated 9th December, 2016, but not appraised so far by the sectoral Expert Appraisal Committee (EAC) in the Ministry, shall be considered by the respective SEAC/SEIAA in different States/UTs.
3. All building/construction projects/townships and area development projects, covered under item 8(a) &(b) of the schedule to the EIA Notification, 2006, shall continue to be dealt by the respective SEIAA/SEAC in different States/, as per the extant provisions contained in the EIA Notification, 2006.
4. For the transferred applications, the SEAC/SEIAA shall consider the remaining process/stages other than those already completed at the MOEF&CC. The process/stages already completed at the MOEF&CC shall not be started de-novo by the SEAC/SEIAA.

5. The seniority of the applications being transferred to the SEAC/SEIAA shall be considered based on their date of application to the MOEF&CC.

Present Case

In compliance to the OM dated 03.04.2018 issued by the MoEF&CC, application (New Proposal no. SIA/PB/NCP/25837/2017) has now been submitted online to SEIAA, Punjab for obtaining environmental clearance under EIA notification dated 14.09.2006 for the development of Integrated Township namely "Mohali Hills" at Sectors-98, 99, 105, 106, 108, 109 and 110, SAS Nagar, Mohali, Punjab. The project proponent has submitted the EIA report prepared on basis of ToR issued by MoEF&CC alongwith with the application.

The case was considered by SEAC in the 168th meeting held on 22.06.2018 and the same was attended by the following on behalf of project proponent:

(i) Sh. Shishir Lal, Head-SEC of the promoter company.
(ii) Sh. Sandeep Garg, M/s ECO laboratories & Consultants Pvt. Ltd.,

The SEAC allowed the project proponent to present the EIA report and the Environmental Consultant started giving presentation of EIA report. The SEAC observed that following observations are required to be dealt with before its case is considered for grant of the EC: -

1) The project proponent is required to submit a copy of acknowledgement along with copy of complete application submitted online to DFO for obtaining forest clearance under Forest (Conservation) Act, 1980 for 05 accesses to site from main Landra-Banur Road.
2) The project proponent is required to submit year-wise CA certificate with effect from 2013.
3) The project proponent is required to submit sector-wise no. of flats earlier and proposed now.
4) The project proponent is required to submit the status of construction of each sector with the following details: -

Sr No.	Sector	Total flats	Already constructed	Balance
		Nos	Nos	Nos

5) Project proponent shall obtain a letter from GMADA regarding when the outfall sewer will be laid in the vicinity of the project.
6) The project proponent is required to submit detail storm water management plan including recharging wells with calculations.
7) The project proponent is required to submit the detail Solid waste management plan.
8) The project proponent is required to submit green area requirements. Whether Green area has been provided as per the EIA manual.
9) The project proponent shall compare base line data generated at the time of earlier Environmental clearance and data generated proposed now.
10) Whether Sampling station for air, water noise etc. are same and if yes, same is required to be justified according to the EIA manual.
11) The compliance should be with respect to rain water only and para

regarding treated effluent should be excluded.

12) The project proponent is required to provide the proposal of Energy saving for Common area, community area and roof top area of group housing project. Solar Power / Solar power generation should be considered in the proposal.
13) The project proponent is required to presented the Traffic management plan.

After detailed deliberations, SEAC decided to defer the case and ask the project proponent to submit reply to the aforesaid observations. The project proponent will present the complete presentation after incorporating the reply to the aforesaid observations.

Accordingly, ADS was raised through online facility available on web portal of MoEF&CC, New Delhi i.e. www.environmentclearance .nic.in.

The project proponent had uploaded the reply of the aforesaid observations on the web portal and is reproduced is as under: -

Sr. No.	OBSERVATIONS	REPLY
1.	The project proponent is required to submit a copy of acknowledgement along with copy of complete application submitted online to DFO for obtaining forest clearance under Forest (Conservation) Act, 1980 for 05 accesses to site from main Landran-Banur Road.	Forest NOC has already been obtained from DFO for 05 accesses to site from main Landran- Banur Road; copy is enclosed as Annexure.
2.	The project proponent is required to submit year-wise CA certificate with effect from 2013.	The expense sheet detailing the expenditure starting from year 2013 to 2017 is attached as Annexure. Balance sheets starting from 2013 will be attached during the time of hard copy submission. Brief details are as follows: However, from 2013 onwards, approx. 90% of the amount was spent on land purchases in Sector-105. Hard cost mainly includes internal fittings & fixtures and landscaping. While, in other sectors, roads, water supply, drainage, irrigation development took place. While, in Sector-99 & 108, fittings and fixtures were done in bungalows.
3.	The project proponent is required to submit sector-wise no. of flats earlier and proposed now.	The details showing the comparison between earlier EC, after sector demarcation by MoEF and proposed now are mentioned in Annexure. Further, sector-wise no. of plots / flats earlier and proposed now are also mentioned.

<table>
<tr>
<td>4.</td>
<td>The project proponent is required to submit the status of construction of each sector with the following details: -
<table>
<tr><th>Sr. No.</th><th>Sector</th><th>Total Flats</th><th>Already Constructed</th><th>Balance</th></tr>
<tr><td></td><td></td><td>Nos.</td><td>Nos.</td><td>Nos.</td></tr>
<tr><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td></td><td></td><td></td><td></td><td></td></tr>
</table>
</td>
<td>The status of construction of each sector mentioning the said details is given below:
<table>
<tr><th>Sr. No.</th><th>Sector</th><th>Total Flats</th><th>Already Constructed</th><th>Balance</th></tr>
<tr><td>1.</td><td>105</td><td>696</td><td>696</td><td>Nil</td></tr>
<tr><td>2.</td><td>109</td><td colspan="3">Proposed Group Housing; exact no. of flats not yet decided.</td></tr>
</table>
Apart from it, plots have also been constructed by the plot owners. Details of the same are mentioned in Annexure.</td>
</tr>
<tr>
<td>5.</td>
<td>Project proponent shall obtain a letter from GMADA regarding when the outfall sewer will be laid in the vicinity of the project.</td>
<td>Letter from GMADA regarding laying of trunk services has already been obtained earlier and copy of the same have been submitted and is attached as Annexure. Further, it is to assure you that in absence of trunk GMADA sewer; treated water obtained from STP will be reused for flushing, horticulture and excess will be used for construction activities.</td>
</tr>
<tr>
<td>6.</td>
<td>The project proponent is required to submit detail storm water management plan including recharging wells with calculations.</td>
<td>Residential Plots having plot area of 400 sq.m. or above (i.e. 407 plots) shall have roof top rain water recharging system within the plot to recharge the ground water as per the specific design. Individual plot owners will be responsible for provision of rain water recharging within their plot i.e. 407 recharging pits will be constructed by individual plot owners.

While, for other areas, rain water recharging is being done by the project proponent. Detailed rain water recharging calculations are attached as Annexure. The Plan showing location of rainwater recharging pits will be submitted during the time of hard copy submission. Nos. of rain water recharging pits proposed in total and constructed at present within individual sectors are given below:
<table>
<tr><th>Sector Name</th><th>Total Recharging Pits</th><th>Constructed at present</th></tr>
<tr><td>Sector 98</td><td>8 Numbers Recharge Structures with 14 Number Boreholes.</td><td>Nil</td></tr>
</table>
</td>
</tr>
</table>

		Sector 99	2 Numbers Recharge Structures with 3 Number Boreholes.	Nil
		Sector 104	2 Numbers Recharge Structures with 3 Number Boreholes.	Nil
		Sector 105	8 Numbers Recharge Structures with 16 Number Boreholes.	7 Numbers Recharge structures with 11 numbers Boreholes
		Sector 106	1 Number Recharge Structures with 2 Number Boreholes.	1 Number Recharge Structures with 2 Number Boreholes.
		Sector 108	16 Numbers Recharge Structures with 23 Number Boreholes.	9 Numbers Recharge Structures with 12 Number Boreholes.
		Sector 109	12 Numbers Recharge Structures with 24 Number Boreholes.	7 Numbers Recharge Structures with 11 Number Boreholes.
		Sector 110	2 Numbers Recharge Structures with 3 Number Boreholes.	Nil
		Total	52 Numbers Recharge Structures with 88 Number Boreholes.	24 Numbers Recharge Structures with 36 Number Boreholes.
7.	The project proponent is required to submit the detail Solid waste management plan	About 28,750 kg/day (@ 0.40 kg/capita/day for residential and @ 0.20 kg/capita/day for commercial) of the solid waste will be		

		generated once colony is fully established. The solid waste will be duly segregated within the project into three separate streams namely Bio-degradable or wet waste, Non-biodegradable or dry waste and Domestic hazardous waste. Solid waste will be managed as per Solid Waste Management Rules, 2016. Solid waste Management Plan is attached as Annexure.
8.	The project proponent is required to submit green area requirements. Whether Green area has been provided as per the EIA manual.	As per EIA Manual, there is as such no green area requirement. However, as per T&CP, Chandigarh; layout plan has been approved with green area of 1,73,326.86 sq.m. (or 42.83 acres) (i.e. 6.85% of overall project area) which is more than permissible green area requirement of 6% of total plot area. 6989 trees / shrubs have been planted within the existing project; details of the same are enclosed as Annexure.
9.	The project proponent shall compare base line data generated at the time of earlier Environmental clearance and data generated proposed now.	Agreed. The comparison of baseline data generated at the time of earlier Environmental clearance and data generated proposed now is attached as Annexure.
10.	Whether Sampling station for air, water noise etc. are same and if yes, same is required to be justified according to the EIA manual.	As per EIA Manual, Ambient air Monitoring network should have minimum one location in upwind side and two sites in downwind side / impact zone. Locations of Ambient Air quality monitoring stations are decided based on meteorological conditions like wind speed, wind direction, temperature, etc.; selected pollution pockets in the area and likely impact areas. Thus, four monitoring locations have been selected i.e. Project Site (Theme Park near Plot no. 106 in Sector-105), Gurudwara Sahib Park in Village- Chaomajra; Agriculture Land in Village- Bhagomajra and Agriculture Land in Village- Dhurali. With respect to water monitoring stations as per manual; set of grab samples for ground water is to be collected; thus, water samples were collected from same locations. As per soil monitoring locations; samples were collected from the same villages. Regarding noise monitoring stations, monitoring is to be done in identified area and once in season. Thus, same locations have been selected for noise monitoring.

11.	The compliance should be with respect to rain water only and para regarding treated effluent should be excluded.	This is in regard to TOR Compliance point No. 11 i.e. Rain water harvesting proposals should be made with due safeguards for ground water quality. Maximize recycling of water and utilization of rain water. Examine details. Reply: Rain Water Harvesting is feasible in the project area and for this purpose, the runoff generated from the roof of the buildings, roads, paved area, lawns & open area is to be channelized through construction of storm water drains. Residential Plots having plot area of 400 sq.m. or above (i.e. 407 plots) shall have roof top rain water recharging system within the plot to recharge the ground water as per the specific design. Individual plot owners will be responsible for provision of rain water recharging within their plot i.e. 407 recharging pits will be constructed by individual plot owners. While, for other areas, rain water recharging is being done by the project proponent. Detailed rain water recharging calculations are attached as Annexure. The Plan showing location of rainwater recharging pits will be submitted during the time of hard copy submission. Details of nos. of rain water recharging pits proposed in total and constructed at present within individual sectors are given in reply of Point no. 6.
12.	The project proponent is required to provide the proposal of Energy saving for Common area, community area and roof top area of group housing project. Solar Power / Solar power generation should be considered in the proposal.	LED street lights have been used instead of MH lamps within the sectors of project. Energy saving calculations showing the same is enclosed as Annexure. Also, 40 Nos. having 100 lt. capacity of solar panels has been provided for solar water heating systems in Group Housing of Sector-105. Terrace drawing showing location of solar panels will be submitted in hard copy.
13.	The project proponent is required to present the Traffic management plan.	Traffic survey was carried out and traffic study report is attached as Annexure.

The case was considered by the SEAC in its 178th meeting held on 15.04.2019, which was attended by the following: -

- Sh. Shishir Lal, Head Sustainability Excellence Centre, on behalf of project proponent.

- Sh. Sandeep Garg, EIA-co-ordinator, M/s Eco-laboratories& Consultants Pvt. Ltd., Mohali, Environment Consultant of the promoter company.
- Ms. Simran, FAE, M/s Eco-laboratories & Consultants Pvt. Ltd, Environment Consultant of the promoter company.

SEAC perused the reply submitted by the project proponent and observed that earlier Environmental Clearance was expired in year 2013. However, the CA certificate suggests increase in fixed assets after 2013 also. Though, the representative of project proponent contested that majority of the expenditure was made on purchase of land, fittings fixtures of already accomplished works and environmental management components besides repair and maintenance work, SEAC was not satisfied with the replies.

One of the member observed that after the sector demarcation, Project area initially envisioned to be sector 98, 105, 108 & 109 has instead been marked as Sector 98, 99,104, 105,106, 108, 109 & 110 SAS Nagar, Mohali as mentioned by the Northern Regional office of MoEF, Chandigarh vide letter no. 5-131/2008-RO(NZ) dated 08.02.2012. Whereas, as per the present agenda it had obtained revised TOR for Sector 98, 99, 105,106, 108, 109 & 110. There is no reference of Sector 104 either in TOR application issued by MoEF&CC nor in present EC application filed before SEIAA, Punjab. Moreover, the project proponent is required to clarify the status of EC application earlier filed before MOEF& CC on 19.09.2017The Project Proponent assured to look into this aspect and agreed to clarify in writing.

Following queries were raised to which the project proponent and his Environmental Consultant sought time:

(a) To clarify as to weather the area of Sector 104 still comes under proposed application as same has not been mentioned in the TOR issued by MOEF&CC as well as in the present EC application submitted to the SEIAA, Punjab. If not reasons there of.

(b) Further, the project proponent is required to clarify the status of EC application earlier filed before MOEF& CC on 19.09.2017

(c) Project proponent is required to submit the bifurcated details of amount spent from year 2013 (After expiry of EC) duly certified by a Chartered Accountant (CA) in the prescribed table given below:

Year	Capital investment (In Lacs)				Expenditure on EMP related activities STP, green area, etc (in lacs)		Expenditure on Repair & Maintenance of old buildings / development work/ constructed before expiry of EC and	Others (specify)
	Land	New Const.	Fitting/ fixtures etc. to complete old building constructed	Development works like Road, sewer, W/S, Power House, etc	Capital Cost	Operational / Maintenance Cost		

			before expiry of EC				water/ electricity Bills etc (in lacs)	
2013 (After expiry of EC) – 2014								
2014-15								
2015-16								
2016-17								
2017-18								
2018-19								

(d) Sector wise details of flats constructed by the company or House constructed by the individual before & after date of expiry of EC to be provided in the following table:

Sector	Year	Status of construction of Flats/ other establishments to be made by Company			Status of construction of Houses/ other establishments to be made by individual plot owners		
		Proposed at the time of EC	Constructed	Balance	Proposed at the time of EC	Constructed	Balance
98	Before expiry of EC in 2013						
	After expiry of EC in 2013 till date						
99	Before expiry of EC in 2013						
	After expiry of EC in 2013 till date						
104	Before expiry of EC in 2013						
	After expiry of EC in 2013 till date						
105	---do---						
106							
108							
109							
110							

(e) Details of allotment letters issued / sale deed executed for plots/ flats/ other establishments belonging to the project, after the expiry of Environmental Clearance in year 2013?

(f) Details of the present occupancy and occupancy likely to be increased in the coming 3-5 years.

(g) Present generation of waste water and quantity of expected waste water after 3-5 years along with the details of utilization/ disposal of present waste water generated at present and after 3-5 years.

(h) Revised rain water harvesting calculations to be submitted considering peak hour rainfall.

(i) Fresh traffic study for 03 days considering the operation of new lanes in the vicinity such as sector 98,99 and sector 105 & 106 dividing roads.

After detailed deliberations, SEAC decided to defer the case and asked the project proponent to submit the reply to aforesaid observations so that further action in the matter can be taken.

The project proponent has now submitted the reply which is annexed as Annexure-2 of the agenda.

The case was considered by the SEAC in its 186th meeting held on 26.12.2019, which was attended by the following: -

i) Sh. Shishir Lal, Head Sustainability Excellence Centre, on behalf of project proponent.

ii) Sh. Sandeep Garg, EIA-Co-ordinator, M/s Eco-laboratories& Consultants Pvt. Ltd., Mohali, Environment Consultant of the promoter company.

iii) Ms. Pariyanka Madan, M/s Eco-laboratories & Consultants Pvt. Ltd, Environment Consultant of the promoter company.

Environmental Consultant of the project proponent submitted the reply to the earlier raised observations as under:-

1) The area of Sector-104 comes under the proposed application and the same has already been mentioned in all the previous documents of TOR as well as the EIA report. But, however, it got missed from the name of location of the project. Thus, kindly read location of project as "Sectors 98, 99, 104, 105, 106, 108, 109 and 110, SAS Nagar, Mohali, Punjab."
2) Application has been filed to MoEF&CC for the withdrawal of the EC application i.e. Proposal No.IA/PB/NCP /63474/2017 dated 19.9.2017. Copy of the letter submitted to MoEF&CC for withdrawal along with snapshot after submission was enclosed as Annexure-1(a) and 1(b) respectively of the agenda.
3) CA Certificate mentioning the amount spent on the project after expiry of EC is attached along as Annexure-2 of the agenda. The amount was spent on land purchases where agreements were done earlier with land owners; construction cost mainly includes the internal finishing work including installation of fitting & fixtures of light/ fans/ACs/sanitary ware, etc. repair and painting, cost involved in roads, sewer & power includes maintenance & repair work involved in the project; cost under STP head includes amount given for installation of STP along with its consultancy charges; etc.
4) Details of the flats or Houses constructed in the different Sectors as per desired details is given as under:_

Sector	Year	Status of const. of flats/other establishments to be made by Company.			Status of const. of flats/other establishments to be made by Individual Plot Owners		
		Proposed (2008)	Constructed	Balance	Proposed (2008)	Constructed	Balance
98	Before June'13						
	After June 13' till date						
99	Before June'13						
	After June 13' till date						
104	Before June'13						
	After June 13' till date						
105	Before June'13	999	998	1			

	After June 13' till date						
106	Before June'13						
	After June 13' till date						
108	Before June'13					51	
	After June 13' till date						
109	Before June'13					99	
	After June 13' till date						
110	Before June'13						
	After June 13' till date						

5) Allotment letter issued / sale deed executed for 1611 plots/flats after the expiry of Environmental Clearance i.e. after 17th June, 2013. Details of the same are enclosed as Annexure-4.

6) Details of the present Occupancy are given below:-

Sl. No.	Sectors	No's (Present Occupancy)
01	98	NA
02	99	13
03	104	9
04	105	46
05	106	7
06	108	65
07	109	43
08	110	NA
09	105 -THE VIEWS MOHALI	145
TOTAL		**328 flats/plots**

Thus, present population is 1,640 persons (328 × 5). As per assumption, there will be increase in population of approx. 25% in 3 years and 40% in 5 years. Thus, total expected population will be 2,050 and 2,296 persons after 3 and 5 years respectively

7) Wastewater generation as per present occupancy is 147 KLD. Thus, expected wastewater generation will be 229 KLD and 256 KLD after 3 and 5 years respectively. The wastewater generated is being treated in existing STP of 100 KLD, 100 KLD and 10 KLD. Treated water is being disposed off for flushing as well as green area within the project resulting in zero discharge.

8) Revised rainwater recharging calculations are enclosed as Annexure-6. Based on the run off available for recharge, the number of harvesting and recharge structures are estimated as under:-

Sectors	Balance Run off (m^3)	40 rainwater recharging structures with 3 boreholes each have been proposed. No recharge structures have been constructed in these sectors yet.
Sector 98	9268.90	
Sector 99	2169.37	

Sector 104	1167.69
Sector 110	2181.56
Total	14,787.52

9) Traffic study report for 3 days is attached along as Annexure-7. The detail of the Modified Traffic Scenario & LOS at different locations (after full occupancy & development is as under:-

Locations	V (Volume in PUC/day)	C (Capacity in PUC/day)	Existing V/C ratio	LOS
A	5137 + 1541* + 6174 = 12852	86,400	0.14	A
B	17205 + 6344* + 6174 = 29723	86,400#	0.34	B

* Proposed Increase in existing traffic after 5 years (30% of the existing traffic)

Note: Road widening has been sanctioned for four lanes at Location B (i.e. Kharar Banur road). Thus, capacity of road will be increased to 86,400 PCUs/day.

Conclusion for the traffic load after expansion:

- The V/C ratio at location A is found to be between 0.0-0.2 for location A which means that the performance of road is Excellent.

  The V/C ratio at location B is between 0.2-0.4 which means that the performance of road will be good.

SEAC took the reply along with all the annexure (1 to 7) on the record. SEAC was satisfied from the reply of the project proponent.

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 to the project proponent for development of Integrated Town ship namely " Mohali Hills" at sector 98, 99, 104, 105, 106, 108, 109 and 110, SAS Nagar (Mohali) in an area 625.35 acres (or 253.07 hectares) having built up ara ,61,844.852 sq.m subject to the following salient features and conditions in addition to the proposed measures: -

S.No.	Item	Details
1.	Online Proposal No.	SIA/PB/NCP/25837/2017
2.	Name and Location of the project	Integrated Township Project "Mohali Hills" located at Sectors - 98, 99, 104, 105, 106, 108, 109 and 110, SAS Nagar (Mohali), Punjab developed by M/s Emaar MGF Land Ltd.

<table>
<tr><td>3.</td><td>Latitude & Longitude</td><td>Few corner coordinates are:<table><tr><th>Latitude</th><th>Longitude</th></tr><tr><td>30°39'27.13"N</td><td>76°41'48.71"E</td></tr><tr><td>30°39'18.52"N</td><td>76°40'59.67"E</td></tr><tr><td>30°39'51.24"N</td><td>76°40'04.84"E</td></tr><tr><td>30°39'36.83"N</td><td>76°39'51.39"E</td></tr><tr><td>30°39'09.67"N</td><td>76°40'38.92"E</td></tr><tr><td>30°38'57.06"N</td><td>76°41'32.43"E</td></tr></table></td></tr>
<tr><td>4.</td><td>Project/activity covered under item of scheduled to the EIA Notification, 14.09.2006</td><td>8(b) - ‘Townships and Area Development projects’ Category B1.</td></tr>
<tr><td>5.</td><td>Whether the project is in critical polluted area or not.</td><td>No.</td></tr>
<tr><td>6.</td><td>If the project involves diversion of forest land. If yes,
a. Extent of the forest land.
b. Status of the forest clearance.</td><td>The diversion of forest land is involved in the project; therefore clearance has already been obtained under Forest (Conservation) Act, 1980. Copy of NOCs has been submitted.</td></tr>
<tr><td>7.</td><td>a. Is the project covered under PLPA, 1900, if No but located near to PLPA area then the project proponent is required to submit NOC from the concerned DFO to the effect that project area does not fall under the provision of PLPA Act, 1900.

b. Is the project covered under PLPA,1900, if yes then Status of the NOC w.r.t PLPA, 1900.</td><td>The project is not covered under PLPA, 1900 and does not fall near any PLPA area.</td></tr>
<tr><td>8.</td><td>If the project falls within 10 km of eco-sensitive area/ National park/Wild Life Sanctuary. If yes,
a. Name of eco-sensitive area/ National park/Wild Life Sanctuary and distance from the project site.
b. Status of clearance from National Board for Wild Life (NBWL).</td><td>City Bird Sanctuary and Sukhna Wildlife Sanctuary are at a distance of approx. 13 km & 15 km respectively from the project location. No Wildlife Sanctuary/National park lies within 10 km of Project location</td></tr>
<tr><td>9.</td><td>Classification/Land use pattern</td><td>The project is earmarked as per Master Plan of Greater</td></tr>
</table>

<table>
<tr><td></td><td>as per Master Plan</td><td>Mohali region. Greater Mohali region showing the project location is attached as Drawing-1 of application.</td></tr>
<tr><td>10.</td><td>Cost of the project</td><td>The cost of the project after expansion is estimated to be Rs. 2,108.286 Crores.</td></tr>
<tr><td>11.</td><td>Total Plot area, Built- up Area and Green area</td><td>The details of project is as under:
<table>
<tr><th>S. No.</th><th>Description</th><th>Area</th></tr>
<tr><td>1.</td><td>Plot area (Total scheme area)</td><td>625.35 acres (or 253.07 hectares)</td></tr>
<tr><td>2.</td><td>Built-up area</td><td>8,61,844.852 sq.m.</td></tr>
<tr><td>3.</td><td>Green area</td><td>76,121.36 sq.m.
(or 18.81 acres)</td></tr>
</table></td></tr>
<tr><td>12.</td><td>Population (when fully operational)</td><td>Estimated population: 77,629 Persons.</td></tr>
<tr><td>13.</td><td>Water Requirements & source in Construction Phase</td><td>During construction phase, water demand will be of approx. 20 KLD.
The water requirement is being met by treated water from STP. Domestic water demand for 125 workers during peak period @ 8 KLD is being provided by fresh water tankers.</td></tr>
<tr><td>14.</td><td colspan="2">Break up of Water Requirements & source in Operation Phase (Summer, Rainy, Winter):
<table>
<tr><th rowspan="2">S. No.</th><th rowspan="2">Season</th><th colspan="2">Fresh water</th><th colspan="3">Reuse water</th><th rowspan="2">Total (KLD)</th></tr>
<tr><th>Domestic (KLD)</th><th>Others (KLD)</th><th>Flushing (KLD)</th><th>Green area (KLD)</th><th>HVAC (KLD)</th></tr>
<tr><td>1.</td><td>Summer</td><td>10584</td><td>-</td><td>3160</td><td>955</td><td>-</td><td>13744</td></tr>
<tr><td>2.</td><td>Winter</td><td>10584</td><td>-</td><td>3160</td><td>312</td><td>-</td><td>13744</td></tr>
<tr><td>3.</td><td>Rainy</td><td>10584</td><td>-</td><td>3160</td><td>87</td><td>-</td><td>13744</td></tr>
</table>
<table>
<tr><th>S.No.</th><th>Description</th><th>Source of water</th></tr>
<tr><td>1.</td><td>Domestic</td><td>Borewells</td></tr>
<tr><td>2.</td><td>Others (Pl define)</td><td>-</td></tr>
<tr><td>3.</td><td>Flushing purposes</td><td>Treated wastewater</td></tr>
<tr><td>4.</td><td>Green area</td><td>Treated wastewater</td></tr>
<tr><td>5.</td><td>HVAC</td><td>-</td></tr>
</table></td></tr>
<tr><td>15.</td><td>Treatment & Disposal arrangements of waste water in Construction Phase</td><td>STP
Wastewater generated during the construction phase is being treated in STP. Waste handling will be done by site contractor whose responsibility lies with collection & storage of construction and demolition waste generated on the site.</td></tr>
</table>

<table>
<tr><td>16.</td><td>Disposal Arrangement of Waste water in Operation Phase</td><td>Total wastewater and sewage generation will be 13,744 KLD which will be treated in Existing STPs of 100 + 100 + 10 KLD + proposed STP of 3.7 & 7.6 MLD capacity.
<table>
<tr><th>Season</th><th>Flushing (KLD)</th><th>Green area (KLD)</th><th>GMADA Sewer (KLD)</th></tr>
<tr><td>Summer</td><td>3,160</td><td>955</td><td>17,859</td></tr>
<tr><td>Winter</td><td>3,160</td><td>312</td><td>17,216</td></tr>
<tr><td>Monsoon</td><td>3,160</td><td>87</td><td>16,991</td></tr>
</table></td></tr>
<tr><td>17.</td><td>Rain water recharging detail</td><td>58,864 m^3/hr of rain water will be generated which will be collected in 158 no. of recharge structures will be provided to recharge the rooftop, green area and paved area.</td></tr>
<tr><td>18.</td><td>Solid waste generation and its disposal</td><td>a) 28,750 kg/day
b) Solid waste will be appropriately segregated (at source) by providing bins into Bio-degradable and non-biodegradable Components.
c) 12,938 kg/day of bio-degradable waste will be converted into Manure using Mechanical Composters of size 6 × 2000 and 1 × 1000 kg/day.
d) 15,237 kg/day of non-biodegradable or dry waste will be handed over to authorized waste pickers
e) e) 575 kg/day of domestic hazardous waste will be disposed off to authorized vendors as per Solid Waste Management Rules, 2016.</td></tr>
<tr><td>19.</td><td>Hazardous Waste & E- Waste</td><td>Used oil from DG sets will be sold to registered recyclers and E-waste will be disposed off as per the E-waste (Management) Amendment Rules, 2018.</td></tr>
<tr><td>20.</td><td>Energy Requirements & Saving</td><td>a) 65,106 KVA from PSPCL.
b) 13 DG Sets of 11,330 total capacity (i.e. 2 × 380 + 2 × 500 + 7 × 1010 + 2 × 1250) will be kept as standby for the power back up. (silent DG sets)
<u>Energy Saving measures:</u>
i) 40 Nos. of solar water heaters having 100 lt. capacity each have been provided for solar water heating systems in Group Housing of Sector-105.
ii) LED street lights have been used instead of MH lamps within the sectors of project.</td></tr>
<tr><td>21.</td><td>Environment Management Plan along with Budgetary break up phase wise and responsibility to implement</td><td>During construction phase, Rs. 964 lakhs as capital & Rs. 43.7 lakhs as recurring will be spent on EMP. While, during operation phase, Rs. 21 lakhs will be spent as recurring cost per annum for implementation of the EMP.</td></tr>
</table>

		Description	**Capital cost (lakhs)**	**Recurring cost (lakhs)**	**Monitoring of Air, Noise, water (per annum) Rs.**
		Construction	964	43.7	1
		Operation	131	21	2

22. CER activities along with budgetary break up and responsibility to implement

Mr. Shishir Lal (Authorized Signatory) of M/s Emaar MGF Land Ltd. will be responsible for implementation of CER (Corporate Environmental Responsibility) as well as Environment Management Plan (EMP) till the project is handed over. As per Office Memorandum of CER dated 01.05.2018; project proponent needs to spend 0.25% of additional project cost i.e. 0.25% of Rs. 1897.336 Cr which is Rs. 4.7 Crores. Thus, project proponent has adopted Village Raipur Kalan along with other activities and will spend Rs. 4.81 Crores as per the below mentioned CER activities:

S. No.	**Activities**	**Annual expenditure**	**Timeline**	**Total expenditure in 7 years**
1.	**Adoption of Village Raipur Kalan**			
	• Constructing Public Health services i.e. water supply network, trunk sewer, street light, solid waste management, etc.	Rs. 43 lakhs	7 years	Rs. 3.01 Cr
	• Adoption of Village Pond & its maintenance	Rs. 20 lakhs	7 years	Rs. 1.4 Cr
2.	Installation of water coolers in common areas for general public in different places	Rs. 1.5 lakh	7 years	Rs. 10.5 lakhs
3.	Woolen Clothes & Blanket distribution & food to needy people during winters	Rs. 1 lakh	7 years	Rs. 7 lakhs
4.	Adoption of Govt. Primary School in Village Moujpur in terms of its maintenance and other necessary facilities	Rs. 2.5 lakhs	7 years	Rs. 17.5 lakhs
5.	Tree plantation drive on World Environment Day-Cost	Rs. 1 lakh	5 years	Rs. 5 lakhs
	Total amount to be spent on CER	Rs. 69 Lakhs		Rs. 4.81 Crores

I. Statutory compliance:

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

ii) The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of

firefighting equipment etc as per National Building Code including protection measures from lightening etc.

iii) 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.

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 Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board / Committee.

vi) The project proponent shall obtain the necessary permission for drawl of ground water/ 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 Chief Controller of Explosives, Fire Department, 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 respective city/ town. For that, the project proponent shall either to submit the NOC/ land use conformity certificate from Deptt of Town and Country Planning or other concerned Authority under whom jurisdiction, the site falls.

xii) Besides 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 type of projects.

xiii) The project proponent shall get the layout plans approved from the Competent Authority for the activities / establishments to be set up at project site in consonance of the project proposal for which this environment clearance is applied.

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 ambient air quality at the site.

iii) The project proponent shall install system to carryout 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 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. The location of the DG sets may be decided with in consultation with State Pollution Control Board.

v) Construction site shall be adequately barricaded before the construction begins. Dust, smoke & 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, continuous dust/ wind breaking walls all around the site (at least 3m height or 1/3rd of the building height and maximum upto 10m). 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 & 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 area shall be prohibited. 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 earmarked area and road side 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 construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.

xiv) The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the 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 National Building Code of lndia.

xvi) Roads leading to or at construction site must be paved and blacktopped (i.e. metallic road)

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 measure be notified at the site.

III. Water quality monitoring and preservation

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

ii) No construction shall be allowed to obstruct the natural drainage through the site, on 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 rain water.

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

iv) The total water requirement for the project will be 13744 KL/day, which shall be met through groundwater & treated wastewater. Total fresh water use shall not exceed 10584 KL/day the proposed requirement as provided in the project details.

v) a)The total wastewater generation from the project will be 13744 KL/day, which will be treated in existing STP's of capacity @ 100+100+10 KLD and additional STP of capacity @ 3.7 MLD and 7.6 MLD to be installed within the project premises. As proposed,

reuse of treated wastewater and discharge of surplus treated wastewater shall be as under:-

S. No.	Season	For Flushing purposes (KLD)	Green Area (KLD)	GMADA Sewer (KLD)
1.	Summer	3160	955	16991
2.	Winter	3160	312	17216
3.	Rainy	3160	87	17859

b) 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.

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

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

vii) The waste water generated from swimming pool(s) shall not be discharged and the same shall be reused within the premises for purposes such as horticulture, HVAC etc.

viii) The quantity of fresh water 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 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 water available. This should be specified separately for ground water 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-Jaws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.

xi) Installation of dual pipe plumbing 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, conditioning etc. shall be done.

xii) The respective project proponent shall discourage the installation of R.O. plants in their projects in order to save the wastage in form of RO reject. However, in case the requirement of installing RO plant is utmost necessary then the rejected stream from the RO shall be separated and shall be utilized by storing the same within the particular component i.e. (Tower/Mall) or in a common place in the project premises.

xiii) The project proponent shall also adopt the new/innovating technologies like less water discharging taps (faucet with aerators)/urinals with electronic sensor system /water less urinals / twin flush cisterns/ sensor based alarming system for overhead water storage tanks and make it a part of the environmental management plans / building plans so as to reduce the water consumption/ground water abstraction in their Building Construction & Industrial projects.

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

Sr. No	**Nature of the Stream**	**Color code**
a)	Fresh water	Blue Color
b)	Untreated wastewater from Toilets/ urinal & from Kitchen	Black color
c)	Untreated wastewater from Bathing/shower area, hand washing (Washbasin / sinks) and from Cloth Washing	Grey color
d)	Reject water streams from RO plants & 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 color
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 grey water	Green with strips
g)	Storm water	Orange Color

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

xvi) The CGWA provisions on rain water harvesting should be followed. Rain water harvesting recharge pits/structure (40 Nos RWH structure each with 3 borewells) /storage tanks shall be provided for ground water recharging as per the CGWB norms.

xvii) A rain water harvesting plan needs to be designed where the recharge bores of minimum one recharge bore per 5,000 square meters of built up area and storage capacity of minimum one day of total fresh water requirement shall be provided. In areas where ground water recharge is not feasible, the rain water should be harvested and stored for reuse. The ground water shall not be withdrawn without approval from the Competent Authority.

xviii) All recharge should be limited to shallow aquifer.

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

xx) Any ground water 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 ground water abstraction or dewatering.

xxi) The quantity of fresh water 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 along with six monthly Monitoring reports.

xxii) Sewage shall be treated in the STP with tertiary treatment. STP shall be installed in phased manner viz a viz in module system designed in a such a way so as to efficiently treat the waste water with increase in its quantity due to rise in occupancy. The treated effluent from STP shall be recycled/re-used for flushing, AC make up water and gardening. No treated water shall be disposed in to municipal stormwater drain.

xxiii) No sewage or untreated effluent water would be discharged through storm water drains. Onsite sewage treatment of capacity of treating 100% waste water to 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 before the project is commissioned for operation. Treated waste water shall be reused on site for landscape, flushing, cooling tower, and other end-uses. Excess treated water shall be discharged as per statutory norms notified by Ministry of Environment, Forest and Climate Change. Natural treatment systems shall be promoted.

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

xxv) Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed 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 residential area/commercial area/industrial area/silence zone both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental pollution loads on the ambient air and noise quality shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB/SPCB.

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

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

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. day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.

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

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) Solar power by utilizing at least 30% of the roof top area shall be used for lighting in the apartment to reduce the power load on grid. 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. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.

VI. Waste Management

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

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

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

iv) Organic waste compost/ Vermiculture pit/ Organic Waste Converter within the premises with a minimum capacity of 0.3 kg /person/day must be installed for treatment and disposal of the waste.

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

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

vii) 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 environment friendly materials.

viii) Fly ash should be used as 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.

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

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

VII. Green Cover

i) No tree can be felled/transplant 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. Plantations to be ensured species (cut) to species (planted).

ii) At least 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. A minimum of one tree for every 80 sqm of total project land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. 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 provided as per SEIAA guidelines.

iii) Where the trees need to be cut with prior permission from the concerned local Authority, compensatory plantation in the ratio of 1: 10 (i.e. planting of 10 trees for every 1 tree that is cut) shall be done and maintained. Plantations to be ensured species (cut) to species (planted). Area for green belt development shall be provided as per the details provided in the project document.

iv) 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 plantation of the proposed vegetation on site.

v) 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.

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

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 regulation.

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

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 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in 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 mask.

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

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

iv) Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, 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.

v) Occupational health surveillance of the workers shall be done on a regular basis.

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

X. Corporate Environment Responsibility

i) The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility. The project proponent shall adhere to the commitments made in the proposal for CER activities for spending at least minimum amount of Rs. 4.81 crore towards following CER activities. The details are given below: -

S. No.	Activities	Annual expenditure	Timeline	Total expenditure in 7 years
1.	**Adoption of Village Raipur Kalan**			
	• Constructing Public Health services i.e. water supply network, trunk sewer, street light, solid waste management, etc.	Rs. 43 lakhs	7 years	Rs. 3.01 Cr
	• Adoption of Village Pond & its maintenance	Rs. 20 lakhs	7 years	Rs. 1.4 Cr
2.	Installation of water coolers in common areas for general public in different places	Rs. 1.5 lakh	7 years	Rs. 10.5 lakhs
3.	Woolen Clothes & Blanket distribution & food to needy people during winters	Rs. 1 lakh	7 years	Rs. 7 lakhs
4.	Adoption of Govt. Primary School in Village Moujpur in terms of its maintenance and other necessary facilities	Rs. 2.5 lakhs	7 years	Rs. 17.5 lakhs
5.	Tree plantation drive on World Environment Day-Cost	Rs. 1 lakh	5 years	Rs. 5 lakhs
	Total amount to be spent on CER	Rs. 69 Lakhs		Rs. 4.81 Crores

ii) 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.

iii) 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.

iv) Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. The project proponent shall spend minimum amount of Rs 964 Lacs towards capital cost and Rs 44.7 Lacs/annum towards recurring cost in Construction phase of the project including the environmental monitoring cost and shall spend minimum amount of Rs 23 Lacs/annum towards recurring cost in 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 until the responsibility of environmental management plan is transferred to the occupier/residents society under proper MOU under intimation to SEIAA, Punjab. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

XI. Validity

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.

XII. Miscellaneous

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

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

iii) The project proponent shall prominently advertise it at least in 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 MoEFCC/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 has to 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 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 Environment Clearance portal.

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 on the website of the company.

viii) The project proponent shall inform the Regional Office as well as the Ministry, 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, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.

xi) 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).

xii) 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.

xiii) The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

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

xv) The Regional Office of this Ministry and 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 by furnishing the requisite data/ information/monitoring reports.

xvi) 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.

xvii) 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.

Item No. 186.03: Application for obtaining Environmental Clearance under EIA Notification dated 14.09.2006 for the expansion of Mega Housing Complex namely "Hyde Park Estate" located at Village Salamatpur, Devinagar, Bharonjian and Ratwara, Tehsil Kharar, District SAS Nagar (Mohali), Punjab developed by M/s DLF Universal Limited (Proposal no. SIA/PB/NCP/25993/2017)

SEAC observed that :-

M/s. DLF Home Developers Ltd. has planned to expand the Mega Housing Complex "Hyde Park Estate" located at Village Salamatpur, Devinagar, Bharonjian, Ratwara and Mullanpur Garibdas, Tehsil Kharar, District SAS Nagar (Mohali), Punjab.
The project comprises of Residential plots, EWS, Commercial and other Institutional facilities.

M/s. DLF Home Developers Ltd. has already received Environmental Clearance vide Letter No. SEIAA/M.S./2012/2074 dated 6th Feb, 2014 for the land area of 224.98 acres; net planned area of 181.86 acres and built-up area of 5,30,986.262 sq.m.
There is plan to increase the plot area to 235.97 acres; net planned area of 192.84 acres and built-up area of 7,07,101.62 sq.m. Thus, application is filed for Expansion of the Mega Housing Complex.
The details of the technical approvals obtained are as under:-

Sr. No.	Description	Status
1.	Earlier Environmental Clearance	Granted for land area of 224.98 acres; net planned area of 181.86 acres and built-up area of 5,30,986.262 sq.m. vide Letter No. SEIAA/M.S./2012/2074 dated 06.02.2014.
2.	CLU for 11.04 acres of land for expansion	Obtained vide Memo No.2116 CTP (Pb) SP 432(M) dated 20.05.2015
3.	NOC for ground water abstraction from CGWA	Obtained vide letter no. 21-4(511)/NWR/CGWA/2011-1738 dated 23.08.2016.
4.	NOC from DFO for Forest Clearance	Obtained vide Letter no. 4419 dated 23.08.2016
5.	Revised NOC from PSPCL	Obtained vide Memo no. 67 dated 22.02.2017
6.	NOC from Fire Department	Obtained vide letter no. FB-17/556 dated 07.11.2017.
7.	Satisfactory report from NRO, MoEF&CC	Obtained vide Letter No. 5-372/2012-RO(NZ)/267-268/268 dated 06.07.2017 for earlier EC.
8.	Consent to Establish from PPCB for 235.97 acres.	Obtained vide Letter No. CTE/Ext/SAS/2018/7001633 dated 05.04.2018 for plot area of 235.97 acres.
9.	Consent to Operate from PPCB for 141 plots	Obtained vide Letter No. CTOA / Varied / SAS / 2018 / 7117763 for Air and

		CTOW/Varied/SAS/2018/7117783 for water dated 05.04.2018
10.	NOC from GMADA regarding Sewerage Permission along with solid waste disposal	Obtained vide Memo No. GMADA-DE(PH-NC)-2015/876 dated 18.09.2015 and letter dated 27.07.2018.

As per Master Plan of Mullanpur, the project site falls in the residential zone.
Comparison as per EC accorded & proposed expansion

Sr. No.	Description	EC Accorded	Proposed	Total (After Expansion)
1.	Estimated Population	22,189 Persons	454 Persons	22,643 Persons
2.	Total Water Requirement	2,898 KLD	76 KLD	2,974 KLD
3.	Fresh water Demand	2,119 KLD	59 KLD	2,178 KLD
4.	STP capacity	Existing STP of 3 MLD capacity		
5.	Parking provision apart from individual plots	653 ECS	141 ECS	794 ECS
6.	Solid waste generation	10,772.83 kg/day	199 kg/day	10,972 kg/day
7.	Rain water recharging Pits	68 Pits		
8.	Power Load	14,535.49 KW or 16,150.54 KVA	1,144.26 KVA	17,294.8 KVA or 17.29 MVA
9.	DG sets	8 DG sets of 14,250 kVA capacity (i.e. 6 × 2,000 + 1 × 1,500 + 1 × 750)		
10.	Project Cost	Rs. 478.27 Crores (As per earlier EC)	Rs. 709.89 Crores (Revision for current EC and for expansion)	Rs. 1,188.16 Crores

Area Details

SI. No.	Description	Area (in sq.m.)	Area (in acres)	Area (in acres)	Area (in sq.m)	Area (in acres)
1.	Total Plot Area	9,10,461.8	224.98	10.99	9,54,936.709	235.97
2.	Area Under EWS	45,729.48	11.30	0.64	48,332.80	11.94 (@ 5.06%)
3.	Area under Acquisition	26,850.89	6.635	-1.555	20,574.79	5.08
4.	Area under Revenue Rasta	11,695.41	2.89	1.5	17,765.70	4.39
5.	Area under Sector Road	66,611.26	16.46	-0.51	64,547.36	15.95

6.	Reserved Area	70,455.77	17.14	0.57	71,665.49	17.71
7.	Net Planned Area [1-(3+4+5+6)]	7,35,961.3	181.86	10.98	7,80,383.38	192.84
8.	Area Under Residential	3,33,137.2	82.32	0.77	3,36,266.38	83.09 (@ 43.09%)
9.	Area Under Commercial	17,806.17	4.40	0.94	21,591.68	5.34 (@ 2.77%)
10.	Area Under Organized Green	45,122.45	11.15	0.5	47,145.88	11.65 (@ 6.04%)
11.	Total Saleable Area (incl. EWS) (2+8+9)	3,96,676.9	98.021	2.349	4,06,190.87	100.37 (@ 52.05%)
12.	Built up area	5,30,986.262 sq.m.		1,76,115.358 sq.m.	7,07,101.62 sq.m.	

Built-up area details of total project (after expansion)

SI.No.	Particulars	Area (in sq.yds)	FAR	Built-up Area (in sq.yds)
1.	Residential Plots	4,02,171.25	As per zoning	7,40,586.85
2.	Commercial	20,465.76	1.75	35,815.08
3.	Booth	5,200	1	5,200
4.	Schools	30,859.37	1 to 0.75	27,979.20
5.	Dispensary	2,613.51	1.5	3,920.265
6.	Religious Building	1,347.09	1.5	2,020.635
7.	CFC/Suvidha Kendra	142.49	1	142.49
8.	Community Center	18,404.63	1	18,404.63
9.	Area under water works, STP, ESS, DG & HSD	11,617.35	1	11,617.35
	Total Built-up Area			8,45,686.5 sq.yds or 7,07,101.62 sq.m.

Present development status

100% services have been laid in the EC accorded portion.

Details of construction of plots are given below:

Total Flats/ Plots	Already Constructed	Balance	Remarks
Nos.	Nos.	Nos.	

1106 Plots as per Earlier EC	141	965	Presently, only 20 families are residing in the project.

Also, Consent to Operate has been obtained for 141 plots.
While, no development work has been done in the expansion part yet.
Population details

Sr. No.	Description	Norms	EC Accorded		Proposed	Total (After Expansion)	
			Total Plots/Area	No. of Persons	No. of Persons	Total Plots/Area	No. of Persons
1.	Residential Plots	15 persons per plot	1,106 Plots	16,590	105	1,113 Plots	16,695
2.	EWS	400 persons per acre	11.30 acres	4,520	256	11.94 acres	4,776
3.	Commercial	100 persons per acre	4.41 acres	441	93	5.34 acres	534
4.	Institutional	100 persons per acre	6.38 acres	638	-	6.38 acres	638
Total Estimated Population				22,189 Persons	454 Persons		22,643 Persons

Comparison of water demand & wastewater generation details

SI. No.	Description	EC Accorded	Proposed	Total (After Expansion)
1.	Total Water Demand	2,898 KLD	76 KLD	2,974 KLD
2.	Fresh Water Demand	2,119 KLD	59 KLD	2,178 KLD
3.	Maximum wastewater generated considering infiltration	2,318 KLD	331 KLD	2,649 KLD
4.	STP capacity	Existing STP of 3 MLD capacity		

Water requirement & wastewater generation (proposed expansion)

SI. No.	Description	No. of persons	Water Consumption (in lpcd)	Total Water Requirement (in KLD)	
1.	Residential Plots	105	200	21	
2.	EWS	256	200	51	
3.	Commercial	93	45	4	
Total Water Requirement				76 KLD	
Flushing water req. (@ 45 lpcd for residential & 16 lpcd for floating)					17 KLD

Flow to sewer (@ 80%)		61 KLD
Treated water (@ 98%)		60 KLD
Green area water req.	2,023.43sq.m.	
Summer (@ 5.5 lt./m2/day)		11 KLD
Winter (@ 1.8 lt./m2/day)		4 KLD
Monsoon (@ 0.5 lt./m2/day)		1 KLD

Water requirement & wastewater generation (total after expansion)

S. No.	Details	Water Demand (in KLD)
1.	Total water req.	2,974 KLD
2.	Fresh Water demand	2,178 KLD
3.	Total flushing water req.	796 KLD
4	Sewage Load @ 80% a) (During summer and winter season)	2,379 KLD
	b) (During rainy season considering infiltration rate @270 KLD (1350 manholes x 200 ltr/manholes/day)	2649 KLD
5.	Treated sewage @98% of the sewage load a) (During Summer & winter season)	2331 KLD
	b) (During rainy season)	2596 KLD
6.	Green area (47,145.88 sqm.) water req.	
	Summer @ 5.5 lt./m2/day	259 KLD
	Winter @ 1.8 lt./m2/day	85 KLD
	Monsoon @ 0.5 lt./m2/day	24 KLD
7.	Treated waste water disposed off to GMADA sewer (Summer, Winter, Rainy)	1276 KLD, 1450 KLD, 1776 KLD

Rain water recharging

Rainwater recharging will be done from Green Area, Roof top Area and Paved Area i.e. 3,25,518.87 sqm., 3,08,504 3 sqm. and 2,54,294.71 sqm. respectively.

Assuming peak hourly rainfall of 45 mm and specific runoff coefficients, total runoff available will be 2417.5 m3/hr.

The details of rain water recharging Calculations are given below:

S. No.	Type of Surface	Catchment Area (in m2) (A)	Run off Coeff. (C)	Peak Hourly Rainfall Intensity (I)	Discharge (Run off) (in m3/hr)
1.	Green Area	3,25,518.87	0.25	0.02	1,628
2.	Paved Area	2,54,294.71	0.55	0.02	2,797
3.	Roof Area	3,08,504	0.85	0.02	5,245
Total Run Off					9,670 m3/hr
Taking 15 minutes retention time, total volume of run-off = 9,670 / 4 = 2417.5 say 2,418 m3					
Considering size of Recharge Pit – Diameter is 4.05 m and Depth is 3 m; Volume of single recharging pit = 38.63 m3					
No. of recharge pits reqd. = 63 pits					

63 rain water recharging pits have already been constructed within the project. However, 68 rain water recharging pits have been proposed in total after expansion.

Solid waste generation & composition

GENERATION				
Total solid waste		10,972 kg/day of solid waste (@ 0.50 kg/capita/day for residential and @ 0.2 kg/capita/day for commercial will be generated from the project site.		
SI. No.	Category of waste	Description	Proposed Treatment / disposal of waste	Quantity of Solid waste generation (in kg/day)
1.	Biodegradable or wet waste (@ 45%)	Green waste, food waste, paper waste and biodegradable plastics	Converted into Manure using Mechanical Composter	4,937
2.	Non-biodegradable or dry waste (@ 53%)	Combustible waste, sanitary waste like diapers, sanitary pads; recyclable waste etc.	Handed over to authorized waste pickers	5,815
3.	Domestic hazardous waste (@ 2%)	Discarded paint drums, pesticide cans, CFL bulbs, tube lights, expired medicines, broken mercury thermometers, used batteries and contaminated gauge, etc.	Disposed off to authorized vendors as per Solid Waste Management Rules, 2016.	220
	Total Solid Waste Generated			10,972 kg/day

Solid waste handling

Construction Phase: The construction debris shall be recycled within the project including use in roads, low lying areas, etc. C & D waste will be handled as per C & D Rules, 2016.

Operational Phase:

Solid waste will be managed as per Solid Waste Management Rules, 2016. Solid waste will be segregated in three separate streams namely: Bio-degradable or wet waste, Non-biodegradable or dry waste and Domestic hazardous waste.

Primary collection of solid waste will be done and then it will be transferred manually using covered trolleys to common solid waste segregation area.

A separate area of 3312.74 sqm. has been earmarked for segregation of solid waste.

Biodegradable waste will be composted by use of Mechanical Composter (5 composters of 1000 kg/day capacity each).

Inert waste will be dumped to authorized dumping site. The recyclable waste shall be sold to resellers.

The hazardous waste such as waste oil from DG sets shall be collected and annually disposed off with authorized recyclers registered by PPCB.
E-waste will be managed through approved vendors and will be handled as per E- Waste (Management) Amendment Rules, 2018.

Parking calculations

Individual plot owners will be responsible for the provision of parking within their plot itself. While, for the commercial areas, parking requirement has been calculated as under:-

Parking Required Details:

SI. No.	Description	FAR (in sq.yds)	Norms	Required Parking (in ECS)
1.	Commercial 1	11,591.67	2 ECS/120 sq.yds	195
2.	Commercial 2	9,747.22		164
3.	Commercial 3	9,686.10		163
4.	Commercial 4	2,533.33		43
5.	Commercial 5	5,556.752		93
Total Parking Required (in ECS)				658 ECS

Parking Proposed Details:

SI. No.	Description	Parking Area (in sq.yds)	Proposed ECS
1.	Commercial 1	6,485.25	236
2.	Commercial 2	5,123.00	186
3.	Commercial 3	5,311.17	193
4.	Commercial 4	1,250.03	45
5.	Commercial 5	3,684.50	134
	Total Parking Proposed (in ECS)		794 ECS

Thus, Parking proposed is much higher than parking required as per norms.

Corporate social responsibility

The project proponent is already doing following activities in the area under CSR:

i) Running a primary health center (Dispensary) in Village Dhanauran wherein the beneficiaries are the local villagers. Free consultation and free medicines are provided. The center is running for the last 3 years.
ii) Have successfully conducted blood donation camp.
iii) Involved in conducting cancer awareness camp in the area along with the NGO.
iv) Conducted awareness camp stroke talk on evils of Tobacco and liquor.
v) Has been contributing by way of donations to the Gurdwaras in the area.
vi) Have encouraged youth participation in regional sports events activities through sponsorships and appreciation.
vii) Have successfully conducted first aid training camp.
viii) Have two times held multispecialty medical camp successfully at Village Togan & Dhanaura.
ix) The company has already contributed a sum of around Rs. 2.0 Crores towards Social Infrastructure fund which will be used for health, sports, etc.However, a sum of Rs. 1 Cr. will be used for CSR which shall be looked after by Environment

Management Cell. The key activities to be undertaken in a period of 5 year within 10 km area of the project besides above shall be: -

x) Free distribution of sampling in the area.

xi) Adoption of school in 10 km area by providing free books, scholarships and support infrastructure up-gradation for economically weaker sections.

xii) DLF Foundation is opening Training Institutes in the area where various type of vocational courses would be conducted free of cost for the unemployed youth of the locality. The training courses would be based on the requirements of the industries/ business in the area and job opportunities would be generated with the help of the such training courses.

xiii) Maintenance of village ponds in the locality in order to help recharge ground water, as well as, to provide a place for recreation for villagers

Eco-sensitive locations

Sr. No.	Environment Sensitive locations	Distance
1.	City Bird Sanctuary, Chandigarh	10 km
2.	Sukhna Wildlife Sanctuary	11 km
3.	Sukhna lake	11 km
4.	Bajwa Institute	1.5km
5.	Punjab University	6.5 km
6.	Ratwara Gurudwara	1 km
7.	Govt. Model Sr. Secondary School, Mullanpur	2 km

RESULTS OF AMBIENT AIR QUALITY MONITORING RESULTS (AVERAGE)

S.No.	Test Parameters	Units	A0	A1	A2	A3
1.	Particulate Matter (PM10)	µg/m3	110.8	107.4	117.4	124.9
2.	Particulate Matter (PM2.5)	µg/m3	60.5	58.7	64.1	68.3
3.	Sulphur Dioxide (SO2)	µg/m3	10.6	10.3	11.3	12.0
4.	Nitrogen Oxides (as NO2)	µg/m3	23.3	22.5	24.6	26.2
5.	Ammonia (NH3)	µg/m3	40.9	39.6	43.3	46.0
6.	Ozone (O3)	µg/m3	16.7	16.2	17.7	18.8
7.	Carbon Monoxide (CO)	mg/m3	<1.5	<1.5	<1.5	<1.5
8.	Lead (Pb) in Particulate Matter	µg/m3	<0.04	<0.04	<0.04	<0.04
9.	Benzo Pyrene(BaP), Particulate Phase Only	ng/m3	<0.5	<0.5	<0.5	<0.5
10.	Benzene (C6H6)	µg/m3	<2	<2	<2	<2
11.	Arsenic (As) in Particulate Matter	ng/m3	<1	<1	<1	<1
12.	Nickel (Ni) in Particulate Matter	ng/m3	<10	<10	<10	<10

Results interpretation of ambient air

i) Ambient Air Quality Monitoring reveals that the minimum and maximum concentrations of PM10 for all the 4 Air Quality monitoring stations were found to be 107.4 µg/m3 and

ii) 124.9 µg/m3 respectively, while for PM2.5 it vary between 60.5 µg/m3 and 68.3 µg/m3.

iii) The higher values of PM may be due to other construction projects as well as traffic movement on Kurali-Chandigarh Road, widening of Kurali-Chandigarh Road, brick kilns operating in the area as well as traffic movement on Kurali-Chandigarh Road.

iv) During the construction phase of expansion project, ambient air quality may further deteriorate due to construction vehicle movement as well as DG sets. Accordingly, mitigation measures like tarpaulin sheets, water sprinkling system at frequent intervals, high quality construction equipments along with compulsory PUC Certificates for all the construction vehicles as well as stack of adequate height is proposed.

v) During the operation phase, Green Belt has been provided to mitigate the air pollution.

vi) As DG set will only be used during power failure as power backup. So, there will be only marginal increment in the air quality pollution level. DG set will be provided with stack height of 3 m above the building as well as acoustic enclosure.

vii) As far as the gaseous pollutants SO2, NO2, CO and VOC are concerned, the prescribed CPCB limit for residential and rural areas has never surpassed at any station.

viii) The minimum and maximum concentrations of NO2 were found to be 22.5 µg/m3 and
26.2 µg/m3 respectively.

ix) The minimum and maximum concentrations of SO2 were found to be 10.3 µg/m3 and 12 µg/m3 respectively.

x) The minimum and maximum concentrations of NH3 were found to be 39.6 µg/m3 and 46 µg/m3 respectively.

xi) The prescribed CPCB limit of SO2 and NO2 is 80 µg/m3 and CO is 4.00 mg/m3 for residential and rural areas has never surpassed at any monitoring station.

xii) The Environmental Study was conducted from both primary and secondary data collection.

xiii) Various Environmental factors were considered and found that there is no significant impact on above said points.

xiv) Environmental data related to water quality monitoring, noise monitoring and soil monitoring report results are shown in upcoming slides.

xv) Analysis results of ground water revealed that pH varies from 7.48 to 7.75,

Total Hardness varies from 128 to 242 mg/l., Total Dissolved Solids varies from 283 to 371 mg/l. and as hardness is exceeding the permissible limit, so WTP has been installed for water treatment system before usage of Ground water for drinking water purpose.

xvi) Ambient noise levels were measured at 5 locations within the project location and 3 locations outside near the project.

xvii) Minimum and maximum noise levels recorded during the day time were from 52.5 dB(A) and 58.4 dB respectively and minimum and maximum level of noise during night time were 40.2 dB and 49.6 dB respectively.

xviii) The result shows all the values are almost near to the acceptable limit. This may be due to construction activities in Ecocity as well as within the project.

xix) During the construction activities for expansion project, noise levels may exceed the desired limits for which PPEs will be provided to all the construction labors for mitigating the noise pollution. No construction will be done at the night time.

xx) During the operation phase, Green Belt has been provided as well as shrubs are provided which help in reducing noise pollution. DG sets are in acoustic enclosure.

xxi) The analysis results show that soil is neutral in nature as pH value ranges from 7.4 – 7.6 with organic matter 0.92%-1.02%.

xxii) The concentration of Sodium (31 mg/kg to 38 mg/kg) and Potassium (24 mg/kg to 31 mg/kg) has been found in the soil samples.

Energy saving measures:

i) Solar energy and alternative source of energy to reduce the fossil energy consumption will be availed by individual housing at the time of completion of construction of houses.

ii) Energy conservation measures involve usage of LEDs, CFLs and solar street lights.

iii) 981 LEDs and 12 CFLs lightening fixtures have been provided for external lightning within the project.

iv) 177 solar lights have been provided within the parks of the project.

Modified traffic scenario

Location	Increased PCU'S-State/National Highway	V (Volume in PUC/day)	C(Capacity in PUC/day)*	Modified V/C Ratio	LOS
Near Eco City	810+4133	4,943	35,000	0.14	A
On Kurali Chandigarh Road near Eco City	1296+4133 +4860 +2500	12,789	35,000	0.36	B
Entrance of Mullanpur	2154+14981	17,135	35,000	0.49	C

IRC 064: Guidelines for Capacity of Roads in Rural Areas (First Revision) by The Indian Road Congress

Conclusion: The V/C ratio is found out to be on average of 0.040 and the expansion of project will result in a modified V/C ratio to be on average of 0.33. Thus, proposed road will be able to cater the increased traffic load

ENVIRONMENTAL MANAGEMENT PLAN

(CONSTRUCTION PHASE)

S.NO.	Title	Budget (in Rs. Lakhs)
1.	Tree plantation & water sprinkling	2
2.	First aid including medical checkup	2
3.	Personnel protective equipments	2
	Total	Rs. 6 Lakhs

(OPERATIONAL PHASE)

S. No.	Title	Budget (in Rs. Lakhs)
1.	Sewage Treatment Plant & Underground tank	986.88
2.	Horticulture & green belt development, Tree plantation & sprinkling	860.43
3.	Solar System	69.6
4.	Rain Water Harvesting	587.76
5.	Fire Fighting	32.29
Total amount		Rs. 2,536.96 Lakhs

Environmental Management Plan

Actual Expenditure spent on Environmental Management Plan till March, 2018

S.No.	Title	Amount (in Rs. Lakhs)
1.	Sewage Treatment Plant & underground tank	949.64
2.	Horticulture & green belt development, Tree plantation & sprinkling	642.04
3.	Solar System	50.82
4.	Rain Water Harvesting	551.02
5.	Fire Fighting	28.16
6.	First Aid including medical check-up	0.10
7.	Personnel protective equipment's	0.15
8.	Air pollution control measures	0.10
9.	Noise pollution control measures	0.80
10.	Environment Monitoring	0.20
Total amount spent till March, 2018		Rs. 2,223.03 Lakhs

Environmental Monitoring Plan & Cost

Component	Stage	Item	Unit Cost	Quantity
Air	Construction	Total 4 AAQM locations, Parameters, PM2.5, PM10, SO2, NOx and CO	5,000/-	Twice a week in every season (3 years)
	Operation Phase	Total 4 AAQM Locations Parameters, PM2.5, PM10, SO2, NOx and CO	5,000/-	Twice a week at each location every season
Ground Water	Construction	Parameters as per IS:10500	7500/-	Six Monthly by approved laboratory for 3 years
	Operation Phase	Parameters as per IS:10500	7500/-	Six Monthly by approved laboratory for 3 years
Treated Waste Water	Operation Phase	BOD, COD, pH, TSS, Oil& Grease	4000/-	Quarterly by approved laboratory
Noise	Construction	Total 4 locations	2500/-	Quarterly by approved laboratory for 3 years
	Operation	Total 4 locations	1000/-	Quarterly by approved laboratory

Earlier, the SEAC in its 173th meeting held on 29.11.2018, considered the application filed by the project proponent and decided to forward the application to the SEIAA with the recommendations to grant environmental clearance for expansion of the Mega Housing Complex namely "Hyde Park Estate" having increase in plot area from
224.98 acres to 235.97 acres with net planned area increase from 181.86 acre to 192.84 acre alongwith built up area increase from 5,30,986.262 sqm to 7,07,101.62 sqm at Village Salamatpur, Devinagar, Bharonjian and Ratwara, Tehsil Kharar, District SAS Nagar (Mohali),unit subject to the submission of some additional documents before the final issuance of Environment clearance by the SEIAA.

Thereafter, the case was considered by the SEIAA in its 144th meeting held on 22.02.2019 and perused the recommendations made by SEAC. The SEIAA observed that the case has been recommended for grant of environmental clearance subject to submission of additional documents. SEIAA took a serious note of the same. SEIAA referred the decision taken by the SEIAA in its 87th meeting held on 30.05.2015, wherein SEAC was requested to discontinue the process of recommending the cases where complete documents/information have not been submitted by the project proponent with the application or at the time of appraisal of the case by the SEAC as there may be chances of some important information getting un-noticed which otherwise may have been important to appraise the project. It also quoted the advisory letter earlier issued vide no. 135 dated 29.01.2018 in the matter. SEIAA decided as under:

i) To remand the case to the SEAC. The same shall be recommended to SEIAA only after taking the requisite documents from the project proponent on record and appraising the same in the meeting of SEAC.
ii) To examine as to whether any area of the project is covered in old case as well as in expansion case under Punjab Land Preservation

Act,1900. If no, whether NOC from the concerned Authority has been submitted in old case as well as expansion case by the project proponent.

iii) In future, no conditional recommendation be made to SEIAA.

In view of the above decision of the SEIAA, the case was re-considered by the SEAC in its 177th meeting held on 13.03.2019 and the same was attended by the following on behalf of the project proponent: -

(i) Sh. Harmeet Singh, General Manager of the promoter company.

(ii) Sh. Sandeep Garg, M/s ECO laboratories & Consultants Pvt. Ltd., Environment consultant of the promoter company.

SEAC asked the project proponent and his environmental consultant to submit the requisite documents as decided during the 173rd meeting of SEAC. To this, the project proponent has submitted the documents /clarifications. The matter was deliberated at length and issue wise gist is as under:

1. Document/clarification sought by SEAC in 173rd meeting: Being a border line case, project proponent shall either obtain exemption certificate from the DFO, Wildlife to the effect that no wildlife sanctuary exists within10 km from the project site or shall submit a copy of the acknowledgement alongwith a set of application submitted to the DFO, Wildlife to the SEIAA for obtaining NOC from them.

The project proponent replied that project is located outside the Eco-sensitive zone of City Bird and Sukhna Wildlife Sanctuary respectively. Apart from this, as per MoEF&CC Notification dated 4th& 18th January, 2017; Eco-sensitive Zone varies from 80 to 125 meters from the City Bird Sanctuary comprising an area of approx.

12.0 hectares while, 2 km to 2.75 km from the boundary of the Sukhna Wildlife Sanctuary comprising an area of 1050 hectares respectively. A Toposheet showing distances of Sanctuary from project location has been submitted. A copy of the application filed for NBWL clearance has also been submitted, which was taken on record by SEAC.

2. Document/clarification sought by SEAC in 173rd meeting: The project proponent will submit detailed calculation justifying the requirement of 68 no. rain water harvesting pits.

To this observation, Environmental Consultant of Project Proponent replied that

- Rainwater recharging will be done from Green Area, Roof top Area and Paved Area i.e. 47,145.88 sqm, 3,08,504 sqm. and 3,01,661.46 sqm. respectively.
- Thus, assuming peak hourly rainfall of 45 mm and specific runoff coefficients, total runoff available will be 2,200 m^3/hr.
- Taking 15 minutes retention time, total volume of run-off = 8,799 / 4 = 2199.75 say 2,200 m^3
- Considering size of Recharge Pit – Diameter is 4 m and Depth is 5 m; Volume of single recharging pit = 62.8 m^3
- No. of recharge pits reqd. = 35 pits

- As per MOEF&CC, minimum one recharge bore per 5,000 sqm. of built-up area needs to be provided. Thus, considering Built-up area of 7,07,101.62 sqm. No. of bores required = 142 bores
  No. of bore already constructed are 63 x 3 = 189 (considering 3 bores per recharge well). However, as per MoEF&CC notification, 68 no. of pits (i.e. 204 bores) are sufficient to cater run off load from the project and thus additional 15 bores i.e. 5 recharging wells will be provided in the expansion project.

3. Document/clarification sought by SEAC in 173rd meeting: The project proponent will submit a properly drafted CER activities plan in accordance to the provisions of OM dated 01.05.2018. It will also provide timeline chart showing the starting and completion period of each activity. 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 must be completed with the completion of the project.

Environmental Consultant of Project Proponent replied that as per OM of MoEF&CC dated 01.05.2018, amount to be spent on CER activity is Rs. 2.97 Crores (i.e. 0.25% of the project cost of Rs. 1,188.16 Crores).The project proponent has already spent Rs. 3.51 crores on CER activities under the project. The details of the same are as under:-

Financial Year	Area of Operation	Amount
Healthcare		
2012-13	Primary Health Clinic, Dhanaura, Mohali	16,44,075
2013-14	Primary Health Clinic, Dhanaura, Mohali	18,27,724
2014-15	Primary Health Clinic, Dhanaura, Mohali	19,03,420
2015-16	Primary Health Clinic, Dhanaura, Mohali	18,79,020
2016-17	Primary Health Clinic, Dhanaura, Mohali	19,95,864
2017-18	Primary Health Clinic, Dhanaura, Mohali	19,67,601
2018-19	Primary Health Clinic, Dhanaura,Mohali	4,45,881
2014-15	Mobile Medical Unit, Mohali	20,04,937
2015-16	Mobile Medical Unit, Mohali	19,26,320
2016-17	Mobile Medical Unit, Mohali	20,72,549
2017-18	Mobile Medical Unit, Mohali	20,31,796
Skill Development		
2012-13	Skill Centre, Dhanaura, Mohali	5,00,000
2013-14	Skill Centre, Dhanaura, Mohali	5,00,000
2014-15	Skill Centre, Dhanaura, Mohali	5,00,000

2015-16	Skill Centre, Dhanaura, Mohali	5,00,000
2016-17	Skill Centre, Dhanaura, Mohali	2,50,000
2017-18	Skill Centre, Dhanaura, Mohali	17,00,000
2018-19	Construction of Police Station, Mohali	25,00,000
Avenue Plantation		
2016-17	Horticulture work at Chandigarh Mullanpur Road	72,97,211
2016-17	Sprinkler Irrigation work at Chandigarh Mullanpur Road	17,37,336
Total Amount in Rs		**3.51Cr**

4. Document/clarification sought by SEAC in 173rd meeting : The project proponent shall explore the possibility of segregating the black and grey streams (if possible, being ongoing project) and provide separate treatment arrangements and dual plumbing system to utilize the treated effluent as per the end use.

Environmental Consultant of Project Proponent responded that Services have already been laid in the EC accorded portion and STP of sufficient capacity to cater the load after expansion has also been installed. Only in expansion part, service lines are to be laid and connected to existing sewer line. Thus, it is not feasible to segregate grey and black streams.

5. Document/clarification sought by SEAC in 173rd meeting: A revised Environment Management Plan (EMP) mentioning the capital costs during construction/operational phase as well as the operational costs will be submitted.

Environmental Consultant of Project Proponent submitted the revised Environment Management Plan (EMP) mentioning the capital costs during construction/operational phase as well as the recurring cost during operation phase is given below:

ENVIRONMENTAL MANAGEMENT PLAN (CONSTRUCTION PHASE)

Sr. No.	Title	Capital cost (in Rs.Lacs)	Recurring cost / annum (in Rs.Lacs)
1.	Sewage Treatment Plant & Underground tank	986	-
2.	Horticulture & green belt development, Tree plantation &sprinkling	892	5

3.	Solar System	70	-
4.	Rain Water Harvesting	587	-
5.	Fire Fighting	32	-
6.	First aid including medical checkup	-	0.2
7.	Personnel protective equipments	-	0.3
8.	Air pollution control measures	-	0.2
9.	Noise pollution control measures	-	1.6
10.	Environmental Monitoring	-	1
	Total	**Rs. 2,567 Lacs***	**Rs. 8.3 Lakhs**

***Note:** Out of Rs. 2,567 Lacs, Rs. 2,223.03 Lacs have already been spent on EMP till March, 2018.

Sr No.	**Title**	**Amount spent (in Rs. Lacs)**
1.	Sewage Treatment Plant & underground tank	949.64
2.	Horticulture & green belt development, Tree plantation & sprinkling	642.04
3.	Solar System	50.82
4.	Rain Water Harvesting	551.02
5.	Fire Fighting	28.16
6.	First Aid including medical check-up	0.10
7.	Personnel protective equipments	0.15
8.	Air pollution control measures	0.10
9.	Noise pollution control measures	0.80
10.	Environment Monitoring	0.20
Total amount spent till March, 2018		**Rs. 2,223.03 Lakhs**

ENVIRONMENTAL MANAGEMENT PLAN (OPERATIONAL PHASE

S. No.	**Title**	**Projected Recurring cost / annum (in Rs. Lacs)**
1.	Sewage Treatment Plant & Underground tank	12.5
2.	Horticulture & green belt development, Tree plantation & sprinkling	23
3.	Solar System	2
4.	Rain Water Harvesting	3
5.	Fire Fighting	1

6.	Air pollution control measures	0.5
7.	Noise pollution control measures	2
8.	Environmental Monitoring	1
	Total	**Rs. 45 Lakhs**

SEAC deliberated with the project proponent to clarify where the amount has been spent in Primary Health center, Dhanaura, Mohali & Skill development center from 2012 to 2019. To this, the project proponent informed that new medical equipment's & new computers have been provided and renovation has been done. To this, SEAC asked the project proponent to show any documentary evidence in support of claim made by him.

The project proponent was unable to give the proper reply in the matter. SEAC was not satisfied from the reply submitted by the project proponent. As such, SEAC asked the project proponent to submit CA Certified document as an evidence to the amount spent on the CER activities carried out for the period 2012 to 2019.

SEAC further observed that amount already spent on CSR activities for the EC granted project can not be considered for expansion project in question. Therefore, revised CER activities to be done strictly in accordance with the provisions of OM dated 01.05.2018 and amount to be spent on CER activities for the expansion project shall be in proportion to the cost of the expansion project . To this, the project proponent sought some time.

6. Document/clarification sought by SEAC in 173rd meeting: The project proponent shall provide STP based on Modular system as per the trends

of the growing population by ensuring proper detention time of untreated effluent in the collection/equalization tank to avoid the septic conditions and efficient operation of STP.

Environmental Consultant of Project Proponent submitted that STP of 3 MLD capacity has already been installed within the project premises. Further, 3 modules of 1 MLD each have been provided & each module can treat 5 batches of 200 KL of sewerage. On an average, plant shall be able to treat approx. 100 KL flow per day. Certificate in this regard from STP supplier has also been submitted.

7. Document/clarification sought by SEAC in 173rd meeting: The project proponent shall submit necessary supporting documents regarding change of name of the developer from M/s DLF Universal Ltd. to M/s DLF Home Developers Ltd.

The Project Proponent submitted that DLF Universal Ltd. stands demerge with another company i.e. M/s. DLF Home Developers Ltd. pursuant to the orders dated 29th March, 2016 and 11th Nov, 2016 of Hon'ble Court of Punjab & Haryana and Hon'ble High court of Delhi respectively. A copy of orders of Hon'ble Court has also been submitted.

8. Document/clarification sought by SEAC in 173rd meeting: As to

whether any area of the project is covered in old case as well as in expansion case under Punjab Land Preservation Act,1900. If no, whether NOC from the concerned Authority has been submitted in old case as well as expansion case by the project proponent.

To another query of SEAC regarding PLPA, the project proponent submitted that khasra nos. of Mega Housing Complex project namely "Hyde Park Estate" being developed on scheme area of 235.97 acres are not part of controlled list given by Punjab Land Preservation Act, 1990. Moreover, Forest NOC for our expansion land
i.e. 11.04 acres has been obtained. A copy of the same has been submitted,which was taken on record by SEAC.
With respect to DFO approval for the existing project, it is submitted that no forest land is involved in their existing project and Environmental clearance has already been granted for existing projects. However, application has been filed to DFO vide Letter No. 4323 dated 12.3.2019 for obtaining NOC. A copy of the same has been submitted, which was taken on record by SEAC.

After detailed deliberations, SEAC decided to defer the case and asked the project proponent to submit the following documents: -

1) CA Certified document as an evidence to the amount spent on the CER activities carried out for the period 2012 to 2019.
2) Revised CER activities schedule with time lines strictly in accordance with the provisions of OM dated 01.05.2018 with amount to be spent on CER activities shall be in accordance to the cost of expansion project without taking benefit of CSR/ CER activities already done for existing project.
3) A copy of permission from the DFO to the effect that existing area of the project does not falls under PLPA, 1900.

The case was placed in 178th meeting of SEAC held on 15.04.2019 and the same was attended by Dr. Sandeep Garg, MD, M/s ECO laboratories & Consultants Pvt. Ltd., Environment consultant of the promoter company. He stated that the project proponent is not able to attend the meeting due to some unavoidable circumstances and requested to consider the case in the next meeting of SEAC. An email dated 12.04.2019 was also received from the consultant wherein, they have forwarded a copy of request letter received from the Sh. Harpreet Singh, Authorized Signatory mentioning that due to unavoidable circumstances, he will not be able to present his case in 178th meeting of SEAC & requested to consider the case in next meeting of SEAC.

SEAC accepted the request of the project proponent & decided to defer the case in light of the request submitted by the project proponent and OM dated 25.02.2010 of MoEF&CC and ask the project proponent to attend the next meeting as and when called for.

The Project Proponent has submitted the reply on 23.09.2019, which is annexure as Annexure-3 of the Agenda .

The case was considered by the SEAC in its 186th meeting held on 26.12.2019, which was attended by the following: -

i) Sh. Manpreet Wahi, Sr. Manager, on behalf of project proponent.

ii) Sh. Sandeep Garg, EIA-Co-ordinator, M/s Eco-laboratories& Consultants Pvt. Ltd., Mohali, Environment Consultant of the promoter company.

iii) Ms. Pariyanka Madan, M/s Eco-laboratories & Consultants Pvt. Ltd, Environment Consultant of the promoter company

Environmental Consultant of the Project proponent summitted the reply as under:-

S.No.	Additional Queries raised by SEAC	Reply
1.	CA Certified document as an evidence to the amount spent on the CER activities carried out for the period 2012 to 2019.	CA certified bills amounting Rs. 1,96,03,356/- spent under CSR during the period from 2012 to 2019. Summary sheet along with CA certified bills submitted as **Annexure 1(a) & 1(b)** respectively.
2.	Revised CER activities schedule with time lines strictly in accordance with the provisions of OM dated 01.05.2018 with amount to be spent on CER activities shall be in accordance to the cost of expansion project without taking benefit of CSR/ CER activities already done for existing project.	Revised CER activities schedule has been prepared based on the criteria of 0.25% of expansion cost (Rs. 709.89 Crores) which amounts to Rs. 1.77 Crores. CER undertaking submitted as **Annexure 2**.
3.	A copy of permission from the DFO to the effect that existing area of the project does not falls under PLPA, 1900.	Permission has been obtained from DFO stating that the project does not fall under PLPA, 1900. Copies of NOCs for existing as well as expansion part submitted as **Annexure 3(a) & (b)** respectively.

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 to the project proponent for Expansion of Mega Housing Complex namely "Hyde Park Estate" located at Village Salamatpur, Devinagar, Bharonjian, Ratwara and Mullanpur Garibdas, Tehsil Kharar, District SAS Nagar (Mohali), Punjab at in an

area 9,54,936.709 m2 (or 235.97 acres) having built up area ,7,07,101.62 m^2 subject to the following salient features and conditions in addition to the proposed measures:

<table>
<tr><th>S.No.</th><th>Item</th><th>Details</th></tr>
<tr><td>1.</td><td>Online Proposal No.</td><td>SIA/PB/NCP /25993/2017</td></tr>
<tr><td>2.</td><td>Name and Location of the project</td><td>Expansion of Mega Housing Complex namely "Hyde Park Estate" located at Village Salamatpur, Devinagar, Bharonjian, Ratwara and Mullanpur Garibdas, Tehsil Kharar, District SAS Nagar (Mohali), Punjab.</td></tr>
<tr><td>3.</td><td>Latitude & Longitude</td><td>Few corner coordinates are given below:
<table>
<tr><th>Corner</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>Corner-A</td><td>30°48'45.11" N</td><td>76°43'19.94" E</td></tr>
<tr><td>Corner-B</td><td>30°48'55.43" N</td><td>76°43'38.21" E</td></tr>
<tr><td>Corner-C</td><td>30°48'11.17" N</td><td>76°43'39.33" E</td></tr>
<tr><td>Corner-D</td><td>30°48'0.26" N</td><td>76°44'4.15" E</td></tr>
<tr><td>Corner-E</td><td>30°47'56.08" N</td><td>76°44'2.53" E</td></tr>
</table></td></tr>
<tr><td>4.</td><td>Project/activity covered under item of scheduled to the EIA Notification, 14.09.2006</td><td>The project falls under Schedule 8(b) - 'Townships and Area Development projects' Category B.</td></tr>
<tr><td>5.</td><td>Whether the project is in critical polluted area or not.</td><td>No. The project does not falls in critical polluted area</td></tr>
<tr><td>6.</td><td>If the project involves diversion of forest land. If yes,
a. Extent of the forest land.
b. Status of the forest clearance.</td><td>No. Project does not involve any diversion of forest land.</td></tr>
<tr><td>7.</td><td>a. Is the project covered under PLPA, 1900, if No but located near to PLPA area then the project proponent is required to submit NOC from the concerned DFO to the effect that project area does not fall under the provision of PLPA Act, 1900.

b. Is the project covered under PLPA,1900, if yes then Status of the NOC w.r.t PLPA, 1900.</td><td>Project is not covered under PLPA 1900. However, NOC has been obtained from DFO, S.A.S. Nagar for a total area of 192.9 acres.</td></tr>
</table>

<table>
<tr><td>8</td><td>If the project falls within 10 km of eco-sensitive area/ National park/Wild Life Sanctuary. If yes,
a. Name of eco-sensitive area/
National park/Wild Life Sanctuary and distance from the project site.
b. Status of clearance from National Board for Wild Life (NBWL).</td><td>City Bird Sanctuary and Sukhna Wildlife Sanctuary are at a distance of approx. 8.8 km & 7.25 km respectively from the project location. Thus, NBWL application has already been filed for City Bird Sanctuary and Sukhna Wildlife Sanctuary.</td></tr>
<tr><td>9.</td><td>Classification/Land use pattern as per Master Plan</td><td>The project falls under Residential zone as per Master plan of Mullanpur.</td></tr>
<tr><td>10.</td><td>Cost of the project</td><td>The cost of the project after expansion is estimated to be Rs. 1,188.16 Crores.</td></tr>
<tr><td>11.</td><td>Total Plot area, Built- up Area and Green area</td><td>he details of project is as under:
<table><tr><th>S.No.</th><th>Description</th><th>Area</th></tr><tr><td>1.</td><td>Plot area (Total scheme area)</td><td>9,54,936.709 m^2 (or 235.97 acres)</td></tr><tr><td>2.</td><td>Built-up area</td><td>7,07,101.62 m^2</td></tr><tr><td>3.</td><td>Green area</td><td>47,145.88 m^2</td></tr></table></td></tr>
<tr><td>12.</td><td>Population (when fully operational)</td><td>Estimated population: 22,643 Persons.</td></tr>
<tr><td>13.</td><td>Water Requirements & source in Construction Phase</td><td>During construction phase, water demand will be of approx. 10 KLD. The water requirement is being met from existing STP of 3 MLD. Domestic water demand for 125 workers during peak period @ 8 KLD is being provided by water tankers.</td></tr>
<tr><td>14.</td><td colspan="2">Break up of Water Requirements & source in Operation Phase (Summer, Rainy, Winter):
<table><tr><th rowspan="2">S. No.</th><th rowspan="2">Season</th><th colspan="2">Fresh water</th><th colspan="3">Reuse water</th><th rowspan="2">Total (KLD)</th></tr><tr><th>Domestic (KLD)</th><th>Others (KLD)</th><th>Flushing (KLD)</th><th>Green area (KLD)</th><th>HVAC (KLD)</th></tr><tr><td>1.</td><td>Summer</td><td>2178</td><td>-</td><td>796</td><td>259</td><td>-</td><td>3,233</td></tr><tr><td>2.</td><td>Winter</td><td>2178</td><td>-</td><td>796</td><td>85</td><td>-</td><td>3,059</td></tr><tr><td>3.</td><td>Rainy</td><td>2178</td><td>-</td><td>796</td><td>24</td><td>-</td><td>2,998</td></tr></table>
<table><tr><th>S.No.</th><th>Description</th><th>Source of water</th></tr><tr><td>1.</td><td>Domestic</td><td>Borewell</td></tr></table></td></tr>
</table>

	2.	Others (Pl define)	-
	3.	Flushing purposes	Treated wastewater
	4.	Green area	Treated wastewater
	5.	HVAC	-
15.	Treatment & Disposal arrangements of waste water in Construction Phase	Already installed STP of 3 MLD within project premises.	
		Treated water from STP will be used for existing green area.	

16.	Disposal Arrangement of Waste water in Operation Phase	Total wastewater generation will be 2,649 KLD which will be treated in already installed STP of 3 MLD based on SBR technology within project premises.

Season	Flushing (KLD)	Green area (KLD)	GMADA Sewer (KLD)
Summer	796	259	1,276
Winter	796	85	1,450
Monsoon	796	24	1,776

17.	Rain water recharging detail	8,799 m^3/hr rain water will be collected in already constructed. 63 nos. of recharging pits with triple bore to recharge the rooftop rainwater of buildings after treatment through oil & Grease traps.
18.	Solid waste generation and its disposal	a) 10,972 kg/day b) Solid wastes will be appropriately segregated (at source) by providing bins into Bio-degradable and non-biodegradable Components. c) 4,937 kg/day of bio-degradable will be Converted into Manure using Mechanical Composters. d) 5,815 kg/day of non-biodegradable or dry waste will be handed over to authorized waste pickers e) 220 kg/day of domestic hazardous waste will be disposed off to authorized vendors as per Solid Waste Management Rules, 2016.
19.	Hazardous Waste & E- Waste	Used oil from DG sets will be sold to registered recyclers and E-waste will be disposed off as per the E-waste (Management) Amendment Rules 2018.

<table>
<tr><td>20.</td><td>Energy Requirements & Saving</td><td>a) 17,294.8 KVA from PSPCL.
b) 8 DG sets of 14,250 kVA capacity (i.e. 6 × 2,000 + 1 × 1,500 + 1 × 750)
<u>Energy Saving measures:</u>
• Solar panels will be availed by individual housing at the time of completion of construction of houses.
• Energy conservation measures involve usage of LEDs, CFLs and solar street lights
• 981 LEDs and 12 CFLs lightening fixtures have been provided for external lightning within the project.
• 177 solar lights have been provided within the parks of the project
<u>Approx. 77.8% energy will be saved.</u></td></tr>
<tr><td>21.</td><td>Environment Management Plan along with Budgetary break up phase wise and responsibility to implement</td><td>During construction phase, Rs. 2567 lakhs as capital & Rs. 8.3 lakhs as recurring will be spent on EMP. While, during operation phase, Rs. 45 lakhs will be spent as recurring cost per annum for implementation of the EMP.

<table><tr><th>Description</th><th>Capital cost (lakhs)</th><th>Recurring cost (lakhs)</th><th>Monitoring of Air, Noise, water (per annum) Rs.</th></tr><tr><td>Construction</td><td>2,567*</td><td>8.3</td><td>1</td></tr><tr><td>Operation</td><td>-</td><td>45</td><td>1</td></tr></table>* Out of Rs. 2,567 Lakhs, Rs. 2,223.03 Lakhs have already been spent on EMP till March, 2018.</td></tr>
<tr><td>22.</td><td colspan="2">CER activities along with budgetary break up and responsibility to implement</td></tr>
<tr><td colspan="3">Mr. Harmeet Singh (Authorized Signatory) of M/s. DLF Home Developers Ltd. will be responsible for implementation of CER (Corporate Environmental Responsibility) within 5 year time. Rs. 1.77 Crores has been planned to be reserved for CER. The following activities have been proposed to be covered under CER:

<table><tr><th rowspan="2">S.No.</th><th rowspan="2">Activities</th><th colspan="5">Timeline
(2019 to 2024)</th><th rowspan="2">Total Expenditure in 5 Years
(in lakh)</th></tr><tr><th>2019 -20 Expenditure
(in lakh)</th><th>2020 -21 Expenditure
(in lakh)</th><th>2021 -22 Expenditure
(in lakh)</th><th>2022 – 23 Expenditure
(in lakh)</th><th>2023 -24 Expenditure
(in lakh)</th></tr><tr><td>1</td><td>Skill center in Village Ratwara_</td><td>NIL</td><td>11</td><td>10</td><td>4</td><td>2</td><td>27</td></tr><tr><td>2</td><td>Adoption of pond in Village Ratwara</td><td>10</td><td>32</td><td>30</td><td>2</td><td>1</td><td>75</td></tr><tr><td>3</td><td>Installation of 10 no. of solar lights in Village Bharonjian</td><td>2</td><td>6</td><td>5</td><td>1</td><td>1</td><td>15</td></tr></table></td></tr>
</table>

4	Construction of Toilets for Govt. Senior Secondary School, Mullanpur Garibdass	2	5	1	1	1	10
5	Shuttle service from Village Salamatpur to PGIMER, Chandigarh	NIL	15	15	10	10	50
	Total	**14**	**69**	**61**	**18**	**15**	**177**

I. Statutory compliance:

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

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

iii) 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.

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 Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board / Committee.

vi) The project proponent shall obtain the necessary permission for drawl of ground water/ 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 Chief Controller of Explosives, Fire Department, 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 respective city/ town. For that, the project proponent shall either to submit the NOC/ land use conformity certificate from Deptt of Town and Country Planning or other concerned Authority under whom jurisdiction, the site falls.

xii) Besides 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 type of projects.

xiii) The project proponent shall get the layout plans approved from the Competent Authority for the activities / establishments to be set up at project site in consonance of the project proposal for which this environment clearance is applied.

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 ambient air quality at the site.

iii) The project proponent shall install system to carryout 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 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. The location of the DG sets may be decided with in consultation with State Pollution Control Board.

v) Construction site shall be adequately barricaded before the construction begins. Dust, smoke & 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, continuous dust/ wind breaking walls all around the site (at least 3m height or 1/3rd of the building height and maximum upto 10m). 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 & 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 area shall be prohibited. 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 earmarked area and road side 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 construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.

xiv) The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the 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 National Building Code of lndia.

xvi) Roads leading to or at construction site must be paved and blacktopped (i.e. metallic road)

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 measure be notified at the site. .

III. Water quality monitoring and preservation

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

ii) No construction shall be allowed to obstruct the natural drainage through the site, on 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 rain water.

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

iv) The total water requirement for the project will be 2974 KL/day, which shall be met through groundwater & treated wastewater. Total fresh water use shall not exceed 2178 KL/day the proposed requirement as provided in the project details.

v) a)The total wastewater generation from the project will be 2649 KL/day, which will be treated in existing STP of capacity @ 3.0 MLD installed within the project premises. As proposed, reuse of treated wastewater and discharge of surplus treated wastewater shall be as under:-

S. No.	Season	For Flushing purposes (KLD)	Green Area (KLD)	GMADA Sewer (KLD)
1.	Summer	796	259	1276
2.	Winter	796	85	1450
3.	Rainy	796	24	1776

b) 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.

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

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

vii) The waste water generated from swimming pool(s) shall not be discharged and the same shall be reused within the premises for purposes such as horticulture, HVAC etc.

viii) The quantity of fresh water 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 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 water available. This should be specified separately for ground water 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-Jaws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.

xi) Installation of dual pipe plumbing 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, conditioning etc. shall be done.

xii) The respective project proponent shall discourage the installation of R.O. plants in their projects in order to save the wastage in form of RO reject. However, in case the requirement of installing RO plant is utmost necessary then the rejected stream from the RO shall be separated and shall be utilized by storing the same within the particular component i.e. (Tower/Mall) or in a common place in the project premises.

xiii) The project proponent shall also adopt the new/innovating technologies like less water discharging taps (faucet with aerators)/urinals with electronic sensor system /water less urinals / twin flush cisterns/ sensor based alarming system for overhead water storage tanks and make it a part of the environmental management plans / building plans so as to reduce the water consumption/ground water abstraction in their Building Construction & Industrial projects.

xiv) The project proponent will provide plumbing system for reuse of treated wastewater for flushing/ HVAC/ other purposes etc. and colour coding of different pipe lines carrying water/wastewater from different sources / treated wastewater as follows:@@

Sr. No	**Nature of the Stream**	**Color code**
a)	Fresh water	Blue Color
b)	Untreated wastewater from Toilets/ urinal & from Kitchen	Black color
c)	Untreated wastewater from Bathing/shower area, hand washing (Washbasin / sinks) and from Cloth Washing	Grey color
d)	Reject water streams from RO plants & AC condensate (this is to be implemented wherever centralized AC system and common RO has been proposed in the	White color

	Project). Further, in case of individual houses/establishment this proposal may also be implemented wherever possible.	
e)	Treated wastewater (for reuse only for plantation purposes) from the STP treating black water	Green
f)	Treated wastewater (for reuse for flushing purposes or any other activity except plantation) from the STP treating grey water	Green with strips
g)	Storm water	Orange Color

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

xvi) The CGWA provisions on rain water harvesting should be followed. Rain water harvesting recharge pits/structure (68 Nos) /storage tanks shall be provided for ground water recharging as per the CGWB norms.

xvii) A rain water harvesting plan needs to be designed where the recharge bores of minimum one recharge bore per 5,000 square meters of built up area and storage capacity of minimum one day of total fresh water requirement shall be provided. In areas where ground water recharge is not feasible, the rain water should be harvested and stored for reuse. The ground water shall not be withdrawn without approval from the Competent Authority.

xviii) All recharge should be limited to shallow aquifer.

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

xx) Any ground water 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 ground water abstraction or dewatering.

xxi) The quantity of fresh water 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 along with six monthly Monitoring reports.

xxii) Sewage shall be treated in the STP with tertiary treatment. STP shall be installed in phased manner viz a viz in module system designed in a such a way so as to efficiently treat the waste water with increase in its quantity due to rise in occupancy. The treated effluent from STP shall be recycled/re-used for flushing, AC make up water and gardening. No treated water shall be disposed in to municipal stormwater drain.

xxiii) No sewage or untreated effluent water would be discharged through storm water drains. Onsite sewage treatment of capacity of treating 100% waste water to 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 before the project is commissioned for operation. Treated waste water shall be reused on site for landscape, flushing, cooling tower, and other end-uses. Excess treated water shall be discharged as per statutory norms notified by Ministry of Environment, Forest and Climate Change. Natural treatment systems shall be promoted.

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

xxv) Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed 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 residential area/commercial area/industrial area/silence zone both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental pollution loads on the ambient air and noise quality shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB/SPCB.

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

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

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. day lighting design and thermal mass etc. shall be

incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.

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

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) Solar power by utilizing at least 30% of the roof top area shall be used for lighting in the apartment to reduce the power load on grid. 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. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.

VI. Waste Management

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

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

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

iv) Organic waste compost/ Vermiculture pit/ Organic Waste Converter within the premises with a minimum capacity of 0.3 kg /person/day must be installed for treatment and disposal of the waste.

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

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

vii) 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 environment friendly materials.

viii) Fly ash should be used as 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.

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

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

VII. Green Cover

i) No tree can be felled/transplant 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. Plantations to be ensured species (cut) to species (planted).

ii) At least 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. A minimum of one tree for every 80 sqm of total project land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. 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 provided as per SEIAA guidelines.

iii) Where the trees need to be cut with prior permission from the concerned local Authority, compensatory plantation in the ratio of 1: 10 (i.e. planting of 10 trees for every 1 tree that is cut) shall be done and maintained. Plantations to be ensured species (cut) to species (planted). Area for green belt development shall be provided as per the details provided in the project document.

iv) 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 plantation of the proposed vegetation on site.

v) 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.

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

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 regulation.

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

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 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in 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 mask.

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

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

iv) Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, 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.

v) Occupational health surveillance of the workers shall be done on a regular basis.

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

X. Corporate Environment Responsibility

i) The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility. The project proponent shall adhere to the commitments made in the proposal for CER activities for spending at least minimum amount of Rs. 1.77 crore towards following CER activities. The details are given below: -

S.No.	Activities	Timeline (2019 to 2024)					Total Expenditure in 5 Years (in lakh)
		2019 -20 Expenditure (in lakh)	2020 -21 Expenditure (in lakh)	2021 -22 Expenditure (in lakh)	2022 – 23 Expenditure (in lakh)	2023 -24 Expenditure (in lakh)	
1	Skill center in Village Ratwara_	NIL	11	10	4	2	27
2	Adoption of pond in Village Ratwara	10	32	30	2	1	75
3	Installation of 10 no. of solar lights in Village Bharonjian	2	6	5	1	1	15

4	Construction of Toilets for Govt. Senior Secondary School, Mullanpur Garibdass	2	5	1	1	1	10
5	Shuttle service from Village Salamatpur to PGIMER, Chandigarh	NIL	15	15	10	10	50
	Total	**14**	**69**	**61**	**18**	**15**	**177**

ii) 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.

iii) 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.

iv) Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. The project proponent shall spend minimum amount of Rs 2567 Lacs towards capital cost and Rs 9.3 Lacs/annum towards recurring cost in Construction phase of the project including the environmental monitoring cost and shall spend minimum amount of Rs 46 Lacs/annum towards recurring cost in 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 until the responsibility of environmental management plan is transferred to the

occupier/residents society under proper MOU under intimation to SEIAA, Punjab. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

XI. Validity

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.

XII. Miscellaneous

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

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

iii) The project proponent shall prominently advertise it at least in 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 MoEFCC/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 has to 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 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 Environment Clearance portal.

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 on the website of the company.

viii) The project proponent shall inform the Regional Office as well as the Ministry, 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, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.

xi) 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).

xii) 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.

xiii) The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

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

xv) The Regional Office of this Ministry and 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 by furnishing the requisite data/ information/monitoring reports.

xvi) 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.

xvii) 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.

Item No. 186.04 Application for obtaining Environmental Clearance for expansion of an existing Sugar Mill Plant of capacity 5000 TCD alongwith co-generation power plant of capacity 59.5 MW at village Chak Allabaksh and Muahiuldinar, Tehsil Mukerian, District Hoshiarpur, Punjab by M/s Indian Sucrose Limited, GT Road, Tehsil Mukerian, Distt. Hoshiarpur (Online Proposal No. SIA/PB/IND2/22643 /2018.

SEAC observed that :

The project proponent has applied for obtaining Environmental Clearance under EIA notification dated 14.09.2006 for establishment of new unit for manufacturing of Steel ingots / billets by installing induction furnaces at Village Ambey Majra, Sirhind Side, Mandi Gobindgarh, Distt. Fatehgarh Sahib, Punjab.

1.0 Background of the case

Earlier, the case was considered by SEAC in the 166thmeeting held on 24.05.2018 and was forwarded to SEIAA with recommendation to grant TORs. Accordingly, SEIAA in its 133rd meeting held on 06.07.2018 decided to issue the TORs. In compliance to the said decision, Terms of Reference have been granted to the project proponent vide letter No. SEIAA/20191266 dated 22.02.2019.

The public hearing was conducted by PPCB on 23.10.2018 and the details of the same are given as under:

Sr. No	Name & address of the person	Detail of query/statement /information/ clarification sought by the person present	Reply of the query/statement /information /clarification given by the project proponent.	Action Plan
1.	Sh. Dalbir Singh, r/o Bishanpur, Tehsil Mukerian, District Hoshiarpur	He stated that there is water & air pollution from the project, which adversely affects their village. More than 100 persons of their village have given complaint in writing regarding pollution of project to the Punjab Pollution Control Board at Hoshiarpur. S.D.O from Pollution Control Board at Hoshiarpur has come to the project, to check the water and air pollution and he verbally stated that the water is polluted. No solution has been made of the said complaint and no written reply to the same has been received. More than 15 persons of their village	Representative of the sugar mill informed that Public hearing is being conducted by the Pollution Control Board to know the problems of the public from the existing unit. He further informed that the pollution control devices of the latest technology having efficiency, three times better from the existing as well as from the expansion project will be installed simultaneously with the expansion project.	Waste water from the existing sugar mill is being treated in the ETP of capacity 3000 KLD. The ETP is going to be modernized before the crushing season. The online monitoring system has been installed and the regular data is supplied to PPCB & CPCB. Further with the expansion project the details & expended ETP will be installed with ZLD scheme and no waste water will be discharged outside the boundary of the Mill. The ETP of latest technology with ZLD which cost 70 lac will be installed with the

		who were suffering from the stomach and breathing diseases have died due to the water & air pollution caused by the sugar mill. If the pollution caused by the existing unit of the Sugar mill. If the pollution from the project has not been controlled then there are more chances of spreading other diseases. He also stated that first of all pollution from the existing unit should be controlled and then the expansion of the project be allowed.		entire satisfaction of PPCBand same will be continuing for the expansion process also. The maintains of wet scrubber is there during the off-season, & eff will be increased. The online Stack monitoring analyzer will be installed & computerized data will supplied to the PPCB &CPCB for entire satisfaction of the officers. To control the Air Pollution for the existing unit, 3 no of **Wet scrubber** has already been installed and for the expansion unit **ESP** will be installed with the 200 TPH boilers. **Budget :** **Waste Water Treatment:** Capital Cost: 70 lakhs Recurring Cost: 8 lakhs **Air pollution control devices:** Capital Cost: 1.90 Crores Recurring Cost: 20 lakhs
2.	Sh. Ajay Kaushal, Ex. Chairman, ZilaParishad, VillageDugriRajputan,District Hoshiarpur	He welcomes the Add. Deputy Commissioner, Hoshiarpur and other officers. He stated that the project proponent in its reply stated that better Pollution Control Board Devices will be installed along with expansion. He wanted to know from the Punjab Pollution Control Board whether the issue of installing the good device is not being addressed while granting NOC to the industry before expansion and the NOC has been issued	Representative of the Sugar Mill informed that public hearing has been conducted to resolve the issues/problem raised by the public. Earlier, the project has increased the capacity of the mill by its own for which the Punjab Pollution Control Board has initiated criminal action against the owner/responsible persons. He reiterated that the public hearing has been conducted to	The details of Pollution Control device explained in S.no 1. Online monitoring station has already been installed at the ETP and the results for the same continuously displayed on the PPCB websites. Online Stack Monitoring Station will be installed for the expansion project. **Budget :** Stack Monitoring: 2 lakhs

		to the small scale projects without the proposal for installing the pollution control devices. He further stated that they are making complaints regarding the pollution from the project since February, 2017. He also stated that if we extract water 120 ft deep from the ground, then color of the water is such like juice of sugarcane. When the water samples from the project are taken by the Pollution Control Board then the same are passed. The samples should also be to got analyzed from outside laboratory other than Punjab Pollution Control Board. The people are dying due to water pollution. He has no objection for expansion of the unit but the pollution from the existing unit should be controlled. The funds allocated that has not been utilized properly for the same. He further stated that when air blows from East to West then there is more air pollution from the project proponent should take more attention on the issues raised by the public regarding control of pollution.	set right all the issues of the public related to the project.	Online ETP Monitoring: 1 lakhs
3. 3.	Sh. Jagdev Singh, Srapanch, Village BhattianRajputan, District Hoshiarpur	He stated that he requested the officers of Punjab Pollution Control Board to resolve the issue regarding pollution from the project as raised by the earlier spokesmen. He further stated that the aerial distance of his village	Environmental consultant of Sugar Mill informed that the pollution control devices of the latest technology will be installed to control the pollution along withonline monitoring system, which will be	Online monitoring station has already been installed at the ETP and the results for the same continuously displayed on the PPCB websites. Online Stack Monitoring Station will be installed for the expansion project.

		from the project is about 2 kms and he never feel pollution from the project, but the pollution may reach there. He also informed that the expansion to be made by the project proponent should also be favored as need of expansion of sugar mill is being felt in the area. Sugacane is the main crop of the area and their family are getting livelihood and also getting more benefits. Last year the mill has milled the sugarcane upto 17-18 May, as such the capacity of the sugar mill should be increased. The pollution should be controlled on ground and not in papers The sugar mill should *be* operated upto April. The safety of the area is also important. With this project, there are other businesses set up in the area by the local people. He demanded that theEmployment should be given to the people of Mukerian area as the problems are faced by this area and benefits should also be made to this area.	monitoredby the Central Pollution Control Board & Punjab Pollution Control Board. He further informed that the preference will be given to the local people in the employment	**Budget :** Stack Monitoring: 2 lakhs Online ETP Monitoring: 1 lakhs The direct employment to ~ 325 person has been provided with the existing project and ~ 25 person will be getting employment with the expansion project. Indirect employment will be generating with the proposed expansion project.
4.	Sh. Gurnam Singh, r/o Village Pandori, Distt. Hoshiarpur	He stated that regarding the pollution problem, Punjab Pollution Control Board is taking strict action. The industry should make proper arrangements to control the pollution. He further stated that earlier in the area, there was rice (Basmati) was main crop and now the sugarcane is main crop	No reply was given	Proponent has proposed the modified technology for the ETP & APCD, to control the pollution.

		in the area. He told the people who wants to expand the unit raise their hands, in response of the same most of the people present raised hands in favor of the project.		
5.	Sh. Harinder Singh Kurewal, r/o Village Bhagana, Distt. Hoshiarpur	He stated that the capacity of the sugar mill should be increased as rice and wheat crops are taking more water than sugarcane. The preference should be given nearby village in development.	Environment consultant of the industry informed that more than Rs 8 crores will be spent under Corporate Social Responsibility activities, which will be utilized with the consultation of the nearest villagers. He further informed that as per new rule, if the industry wants to employ more than 25 workers, then the same should be employed through Deputy Commissioner Office. As such, the people of the area should apply to the DC, Hoshiarpur for taking job in the sugar mill and they will get the list from them.	He supported the project and preference will be given to the village of Chak Allabaksh and MahiuldinpurDalel on the basic of qualification and Experience.
6.	Sh. SachinDhayia, Press Reporter, Dainik Bhaskar	1. He wanted to know whether the distillery project is being established or the capacity of the sugar mill is increased. 2. First of all, the pollution from the existing unit should be controlled and thereafter, the capacity of the same will allowed to be increased. People are dying and no action is being taken on the complaint filed by the nearby people. 3. In the public hearing, the industry has	Representative of the Sugar Mill informed that the ·public hearing is being conducted for Enhancement of the capacity of the sugar mill and there is no proposal to set up a distillery unit. As already stated the pollution control devices of the latest technology will be installed to control the pollution from the existing as well as from expansion project. Environmental Engineer (Mega), Punjab Pollution Control Board, Patiala shown the photocopy	1. There is no proposal for the distillery unit. 2. Defined in S.No 1 3. Public notice was published in three leading newspapers namely Hindustan Times,

		gathered the public from its own persons. No wide publicity and announcement has been made in the nearby villages and name of the newspapers in which public notice has been published, be informed. 4. If the water from 120ft deep is taken, the same is not potable.	of the public notice and informed that the public notice was published in three leading newspapers namely Hindustan Times, Jagbani&Dainik Bhaskar in its edition dated 21.09.2018.	Jagbani & Dainik Bhaskar in its edition dated 21.09.2018.
7.	Master Kewal Singh, Nambardar, Village Bishanpur, Distt. Hoshiarpur	He stated that he has received the information regarding the public hearing directly or indirectly, therefore, he has come to attend the public hearing. He further stated that whatever commitment has been made that has not been implemented. The paper mill was established on this place in the year 1967 where the people of the nearby area were worked in the same, but thereafter they were retrenched. Preference should be given to the local area in employment. Pollution problem should be sort out Earlier, the mill has taken the land from the farmers but the same was not returned to the real owners and the land was sold out @ Rs.4,00,000/- per acre. The expansion of the sugar mill should be carried out.	Representative of the Sugar Mill reiterated that the public hearing is being conducted for listening the grievances of the public, so that the industry is able to sort out the issues/problems raised by the public. To control the water & air pollution, a huge amount will be spent. Monitoring system will also be installed on them which will be monitored by the CPCB & PPCB through web technology on day to day basis.	Paper Mill was closed and preference will be given to the village of Chak Allabaksh and MahiuldinpurDalel on the basic of qualification and Experience.
8.	Sh. Surjit Singh, Sarpanch, Village BhattianJattan, District Hoshiarpur	He stated that the questions raised by the earlier speaker including sarpanch Village Bishanpur are very valuable; he further stated that no	Representative of the Sugar Mill informed that the company has four Sugar Mills, with the expansion of the unit, more opportunities of	The PPCB should take the action as per the law. Employment details are explained in S.No 3.

		reply has been received by the villagers of Bishanpur regarding the complaint made by them. He thanks the project proponent for establishing the sugar mill in the area and given congratulation for the expansion of the same. The industry should give employment in the mill and an assurance should be given in this regard. The people of the area have given land to the sugar mill at the lower rates. Expansion of the sugar should be carried out and the pollution should also be controlled.	employment will be generated, but as of now, he has no data regarding how many persons are directly get the benefit of employment. The youth who had passed MBA and ITI will get the opportunity of job in the mill.	
9.	Sh. Vijay Kumar Jain, Nambardar, Village MahiuldinpurDalel, Distt. Hoshiarpur	He welcomes the Add, Deputy Commissioner and stated that the problems raised by the public are genuine and are in actual. He stated that he will request the ADC, Hoshiarpur to get the problems solved. The area has got the benefit from the sugar mill. Earlier, there was a problem of purchasing of rice, which was main crop of the area. Now, the farmers are getting more benefits by sowing sugarcane crop. He thanked the project proponent for expansion of the project. The industry should make development in the villages which have given their land to the sugar mill. The sugar mill should be operated till the entire season	No reply was given	He welcome the project as 80-85 % people that attend the public hearing are in favor of the expansion project & problem raised by the people will be solved by the committee under the guidance's of ADC

The project proponent has now submitted the EIA report.

The application for obtaining EC was submitted on 15.05.2019 before the date of notification dated 27.06.2019 and thus the fee for obtaining EC was not applicable on the project. The project proponent was raised EDS online on 14.02.2019, details of which is given as under:

S.No	EDS	Reply
1	Details of specific activities to be carried out by the industry under CER along with their cost & timelines i.e. amount to be spent & completion schedule as per OM dated 01.05.2018 be incorporated in EIA report instead of generalizing statement that Rs.8 crore be spent	As per the OM dated 01.05.2018, the CER budget is 1.67 Crore. The details CER activity list has been submitted.
2	Rs. 1.7 crore has been derived as benefits from violation whereas Rs.45 lacs has been proposed under Remediation Plan. Clarify. Secondly The details of activities and amount to be spent under Natural & Community Resource Augmentation Plan shall be incorporated in EIA report as per Additional Specific TOR.	A Total 45 lacs has been proposed by the proponent as the Remediation budget which will be used as: 1. Remediation plan budget (Rs. 20/- lakhs) 2. Natural Resource Augmentation plan budget (Rs. 10/- lakhs) 3. Community Resource Augmentation budget (15/- lakhs). The details of proposed activities are submittd.
3	The activities and amount proposed under EMP and Remediation Plan shall be separately listed and avoid overlapping of the same. Further, the details including the name of the villages and consent where amount has been proposed for carrying out the activity shall be incorporated in EIA report.	Rs 3.79 crore has been proposed under the Environment Management Plan. Rs 45 lac has been proposed under the Remediation Plan. The activities under the EMP & Remediation plan has been explained separately.
4	Some of the lab reports attached in the additional documents are not legible at all. Thus, difficult to check the details. Please attach legible reports after proper scanning.	Compiled
5	The images including incorporated in the EIA report are also not legible. Ex. Layout Map, Spatial distribution of predicted GLCs of SO2, etc. Please incorporate the same after proper scanning.	Compiled

6	In case of green belt, proper details of species, width of plantation, planting schedule post plantation and maintenance plan for 3 years shall be provided. The green belt shall be around the boundary and a scheme for greening of the roads used for the project shall also be incorporated.	Submitted
7	The details of compliance of the TOR points where complied has been mentioned be incorporated in EIA report.	Complied

The project proponent was again raised EDS on 05.09.2019 and details of which are given as under:

S. No.	EDS Observation	Reply
1	The reply to EDS no. 2 and 3 is incomplete. (Please mention the page no. of EIA report) EDS 2: Rs. 1.7 crore has been derived as benefits from violation whereas Rs.45 lacs has been proposed under Remediation Plan. Clarify. Secondly, The details of activities and amount to be spent under Natural & Community Resource Augmentation Plan shall be incorporated in EIA report as per Additional Specific TOR. EDS 3: The activities and amount proposed under EMP	EDS 2: Rs. 45,00,000 has been proposed under remediation planwhich will be used as: i) Remediation plan budget (Rs. 20/- lakhs) ii) Natural Resource Augmentation plan budget (Rs. 10/- lakhs) iii) Community Resource Augmentation budget (15/- lakhs). The above details are mentioned at page number 210 of the EIA report. However, we are also proposing budgets for various other activities such as: i) Environmental Management Plan of Rs. 3.79 as capital cost and Rs. 38 Lakhs as recurring cost. ii) Corporate Environmental Responsibility budget of Rs. 8 Cr. iii) Occupational Health Safety Budget of Rs. 15 Lakhs. Augmentation Plan has been submitted. The activities and amount proposed under EMP and Remediation Plan are separately listed. Further, the details including the

	and Remediation Plan shall be separately listed and avoid overlapping of the same. Further, the details including the name of the villages and consent where amount has been proposed for carrying out the activity shall be incorporated in EIA report.	name of the villages and consent where amount has been proposed for carrying out the activity have been incorporated in EIA report
2	The project proponent has cited table no. 13.4 and 13.5 in its reply, however in the EIA report annexed with application, no such table is found annexed.	Table numbers 13.4 and 13.5 have been inadvertently mentioned in the reply. Activity wise breakup of various plans are given as: 1. Community resource augmentation 2. Remediation plan
3	The indexing of EIA report, total pages are mentioned as 211. Besides the contents of the index suggests that some documents like CGWA Application, Test Analysis Report, Land Document, Land Conversion, DFO NOC etc. are also the part of the EIA report. However, these documents are not found attached. (Please mention the page no of EIA report)	EIA contains 211 pages only. Previously we have uploaded EIA and Annexures separately (as additional documents). We are now submitting single file with EIA and Annexures.

The case could not be considered by the SEAC in its 185th meeting due to paucity of time and it was decided that the case be placed in the next meeting on priority basis

2.0 Deliberations during the 186th meeting of SEAC held on 26.12.2019

The meeting was attended by the Sh. V.P Gupta, Vice President, authorized representative of the project proponent and Environmental Consultant. Environmental Consultant of the promoter company presented the salient features of the project. The details with regards to rain water harvesting, water demand calculations, dust & slag disposal, maintenance plan of green area, online monitoring system of APCD & Toposheet showing the distance of project location from CEPI Cluster were deliberated.

3.0 Recommendation

After detailed deliberations, SEAC decided to defer the case and the project proponent be asked to submit the reply on following: -

i) Revised Water Balance Diagram
ii) Handling of Sludge by Centrifuge.

iii) Inlet and outlet Characteristics of existing APCD.
iv) Examine the installation of ESP as APCD .
v) Ground water sampling from State Laboratory i.e PBTI Lab, Mohali
vi) Damage assessment studies in compliance to the TOR no. 14
vii) Detail of CER activities as per OM Dated 01.05.2018 for Rs 8.0 Crore as committed during public hearing.
viii) Rain water recharging proposal.
ix) Detail of the plantation area &Maintenance plan for Green Area.

Item No. 186.05: Application for obtaining Environmental clearance under EIA notification dated 14.09.2006 for expansion of the project namely Chitkara University, Rajpura, Patiala (Punjab) located at H. B. No. 262 & 263 Jhansla & Fatehpur Garhi Rajpura, Distt. Patiala, Punjab by M/s Chitkara Educational Trust, 1097, SECTOR 18-C, Chandigarh. (Proposal No. SEIAA/ PB/ NCP/35596/ 2019)

SEAC observed as under:-

The project proponent has applied for obtaining Environmental Clearance under EIA notification dated 14.09.2006 for expansion of the project namely Chitkara University, Rajpura, Patiala (Punjab) located at H. B. No. 262 & 263 Jhansla & Fatehpur Garhi Rajpura, Distt. Patiala, Punjab. The project proponent has deposited requisite fee Rs 127000/- as per the Govt. Notification dated 27.06.2019.

The project proponent was issued ToRs were issued to the project proponent vide letter no 1180-82 dated 09.12.2019.

The case was considered by SEAC in its 186th meeting held on 26.12.2019 and was attended by the following on behalf of the project proponent:

i) Sh. Kamal Kishore, Director (Projects) and Sh. S.C.Sharma, Registrar, M/s Chitkara University.
ii) Sh. Sumitana Dutta (FAE) and Sh. Sandeep Singh (FAE), M/s CPTL, Mohali, Environmental Consultant of the project proponent.

SEAC allowed the project proponent to present the salient features of the project and the Environmental Consultant of the same presented as under:

S.No.	Item	Details
1.	Name and Location of the project	**Chitkara University** Village Jhansla & Fatehpur Garhi, NH 07 (Chandigarh-Patiala NH), Tehsil Rajpura, Distt. Patiala – 140 401 (Punjab)
2.	Latitude & Longitude	$30^0 30'52''$ N, $76^0 39'48''$ E
3.	Project/activity covered under item of scheduled to the EIA Notification, 14.09.2006	Category 8(b) – Total built up area >150000 m^2

4.	Whether the project is in critical polluted area or not.	No
5.	If the project involves diversion of forest land. If yes, a. Extent of the forest land. b. Status of the forest clearance.	Yes – 0.0169 Ha for approach Road FCA obtained
6.	a. Is the project covered under PLPA,1900, if No but located near to PLPA area then the project proponent is required to submit NOC from the concerned DFO to the effect that project area does not fall under the provision of PLPA Act, 1900. b. Is the project covered under PLPA,1900, if yes, then Status of the NOC w.r.t PLPA,1900.	No
7.	If the project falls within 10 km of eco-sensitive area/ National park/Wild Life Sanctuary. If yes, a. Name of eco- sensitive area/ National park/Wild Life Sanctuary and distance from the project site. b. Status of clearance from National Board for Wild Life (NBWL).	No

8.	Classification/Land use pattern as per Master Plan	Mixed Land Use			
9.	Cost of the project	**Existing**	**Proposed**	**Total**	
		Rs. 235 Crores	**Rs. 120 Crores**	**Rs. 355 Crores**	
10.	Total Plot area, Built-up Area and Green area		**Existing**	**Proposed**	**Total**
		Total land area (net)	~159928 m^2 (~39.52 acres)	~~96877 m^2 (~23.93 acres)	~256805 m^2 (63.45 acres)
		Total built-up area, m^2	~146367.64	~117110.60	~263478.24
		Area under parks/play grounds/green area, m^2	~28540.72 (~18.7%)	~15313.29 m^2	~43854.01 m^2 (~17.1%)
11.	Population (when		**Existing**	**Proposed**	**Total**

<table>
<tr><td></td><td>fully operational)</td><td>
<table>
<tr><td>Expected population (fixed)</td><td>~4100</td><td>~1600</td><td>~5700</td></tr>
<tr><td>Expected population (floating)</td><td>~9900</td><td>~3100</td><td>~13800</td></tr>
</table>
</td></tr>
<tr><td>12.</td><td>Water Requirements & source in Construction Phase</td><td>~25 KLD
To be met from treated wastewater from the existing STP in premises</td></tr>
<tr><td>13.</td><td colspan="2">Break up of Water Requirements & source in Operation Phase (Summer, Rainy, Winter):</td></tr>
<tr><td>14.</td><td colspan="2">
<table>
<tr><td rowspan="2">Sr. No.</td><td rowspan="2">Season</td><td colspan="2">Fresh Water</td><td colspan="3">Reuse water</td><td rowspan="2">Total KLD</td></tr>
<tr><td>Domestic</td><td>Others (Pl define) KLD</td><td>For Flushing purposes KLD</td><td>Green Area KLD</td><td>HVAC If any KLD</td></tr>
<tr><td>1.</td><td>Summer</td><td>570</td><td></td><td>460</td><td>240</td><td></td><td>1350</td></tr>
<tr><td>2.</td><td>Winter</td><td>570</td><td></td><td>460</td><td>70</td><td></td><td>1350</td></tr>
<tr><td>3.</td><td>Rainy</td><td>570</td><td></td><td>460</td><td>110</td><td></td><td>1350</td></tr>
</table>
</td></tr>
<tr><td></td><td>Source of Water</td><td>Purposes Source
Domestic Ground water
Others Treated wastewater
For Flushing purposes
Green Area
HVAC If any</td></tr>
<tr><td>15.</td><td>Treatment & Disposal arrangements of waste water in Construction Phase</td><td>Existing STP
Plantation area ~5.81 acres (in addition to the green area within the campus)</td></tr>
<tr><td>16.</td><td>Disposal Arrangement of Waste water in Operation Phase</td><td>Total = ~830 KLD, which will be treated in the STP of capacity ~1200 KLD installed in the project premises.
<table>
<tr><th>Sr.No.</th><th>Season</th><th>For Flushing purposes (KLD)</th><th>Green Area sqm (KLD)</th><th>Plantation area, if any (KLD)</th></tr>
<tr><td>1.</td><td>Summer</td><td>460</td><td>240</td><td>130</td></tr>
<tr><td>2.</td><td>Winter</td><td>460</td><td>110</td><td>260</td></tr>
<tr><td>3.</td><td>Rainy</td><td>460</td><td>70</td><td>300</td></tr>
</table>
</td></tr>
<tr><td>17.</td><td>Rain water recharging detail</td><td>~54 recharge wells to be provided. Annual recharge potential is >71000 kL.</td></tr>
</table>

<table>
<tr><td>18.</td><td>Solid waste generation and its disposal</td><td>a) 2100 kg/day
b) Recycled components to be sold to authorized recyclers
Biodegradable component to be converted into manure through composting
Other waste to be disposed through MC Rajpura</td></tr>
<tr><td>19.</td><td>Hazardous Waste & E-Waste</td><td>To be disposed through authorized recyclers</td></tr>
<tr><td>20.</td><td>Energy Requirements & Saving</td><td><table><tr><th>Existing</th><th>Proposed</th><th>Total</th></tr><tr><td>7281.94 kW</td><td>~7468 kW</td><td>~14750 kW</td></tr></table></td></tr>
<tr><td>21.</td><td>Environment Management Plan along with Budgetary break up phase wise and responsibility to implement</td><td>Construction:
All manpower will be provided with personal protective equipment.
The sanitation and sewage system in labour camp are designed, built, and operated, such that no health hazards occur and no pollution to air, ground water, etc., takes place.
Prevention of pollution from handling of construction material and construction waste
Operation:
Wastewater collection, treatment, and reuse/disposal
Segregated handling, management and disposal of solid waste and other wastes (hazardous and e-waste)
Adequate storm water collection and management system for recharge of groundwater
Green belt development
Extensive use of solar energy
Use of architectural features for energy conservation
Capital cost of EMP = INR 215,00,000.00
Operational cost of EMP = INR 79,00,000.00 per year</td></tr>
<tr><td>22.</td><td>CER activities along with budgetary break up and responsibility to implement</td><td>Development of Green Area & Construction (INR ~7 lakh)
Community Lighting Solar Based Support System (INR ~11 lakh)
Village Hygiene and Sanitation (INR ~15 lakh)
Drinking Water Provision (INR ~16 lakh)
Upliftment of Education (INR ~13 lakh)
Health Care Support (INR ~12 lakh)
Tree Plantation (500 trees) (INR ~6 lakh) Gross CSER commitment (INR ~80 lakh)</td></tr>
</table>

SEAC raised the following queries to project proponent to which he replied as under:-

Sr. No.	Observations	Reply submitted by the project proponent and his Environmental Consultant
1.	As to whether the permission from Deptt. of Forest under the Forest	No forest land is involved at the project site.

	(Conservation) Act, 1980 and Wildlife (Protection) Act, 1972 has been obtained.	
2.	Whether online application for obtaining NOC for abstraction of ground water has been applied CGWA?	Online application has been submitted on the portal of CGWA for obtaining permission for abstraction of ground water and a copy of the same has been submitted.
3.	As to whether the land use of the area is permissible for the establishment of the project for which EC has been applied as per the provisions of Master Plan of the city.	CLU has been obtained from Department of Town & Country Planning vide memo no. 3009 dated 04.05.2018, 3867 dated 22.06.2018 and 7725 dated 18.12.2018.
3.	What will be the treatment proposal for the sewage expected from the labours / employees during the construction phase?	Septic tank will be provided for the treatment of waste water generated during construction phase.
4.	The proposed CER activities are general and the project proponent is required to submit CER proposal specifically mentioning the activities.	The project proponent agreed to the same and submitted the new CER proposal for the following activities:

	Proposed CSER activity	**Amount (INR)**	**Likely date of Completion**
1	**Village Jhansala**		
	1) Installation of Solar Street Lighting 10 Nos.	150000	December, 2020
	2) Health Care support	500000	December, 2020
	3) Construction of Girls Toilets in Sr. Secondary School 2 Nos	400000	December, 2020
	4) Construction of Girls Toilets Elementary School 1 Nos	200000	December, 2020
	5) Construction of Girls Toilets in Village Vocational center 1 Nos	250000	December, 2020
	6) Renovation of Vocational center	200000	December, 2020
	7) Tree Plantation & Maintenance with tree Guard in Village 200 Nos	200000	December, 2021
	8) Furniture at Sr. Secondary School	150000	December, 2021
	9) Paving tiles in elementary school	450000	December, 2021
	10)Audio Visual equipments for smart class room in elementary School	125000	December, 2021

	11) Development of Botanical Garden of Senior Secondary School	500000	December, 2021
2	**Village Kalo Majra**		
	1) Construction of Girls Toilets Elementary School 1 Nos	200000	December, 2022
	2) Renovation of Cremation Sheds	400000	December, 2022
	3) Tree Plantation & Maintenance with tree Guard in Village 100 Nos	100000	December, 2022
	4)Audio Visual equipments for smart class room in elementary School	125000	December, 2022
	5) camp and health care support	300000	December, 2022
	6) Installation of Solar Street Lighting 10 Nos.	150000	December, 2022
3	**Village Ram Nagar**		
	1) Construction of Girls Toilets Elementary School 1 Nos	200000	December, 2023
	2) Tree Plantation & Maintenance with tree Guard in Village 100 Nos	100000	December, 2023
	3)Audio Visual equipments for smart class room in elementary School	125000	December, 2023
	4)Medical camp and health care support	300000	December, 2023
	5) Paving tiles in elementary school	450000	December, 2023
	6) Installation of Solar Street Lighting 10 Nos.	150000	December, 2023
4	**Village Thuha**		
	1) Construction of Boundary Wall for Community center	1050000	December, 2024
	2) Supply and installation of Colour coded waste Bins 50 Nos	100000	December, 2024
	3)Medical camp and health care support	300000	December, 2024
	4) Installation of Solar Street Lighting 10 Nos.	150000	December, 2024
5	**Village Fatehpurgarhi**		
	1) Construction of Girls Toilets Elementary School 2 Nos	400000	December, 2024
	2)Audio Visual equipments for smart class room in elementary School	125000	December, 2024
	3) Installation of Solar Street Lighting 10 Nos.	150000	December, 2024
	Total amount	8000000	

SEAC was satisfied from the presentation and reply given to the observation. SEAC took a copy of presentation along with reply on record.

After deliberations, SEAC decided to award 'Silver Grading' to the project proposal and to forward the application of the project proponent to SEIAA with the recommendations to grant Environmental Clearance for expansion of the project namely "Chitkara University" having built up area 263478.24 sqm (after Expansion) in total land area of 2,56,805, located at H.B. No. 262 & 263, Jhansla and Fatehpur Garhi, Rajpura, Distt. Patiala, Punjab as per the details mentioned in the Form 1, 1A, EMP & subsequent presentation / clarifications made by the project proponent and his consultant with, proposed measures, conditions:

I. Statutory compliance:

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

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

iii) 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.

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 Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board / Committee.

vi) The project proponent shall obtain the necessary permission for drawl of ground water/ 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 Chief Controller of Explosives, Fire Department, 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 confirm to the suitability as prescribed under the provisions laid down under the master plan of respective city/ town. For that, the project proponent shall either to submit the NOC/ land use conformity certificate from Deptt of Town and Country Planning or other concerned Authority under whom jurisdiction, the site falls.

xii) Besides 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 type of projects.

xiii) The project proponent shall get the layout plans approved from the Competent Authority for the activities / establishments to be set up at project site in consonance of the project proposal for which this environment clearance is applied.

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 ambient air quality at the site.

iii) The project proponent shall install system to carryout 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 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. The location of the DG sets may be decided with in consultation with State Pollution Control Board.

v) Construction site shall be adequately barricaded before the construction begins. Dust, smoke & 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, continuous dust/ wind breaking walls all around the site (at least 3m height or 1/3rd of the building height and maximum upto 10m). 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 & 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 area shall be prohibited. 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 earmarked area and road side 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 construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.

xiv) The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the 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 National Building Code of lndia.

xvi) Roads leading to or at construction site must be paved and blacktopped (i.e. metallic road)

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 measure be notified at the site.

III. Water quality monitoring and preservation

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

ii) No construction shall be allowed to obstruct the natural drainage through the site, on 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 rain water.

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

iv) The total water requirement for the project will be 1350 KL/day, out of which 540 KL /day shall be met through own tube well and remaining through recycling of treated waste water. Total fresh water use shall not exceed the proposed requirement as provided in the project details.

v) a)The total wastewater generation from the project will be 830 KL/day, which will be treated in STP of capacity @ 1200 KLD on MBBR technology within the project premises. As proposed, reuse of treated wastewater and discharge of surplus treated wastewater shall be as under:-

S. No.	Season	For Flushing purposes (KLD)	Green Area (KLD)	Plantation in addition to the green area within the campus (KLD)
1.	Summer	460	240	130
2.	Winter	460	110	260
3.	Rainy	460	70	300

b) 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.

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

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

vii) The waste water generated from swimming pool(s) shall not be discharged and the same shall be reused within the premises for purposes such as horticulture, HVAC etc.

viii) The quantity of fresh water 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 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 water available. This should

be specified separately for ground water 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-Jaws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.

xi) Installation of dual pipe plumbing 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, conditioning etc. shall be done.

xii) The respective project proponent shall discourage the installation of R.O. plants in their projects in order to save the wastage in form of RO reject. However, in case the requirement of installing RO plant is utmost necessary then the rejected stream from the RO shall be separated and shall be utilized by storing the same within the particular component i.e. (Tower/Mall) or in a common place in the project premises.

xiii) The project proponent shall also adopt the new/innovating technologies like less water discharging taps (faucet with aerators)/urinals with electronic sensor system /water less urinals / twin flush cisterns/ sensor based alarming system for overhead water storage tanks and make it a part of the environmental management plans / building plans so as to reduce the water consumption/ground water abstraction in their Building Construction & Industrial projects.

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

Sr. No	**Nature of the Stream**	**Color code**
a)	Fresh water	Blue Color
b)	Untreated wastewater from Toilets/ urinal & from Kitchen	Black color
c)	Untreated wastewater from Bathing/shower area, hand washing (Washbasin / sinks) and from Cloth Washing	Grey color
d)	Reject water streams from RO plants & 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 color
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 grey water	Green with strips

g)	Storm water	Orange Color

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

xvi) The CGWA provisions on rain water harvesting should be followed. Rain water harvesting recharge pits (54 Nos) /storage tanks shall be provided for ground water recharging as per the CGWB norms.

xvii) A rain water harvesting plan needs to be designed where the recharge bores of minimum one recharge bore per 5,000 square meters of built up area and storage capacity of minimum one day of total fresh water requirement shall be provided. In areas where ground water recharge is not feasible, the rain water should be harvested and stored for reuse. The ground water shall not be withdrawn without approval from the Competent Authority.

xviii) All recharge should be limited to shallow aquifer.

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

xx) Any ground water 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 ground water abstraction or dewatering.

xxi) The quantity of fresh water 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 along with six monthly Monitoring reports.

xxii) Sewage shall be treated in the STP with tertiary treatment. The treated effluent from STP shall be recycled/re-used for flushing, AC make up water and gardening. No treated water shall be disposed in to municipal stormwater drain.

xxiii) No sewage or untreated effluent water would be discharged through storm water drains. Onsite sewage treatment of capacity of treating 100% waste water to 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 before the project is commissioned for operation. Treated waste water shall be reused on site for landscape, flushing, cooling tower, and other end-uses. Excess treated water shall be discharged as per statutory norms notified by Ministry of Environment, Forest and Climate Change. Natural treatment systems shall be promoted.

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

xxv) Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed 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 residential area/commercial area/industrial area/silence zone both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental pollution loads on the ambient air and noise quality shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB/SPCB.

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

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

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. day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.

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

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) Solar power by utilizing at least 30% of the roof top area shall be used for lighting in the apartment to reduce the power load on grid. 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. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.

VI. Waste Management

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

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

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

iv) Organic waste compost/ Vermiculture pit/ Organic Waste Converter within the premises with a minimum capacity of 0.3 kg /person/day must be installed for treatment and disposal of the waste.

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

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

vii) 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 environment friendly materials.

viii) Fly ash should be used as 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.

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

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

VII. Green Cover

i) No tree can be felled/transplant 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. Plantations to be ensured species (cut) to species (planted).

ii) At least 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. A minimum of one tree for every 80 sqm of total project land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. 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 provided as per SEIAA guidelines.

iii) Where the trees need to be cut with prior permission from the concerned local Authority, compensatory plantation in the ratio of 1: 10 (i.e. planting of 10 trees for every 1 tree that is cut) shall be done and maintained. Plantations to be ensured species (cut) to species (planted). Area for green belt development shall be provided as per the details provided in the project document.

iv) 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 plantation of the proposed vegetation on site.

v) 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.

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

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.

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 regulation.

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

viii) 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 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in 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.

ix) 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 mask.

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

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

iv) Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, 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.

v) Occupational health surveillance of the workers shall be done on a regular basis.

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

X. Corporate Environment Responsibility

v) The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility. The project proponent shall adhere to the commitments made in the proposal for CER activities for spending at least minimum amount of Rs. 70.00 Lacs towards following CER activities. The details are given below: -

CSER COMMITMENT (CHITKARA UNIVERSITY, PUNJAB)			
	Proposed CSER activity	**Amount (INR)**	**Likely date of Completion**
1	**Village Jhansala**		
	1) Installation of Solar Street Lighting 10 Nos.	150000	December, 2020
	2) Health Care support	500000	December, 2020
	3) Construction of Girls Toilets in Sr. Secondary School 2 Nos	400000	December, 2020
	4) Construction of Girls Toilets Elementary School 1 Nos	200000	December, 2020
	5) Construction of Girls Toilets in Village Vocational center 1 Nos	250000	December, 2020
	6) Renovation of Vocational center	200000	December, 2020
	7) Tree Plantation & Maintenance with tree Guard in Village 200 Nos	200000	December, 2021
	8) Furniture at Sr. Secondary School	150000	December, 2021
	9) Paving tiles in elementary school	450000	December, 2021
	10)Audio Visual equipments for smart class room in elementary School	125000	December, 2021
	11) Development of Botanical Garden of Senior Secondary School	500000	December, 2021
2	**Village Kalo Majra**		
	1) Construction of Girls Toilets Elementary School 1 Nos	200000	December, 2022
	2) Renovation of Cremation Sheds	400000	December, 2022
	3) Tree Plantation & Maintenance with tree Guard in Village 100 Nos	100000	December, 2022
	4)Audio Visual equipments for smart class room in elementary School	125000	December, 2022
	5) camp and health care support	300000	December, 2022
	6) Installation of Solar Street Lighting 10 Nos.	150000	December, 2022
3	**Village Ram Nagar**		
	1) Construction of Girls Toilets Elementary School 1 Nos	200000	December, 2023
	2) Tree Plantation & Maintenance with tree Guard in Village 100 Nos	100000	December, 2023
	3)Audio Visual equipments for smart class room in elementary School	125000	December, 2023
	4)Medical camp and health care support	300000	December, 2023
	5) Paving tiles in elementary school	450000	December, 2023
	6) Installation of Solar Street Lighting 10 Nos.	150000	December, 2023
4	**Village Thuha**		
	1) Construction of Boundary Wall for Community center	1050000	December, 2024
	2) Supply and installation of Colour coded waste Bins 50 Nos	100000	December, 2024
	3)Medical camp and health care support	300000	December, 2024
	4) Installation of Solar Street Lighting 10 Nos.	150000	December, 2024
5	**Village Fatehpurgarhi**		
	1) Construction of Girls Toilets Elementary School 2 Nos	400000	December, 2024
	2)Audio Visual equipments for smart class room in elementary School	125000	December, 2024

	3) Installation of Solar Street Lighting 10 Nos.	150000	December, 2024
	Total amount	8000000	

vi) 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.

vii) 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.

viii) Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. The project proponent shall spend minimum amount of Rs 215 Lacs towards capital cost and Rs 5.0 Lacs/annum towards recurring cost in Construction phase of the project including the environmental monitoring cost and shall spend minimum amount of Rs 74.0 Lacs/annum towards recurring cost in 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 until the responsibility of environmental management plan is transferred to the occupier/residents society under proper MOU under intimation to SEIAA, Punjab. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

XI. Validity

ii) 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.

XII. Miscellaneous

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

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

iii) The project proponent shall prominently advertise it at least in 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 MoEFCC/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 has to 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 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 Environment Clearance portal.

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 on the website of the company.

viii) The project proponent shall inform the Regional Office as well as the Ministry, 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, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.

xi) 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).

xii) 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.

xiii) The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

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

xv) The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data/ information/monitoring reports.

xvi) 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.

xvii) 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.

Item No. 186.06: Application for obtaining Environmental Cleanness under EIA notification dated 14.09.2006 for expansion of mild steel billets manufacturing unit located in the revenue estate of Village Akalgarh & Bhagwanpura, Tehsil Nabha & Amloh, District Patiala & Fatehgarh Sahib, Punjab by M/s Madhav Alloys Pvt. Ltd., (proposal no. SIA/PB/IND/37520/2010)

1.0 Background

Earlier, the promoter company was granted environmental clearance for the establishment of mild steel billets manufacturing unit of 3,00,000 MTPA capacity at Village Akalgarh and Bhagwanpura, Tehsil Nabha and Amloh, District Patiala and Fatehgarh Sahib in Punjab vide letter no J-11011/406/2010-IA-II (I) dated 16.03.2012 by the MoEF & CC , New Delhi.

The project proponent had filed application for issuance of TOR under EIA notification, 2006 for expansion of mild steel billets manufacturing unit located in the revenue estate of Village Akalgarh and Bhagwanpura, Tehsil Nabha and Amloh, District Patiala and Fatehgarh Sahib, Punjab. The project is covered under category 3(a) - Metallurgical Industries (ferrous & non-ferrous) of the Schedule appended to the said notification.

As per requirement of OM dated 07.09.2017 issued by MoEF & CC, New Delhi, the Northern Regional office, Chandigarh of the Ministry has been has been requested vide letter no. 319 dated 09.03.2018 to send the certified compliance report the previously granted Environmental Clearance to the project.

The case was considered by SEAC in its 163rd meeting held on 13.03.2018. The SEAC allowed the project proponent to present the salient features of the project for issuance of TORs. The Standard TORs prescribed by the MoEF & CC have been proposed.

After detailed deliberations, it was decided to categorize the project into B-1 category and that the project proponent should submit an Environment Impact Assessment Study Report. After further deliberations on the proposed Terms of Reference (TOR) suggested by the project proponent, the Committee approved the following Terms of Reference for Environmental Impact Assessment Study of the proposed project including above observations as additional TOR and recommended to SEIAA to issue the certain TORs

The case was considered by SEIAA in its 129th meeting held on 23.03.2018. wherein Environmental Consultant of the Promoter industry presented the salient features of the project. During discussions, representative of the promoter Industry agreed to comply with fully all the conditions as mentioned by SEAC.

The SEIAA observed that the SEAC has categorized the project into B-1 category and has recommended specific TORs for undertaking detailed EIA & EMP for such type of projects. The SEIAA looked into the details of the case and was satisfied with the same. Therefore, the Authority decided to accept the recommendations of SEAC and approved Terms of Reference for undertaking detailed EIA & EMP as finalized by SEAC.In compliance to the above said decisions, TORs were issued vide letter no. 537 dated 10.04.2018.

Present case

The project proponent has submitted detailed EIA report. The project proponent has deposited Rs 1,27,000/- Vide UTR No. SBIN319250327660 dated 07.09.2019, against total investment of Rs 12.7 Crores as mentioned at page no 129 of EIA report, which is adequate as per the Govt. Notification dated 27/06/2019.

The project proponent had conducted the public hearing on 04.10.2018 in two stages i.e. at 12 pm for District Patiala and 3.0 pm for District Fatehgarh Sahib and the details of the same is mentioned in the Chapter 14.0 in the EIA report.

The project proponent submitted that verified certified compliance report to the conditions of earlier environmental clearance has been obtained vide letter dated 29.03.2019 where in Regional Office of MoEF&CC Chandigarh has revoked the directions issued to the unit vide letter dated 15.10.2018.

The Committee in the 186th meeting held on 26.12.2019 was apprised that the case was earlier deferred in the 184th meeting of SEAC with following observations:

i) Clarification from PPCB to the effect that:
   a) the project site is not located within a radius of 5.0 Km of the Critically polluted area as identified by the CPCB.
   b) Slag generated from the project, is not hazardous in nature.
   c) Capacity of M/s Rashandeep Construction Pvt. Ltd., Kharar road, Village Mota Majra, Mohali for making fly ash bricks & interlocking tiles by using slag.
ii) Rain water recharging proposal.
iii) Water balance and Material balance of APCD dust & slag.

iv) Ground water recharging plan.
v) Maintenance plan for Green Area.
vi) Submit the Compliance of TOR No. F(vi) regarding application submitted for clearance under Wild life Act, 1972.
vii) Acknowledgment of the application submitted for obtaining NOC from forest Department along with complete set of the application.
viii) In earlier granted EC dated 16.03.2012 by MoEF&CC the land required for the project is mentioned as 21.02 acres whereas, in the new application of expansion the land acquired has been shown as 38.03 acres. There is a difference of 17 acres of land, the cost of which has not been added in the total project cost. Balance fee to be deposited as per the revised project proposal.
ix) It has been observed that the project proponent has added 1,20,000 TPA of ERW and MS Black Pipes/Galvanized Pipes which was not mentioned in the TOR application issued dated 10.04.2019. Project proponent was asked to change the subject of application for grant of EC as mentioned in TOR.
x) Material balance of 5 TPD of APCD dust disposal needs to be revised.

The project proponent has also submitted the balance fee of Rs. 54000/- dated 26.11.2019 making total amount of EC fee deposited as Rs. 1.81 lakhs.

2.0 Deliberations during the 186th meeting held on 26.12.2019

The case was considered by the SEAC in 186th meeting held on 26.12.2019, which was attended by Sh. Harminder Karbanda G.M (F& A), authorized representative of the project proponent and his environment consultant. The Project Proponent submitted the compliance of the queries raised in 184th meeting of SEAC as under:

S. No.	Additional Queries raised by SEAC	Reply
1.	Clarification from PPCB to the effect that: (a) The project site is not located within a radius of 5.0 km of the Critically polluted area as identified by the CPCB.	a) Letter has been obtained from MC vide Letter No. 2160 dated 23.09.2019 regarding the fact that project falls outside MC limit of Mandi Gobindgarh and is at a distance of 15 km from Mandi Gobindgarh. Further, Letter has also been obtained from RO, Fatehgarh Sahib, PPCB vide Letter No. 3244 dated 24.09.2019 regarding the fact that industry is not covered under notified action plan for non-attainment of Mandi Gobindgarh. Copy of the letters from

	(b) Slag generated from the project, is not hazardous in nature. (c) Capacity of M/s Rashandeep Construction Pvt. Ltd., Kharar road, Village Mota Majra, Mohali for making fly ash bricks & interlocking tiles by using slag.	MC & RO PPCB were taken on the record by SEAC. b) Letter has been obtained from PPCB vide letter No. 3945 dated 15.11.2019 regarding the nature of the slag generated from the induction furnace which states that it is non-hazardous in nature. Copy of the same was taken on record by the SEAC. c) They have requested M/s Rashandeep Construction Pvt. Ltd. to share the copy of Consent to Operate obtained from PPCB regarding manufacturing of fly ash bricks & interlocking tiles. But, as they have not submitted any document from his side thus, they have executed an agreement with M/s Ramjee Concrete Pvt. Ltd. who is having valid Consent to Operate granted by PPCB. Copy of Agreement with M/s Ramjee Concrete Pvt. Ltd. along with Consent to Operate of M/s Ramjee Concrete Pvt. Ltd. were submitted, which were taken on record by the SEAC. Further, they are also looking into the option of installing our own block manufacturing unit. They assure that slag will be disposed in environmentally safe manner.
2.	Rain water recharging proposal.	Rain water recharging proposal was submitted. Total Quantity of water recharge is 65 % of the volume of water available in the ponds after desilting i.e. 65 % of 5,52,393 m^3 per annum = 3,59,055.45 m^3 per annum With a total rain fall of the order of 677 mm per annum, the plausible annual recharge to the ground water from the project area are estimated at 3,59,055.45 m^3 per annum against the annual pumpage to the extent 1,15,500 m^3 per annum by considering 350 days. Thus, the recharge proposed is more than the required double recharge quantity of 2,31,000 m^3 per annum.

<table>
<tr><td>3.</td><td>Water balance and Material balance of APCD dust & slag.</td><td>Water balance and Material balance of APCD dust & slag was submitted</td></tr>
<tr><td>4.</td><td>Ground water recharging plan.</td><td>Ground water recharging plan was submitted and is same as of Rain Water Recharging proposal as given at point no 2 above.</td></tr>
<tr><td>5.</td><td>Maintenance plan for Green Area</td><td>Green area maintenance plan was submitted. The project Proponent submitted that 51110 sqm green area will be developed and about 14,50,000/- amount will be reserved for the maintenance for 3 years.</td></tr>
<tr><td>6.</td><td>Submit the Compliance of TOR No. F(vi) regarding application submitted for clearance under Wild life Act, 1972.</td><td>They submitted an undertaking that their project location is outside the Eco- Sensitive zone of the Bir Bhadson Wildlife Sanctuary and Eco- Sensitive zone is 100 m from the boundary of the Sanctuary as per MOEF&CC Notification S.O.2483 (E) dated 21.04.2016. A Copy of the said notification was taken on record by the SEAC.</td></tr>
<tr><td>7.</td><td>Acknowledgment of the application submitted for obtaining NOC from forest Department along with complete set of the application.</td><td>The project proponent submitted acknowledgment of the application applied for obtaining NOC from forest Department along with complete set of the application, which was taken on record by the SEAC.</td></tr>
<tr><td>8.</td><td>Balance fee to be deposited as per the revised project proposal.</td><td>As per the revised project proposal, the cost of project including land cost will be Rs. 18.06 Crores. Further, in the EIA report, they have included the components which don’t require Environmental Clearance i.e. WRD, pipe plant, etc. Thus, the breakup of the project cost considering components which require Environmental Clearance is as below:
<table>
<tr><th>S.No.</th><th>Description</th><th>Amount (in Crores)</th></tr>
<tr><td>1.</td><td>Land</td><td>2.76</td></tr>
<tr><td>2.</td><td>Building</td><td>1.60</td></tr>
<tr><td>3.</td><td>Plant & Machinery</td><td>13.70</td></tr>
</table>
</td></tr>
</table>

		4. Others 0.00 **Total cost** **Rs. 18.06** Accordingly, fee of Rs. 1,81,000/- is applicable against the total cost of Rs. 18.06 Crores. Out of this, Rs. 1,27,000/- was submitted earlier and the balance fee of Rs. 54,000/- has been submitted vide UTR No. SBIN219330186408 dated 26.11.2019.

SEAC was not satisfied from the reply of the project proponent given at 1 (c), 2, and 8 raised the queries to the project proponent to which he replied as under:-

Sr No.	**Observations**	**Reply**
1	Will they elaborate the details of the hollow blocks and interlock pavers manufacturing unit to be installed to dispose off the slag in environmentally sound manner.	The project proponent submitted undertaking to the effect that they are planning to establish a recycling unit namely Madhav Environmental Solutions Pvt. Ltd. in an area of approx. 8 acres of land (already acquired) in which slag will be used as raw material ingredient to manufacture the hollow blocks and interlock pavers as well as WRD unit. The capacity of plant will be 300 TPD out of which 100 TPD will be used as slag(65 TPD will be of their own unit). The plant having estimated cost of Rs 5 to 6 Crore and will be commercially operated with in 1 year.
2	What is capacity of WRD unit and wheather they are planning to increase the capacity of the unit.	Project Proponent infomed that current capacity of WRD unit to process the APCD dust of Category 35.1 is 10 TPD and they are in the process of scaling up the unit under the name of Madhav Environmental Solutions Private Limited (a sister Concern of Madhav KRG Group) in which they shall increase the capacity of the unit as 25-30 TPD for processing of APCD dust. The said waste recycling unit is expected to come into operation by 31st October, 2020. The undertaking

		submitted in this regard, is taken on record by the SEAC.
3	Rain water recharging proposal submitted by the project proponent, is not as per the CGWA norms as 65% of the volume of water available in the ponds after desilting` was considred as total quantity of water to be recharged instead of taking 50%.	The project proponent submitted the revised proposal as under: - Total Quantity of water recharge is 50% of the volume of water available in the ponds after desilting i.e. 50 % of 5,52,393 m^3 per annum = 2,76,196.5 m^3 per annum. With a total rain fall of the order of 677 mm per annum, the plausible annual recharge to the ground water from the project area are estimated at 2,76,196.5 m^3 per annum against the annual pumpage to the extent 1,15,500 m^3 per annum by considering 350 days. Thus the recharge proposed is more than the required double recharge quantity of 2,31,000 m^3 per annum. Further, all the wastewater of the nearby Dargapur, Ramgarh, Ghundar and Chahal villages which will be directed towards the village ponds will be first treated in trenches through CSIR-NEERI's Phytorid Wastewater Treatment Technology and overflow water will be discharged into the pond
4	The project proponent has not mentioned the land area in the CA certificate.	The project proponent submitted the CA certificate mentioning the land area as 17.01 acres, which was taken on record by SEAC.
5	It has been observed that the project proponent has added 1,20,000 TPA of ERW and MS Black Pipes/Galvanized Pipes which was not mentioned in the TOR application issued	The project proponent submitted an undertaking to the effect as under: i) They have applied for EC for installation of one additional Induction Furnace of 25 TPH capacity. However,

	dated 10.04.2019.Please Clarify	while applying for Environmental Clearance, ERW & Pipe & Tube unit was mentioned in the final EIA report as an integrated unit, although the permission of Environmental Clearance is not applicable on ERW and Pipe & Tube Plant. ii) Environmental Clearance application may be proceeded without mentioning the ERW and Pipe & Tube unit
6.	Water balance submitted was found incorrect and the project proponent is required to submit revised water balance.	The project proponent submitted the revised water balance diagram, which was taken on record by the SEAC.
7	Material balance submitted was found incorrect and the project proponent is required to submit revised Material balance.	The project proponent submitted the revised material balance diagram, which was taken on record by the SEAC.
8	Amloh block Zone is notified over exploited zone. How the industry will arrange the water for industrial use.	The project proponent submitted that their unit falls under Nabha and Amloh Block as per CGWA guidelines. But existing borewells come under Nabha Block, which is non notified (over exploited zone). However, they had already submitted application to CGWA on 28.11.2018 for net ground water demand of 330 KLD. Further, the project proponent submitted an undertaking to the effect that they shall install the borewell for the abstraction of ground water under Nabha Block only, which is non notified over exploited zone and will not abstract ground water from Amloh block, which is notified over exploited zone

The SEAC observed that the project proponent has provided adequate, satisfactory clarifications to the observations raised by it and awarded 'Silver Grading' to the project proposal.

3.0 Recommendation

After detailed deliberations, SEAC decided that case be forwarded to SEIAA with the recommendations to grant environmental clearance for expansion of unit in the existing premises located in the revenue estate of Village Akalgarh and Bhagwanpura, Tehsil Nabha and Amloh, Distt. Patiala and Fatehgarh Sahib, Punjab by M/s Madhav Alloys Pvt. Ltd. as per the details mentioned in the EIA study & subsequent presentation / clarifications made by the project proponent and his consultant with following salient features after expansion, proposed measures, conditions:

<table>
<tr><td>1.</td><td>Name and Location of the project</td><td>M/s Madhav Alloys Pvt. Ltd.
Village Akalgarh and Bhagwanpura,
Tehsil Nabha & Amloh, District Patiala and Fatehgarh Sahib, Punjab</td></tr>
<tr><td>2.</td><td>Nature of project (Fresh/Expansion Amendment/Others)</td><td>Expansion project</td></tr>
<tr><td>3.</td><td>a) Category
b) Activity
(as per schedule appended to EIA Notification, 2006 as amended time to time.)</td><td>a) B-1
b) 3(a)
Metallurgical Industries
(Ferrous &Non Ferrous Alloys).</td></tr>
<tr><td>4.</td><td>Area Details</td><td>
<table>
<tr><th>Description</th><th>After expansion (sq.m)</th></tr>
<tr><td>Total area</td><td>1,54,628.0241 (38.03 acres)</td></tr>
<tr><td>Shed covered area</td><td>53,606</td></tr>
<tr><td>Green Area</td><td>51,110</td></tr>
</table>
</td></tr>
<tr><td></td><td>Co-ordinates of the project site</td><td>
<table>
<tr><th>Point</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>A</td><td>30°33'41.37" N</td><td>76°14'26.28" E</td></tr>
<tr><td>B</td><td>30°33'41.25" N</td><td>76°14'29.51" E</td></tr>
<tr><td>C</td><td>30°33'34.28" N</td><td>76°14'29.30" E</td></tr>
<tr><td>D</td><td>30°33'34.01" N</td><td>76°14'34.55" E</td></tr>
<tr><td>E</td><td>30°33'29.61" N</td><td>76°14'34.47" E</td></tr>
<tr><td>F</td><td>30°33'29.42" N</td><td>76°14'28.35" E</td></tr>
<tr><td>G</td><td>30°33'26.31" N</td><td>76°14'28.11" E</td></tr>
<tr><td>H</td><td>30°33'41.38" N</td><td>76°14'29.19" E</td></tr>
<tr><td>I</td><td>30°33'21.80" N</td><td>76°14'13.38" E</td></tr>
<tr><td>J</td><td>30°33'26.14" N</td><td>76°14'16.89" E</td></tr>
<tr><td>K</td><td>30°33'32.07" N</td><td>76°14'16.06" E</td></tr>
</table>
</td></tr>
</table>

		L	30°33'31.97" N	76°14'12.66" E
		M	30°33'33.78" N	76°14'12.67" E
		N	30°33'35.02" N	76°14'21.10" E
		O	30°33'35.08" N	76°14'25.85" E
5	Classification/Land use pattern as per Master Plan	Industrial		
6	Project Cost of expansion	Rs. 18.06 Crores		
7	EC fee	i) Rs 1,27000/- vide NEFT SBIN319250327660 dated 07.09.2019 ii) Rs. 54000/- vide UTR no.SBIN219330156408 dated 26.11.2019		
8	Raw Material requirement (After expansion)	Scrap: 1408 TPD Ferro Alloys, Sponge & DRI: 242 TPD		
9	Production Capacity (After expansion)	Billets/Steel Ingots @ 5,25,000 TPA , TMT bars/ Wire rods/ MS rounds @5,25,000 TPA		
10	Details of major productive machinery/plant (After expansion)	i) 3 no's Induction Furnaces of capacity 25 TPH each ii) 01 Rolling Mill of capacity 5,25,000 TPA iii) one ladle refining furnace		
11	Manpower (After expansion)	1264 (Both technical & non-technical)		
12.	Water Requirements&source in Construction Phase	10KLD of water will be required during construction phase which will be met by treated water of STP.		
13.	Rain water recharging detail	Rain water recharging will be done by adoption of pond in the same assessment unit. 2,76,196.5 m^3 per annum of water will be recharged against the ground water withdrawal of 330 KLD considering 350 operational days.		
14.	Water Requirements & its source (After expansion)	Total water requirement for the project after expansion will be 475 KLD out of which fresh water requirement will be 330. KLD and remaining will be met from the treated waste water. Break-up of the same is given below:		

S. No.	Description	Existing water demand (KLD)	Water demand after expansion (KLD)	Source
1.	Domestic water demand	32	55	Ground water
2.	Cooling water	150	275	Ground water or

	demand			
3.	Process water/ Recycled treated waste water	30	145	Treated water from STP & ETP
Total		**212**	**475**	**475**

S.No.	**Season**	**Green area water demand in KLD**	**Source of water**
1	Summer	281	Treated water from STP, ETP and STP of village Bharipanecha
2	Winter	92	
3	Rainy	25	Treated water from STP & ETP

15 Details of Effluent (After expansion)

Sr. No.	Details	Quantity (After Expansion)	Remarks
i)	Industrial Effluent	145 KLD	Industrial waste water will be treated in the already installed ETP of 150 KLD capacity. After treatment with UF & RO, 123 KLD treated water will be reutilized as process water and 22 KLD RO reject will be utilized for onto land for plantation purposes.
ii)	Domestic Effluent.	44 KLD	Wastewater generated from the project will be treated in the STP of capacity 150 KLD. After treatment with RO, 22 KLD treated water will be reutilized as process water. However, RO reject will be utilized for onto land for plantation purposes.

16 Details of Emissions(After expansion)

Sr. No.	Source	Capacity	Chimney Height (m)	Air Pollution Control Device
i)	Induction Furnace (Existing)	2 x 25 TPH	36 m each	Dog House Type hood followed by Multi-cyclone separator, Pulse Jet Bag Filter
ii)	Induction Furnace (Proposed)	1 x 25 TPH	36 m	Dog House Type hood followed by Pulse Jet Bag Filter
iii)	DG sets (existing)	2 x 600 KVA each	h+5.0 m	Equipped with Canopy
iv)	DG sets (Proposed)	1 x 550 KVA	h+4.5 m	Equipped with Canopy
v)	DG sets (Proposed)	50 KVA	h+1.5 m	Equipped with Canopy

	vi)	Fume Exhaust System in Pickling Section (Galvanizing Unit)	Existing	15 m	Wet Scrubber System
	vii)	Ammonia Ventilation (WRD)	Existing	15 m	Wet Scrubber System
	viii)	Hot water Generator	Existing	15 m	Stack

17 Details of Hazardous waste and its disposal(After expansion)

Sr. No.	Hazardous Waste Category	Quantity (After expansion)	Disposal
i)	Cat. 35.1 – Exhaust air or Gas cleaning Residue	5 TPD	Shall be treated in waste recycling division of the unit for recovery of zinc. The remaining waste from WRD unit (if any) shall be sent to Nimbua Greenfield (Punjab) Ltd
ii)	Cat. 5.1 – Used Oil	1.5 KL/annum	Shall be reprocessed through authorized recyclers of waste oil
iii)	Category 34.3 – ETP sludge	3 TPA	Shal be disposed through Nimbua Greenfield (Punjab) Ltd
iv)	Category 33.1 – Hazardous chemicals / waste	211 Nos/annum	Shal be disposed through Nimbua Greenfield (Punjab) Ltd

18. Solid waste generation and its disposal(After expansion)

Sr. No.	Solid Waste	Quantity (After Expansion)	Disposal
	Somestic solid waste	253 kg/day	Domestic waste will be properly collected and segregated into biodegradable and non-biodegradable waste. The solid waste will be disposed off as per Solid Waste Management Rules, 2016.
(i)	Slag	65.0 TPD	30 TPD of metal will be recovered from the slag and remaining slag will be used as as raw material ingredient for the manufacturing of hollow blocks and interlock pavers in the proposed manufacturing unit of capacity 300 TPD

19	Energy Requirements (After expansion)	Total Power Requirement after expansion will be 43 MVA 2 DG sets of 600 KVA, 1 DG set of 550 KVA & 1 DG set of 50 KVA equipped with canopies as stand-by arrangements
20	Environment Management Plan Environment Management Cell (EMC) shall be responsible for implementation of EMP headed by the Director of the company. He will supported by General Manager	

(Environment) and environmental consultant. The budgetary requirement for implementation of EMP is as under:-

S. No.	Environmental Protection Measures	Capital Cost (Rs.in lakhs)	Recurring Cost (Rs.in lakhs/year)
1	Air PollutionControl (Installation of APCD)	50	2.0
2	NoisePollutionControl(Including cost of landscaping & green belt)	10.0	1.5
3	Solid Waste Management	12.0	1.0
4	Water Pollution Control (STP, ETP & RO)	2.0	2.0
5	Environment Monitoring & Management	3.0	5.0
6	Health, Safety & Risk Assessment	3.0	0.5
7	RainWaterRecharging outside the project premises	10	2.0
8	Miscellaneous	1.0	0.5
Total		**91**	**14.5**

21	CER activities along with budgetary break up and responsibility to implement	Mr. Sudhir Goyal of M/s Madhav Alloys Pvt. Ltd. will be responsible for implementation of CER (Corporate Environment Responsibility). Rs. 18 lakhs (@ 1% of expansion cost) is required for C.E.R activities as per Office Memorandum vide F. No. 22-65/ 2017-IA.III dated 01.05.2018. However, Rs. 25 Lakhs have been planned to be reserved for CER. The details of activities have been mentioned in the CER condition.

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 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 concerned State pollution Control Board/ Committee.

v. The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water from the competent authority concerned 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.

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 conditions imposed by District Town Planner, Patiala vide Memo No. 923 DTP(P)/A-31(P) dated 14.06.2010 dated 14.06.2010 for an area of 17.96 acres and DTP Fatehgarh Sahib vide memo no 758-DTP(FGS)/NG-62 dated 21.06.2010 for an area of 8.13 acres and Urban Development Department vide Ref no. PBIP/1805492489 dated 08.01.2019 for an area of 15.854 acres.

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 vide G.S.R 277 (E) dated 31stMarch 2012 (applicable to IF/EAF) as amended from time to time; S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time) and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized 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 laboratories recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.

iii. The project proponent shall install system carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PMIO and PM25 in reference to PM emission, and S02 and NOx in reference to S02 and NOx emissions) within and outside the plant area (at least at four locations one within and three outside the plant area at an angle of 120°

each), covering upwind and downwind directions. (case to case basis small plants: Manual; Large plants: Continuous).

iv. The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality/ fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six monthly monitoring report.

v. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources.

vi. The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.

vii. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.

viii. Recycle and reuse iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/ agglomeration.

ix. The project proponent shall use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.

x. The project proponent shall provide covered sheds for raw materials like scrap and sponge iron, lump ore, coke, coal, etc.

xi. The project proponent shall provide primary and secondary fume extraction system at all melting furnaces.

xii. Design the ventilation system for adequate air changes as per ACGIH document for all tunnels, motor houses, Oil Cellars.

III. Water quality monitoring and preservation

i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R 277 (E) dated 3151 March 2012 (applicable to IF/EAF) as amended from time to time; S.O. 3305 (E) dated 7thDecember 2015 (Thermal Power Plants) as amended from time to time) and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories. (case to case basis small plants: Manual; Large plants: Continuous)

ii. The project proponent shall monitor regularly ground water quality at least twice a year (pre and post monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.

iii. The project proponent shall submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.

iv. Adhere to 'Zero Liquid Discharge'.

v. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.

vi. The project proponent shall provide the ETP for effluents of rolling mills to meet the standards prescribed in G.S.R 277 (E) 31stMarch 2012 (applicable to IF/EAF) as amended from time to time.

vii. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off

viii. The project proponent shall practice rainwater harvesting to maximum possible extent i.e. pond located in the Village Dargapur, Ramgarh , Ghundar and Chahal shall be adopted with rain water recharging after desilting @ 276,196.5 m3/annum.As an additional safety measure, the stream carrying waste water of the village shall be diverted in one corner of Phytorid plants trench (designed based on the technology developed by CSIR-NEERI's) divided in different parts, the overflow of each chamber shall be allowed to enter into another chamber which will ultimately lead to purification of water and collected into pond to avoid any contamination of ground water aquifer. 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.

ix. The project proponent shall make efforts to minimize water consumption in the steel plant complex by segregation of used water, practicing cascade use and by recycling treated water.

IV. Noise monitoring and prevention

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

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

V. Energy Conservation measures

i. The project proponent shall provide waste heat recovery system (pre-heating of combustion air) at the flue gases of reheating furnaces.

ii. Practice hot charging of slabs and billets/blooms as far as possible.

iii. Ensure installation of regenerative type burners on all reheating furnaces.

iv. Provide solar power generation on rooftops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly.

v. Provide the project proponent for LED lights in their offices and residential areas.

VI. Waste management

i. Used refractories shall be recycled as far as possible.

ii. Oily scum and metallic sludge recovered from rolling mills ETP shall be mixed, dried, and briquetted and reused melting Furnaces

iii. 100% utilization of fly ash shall be ensured. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding in this regard shall be submitted to the Ministry's Regional Office.

iv. The waste oil, grease and other hazardous waste shall be disposed of as per the Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016.

v. Kitchen waste shall be composted or converted to biogas for further use.(to be decided on case to case basis depending on type and size of plant)

VII. Green Belt

i) Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant. The industry shall ensure that most of the periphery shall be provided with green belt by removing the unwanted/non-productive structures already provided in the existing project near the boundary wall.

ii) The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration including plantation.

VIII. 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 project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms of Factory Act.

iii. 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.

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

v. The project proponent shall carry out the activities and spent an amount as committed during the Public Hearing and give preference to the local person as per the qualification to be employed in the expansion project.

IX. Corporate Environment Responsibility

i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility. The project proponent shall adhere to the commitments made in the proposal for CER activities for spending atleast minimum amount of Rs. 25 Lacs towards following CER activities:

Sr. No.	Activities	Total Expenditure in 1 Year (in lakhs)	Timeline (Starting from date of grant of EC)	Total Expenditure
1.	**Wildlife conservation plan (Already Paid)**			
	Planting of fruit bearing species including watch and ward for 5 years @ 4.50 lakh per hectare (2 Ha.).	1,80,000	5 year	9,00,000
	Provision of one patrolling vehicle for the officer to patrol the study area.	6,00,000	1 year	6,00,000
	Public awareness and wildlife education activities.	50,000	1 year	50,000
	Fuel for vehicle @ 100 Lt. per month for first year and maintenance.	1,00,000	1 year	1,00,000
	Contingency/General	50,000	1 year	50,000
2.	**Awareness to local Farmers**			
	Providing awareness programs on use and make of DESI MANURE from cow-dung.	1,00,000	1 year	1,00,000
	Awareness programs on Modern approaches of soil fertility evaluation and fertilizer recommendation	50,000	2 years	1,00,000

3.	**Education** Providing Scholarship to the needy students of Akalgarh Sarkari School and Nurpura Govt. School.	2,00,00	1 year	2,00,000
	Providing basic needs such as books, dresses etc. to the students of Akalgarh Sarkari School and Nurpura Govt. School.	1,50,000	1 year	1,50,000
4.	**Health** Organizing medical camps & Blood donation in surroundings villages of Akalgarh & Bhagwanpura	50,000	5 year	2,50,000
Total		Rs. 15,30,000		Rs. 25,00,000

However, CER activities shall strictly be in accordance with the activities listed out in the OM dated 01.05.2018 and as per the proposal submitted by the project proponent. 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 must be completed with the completion of the project.

ii. The company shall have a well laid down environmental policy duly approve 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.

iii. 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.

iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for

any other purpose. The project proponent shall spend minimum amount of Rs 91Lacs towards capital cost and Rs 14.5 Lacs / annum towards recurring cost. The entire cost of the environmental management plan will continue to be borne by the project proponent. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

v. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six-Monthly Compliance Report.

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

vii. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the plants shall be implemented.

XI. Validity

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

XII. Miscellaneous

i. 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.

ii. 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.

iii. 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.

iv. 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.

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

vi. 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.

vii. 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.

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

ix. The project proponent shall abide by all the commitments and recommendations made in the EIA /EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.

x. 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).

xi. 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.

xii. The SEIAA/Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

xiii. The SEIAA/ Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

xiv. 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 by furnishing the requisite data / information/monitoring reports.

xv. 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.

xvi. 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.

ADDITIONAL SPECIFIC CONDITIONS DECIDED DURING MEETING OF SEAC

i. The project proponent shall minimize the water consumption in the steel plant complex by segregation of used water, practicing cascade use and by recycling treated water.

ii. The project proponent shall provide STP for treatment of waste water & reutilization of the treated water for core/non-core activities so as to achieve the Zero Liquid Discharge Condition as per the III (iv) of OM dated 09/08/2018 issued by the MoEF&CC for such units.

iii. The project proponent shall reuse of cooling tower blow down, simultaneously ensuring the standards prescribed for such purge waters. If required, necessary arrangements shall be made to keep this waste stream within the parameters required for reuse.

iv. A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site. Sand, murram, loose soil, cement, stored on site shall be covered adequately and Water sprinkling system be put in place so as to prevent dust pollution.

v. The project proponent shall reserve land for loading or unloading of raw material, products, slag, hazardous waste as well as for storage of these materials and the area to be reserved for parking. The area to be reserved by considering the time required for loading and unloading of vehicles for respective activities and minimum/maximum period for which storage of the above material is required in the premises. The areas for the respective activities to be marked on the layout plan.

vi. The project proponent shall comply with the standard operating procedures and upgradation of suction and treatment arrangement for the secondary emissions as prescribed by the State Pollution Control Board or by CPCB/MoEF&CC.

vii. Whole of the vehicle movement area as well as approach road to the gate /weighing bridge shall be paved with pucca / metalled / cement concrete road to control the dust emissions expected from the vehicle movement.

viii. The vehicles to be used for loading / unloading purpose shall not be parked along roadside so as to avoid the traffic congestion and dedicated parking place to be provided for the same.

ix. The project proponent shall adopt green technologies to conserve the water and energy including shearing / cutting / bundling machines. Also to provide abrasive resistant fire bricks in the crucibles to reduce the periodic maintenance & disposal of discarded fire bricks.

x. The project proponent shall use natural gas (if available) as substitute fuel wherever possible in the existing industry/ for expansion project.

xi. The project proponent shall take necessary action w.r.t. the following:-

a) Recovery of iron from slag before disposing it off.

b) Identify the areas for utilization of slag in scientific manner and its usage in cement / construction industry / road laying etc.

c) Recovery of precious metals like Zinc, lead and iron etc. from the APCD dust (Hazardous waste) through authorized re-processor.

xii. The project proponent shall install the hollow blocks & interlock pavers manufacturing unit of capacity 300 TPD to utilize the 65 TPD slag generated from their unit as raw material along with other ingredient and commission the same within one year

xiii. The project proponent shall install the borewell for the abstraction of ground water under Nabha Block only, which is non notified over exploited zone and will not abstract ground water from Amloh block, which is notified over exploited zone.

xiv. The project proponent shall install 02 no. low cost instruments within the premises and monitor Continuous/Real time data.

Item No. 186.07: Application for obtaining Environmental Cleanness under EIA notification dated 14.09.2006 for expansion of mild steel billets manufacturing unit by replacement of induction furnaces in the revenue estate of village – Mangarh, Macchiwara Road, Kohara, Ludhiana East, Distt. Ludhiana, Punjab by M/s Renny Strips Pvt. Ltd. (Furnace Division), (Proposal No. SIA/PB/IND/ 37379/2018)

1.0 Background

Earlier, the project proponent had filed application for issuance of TOR under EIA notification, 2006 for expansion of steel manufacturing unit by replacing the existing inductionfurnaces ofcapacity8TPH with aInduction furnace of capacity 15TPH in Village – Mangarh, Machhiwara Road, Kohara, Ludhiana-east District- Ludhiana, Punjab.The project is covered under category 3 (a) – Secondary Metallurgical Industries (ferrous & non-ferrous) of the Schedule appended to the said notification. The project proponent has submitted form 1 and other requisite documents.

The case was considered by the SEAC in the 167th meeting held on 26.05.2018 Environmental Consultant of the Promoter industry proposed the Standard TORs prescribed by the MoEF & CC.

To a query of SEAC regarding land use pattern as per the master plan of Ludhiana and distance of the project site from critically polluted area, the project proponent replied that the project falls under industrial zone as per the master plan of Ludhiana and the project site is located 7.1km away from critical polluted area. To another query of the SEAC regarding whether separate consent to operate has been obtained for M/s Renny Strips Pvt Ltd. (Furnace Division) & M/s Renny Strips Pvt. Ltd., the project proponent replied that both units have separate entity, separate electric connection, separate entrance & obtained separate Consent to Operate under water Act 1974, and Air Act, 1981. M/s Renny Strips Pvt Ltd. (Furnace Division)

has obtained the Consent to Operate for operation of induction furnace of 8 tons/heat capacity to manufacture Steel Ingots @81 TPD which are valid upto 30.09.2022and M/s Renny Strips Pvt. Ltd. has obtained the varied Consent to Operate under Water Act, 1974 & Air Act, 1981 for induction furnace of capacity 6 TPH to manufacture steel ingots @72 TPD which are valid upto 30.06.2018.

Environmental Consultant of the Promoter industry requested to allow them to prepare EIA report by carrying out common monitoring in buffer zone in case of this industry & another industry namely M/s Renny Strips Pvt. Ltd., located in revenue estate of Village – Mangarh, Machhiwara Road, Kohara, Ludhiana-east District- Ludhiana, Punjab to whom TOR has been recommended in the 167th meeting of SEAC held on 26.05.2018 as the sites of both the industries fall within 500 m radius of each other. The SEAC accepted the request of Environmental Consultant and allowed them to carry out common monitoring in the buffer zone for the purpose of collecting base line data to prepare EIA report in case of these two industries. However, separate monitoring shall be carried out in the core zone of both the industrial projects.

The SEAC observed that the project proponent has provided adequate and satisfactory clarifications to the observations raised by it. After detailed deliberations, it was decided to categorize the project into B-1 category and that the project proponent should submit an Environment Impact Assessment Study Report.

After further deliberations on the proposed Terms of Reference (TOR) suggested by the project proponent, the Committee approved the following Terms of Reference for Environmental Impact Assessment Study of the proposed project and recommended to SEIAA to issue the TORs.

The case was considered by SEIAA in its 134th meeting held on 09.07.2018, which was attended by the following on behalf of project proponent:

i) Sh. Rajat Jindal, General Manager of the Promoter Company.
ii) Sh. Sumitava Dutta FAE, M/s CPTL, Chandigarh, Environment consultant of the promoter company.

Sh. Sumitava Dutta, Environmental Consultant of the project proponent presented the salient features of the project and requested for issuance of TORs. He also requested to allow them to prepare EIA report by considering common monitoring in buffer zone in case of this industry & another adjoining industry namely M/s Renny Strips Pvt. Ltd., Village Mangarh, Machhiwara Road, Near Kohara (Item No. 134.08), which is a unit of the same firm. He also informed that they have already conducted the EIA study during April, May & June, 2018 and requested to accept the same.

In a query raised by the SEIAA regarding distance of site from critically polluted area, being site falls in District Ludhiana, the Environmental Consultant informed that the site falls at a distance of 7.1 kms from the Critically Polluted area and submitted a copy of Geological Survey of India Topo sheet on which the distance of project site from boundary of Critically Polluted Area of Ludhiana was marked and shown to be 7.1 kms.

During discussions, representative of the industry agreed to comply with fully all the ToRs as mentioned by SEAC.The SEIAA observed that the SEAC has categorized the project into B-1 category and has recommended specific TORs for undertaking detailed EIA & EMP for such type of projects.The SEIAA looked into the details of the case and was satisfied with the same. Therefore, the Authority decided as under:-

a. to accept the recommendations of SEAC and approved Terms of Reference for undertaking detailed EIA & EMP as finalized by SEAC.
b. Distance of both the project sites i.e. instant item and item No. 134.08 from boundary of critically polluted area of Ludhiana be got verified from Punjab Pollution Control Board.
c. To accept the request of Environmental Consultant and allowed to prepare EIA study report by considering common EIA study already carried out for both the units as mentioned above, during April, May & June, 2018.

In compliance to the above said decision, the following actions were taken:-

i) ToRs and other decision of SEIAA has been conveyed to the project proponent vide letter No. 986 dated 16.07.2018.
ii) Punjab Pollution Control Board has been requested vide letter No. 931 dated 16.07.2018 as per decision that the Distance of both the project sites i.e. M/s Renny Strips Pvt. Ltd. (Furnace Division) and M/s Renny Strips Pvt. Ltd. from boundary of critically polluted area of Ludhiana be got verified from Punjab Pollution Control Board (PPCB). No reply has been received from PPCB whereas, project proponent has again submitted duly signed topo sheet with distance of units from the boundary of critically polluted area of Ludhiana marked on it.

Preset Case

The project proponent has now submitted EIA report along with form-2 and other requisite documents.

EIA report was scrutinized and the following EDS were raised to which the project proponent replied as under:

Sr. No.	**EDS**	**REPLY**
1.	Details of CER activities (concrete proposal) be provided in compliance to the provisions of OM dated 01.05.2018 as well as per the decisions taken by SEIAA & SEAC in the meetings in similar type of cases.	The details of CER activities are as under**:-**

		S.No.	**Activity**	**Environment Aspect**	**Cost (Rs. Lac)**	**Recurring Cost (Rs. Lac)**	**Timeline**
		1.	Providing Bio-Toilets 02 No's in Village-Mangarh	Water Pollution	2.0	0.10	Within one year of grant of EC
		2.	Providing ambulance for nearby dispensary	--	4.0	0.60	Within one year of grant of EC
		3.	Development of Crematorium and tree plantation there in Village-Mangarh	Air Pollution Control	4.0	0.10	Within 15 months of grant of EC
		TOTAL			**10.0**	**0.80**	
2.	Details of Rain water harvesting (concrete proposal) shall be provided as per the decisions taken by SEIAA & SEAC in the meetings in similar type of cases.				For rain water harvesting, a village pond has been adopted. NOC from village sarpanch submitted.		
3.	The green belt shall be developed on the entire boundary as per conditions of TOR. But the industry has shown the same only on three sides, clarify.				Submitted		

EDS were again raised on 25.09.2019 and project proponent submitted the reply vide letter dated 18.11.2019 as under:

S. No.	**Detail of the documents**	**Submitted/ Not submitted**	**Mention page no. as per the hard copy while submitting reply to EDS**
1.	As the case is at security stage and project proponent submitted the application on 26/08/2019	Not submitted-	Submitted through RTGS vide URN No. N277190945165908 dated 04.10.2019

	as per web portal, the project proponent is required to deposit EC fee @ Rs. 10,000 per crore of total project cost as per the notification no.10/167/2013-STE)5/1510178/1 dated 27/06/2019. Cost of the project in Crores- Rs. 10 Crore, thus Rs. 1,00,000/- is required to be deposited through NEFT/RTGS on the following detail:- **<u>Account Detail</u>** Punjab State Council for Science & Technology Corporation Bank, Sector-8, Chandigarh Account NO.-520101262451298 IFSC code no.-CORP0000319.	Please submit EC Fee Rs. 1,00,000/-	
2.	Properly filled Form 2 along with signed declaration attached in hard copy.	Please submit in the hard copy.	Submitted
3.	Certificate of accreditation of EIA consultant	Validity till 09.02.2019, submit letter of extension validity.	The EIA consultant accreditation is listed in Sr. 26 in the list of Accredited consultants and a copy of the same has been submitted

4.	Whether the project area falls in whole or partially within 5.0 Km from the boundary of critical polluted area notified by MoEF&CC. (Please specify in Yes/No)	Please specify in Yes/No & proof of project site 5km away from the municipal limits from authorized state department.	The project does not fall in whole or partially within 5.0 Km from the boundary of critical polluted area notified by MoEF&CC.
5.	As per TOR, 1500 tress/hectare are required to be planted	In 12,500 sqm green area of project site, only 100 no. trees are proposed to be planted which needs to be revised as per TOR condition.	Total area for plantation is 938.57 sqm for which 146 trees are to be planted. In addition to the existing 46no.of trees, 100 more trees will be planted to maintain the tree density of 1500 trees/ha.
5.	Various documents to be submitted along with the EC are listed as under:- a) Is the project covered under PLPA, 1900, if no but located near to PLPA area then the project proponent is required to submit NOC from the concerned DFO to the effect that project area does not fall under the provision of PLPA act, 1900. b) Is the project covered under PLPA, 1900, if yea then status of the NOC w.r.t. PLPA, 1900.	Submit undertaking to reflect that project is neither located near to PLPA area nor fall in the PLPA area.	Submitted
6.	(a) in case where land has already been purchased/acquired: Proof of ownership of land (existing owner) such as copy of latest Jamabandi	Submit proof of ownership of land the details indicating Khasra no.	Land documents submitted

	(not more than one month old) and credible document showing status of land acquisition w.r.t. project site as prescribed in OM dated 07.10.2014 issued by MoEF)		
7.	Location plan showing the exact location of the project site w.r.t. some permanent/important features of the area and site plan of the project showing the following: i) Location of STP, ETP and APCD ii) Solid waste storage area and slag area iii) Hazardous waste storage area iv) Green belt with marking of tree v) Parking space vi) Firefighting equipment layout vii) First aid room viii) Location of tubewell ix) DG sets and transformers x) Any other utilities	Submit layout plan having legend indicating location of: i) Location of STP, ETP and APCD. ii) Solid waste storage area and slag area iii) Hazardous waste storage area iv) Green belt with marking of tree v) Parking space vi) Firefighting equipment layout	Layout Plan submitted
8.	Analysis reports of ambient air, ground water and noise levels from NABL/MoEF accredited		Field data sheets submitted

	laboratories as per detail below:- (i) The field data sheets as prescribed by SEIAA, Punjab which are available on the official website of SEIAA, Punjab along with exact location of sampling/monitoring point marked on the layout map should be filled at the time of sample collection/monitoring by the Lab and should be attached with the water, air, noise & soil monitoring reports. (ii) Water, air, noise & soil monitoring reports more than 6 months old or prior to date of signing of consent letter/agreement with the land owner shall not be accepted w.e.f. June, 1st, 2015 onwards. (iii) Atleast one groundwater sample from the shallow/first aquifer and in case groundwater is to be abstracted for drinking purposes then atleast one groundwater sample from the said aquifer should be mentioned and reports be attached accordingly.	i. Submit field data sheets. ii. Specify page no. of water, air, noise & soil monitoring test reports & if not attached please attach.	Test reports submitted

9	Energy conservation measures, quantification of energy saved and renewable energy devices used.	Submit the details & quantify energy saved.	All th exterior lights will be standalone solar lights and the internal lighting will be LED based. The induction furnace will be energy efficient processing the same charge in lesser time. By using solar lights for external lighting and LED for internal lighting, there will be energy savings of 100% and 80 % resp. By employing Induction Furnace with 90 mins per heat time as compared to 120 mins in vogue, there will be 25% saving in energy. By using high melting furnace, the holding time will be shortened.
10	Construction schedule (PERT/CPM chart)	Submit PERT/CPM chart	No new construction will be done.

It is pertinent to mention here that the project proponent has not submitted satisfactory reply of point no 4 i.e whether the project area falls in whole or partially within 5.0 Km from the boundary of critical polluted area notified by MoEF&CC. Also, PPCB has not submitted reply in reference to letter no. 931 dated 16.07.2018.

2.0 Deliberations during the 186th meeting of SEAC held on 26.12.2019

The case was considered by the SEAC in the 186th meeting held on 26.12.2019 and same was attended by the following on behalf of the project proponent:

(i) Sh. Binny Gupta- Director of the promoter company.
(ii) Sh. Sumitava Dutta & Sh.Sandeep Singh , FAE, M/s CPTL, Chandigarh, Environment consultant of the promoter company.

Before allowing the project proponent to present salient features of the project, to a query of SEAC, project proponent submitted topography sheet mentioning the distance 6.1 Km from the boundary of MC Limit/ Critically Polluted Area of Ludhiana alongwith undertaking and letter dated 16.11.2018 from MC Ludhiana regarding more than 5 km distance of M/s Renny Alloys Pvt. Ltd located at village Lakhowal (Unit near to M/s Renny Strips Pvt. Ltd.) from the boundary MC limit of Ludhiana.

SEAC made it clear to the project proponent, that in case, information submitted by project proponent 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 his risk and cost. The committee will not be responsible for any loss. The project proponent agreed with the same. Thereafter, the SEAC allowed the project proponent to present the salient features of the project as under:-

<table>
<tr><td>1.</td><td>Name and Location of the project</td><td colspan="2">M/s Renny Strips Pvt. Ltd. (Furnace Division) Village-Mangarh, Machhiwara Road, Near Kohara, District-Ludhiana, Punjab</td></tr>
<tr><td>2.</td><td>Nature of project (Fresh/Expansion Amendment/Others)</td><td colspan="2">Expansion project</td></tr>
<tr><td>3.</td><td>a) Category
b) Activity
(as per schedule appended to EIA Notification, 2006 as amended time to time.)</td><td colspan="2">a) B-1
b) 3(a)
Metallurgical Industries
(Ferrous &Non Ferrous Alloys).</td></tr>
<tr><td>4.</td><td colspan="3">Area Details
<table>
<tr><th>Sr no.</th><th>Particulars</th><th>Area (sqm)</th></tr>
<tr><td>1</td><td>Total area of plot</td><td>2936.00</td></tr>
<tr><td>2.</td><td>Area left as /C.L.U.</td><td>102.95</td></tr>
<tr><td>3.</td><td>Net area of plot</td><td>2832.00</td></tr>
<tr><td>4.</td><td>Ground Coverage (40.55%)</td><td>1148.68</td></tr>
<tr><td>5.</td><td>Total Covered Area</td><td>1148.68</td></tr>
<tr><td>6.</td><td>Plantation Area (33.14%)</td><td>938.57</td></tr>
<tr><td>7.</td><td>Road Area (14.59%)</td><td>413.29</td></tr>
<tr><td colspan="3">Shed Details</td></tr>
<tr><td>8</td><td>Total Shed Covered Area</td><td>1118.58</td></tr>
<tr><td>9</td><td>Raw (Scrap) Material Area</td><td>661.30</td></tr>
<tr><td>10</td><td>Finished Goods Area</td><td>71.28</td></tr>
<tr><td>11</td><td>Working/Furnace Area</td><td>260.26</td></tr>
<tr><td>12</td><td>Office & Toilet Block Area</td><td>55.71</td></tr>
<tr><td>13</td><td>Hazardous Waste Storage Area</td><td>12.29</td></tr>
</table></td></tr>
<tr><td>4.</td><td>Co-ordinates of the project site</td><td colspan="2">Latitude: -
$30^0$52’22.57”N,$30^0$52’22.86”N
$30^0$52’19.90”N, $30^0$52’20.00”N
Longitude:-
$76^0$01’04.57”E, $76^0$01’06.02”E,
$76^0$01’05.96” E, $76^0$01’04.50” E</td></tr>
</table>

5.	Project Cost (After expansion)	Rs. 10.00 Crores
6.	Raw Material requirement (After expansion)	MS Scrap & Ferro Alloys@ 71,280 TPA
7.	Production Capacity	Steel Ingots/ Billets@ 64,800 TPA
8	Details of major productive machinery/plant (After expansion)	(i) Induction furnace (1X15 TPH) ii) EOT Crane: 03 Nos
9.	Manpower (After expansion)	200 persons
10.	Water Requirements & its source(After expansion)	Total Water Demand: 30KLD i) Domestic: 9.0 KLD ii) Cooling: 21.0KLD The application has been submitted to CGWA for ground water abstraction is for capacity 10 KLD whereas the total requirement is 30 KLD which will be fulfilled through treated water of STP of MC Ludhiana or STP of nearby industries for industrial purposes.

11. Details of Effluent (After expansion)

Sr. No.	Details	Quantity (After Expansion)	Remarks
iii)	Industrial Effluent	Nil	No industrial effluent generated
iv)	Domestic Effluent.	7.2 KLD	STP of 15KLD capacity will be installed & treated water used in Plantation/Green Area

12. Details of Emissions(After expansion)

Sr. No.	Source	Capacity	Chimney Height (m)	Air Pollution Control Device
i)	Induction Furnace	1 x 15 TPH	30 m each	Side suction Hood spark arrestor followed by Bag Filter
ii)	DG sets	125 KVA	3.0 m	Equipped with Canopy

13. Details of Hazardous waste and its disposal(After expansion)

Sr. No.	Hazardous Waste Category	Quantity (After expansion)	Disposal
i)	Cat.35.1 – Exhaust air or Gas cleaning Residue	18TPA	Shall be reprocessed through M/s Madhav Alloys, Fatehgarh Sahib, for recovery of metal. In case non acceptance by the reprocessors, the hazardous waste to be given CSTDF, Nimbua
ii)	Cat.5.1 – Used Oil	0.010KL per annum	Lubricant within the industry

14. Solid waste generation and its disposal(After expansion)

Sr. No.	Solid Waste	Quantity (After Expansion)	Disposal

	(i)	Slag	10.0 TPD	Shall be reprocessed through M/s Aggarwal Brick Works after recovery of metals for manufacturing of bricks

15.	Energy Requirements (After expansion)	i) Power load: 4,990 KW through PSPCL. ii) Single silent DG set of capacity 125 KVA as stand-by arrangement.

16. Environment Management Plan

Environment Management Cell (EMC) shall be responsible for implementation of EMP which consists of Director of the company, representative of management, process-in-charge, in-charge maintenance and a representative of environmental consultant. The budgetary requirement for implementation of EMP is as under:-

Sr. No	**Title**	**Capital Cost Rs. Lakh**	**Recurring Cost Rs. Lakh**
1.	Pollution Control during construction stage	2.0	---
2.	Air Pollution Control (Installation of APCD)	50.0	3.0
3.	Water Pollution Control / septic tank upgradation	5.0	0.5
4.	Noise Pollution Control (Including cost of Landscaping, Green Belt)	3.0	0.10
5.	Solid Waste Management	2.0	--
6.	Environment Monitoring and Management	3.0	--
7.	Occupational Health, Safety and Risk Management	5.0	--
8.	RWH	4.0	--
9.	Miscellaneous	1.0	--
	Total	75.0	3.6

17.	Modified Traffic Scenario & Los (including additional transportation due to M/s Renny Strips Pvt. Ltd. & M/s Renny Strips Pvt. Ltd. (Furnace Division)	After the proposed expansion coming into being on an average 35 trucks (M/s Renny Strips Pvt. Ltd. & M/s Renny Strips Pvt. Ltd. (Furnace Division)) will be involved in the transportation of Raw Material and furnished products which will be transported via either side of this road.

Locations	V (Volume in PCU/day)	C (Capacity in PCU/day)*	Existing V/C ratio	LOS
Point 'A' : 500m f Kohara Chowk tow Machhiwara	5295	15000	0.35	B
Point 'B' : 500m f the industry tow Machhiwara	4998	15000	0.33	B

From the above traffic analysis, it is observed that due to additional transportation of raw materials & products, the LOS will be insignificantly affected and the performance of road will remain the same.

18 CER activities along with budgetary break up and responsibility to implement

An amount of Rs. 10.0 Lakhs has been earmarked for CER. (Corporate Environment Responsibility) as per Office Memorandum vide F. No. 22-65/ 2017-IA.III dated 01.05.2018. The details of activities provided in EDS submitted on 24.08.2019 have been mentioned as under:

S.No.	Activity	Environment Aspect	Cost (Rs. Lac)	Recurring Cost (Rs. Lac)	Timeline
1.	Providing BioToilets 02 No's in Village-Mangarh	Water Pollution	2.0	0.10	Within one year of grant of EC
2.	Providing ambulance for nearby dispensary		4.0	0.60	Within one year of grant of EC
3	Development of Crematorium and tree plantation there in Village	Air Pollution Control Mangarh Air Pollution Control 4.0 0.10 Within 15 months of grant of EC	4.0	0.10	Within 15 months of grant of EC
TOTAL			**10.0**	**0.80**	

SEAC raised the following queries to the project proponent to which he replied as under:-

Observation 1 : Submit the proposal on Rain Water Harvesting & Recharging of a Govt. Sr. Sec. school at village Lakho-Gaddowal, District Ludhiana w.r.t. CGWA guidelines.

Reply 1: Reply submitted by the project proponent reproduced as under:-

Rain Water Harvesting & Recharging inside the steel industry and roof top may contain various metallic constituents, air born from the process activity as well as from the stacks of various industries. So, the industry has adopted Sr. Sec. school at village Lakho-Gaddowal, District Ludhiana (Pb) and submitted Adoption agreement dated 31.05.2019 including no objection from school authorities.

Water required to be harvested:

Total water requirement of the Industry - 30 m^3,

Annual water abstraction- 10,500 m^3,

Quantity of RW required to be harvested as per CGWA - 21,000 m^3

Recharge through School premises:

The industrial unit has adopted one School (area of 47727.6 m^2) for rain water harvesting. The detailed calculations for rain water harvesting through school is given in table given below:-

Description	**Area (in m^2)**	**Runoff Coefficient in %**	**Rainfall (m)**	**Availability of Surface runoff water (cum)**
Roof top building area	19091.1	0.9	0.700	12027.4
Green area	4772.8	0.3	0.700	1002.29
Open area	23863.7	0.5	0.700	8352.3
Total water available				21382.0

The recharge will be done as per the guidelines of CGWA.

Observation 2 : Submit the revised water balance diagram for Green area w.r.t. summer, winter and rainy season

Reply 2: The project proponent submitted the water balance diagram as under: -

S.No.	**Season**	**Green area water demand in KLD**	**Source of water**

1	Summer	5.2	Treated water from STP
2	Winter	1.7	
3	Rainy	0.5	Treated water from STP
The project proponent has submitted undertaking regarding application submitted to CGWA for ground water abstraction is for capacity 10 KLD whereas the total requirement is 30 KLD which will be fulfilled through treated water of STP of MC Ludhiana or nearby industries for industrial purposes.			

Observation 3 : Submit the blockwise detail of the green area to be developed by the project proponent.

Reply 3: The project proponent submitted that green area has been kept to an extent of 968.88 m^2 (33%) of the total project area, wherein 46 trees have already been planted and another 100 trees will be planted in the industry premises. The native plant species like Jamun, Arjun, Mulberry, Poplar, Shisham, Kikkar will be planted in the industry premises. The detail calculations of green area submitted as under:-

Description	**Area (m^2)**	**No. of plants**
Green area-I	123.60	18
Green area-II	525.47	76
Green area-III	221.95	36
Green area-Iv	31.83	6
Green area-V	66.03	10
Total	**968.88**	**146**

Observation 4 : Submit the various component of the project cost such as cost of Land, Building and machinery etc.

Reply 4: The project proponent submitted an undertaking to the effect that the gross value (comprising existing and proposed cost) of the project having land, building and plant & machinery etc. in the project named as M/s Renny Strips Pvt. Ltd. (Furnace Division) at Village- Mangarh, Machhiwara Road, Near- Kohara, District- Ludhiana, Punjab is Rs 10 Crores. The breakup of project cost is as follows:-

Sr. No.	Description	Existing (Rs. in Crores)	Proposed (Rs. in Crores)	Total Cost (Rs. in Crores)
1.	Land	3.55	Nil	3.55

2.	Building	1.25	0.51	1.76
3.	Machinery	2.13	1.86	3.99
4.	Others	0.50	0.20	0.70
Total		7.43	2.57	10.00

Observation 5 : The project proponent was asked to install Pulse-jet Bag Filter APCD with offline cleaning technology.

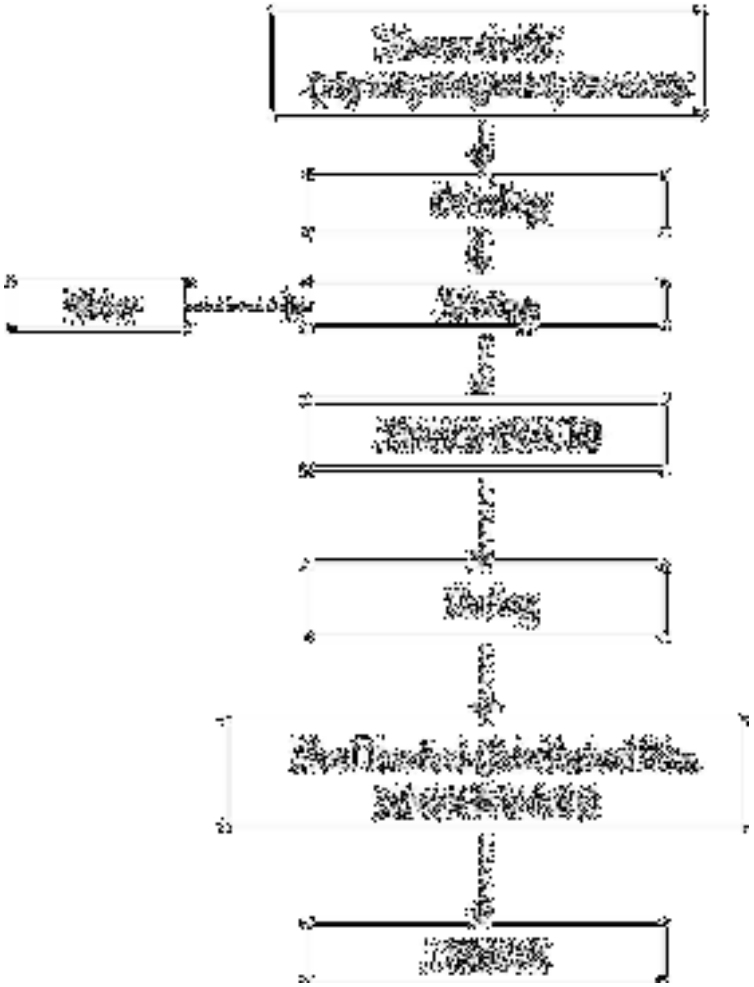
Reply : The project proponent agreed to install Pulse-jet Bag Filter APCD with offline cleaning technology & submitted undertaking.

The SEAC observed that the project proponent has provided adequate, satisfactory clarifications to the observations raised by it and awarded **'Silver Grading'** to the project proposal

Observation 6 : The project proponent was asked to submit the Slag utilization certificate along with process details of manufacturing interlocking tiles.

Reply : The project proponent submitted the details as under :

M/s Aggarwal Bricks works located at village- Duley, Alamgir, District- Ludhiana is engaged in manufacturing of interlocked tiles. Our slag utilization capacity is 25 TPD. We have made an agreement with M/s Renny Strips Pvt. Ltd. (Furnace Division) located at village Mangarh, Machhiwara road, Kohara, District- Ludhiana (Pb,) to slag offtake of 10 TPD. The manufacturing process flow diagram is as under:-



3.0 Recommendations

After detailed deliberations, SEAC decided that case be forwarded to SEIAA with the recommendations to grant environmental clearance for expansion of its existing unit located in the revenue estate of Mangarh, Macchiwara Road, Kohara, Distt. Ludhiana, Punjab by M/s Renny Strips Pvt. Ltd. (Furnace Division) as per the details mentioned in the EIA study & subsequent presentation / clarifications made by the project proponent and his consultant with aforesaid salient features after expansion and conditions as under:-

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 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 concerned State pollution Control Board/ Committee.

v. The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water from the competent authority concerned 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.

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 Housing and Urban Development Department vide No. PBIP/CAPA/(HUD/2017/873 dated 04.09.2017.

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 vide G.S.R 277 (E) dated 31stMarch 2012 (applicable to IF/EAF) as amended from time to time; S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time) and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized 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 laboratories recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.

iii. The project proponent shall install system carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PMIO and PM25 in reference to PM emission, and S02 and NOx in reference to S02 and NOx emissions) within and outside the plant

area (at least at four locations one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions. (case to case basis small plants: Manual; Large plants: Continuous).

iv. The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality/ fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six monthly monitoring report.

v. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources.

vi. The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.

vii. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.

viii. Recycle and reuse iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/ agglomeration.

ix. The project proponent shall use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.

x. The project proponent shall provide covered sheds for raw materials like scrap and sponge iron, lump ore, coke, coal, etc.

xi. The project proponent shall provide primary and secondary fume extraction system at all melting furnaces.

xii. Design the ventilation system for adequate air changes as per ACGIH document for all tunnels, motor houses, Oil Cellars.

III. Water quality monitoring and preservation

i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R 277 (E) dated 3151 March 2012 (applicable to IF/EAF) as amended from time to time; S.O. 3305 (E) dated 7thDecember 2015 (Thermal Power Plants) as amended from time to time) and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories. (case to case basis small plants: Manual; Large plants: Continuous)

ii. The project proponent shall monitor regularly ground water quality at least twice a year (pre and post monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.

iii. The project proponent shall submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.

iv. Adhere to 'Zero Liquid Discharge'.

v. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.

vi. The project proponent shall provide the ETP for effluents of rolling mills to meet the standards prescribed in G.S.R 277 (E) 31stMarch 2012 (applicable to IF/EAF) as amended from time to time.

vii. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off

viii. The project proponent shall practice rainwater harvesting to maximum possible extent i.e. school adopted in the Village Lakho Gaddowal (area 47727.6 m^2) for rain water recharging @ 21382 m^3/annum as per the CGWA norms.

ix. The project proponent shall make efforts to minimize water consumption in the steel plant complex by segregation of used water, practicing cascade use and by recycling treated water.

IV. Noise monitoring and prevention

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

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

V. Energy Conservation measures

i. The project proponent shall provide waste heat recovery system (pre-heating of combustion air) at the flue gases of reheating furnaces.

ii. Practice hot charging of slabs and billets/blooms as far as possible.

iii. Ensure installation of regenerative type burners on all reheating furnaces.

iv. Provide solar power generation on rooftops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly.

v. Provide the project proponent for LED lights in their offices and residential areas.

vi. By employing energy efficient Induction Furnace, it will process the same charge in lesser time. Running IF with 90 mins per heat time as compared to 120 mins in vogue, there will be 25% saving in energy. By using high melting furnace, the holding time will be shortened.

VI. Waste management

i. Used refractories shall be recycled as far as possible.

ii. Oily scum and metallic sludge recovered from rolling mills ETP shall be mixed, dried, and briquetted and reused melting Furnaces

iii. 100% utilization of fly ash shall be ensured. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding in this regard shall be submitted to the Ministry's Regional Office.

iv. The waste oil, grease and other hazardous waste shall be disposed of as per the Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016.

v. Kitchen waste shall be composted or converted to biogas for further use.(to be decided on case to case basis depending on type and size of plant)

VII. Green Belt

i) Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant. The industry shall ensure that most of the periphery shall be provided with green belt by removing the unwanted/non-productive structures already provided in the existing project near the boundary wall.

ii) The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration including plantation.

VIII. 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 project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms of Factory Act.

iii. 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.

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

v. The project proponent shall carry out the activities and spent an amount as committed during the Public Hearing and give preference to the local person as per the qualification to be employed in the expansion project.

IX. Corporate Environment Responsibility

i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility. The project proponent shall adhere to the commitments made in the proposal for CER activities for spending atleast minimum amount of Rs. 10 Lacs as capital cost and 0.8 lacs/annum towards following CER activities:

S.No.	Activity	Environment Aspect	Cost (Rs. Lac)	Recurring Cost (Rs. Lac)	Timeline
1.	Providing Bio-Toilets 02 No's in Village- Mangarh	Water Pollution	2.0	0.10	Within one year of grant of EC
2.	Providing ambulance for nearby dispensary	--	4.0	0.60	Within one year of grant of EC
3.	Development of Crematorium and tree plantation there in Village- Mangarh	Air Pollution Control	4.0	0.10	Within 15 months of grant of EC
TOTAL			**10.0**	**0.80**	

However, CER activities shall strictly be in accordance with the activities listed out in the OM dated 01.05.2018 and as per the proposal submitted by the project proponent. 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 must be completed with the completion of the project.

The entire activities proposed under CER shall be treated as project and shall be monitored. The monitoring report shall be submitted to the regional office as a part of half-yearly compliance report and to the District Collector.

ii. The company shall have a well laid down environmental policy duly approve 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.

iii. 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.

iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. The project proponent shall spend minimum amount of Rs 75 Lacs towards capital cost and Rs 3.6 Lacs / annum towards recurring cost. The entire cost of the environmental management plan will continue to be borne by the project proponent. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

v. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six-Monthly Compliance Report.

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

vii. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the plants shall be implemented.

XIII. Validity

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

XIV. Miscellaneous

i. 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.

ii. 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.

iii. 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.

iv. 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.

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

vi. 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.

vii. 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.

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

ix. 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 State Expert Appraisal Committee.

x. 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).

xi. 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.

xii. The SEIAA/Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

xiii. The SEIAA/ Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

xiv. 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 by furnishing the requisite data / information/monitoring reports.

xv. 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.

xvi. 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.

ADDITIONAL SPECIFIC CONDITIONS DECIDED DURING MEETING OF SEAC

i. The project proponent shall minimize the water consumption in the steel plant complex by segregation of used water, practicing cascade use and by recycling treated water.

ii. The project proponent shall provide STP for treatment of waste water & reutilization of the treated water for core/non-core activities so as to achieve the Zero Liquid Discharge Condition as per the III (iv) of OM dated 09/08/2018 issued by the MoEF&CC for such units.

iii. The project proponent shall reuse of cooling tower blow down, simultaneously ensuring the standards prescribed for such purge waters. If required, necessary arrangements shall be made to keep this waste stream within the parameters required for reuse.

iv. A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site. Sand, murram, loose soil, cement, stored on site shall be covered adequately and Water sprinkling system be put in place so as to prevent dust pollution.

v. The project proponent shall reserve land for loading or unloading of raw material, products, slag, hazardous waste as well as for storage of these materials and the area to be reserved for parking. The area to be reserved by considering the time

required for loading and unloading of vehicles for respective activities and minimum/maximum period for which storage of the above material is required in the premises. The areas for the respective activities to be marked on the layout plan.

vi. The project proponent shall comply with the standard operating procedures and upgradation of suction and treatment arrangement for the secondary emissions as prescribed by the State Pollution Control Board or by CPCB/MoEF&CC.

vii. Whole of the vehicle movement area as well as approach road to the gate /weighing bridge shall be paved with pucca / metalled / cement concrete road to control the dust emissions expected from the vehicle movement.

viii. The vehicles to be used for loading / unloading purpose shall not be parked along roadside so as to avoid the traffic congestion and dedicated parking place to be provided for the same.

ix. The project proponent shall adopt green technologies to conserve the water and energy including shearing / cutting / bundling machines. Also to provide abrasive resistant fire bricks in the crucibles to reduce the periodic maintenance & disposal of discarded fire bricks.

x. The project proponent shall use natural gas (if available) as substitute fuel wherever possible in the existing industry/ for expansion project.

xi. The project proponent shall take necessary action w.r.t. the following:-

a) Recovery of iron from slag before disposing it off.

b) Identify the areas for utilization of slag in scientific manner and its usage in cement / construction industry / road laying etc.

c) Recovery of precious metals like Zinc, lead and iron etc. from the APCD dust (Hazardous waste) through authorized re-processor.

xii. The project proponent shall install the pulse jet bag filter APCD with offline cleaning technology with the proposed induction furnace.

Item No. 186.08: Application for for obtaining Environmental Clearance (EC) under EIA notification dated 14.09.2006 for Expansion of existing water based paints, powder coating paints and emulsion manufacturing facilities in its Integrated Paint Manufacturing Facility at Phase II, Goindwal Industrial Complex, Village - Goindwal Sahib, Tehsil- Khadur Sahib, District- Tarn Taran, Punjab by M/s Kansai Nerolac Paints Limited (Proposal no SIA/ PB/IND2/ 21582/2018).

SEAC observed that :

The project proponent has filed application for obtaining Environmental clearance under EIA Notification, 2006 for Expansion of existing water based paints, powder coating paints and emulsion manufacturing facilities in its Integrated Paint Manufacturing Facility at Phase II, Goindwal Industrial Complex, Village - Goindwal Sahib, Tehsil- Khadur Sahib, District- Tarn Taran, Punjab. The project is covered under category 5(a)- "Integrated Paint Industries" of the Schedule appended to the said notification.

The project was earlier granted TOR vide letter no. SEIAA/2018/473 dated 09.04.2018 with Standard Terms of Reference and additional specific TORs decided during meeting of SEAC.

Now, the project proponent has submitted EIA report. The details are as under:

<table>
<tr><td>1</td><td>Name and Location of the project</td><td>M/s. Kansai Nerolac Paints limited, Village- Goindwal Sahib, Tehsil- Khadur Sahib, District- Taran Taran, Punjab</td></tr>
<tr><td>2.</td><td>Category / Item No. (in schedule)</td><td>5 (a) Integrated Paint Industry</td></tr>
<tr><td>3.</td><td colspan="2">Area Details
<table>
<tr><th>Details</th><th>Existing land area</th><th>Greenbelt area</th><th>Area for Expansion</th></tr>
<tr><td>Plot Area</td><td>142179 sqm</td><td>4692 sqm</td><td>26,274 sqm</td></tr>
</table></td></tr>
<tr><td>4.</td><td colspan="2">Co-ordinates of the project site
<table>
<tr><th>NAME</th><th>LATITUDE</th><th>LONGITUDE</th></tr>
<tr><td>A</td><td>31° 21' 42.10"N</td><td>75° 7' 57.60"E</td></tr>
<tr><td>B</td><td>31° 21' 47.10"N</td><td>75° 7' 50.00"E</td></tr>
<tr><td>C</td><td>31° 21' 45.50"N</td><td>75° 7' 48.60"E</td></tr>
<tr><td>D</td><td>31° 21' 42.30"N</td><td>75° 7' 45.80"E</td></tr>
<tr><td>E</td><td>31° 21' 36.10"N</td><td>75° 7' 40.40"E</td></tr>
<tr><td>F</td><td>31° 21' 35.90"N</td><td>75° 7' 40.20"E</td></tr>
<tr><td>G</td><td>31° 21' 40.30"N</td><td>75° 7' 33.20"E</td></tr>
<tr><td>H</td><td>31° 21' 40.70"N</td><td>75° 7' 32.80"E</td></tr>
<tr><td>I</td><td>31° 21' 39.70"N</td><td>75° 7' 32.80"E</td></tr>
<tr><td>J</td><td>31° 21' 35.20"N</td><td>75° 7' 39.70"E</td></tr>
<tr><td>K</td><td>31° 21' 33.00"N</td><td>75° 7' 37.60"E</td></tr>
<tr><td>L</td><td>31° 21' 28.10"N</td><td>75° 7' 45.70"E</td></tr>
<tr><td>M</td><td>31° 21' 34.30"N</td><td>75° 7' 50.30"E</td></tr>
</table></td></tr>
<tr><td>5.</td><td>Project Cost</td><td>Rs. 370 crores</td></tr>
<tr><td>6.</td><td colspan="2">Raw Material requirement</td></tr>
</table>

S. No.	Chemical	State	Storage means	Size of storage means	Consumption (MT/Month)
	Product: Water based paint				
1.	Additives	Powder & liquid	Bag, barrel & Carboy	Bag: 25 kg Barrel: 200 liters Carboy: 25 Liters.	310
2	Biocides	Powder & liquid	Bag, barrel & Carboy	Bag: 25 kg Barrel: 200 liters Carboy: 25 Liters.	162
3	Driers	Liquid	Barrel	200 Liters	3
4	Emulsion	Liquid	Barrel, Carboy, Storage Tank	Barrel: 200 Liters Carboy: 25 Liters Storage Tank: 30 KL	2850
5	Extenders	Powder	Bag	25 Kg	4073
6	Pigments	Solid, Liquid, Paste	Bag , Carboy	Bag:25 Kg Carboy: 25 Kg	383
7	Liquor ammonia	Liquid	Carboy	Carboy: 25 Liter	27
8	Chemicals	Powder, Solid	Bag	25 Kg	112
9	TiO2	Powder	Bag	25 Kg	725
10	Water	Liquid	Storage Tank	60 KL	5650
	Product: Powder coating paint				
11	Additive	Solid	Bag	25 kg	22
12	Catalyst	Solid	Bag	25 kg	0.5
13	Extender	Solid	Bag	25 kg	444
14	Hardener	Solid	Bag	25 kg	7
15	Metallic Pigment	Solid	Bag	25 kg	0.2
16	Pigment	Solid	Bag	25 kg	99

S. No.	Chemical	State	Storage means	Size of storage means	Consumption (MT/Month)
17	Resin	Liquid, Solid	Barrel, Bag	200 Liter, 25 Kg	650
18	Wax	Solid	Bag	25 kg	3
	Product : Emulsion				
19	Additives	Powder	Bag	20 kg	4.7
20	Chemicals	Powder, Liquid	Bag, Carboy, Barrel	Bag- 25 kg Carboy: 25 liter Barrel: 200 liter.	140
21	Monomer	Liquid	Storage Tank	Styrene :60 KL Other Monomers– 100 kl	1386.5
22	Liquor ammonia	Liquid	Carboy	25 liters	24.5
23	De-ionized water	Liquid	Storage tank	60 KL	1471.5
24	Biocides	Liquid	Carboy	25 liters	3.75

7. Production Capacity

S.No.	Name of Products	Unit	Production capacity	Proposed Expansion	Total Capacity
1	Water based paints	TPA	38000	74000	112000
2	Powder coating paints	TPA	14400	nil	14400
3	Emulsion	TPA	24000	12000	36000

9. Manpower

Man-power requirement for manufacturing facility is approx. 145 nos. (Permanent and contract basis).

10. Water Requirements & its source

Total Water Demand: 711 KLD

i) Recycled water 165 KLD
ii) Fresh water demand: 546 KLD

The main source of water available in the area is PSIEC water supply and bore well after prior permission from CGWA.

11. Details of Effluent

No.	Details	Quantity (After Expansion)	Remarks

	i)	Industrial Effluent	111	The effluent generated from the domestic use will be separately treated in STP and treated water will be completely reused in gardening. The industrial effluent will be collected separately and treated in ETP followed by RO & MEE. Treated water from RO and MEE will be recycled and reused in plant premises. The ETP sludge and salts will be disposed at TSDF.
	ii)	Domestic Effluent.	KLD	

12. Details of Emissions

Sr. No.	Source	Existing Capacity	Proposed capacity	Chimney Height (m)
i)	Boiler	300 Kg/Hr	450 kg/hr	30.0
ii)	Boiler	900 Kg/Hr	1000 kg/hr	30.0
iii)	DG SET	2000 KVA	2000 KVA	30.0
iv)	DG SET	2000 KVA	2000 KVA	30.0
v)	DG SET	0	500 KVA	30.0

13. Details of Hazardous waste and its disposal

Sr. No.	**Hazardous Waste Category**	**Quantity (After expansion)**	**Disposal**
i)	ETP sludge	95 Tons	TSDF
ii)	Used/spent oil	6 Tons	PPCB approved authorized recycler
iii)	Oil/grease scheming residue	3 Tons	PPCB approved authorized recycler
iv)	Process waste/residue/sludge	100 Tons	TSDF
v)	Distillation sludge	130 Tons	TSDF
vi)	Contaminated cotton waste/liner	15 Tons	TSDF
vii)	Filler residue	30 Tons	TSDF

viii)	Discarded containers/Bags, barrel liners	197920 Nos	PPCB approved party
ix)	MEE Salt	51 Tons	TSDF

14. Solid waste generation and its disposal

i) Non - hazardous waste like paper and plastic waste, wooden scrap, metal scrap, will be sold to recyclers.

ii) The Sludge generated from the STP of ~14 kg/day will be used as manure for greenbelt development.

iii) Kitchen / Canteen wastes and other biodegradable wastes will be sent to Vermi-composting.

15.	Energy Requirements	Punjab State Power Corporation Ltd (PSPCL) will supply power. The peak power demand will be 4200 KVA. The DG set (2 nos. x 2000KVA, 1no x 500 KVA) will be installed and will be used in case of power failure

16. Environment Management Plan

S. No.	Designation	Proposed responsibility
1.	Works Manager	Overall responsible for Environmental Issues of the plant, Environmental policy and directions
2.	EHS Manager	Overall responsibility for environmental management and decision making for all environmental issues
3.	EHS Officer	Overall in-charge of operation of environmental management facilities Ensure environmental monitoring as per appropriate procedures Ensure correct records of generation, handling, storage, transportation and disposal of solid hazardous wastes. Ensuring legal compliance by properly undertaking activities as laid down by various regulatory agencies from time to time and interacting with the same and arranging awareness programme among the workers

The budgetary requirement for implementation of EMP is as under:-

Sr. No	**Title**	**Capital Cost**	**Recurring Cost Rs. INR**

		Rs. Lakh	
1.	Ambient air monitoring of parameters specified by UPPCB consents from time to time (PM10, PM2.5, SO2, NOx)	5.0	48000 per Annum
2.	Stack monitoring of parameters specified by UPPCB consents from time to time	135	72,000 per Annum
3.	Maintaining record of water consumption and wastewater generation	250	-
4.	Monitoring of industrial effluent of parameters		30000 per Annum
5.	Analysis of sewage water		30000 per Annum
6.	Monitoring of groundwater		9000 per annum
7.	Ambient Noise level	50	2000 per Annum
8.	Maintaining record of Hazardous Waste Generation, Storage and Disposal	--	2,50,000 per Annum
9.	Hazardous waste (ETP Sludge) analysis	10	10,00,000 per annum
10	Greenbelt development	7.6	50,000 per annum

17. Other project approvals

i)	CTO from PPCB	Plant is currently under construction phase and CTE has been obtained from PPCB
ii)	Authorization for Hazardous Waste	Authorization for Hazardous waste has been obtained from NIMBUA GREENFIELD (PUNJAB) LIMITED vide letter no. Nibua/ACs/Gen 2016-2017/12273 dated 1st Aug 2016
iii)	CGWA Approval	At present there is no borewell at site. Assurance letter for water supply from PSIEC is given

		iv)	Certified compliance report from RO, PPCB	RO MoEF&CC, Chandigarh vide letter no, 5-02/2017- RO (NZ)/1256-1258 dated 17th December 2018

The case was considered by the SEAC in its 181st meeting held on 11.07.2019 and the same was attended by the following on behalf of the project proponent: -

(i) Sh. Indranath Chatterjee, Chief Manager, EHS, Industry

(ii) Ms. Parul Patel, EIA Co-ordinator, M/s Kadam Environmental Consultants Ltd Mohali, Environment Consultant of the promoter company

Before allowing the Project Proponent and his Environmental Consultant to present the salient features of the project, SEAC asked the project proponent to submit the compliance of observations raised by the Northern Regional Office of MoEF&CC at Chandigarh in the compliance report of earlier granted environmental clearance. Project proponent submitted the pointwise compliance but was unable to show the documentary evidence in support the compliance made to the observations. SEAC was not satisfied with the reply given by the project proponent and his environmental consultant. SEAC observed that in present case, the compliance report given by the Northern Regional Office of MoEF&CC at Chandigarh shows some observations to which the project proponent has claimed that they have made compliance of the same. However, in absence of any concrete evidence from the project proponent, as such before proceeding further, the action taken report is required to be got verified from the Regional office of MoEF&CC as per OM dated 07.09.2017. SEAC also observed that in order to avoid the delay, the Committee allowed the project proponent and his environmental consultant to present the salient features of the project so that the project proponent can submit the reply to the further observations (if any) raised in the present meeting.

SEAC asked the following queries to which project proponent and his environmental consultants sought time to attend the same:

a) Certificate from the revenue authority w.r.t area of the site falls under which block so as to ascertain its zone that the site does not fall under notified zone as declared by CGWA.
b) Water balance needs to be revised as treated waste water accounted for green belt purpose is not in consonance with the space available for its disposal within the premises. Simultaneously, alternative space/land required for disposal is to be worked out
c) Possibility of taking the reject of the boiler and demineralized plant directly into RO/UF instead of ETP so as to reduce the load on the treatment plant.
d) Possibility of recovery of the condensate water and its re-use.
e) Possibility of providing three stage RO plant to be explored to increase the RO permeate and to reduce the RO reject quantum so as to minimize the energy requirement for MEE. Ultimately, this will help in reducing the Air Pollution from fuel burning in boiler.
f) Re-examine the capacity of the boiler as presently proposed baby boiler of 450 kg/hour seems not to be sufficient for MEE.
g) Check the possibility of co-processing of Hazardous waste having high calorific value generated for cement kilns in place of dumping the same at CSTDF, Nimbua.

h) CER activities shall be proposed in accordance with the provisions of the OM dated 01.05.2018 and timeline for execution of the same to be specified.
i) Onsite & Offsite emergency plans and its compliance status to be submitted.
j) Copy of the NOC obtained from the Forest Department bearing signature of the issuing Authority be submitted.
k) Undertaking to the effect that no construction activity w.r.t. the proposed expansion for which this application for environmental clearance is submitted has been carried out.

After detailed deliberations, SEAC decided as under:

a) Northern Regional Office of MoEF&CC at Chandigarh be requested to re-verify the action taken by the project proponent w.r.t the observations raised by their office in the early Compliance report received from MoEF&CC and send the report at the earliest possible so that further action on the expansion application may be taken.
b) Case be deferred till the Project proponent and his Environmental Consultant attend the aforesaid observations & submit the complete reply.

In compliance to the above decisions, the Northern Regional Office of MoEF&CC at Chandigarh was requested vide letter no 859 dated 22/08/2019 to re-verify the action taken by the project proponent w.r.t the observations raised by their office in the early Compliance report received from MoEF&CC.

The decision of SEAC has been conveyed to the project proponent through online ADS (additional detail sought) facility available on the web portal and letter no 861 dated 22/08/2019. The project proponent has now submitted its reply through online system which is placed at Annexure-5 of the Agenda.

The case was considered by SEAC in 186th meeting held on 26.12.2019, but no one from the project proponent attended the meeting.

In light of Office Memorandum dated 25.02.2010 of MoEF, Govt. of India, the SEAC decided to defer the case and asked the project proponent to attend next meeting of the SEAC as and when held.

Item No. 186.09: Application for obtaining Environmental Clearance (EC) under EIA notification dated 14.09.2006 for establishment of a Warehouse Project located at Village Mehtabgarh (H.B. No.: 77), Tehsil Rajpura, District Patiala, Punjab by M/s Binny Warehousing, (Proposal No. SIA/PB/MIS/127612/2019).

SEAC observed as under:

The project proponent has filed an application for obtaining Environmental Clearance (EC) under EIA notification dated 14.09.2006 for establishment of a Warehouse Project located at Village Mehtabgarh (H.B. No.: 77), Tehsil Rajpura, District Patiala, Punjab by M/s Binny Warehousing. The details of the project as given in Form 1, Form 1A and other documents are as under:

The project proponent was raised following EDS on 09.12.2019 and the reply submitted by the project proponent is given as under:

S.No.	Detail of the Document	Submitted/Not submitted/Not applicable	Reply
1.	EC processing fee (DD No. & date) For B1 projects : At the time of TOR 25% and at the time of EC 75% For B2 project At the time of time of EC 100%	Not Submitted.	Submitted. EC processing fees of Rs. 64,650/- has been submitted through NEFT vide UTR No. Dr-COEP000319 dated 27.11.2019.
2.	Various documents to be submitted along with the EC are listed as under: 1. Is the project involves diversion of forest land. If yes, . Extent of the forest land. . Status of the forest clearance . In case, project involves diversion of forest land then the project proponent will file an application before the concerned DFO obtaining forest clearance under Forest (Conservation) Act, 198 and submit acknowledgement along-with copy of application submitted to concerned DFO	Not Submitted.	1. No. There is no diversion of forest land involved for the proposed project. 2. Project is not covered under PLPA, 1900. Further, NOC has been obtained from DFO, Patiala. Copy of the NOC has already been submitted **.**

	. (a) Is the project covered under PLPA, 1900, if No but located near to PLPA area then the project proponent is required to submit NOC from the concerned DFO to the effect that project area does not fall under the provision of PLPA Act, 1900. (b) Is the project covered under PLPA, 1900, if yes then Status of the NOC w.r.t PLPA, 1900. 3. If the project falls within 10 km of eco-sensitive area. If yes, (a) Name of eco-sensitive area and distance from the project site. (b) Status of clearance from National Board for Wild Life (NBWL). (c) The project proponent is required to submit either documentary proof to the effect that Wildlife Sanctuary is more than 10 kms from the project site or in case, the same is within 10 kms radius then, the project proponent will file an application before the concerned DFO, Wildlife for obtaining NBWL permission and submit acknowledgement along-with copy of application submitted to concerned DFO Wildlife for obtaining permission from NBWL.		3. No. There is no eco-sensitive area within 10 km of the project location and same has been mentioned in Form I(III) Environmental Sensitivity.
3.	a) Properly filled Form 1 & 1A along with signed declaration b) Brief Description of the project (Annexure-A) c) Co-ordinates of all the corners of the project	Attach kml file with all the coordinates	Submitted

4.	500 meter radius map of the area from periphery of project site clearly indicating the various industries (specifically red category industries) and structures lying in the area.	Not attached	Submitted
5.	Location plan showing the exact location of the project site w.r.t. some permanent / important features of the area and site plan of the project	Not submitted	Submitted
	showing the following: i) Location of STP ii) RWH and water recharge pits		(i) Septic tank has been proposed instead of STP; location of septic tank has already been submitted; Submitted. Submitted
6	Drawing showing plumbing systems for use of fresh, treated wastewater and hot water i.e. colour coding of the different lines	Not submitted	Now submitted
7.	Construction Phase i) Max. Water Requirement (KLD), Source of the Water and treatment facility Operation Phase	Not submitted	1. During Construction phase, water demand will be met through treated water from private tankers. Water demand will be 10 KLD. 2. During operation phase, water will be abstracted from borewell. Total groundwater water requirement for the project will be approx. 37.5 KLD

8.	Detail of water bodies near the proposed project and impact on drainage if any	Not submitted	Following water bodies exists within 15 km of the project: Taghansu minor : Approx. 1 km (NW) Rajkhand Minor : Approx. 1 km Saldkheri Minor : Approx. 1.7 km (E) Chatarnagar minor : Approx. 8 km (SE) Mardanpur Minor : Approx. 14 km (SE) Banur Canal Inundation : Approx. 5 km (E) Bhakra Main line canal : Approx. 8.5 km (SE) Ghagghar River : Approx. 13 km (NE) Although there will be no significant impact due to this project as the storm water flows naturally to the already laid storm water line along NH-1 i.e. Ambala-Ludhiana highway which is adjacent to the project and ultimately enters the Ghagghar river.

The project proponent was again raised EDS on 18.12.2019 and the project proponent replied as under:

S.No.	**Detail of the Document**	**Observations on the reply submitted**	**Reply**
1.	Earlier EDS As per the application, one warehouse exists with a built- up area of 1942.37 sq.m., whether the project proponent has got the building plan approved from the Department of Town & Country Planning/ PUDA/ MC before carrying out the construction of this warehouse. Why the case be not considered as a violation case as already construction of one warehouse.	i) No date has been mentioned in the drawing no 9 along with stamp. Please attached the covering letter, which was received by the company while obtain drawing approved from the Deputy Director of Factories.	i) Approval of Building plan was approved by Director of Factories vide letter No. DOF190491568 dated 22.04.2019.

	Reply Submitted : Earlier approved layout plan approved from Director of Factories, Punjab have already been submitted as **Drawing 9**. Further, existing warehouse details have been mentioned in Introduction part of Conceptual Plan along with respective approvals as annexures. Hence, it should not be considered as a violation case. (Refer Introduction part of Conceptual Plan Page no. 24 and Drawing 9 page No. 148)	ii) Whether existing building plan approved from the Department of Town & Country Planning/ PUDA/ MC before carrying out the construction of this warehouse. Specify in Yes or No. If No, please provide the reason for that. iii) If you see the drawing no 09, it was mentioned on the drawing as under:- a) Proposed ware house-1 b) Proposed ware house -2 c) Future expansion ware housing. Thus, the approved map itself, have all the components including the exiting warehouse-1 at the planning stage. Please clarify, how the existing ware house is separate from the planning of proposed project?	ii)No.As the warehouse is considered as industry so the competent authority for approval is Director of Factories. Thus, the layout is not approved by another authority. iii) The Drawing No. 9 is clearly mentioning that at the time of initial planning only 2 sheds (Warehouse 1 & 2) with a built-up area of 5,471.989 sq. were proposed. As the built-up area was < 20,000 sq.m. Thus, Environmental Clearance was not applicable at that stage. The Future expansion area clearly states that some part for land was reserved for future planning. Now we have done the planning on future expansion area and accordingly the built-up area is revised to 32,321.43 sq.m. Thus, application of EC has been submitted.

Environmental Engineer, Regional Office, Patiala vide email dated 19.12.2019 informed that the site was visited by Er. Gurkaran Singh, AEE of this office alongwith Sh. Darshan Punshi, representative of the project on 18/12/2019 and the report is as under:

"No construction work has been started at the site. During visit, it was observed that there is a godown of Good rick, tea indus tower warehouse, khal manufacturing unit (yet to be commissioned), waste rubber to power converting unit namely M/s Ganesh Rubber Industry, Abadi/ Village Mehtabgarh, passage under construction to Quark City, Ambala Delhi National Highway is located within the 500 meters radius of the proposed site, as shown by the represent of the industry. The project proponent during visit has also submitted copy of CLU in which it is mentioned that site falls in the mixed land use zone and industrial land use zone of statutory Master Plan of Rajpura and this activity is permissible. Since some part of the industry is located in the mixed land use zone as per policy of the Board, certificate of its location/ situation from the nearest village lal lakir/ phirni/ MC limits from revenue authorities may be obtained. The lal lakir and phirni of Vill. Mehtabgarh as shown by the resident of the village Sh. Kuldeep Singh is about 365 meter and 345 meters (checked from Google Earth), from the proposed site, shown by the representative of the project. But SDM certificate to verify the actual authenticated distances from the proposed site (as no boundary has been constructed) from landmarks, as per policy of the Board may be sought."

The case was considered by SEAC in its 186th meeting held on 26.12.2019 and was attended by the following on behalf of the project proponent:

i) Sh. Darshan Punshi, Partner.
ii) Sh. Sandeep Garg, M/s ECO Laboratories & Consultants Pvt. Ltd.

SEAC allowed the project proponent to present the salient features of the project and the Environmental Consultant of the same presented as under:

S.No.	Item	Details
1.	Online Proposal No.	**SIA/PB/MIS/127612/2019**
2.	Name and Location of the project	M/s Binny Warehousing Village Mehtabgarh (H.B. No.: 77), Tehsil Rajpura, District Patiala, Punjab.
3.	Latitude & Longitude	Corners coordinates of project location are: **A**- 30°28'21.71" N, 76°37'04.88" E ; **B**- 30°28'33.10" N, 76°37'09.26" E **C**- 30°28'37.20" N, 76°37'12.98" E **D**- 30°28'31.38" N, 76°37'20.81" E **E**- 30°28'27.68" N, 76°37'17.51".

<table>
<tr><td>4.</td><td>Project/activity covered under item of scheduled to the EIA Notification, 14.09.2006</td><td colspan="3">The project falls under Schedule 8(a) - 'Building and Construction project'.</td></tr>
<tr><td>5.</td><td>Whether the project is in critical polluted area or not.</td><td colspan="3">No</td></tr>
<tr><td>6.</td><td>If the project involves diversion of forest land. If yes,
a. Extent of the forest land.
b. Status of the forest clearance.</td><td colspan="3">No. Project does not involve any diversion of forest land.</td></tr>
<tr><td>7.</td><td>a. Is the project covered under PLPA, 1900, if No but located near to PLPA area then the project proponent is required to submit NOC from the concerned DFO to the effect that project area does not fall under the provision of PLPA Act, 1900.
b. Is the project covered under PLPA, 1900, if yes then Status of the NOC w.r.t PLPA, 1900.</td><td colspan="3">Project is not covered under PLPA, 1900.</td></tr>
<tr><td>8.</td><td>If the project falls within 10 km of eco-sensitive area/ National park/Wild Life Sanctuary. If yes,
a. Name of eco-sensitive area/ National park/Wild Life Sanctuary and distance from the project site.
b. Status of clearance from National Board for Wild Life (NBWL).</td><td colspan="3">No. The project does not fall within 10 km of eco-sensitive area/ National park/Wild Life Sanctuary.</td></tr>
<tr><td>9.</td><td>Classification / Land use pattern as per Master Plan</td><td colspan="3">The project falls under Mixed land use Zone and Industrial Land Use Zone as per Master plan of Rajpura.</td></tr>
<tr><td>10.</td><td>Cost of the project</td><td colspan="3">Rs. 17.71 Crores</td></tr>
<tr><td>11.</td><td>Total Plot area, Built- up Area and Green area</td><td colspan="3"><table><tr><th>S.No.</th><th>Description</th><th>Area</th></tr><tr><td>1.</td><td>Plot area</td><td>64,679.40 m^2
(or 15.98 acres)</td></tr><tr><td>2.</td><td>Built-up area</td><td>32,321.43 m^2</td></tr></table></td></tr>
</table>

		3.	**Existing Built-up area**	**1942.37 m^2**
		4.	Green area	6,700 m^2

12.	Population (when fully operational)	Estimated population: 30 Workers
13.	Water Requirements & source in Construction Phase	10 KLD of water will be required during construction phase which will be met by Private water tankers.
14.	Break up of Water Requirements & source in Operation Phase (Summer, Rainy, Winter):	

S.No.	Season	**Fresh water**		**Reuse water**	**Total (KLD)**
		Domestic (KLD)	**Green area 6700 sqm (KLD)**	**Green area 6700 sqm (KLD)**	
1.	Summer	1.5	36	1	37.5
2.	Winter	1.5	11	1	12.5
3.	Rainy	1.5	2	1	3.5

S.No.	**Description**	**Source of water**
1.	Domestic	Ground water
2.	Others (Pl define)	Green Area
3.	Green area	Treated wastewater & fresh water

15.	Treatment & Disposal arrangements of waste water in Construction Phase	Sewage generation during construction phase will be treated in Septic tank.
16.	Disposal Arrangement of Waste water in Operation Phase	1.2 KLD of sewage will be generated from the project which will be treated in septic tank. Treated water will be
	Phase	used for green area development.
17.	Rain water recharging detail	Total 7 no. of Rain water recharging pits will be provided to recharge the rooftop, paved and green area after treatment through oil & Grease traps.
18.	Solid waste generation and its disposal	a) 6 kg/day b) Solid waste will be appropriately segregated (at source. by providing bins) into recyclable, Bio-degradable Components, and non-bio-degradable. c) Bio-degradable will be converted into manure using Compost Pit d) Recyclable waste will be sold to authorized recyclers e) Inert waste will be disposed off to dumping site.
19.	Hazardous Waste & E-Waste	Used oil from DG sets will be sold to registered recyclers and E-waste will be disposed off as per the E-waste (Management) Amendment Rules 2018.

<table>
<tr><td>20.</td><td>Energy Requirements & Saving</td><td>a) 100 KW from PSPCL.
b) DG set 82.5 KVA capacity equipped with canopy will be used as standby arragments
c) LEDs will be used in place of CFL as energy saving measures.</td></tr>
<tr><td>21.</td><td>Environment Management Plan along with Budgetary break up phase wise and responsibility to implement</td><td>During construction & operation phase, Mr. Darshan Punshi will be responsible for implementation of the EMP till the project is handed over.
<table>
<tr><th>Description</th><th>Capital cost (lakhs)</th><th>Recurring cost (lakhs)</th><th>Monitoring of Air, Noise, water (per annum) Rs.</th></tr>
<tr><td>Construction</td><td>23</td><td>4</td><td>Rs. 1 lakh</td></tr>
<tr><td>Operation</td><td>-</td><td>7.6</td><td>Rs. 1 lakh</td></tr>
</table></td></tr>
<tr><td>22.</td><td colspan="2">CER activities along with budgetary break up and responsibility to implement.</td></tr>
<tr><td colspan="3">Mr. Darshan Punshi will be responsible for implementation of the CER activities. The estimated cost of project is Rs. 17.71 Crores. Rs. 5 lakhs has been reserved for C.E.R activities as per Office Memorandum vide F. No. 22-65/ 2017-IA.III dated 01.05.2018. The following activities have been
proposed to be covered under CER.
<table>
<tr><th>S.No.</th><th>Activities</th><th>Annual Expenditure (in Lakhs)</th><th>Timeline</th><th>Total Expenditure in 1 Year (in Lakhs)</th></tr>
<tr><td>1.</td><td>Road Maintenance of Village Mehtabgarh</td><td>5 lakhs</td><td>1 year</td><td>5</td></tr>
<tr><td></td><td>Total</td><td>Rs. 5 lakhs</td><td></td><td>Rs. 5 lakhs</td></tr>
</table></td></tr>
</table>

SEAC raised following queries to the project proponent and the project proponent replied as under:

Sr. No.	Observations	Reply submitted by the project proponent and his Environmental Consultant
1.	Whether the project proponent has got building plan approved from the Department of Town and Country Planning before carrying out the construction of one warehouse.	The building was approved from the Department of Factories.
2.	As to whether the permission from Deptt. of Forest under the Forest (Conservation) Act, 1980 and Wildlife (Protection) Act, 1972 has been obtained.	No forest land is involved at the project site.

3.	Whether online application for obtaining NOC for abstraction of ground water has been applied CGWA?	Online application has been submitted on the portal of CGWA for obtaining permission for abstraction of ground water and a copy of the same has been submitted.
3.	As to whether the land use of the area is permissible for the establishment of the project for which EC has been applied as per the provisions of Master Plan of the city.	CLU has been obtained from Department of Town & Country Planning vide memo no. 653- STP (P)/ SP- 327 dated 28.02.2019 for an area measuring 15.9791 acres.
4.	What will be the treatment proposal for the sewage expected from the labours / employees during the construction phase?	Septic tank will be provided for the treatment of waste water generated during construction phase.
5.	The project proponent has proposed to utilize ground water for 1.5 KLD for internal landscaping and 1.5 KLD of groundwater for domestic effluent. The project proponent should utilize treated wastewater for the landscaping purposes.	The project proponent submitted that the treated sewage water required for internal landscaping purpose will be obtained from nearby STP plant. The project proponent also submitted that they will not use any freshwater for landscaping purpose and domestic water requirement of 1.5 KLD will be met through water dispensable bottles or water tankers.
6.	The proposed CER activities are general and the project proponent is required to submit CER proposal specifically mentioning the activities.	The project proponent agreed to the same and submitted the new CER proposal to the effect that the amount of Rs. 5 lakh covered under CER will be utilized for development of toilets and its maintenance in the Govt. School in village Chamaru.

SEAC took a copy of presentation along with reply given by the project proponent and his environmental consultant on record.

After deliberations SEAC decided to award **'Silver Grading'** to the project proposal and to forward the application of the project proponent to SEIAA with the recommendations to grant Environmental Clearance for establishment of warehouse project having built up area 32,321.43 m^2 in total land area of 64679.40 sqm at village Mehtabgarh, Tehsil Rajpura, District Patiala, Punjab, as per the details mentioned in the Form 1, 1A, EMP & subsequent presentation / clarifications made by the project proponent and his consultant with, proposed measures, conditions:

I. Statutory compliance:

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

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

iii) 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.

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 Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board / Committee.

vi) The project proponent shall obtain the necessary permission for drawl of ground water/ 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 Chief Controller of Explosives, Fire Department, 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 confirm to the suitability as prescribed under the provisions laid down under the master plan of respective city/ town. For that, the project proponent shall either to submit the NOC/ land use conformity certificate from Deptt of Town and Country Planning or other concerned Authority under whom jurisdiction, the site falls.

xii) Besides 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 type of projects.

xiii) The project proponent shall get the layout plans approved from the Competent Authority for the activities / establishments to be set up at project site in consonance of the project proposal for which this environment clearance is applied.

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 ambient air quality at the site.

iii) The project proponent shall install system to carryout 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 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. The location of the DG sets may be decided with in consultation with State Pollution Control Board.

v) Construction site shall be adequately barricaded before the construction begins. Dust, smoke & 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, continuous dust/ wind breaking walls all around the site (at least 3m height or 1/3rd of the building height and maximum upto 10m). 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 & 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 area shall be prohibited. 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 earmarked area and road side 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 construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.

xiv) The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the 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 National Building Code of lndia.

xvi) Roads leading to or at construction site must be paved and blacktopped (i.e. metallic road)

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 measure be notified at the site. .

III. Water quality monitoring and preservation

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

ii) No construction shall be allowed to obstruct the natural drainage through the site, on 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 rain water.

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

iv) The total domestic water requirement for the project will be 1.5 KL/day, which shall be met with water dispensable bottles or water tankers.

v) a)The total wastewater generation from the project will be 1.2 KL/day, which will be treated in septic tank and the treated wastewater will be utilised onto land for plantation.

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

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

vii) The quantity of fresh water usage 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 along with six monthly Monitoring reports.

viii) 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 water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.

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

x) Installation of dual pipe plumbing 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, conditioning etc. shall be done.

xi) The respective project proponent shall discourage the installation of R.O. plants in their projects in order to save the wastage in form of RO reject. However, in case the requirement of installing RO plant is utmost necessary then the rejected stream from the RO shall be separated and shall be utilized by storing the same within the particular component i.e. (Tower/Mall) or in a common place in the project premises.

xii) The project proponent shall also adopt the new/innovating technologies like less water discharging taps (faucet with aerators)/urinals with electronic sensor system /water less urinals / twin flush cisterns/ sensor based alarming system for overhead water storage tanks and make it a part of the environmental management plans / building plans so as to reduce the water consumption/ground water abstraction in their Building Construction & Industrial projects.

xiii) The project proponent will provide colour coding of different pipe lines carrying water/wastewater from different sources / treated wastewater as per the IS standards.

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

xv) The CGWA provisions on rain water harvesting should be followed. Rain water harvesting recharge pits (7 Nos) /storage tanks shall be provided for ground water recharging as per the CGWB norms.

xvi) A rain water harvesting plan needs to be designed where the recharge bores of minimum one recharge bore per 5,000 square meters of built up area and storage capacity of minimum one day of total fresh water requirement shall be provided. In areas where ground water recharge is not feasible, the rain water should be harvested and stored for reuse. The ground water shall not be withdrawn without approval from the Competent Authority.

xvii) All recharge should be limited to shallow aquifer.

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

xix) Any ground water 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 ground water abstraction or dewatering.

xx) The quantity of fresh water 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 along with six monthly Monitoring reports.

xxi) No sewage or untreated effluent water would be discharged through storm water drains. Onsite sewage treatment of capacity of treating 100% waste water to 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 before the project is commissioned for operation. Treated waste water shall be reused on site for landscape, flushing, cooling tower, and other end-uses. Excess treated water shall be discharged as per statutory norms notified by Ministry of Environment, Forest and Climate Change. Natural treatment systems shall be promoted.

xxii) Sludge from the septic tank shall be collected, conveyed and disposed 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 residential area/commercial area/industrial area/silence zone both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental pollution

loads on the ambient air and noise quality shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB/SPCB.

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

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

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. day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.

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

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) Solar power by utilizing at least 30% of the roof top area shall be used for lighting in the apartment to reduce the power load on grid. 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. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.

VI. Waste Management

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

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

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

iv) Organic waste compost/ Vermiculture pit/ Organic Waste Converter within the premises with a minimum capacity of 0.3 kg /person/day must be installed for treatment and disposal of the waste.

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

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

vii) 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 environment friendly materials.

viii) Fly ash should be used as 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.

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

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

VII. Green Cover

i) No tree can be felled/transplant 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. Plantations to be ensured species (cut) to species (planted).

ii) At least 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. A minimum of one tree for every 80 sqm of total project

land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. 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 provided as per SEIAA guidelines.

iii) Where the trees need to be cut with prior permission from the concerned local Authority, compensatory plantation in the ratio of 1: 10 (i.e. planting of 10 trees for every 1 tree that is cut) shall be done and maintained. Plantations to be ensured species (cut) to species (planted). Area for green belt development shall be provided as per the details provided in the project document.

iv) 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 plantation of the proposed vegetation on site.

v) 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.

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

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 regulation.

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

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 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on

cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in 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 mask.

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

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

iv) Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, 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.

v) Occupational health surveillance of the workers shall be done on a regular basis.

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

X. Corporate Environment Responsibility

i) The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility. The project proponent shall adhere to the commitments made in the proposal for CER activities for spending at least minimum amount of Rs. 5.00 Lacs towards development of toilets and its maintenance in the Govt. School in village Chamaru, Tehsil Rajpura, Distt. Patiala.

ii) 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.

iii) 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.

iv) Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. The project proponent shall spend minimum amount of Rs 23 Lakhs towards capital cost and Rs 4.0 Lakhs/annum towards recurring cost in Construction phase of the project including the environmental monitoring cost and shall spend minimum amount of Rs 7.6 Lakhs/annum towards recurring cost in 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 until the responsibility of environmental management plan is transferred to the occupier/residents society under proper MOU under intimation to SEIAA, Punjab. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

XI. Validity

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.

XII. Miscellaneous

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

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

iii) The project proponent shall prominently advertise it at least in 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 MoEFCC/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 has to 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 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 Environment Clearance portal.

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 on the website of the company.

viii) The project proponent shall inform the Regional Office as well as the Ministry, 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, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.

xi) 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).

xii) 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.

xiii) The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

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

xv) The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data/ information/monitoring reports.

xvi) 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.

xvii) 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.

Item No. 186.10: Application for obtaining Environmental Cleanness under EIA notification dated 14.09.2006 for expansion of existing manufacturing unit by addition of 3 Nos. induction furnaces of capacity 12 TPH each and increase of capacity of rolling mill upto 1,40,000 TPA located in the revenue estate of village Alour, Bhadla Road, Tehsil Khanna, Distt. Ludhiana, Punjab by M/s HL Chopra Steel Rolling Mills (Proposal No. SIA/PB/IND/36822/2018)

1.0 Background

Earlier, the project proponent filed application for issuance of TOR under EIA notification, 2006 for expansion of existing manufacturing unit by addition of 3 nos. induction furnaces of capacity 12 TPH each &increase in the capacity of rolling mill upto 1,40,000TPA (20 ton per hour) located in the revenue estate of village Alour, Bhadla Road, Tehsil- Khanna, District-Ludhiana, Punjab. The project is covered under category 3(a) - Metallurgical Industries (ferrous & non-ferrous) of the Schedule appended to the said notification. The case was considered by SEAC in the 169th meeting held on 20.07.2018 and was forwarded to SEIAA with recommendation to grant TORs. Accordingly, SEIAA in its 135th meeting held on 20.08.2018. decided to issue the TORs. In compliance to the said decision, TORs were issued to the project proponent vide letter no. 1145 dated 31.08.2018.

The project proponent has now submitted the EIA report. EIA report was scrutinized and EDS were raised to which project proponent replied on 07.08.2019 as under:

S.No.	EDS	REPLY
1.	Details of CER activities (concrete proposal) be provided in compliance to the provisions of OM dated 01.05.2018 as well as per the decisions taken by SEIAA & SEAC in the meetings in similar type of cases.	The industry has adopted Govt. Primary School, Bazigar Basti, Village- Bhadla, Tehsil- Khanna, District- Ludhiana for undertaking the CER activities. The details in in this regard submitted.
2.	The industry shall be installing separate rolling mill. Clarify as to whether the industry is planning to use CNG as fuel.	The industry will use CNG as fuel as and when the same is made available. The undertaking in this regard is submitted

3.	Details of Rain water harvesting (concrete proposal) shall be provided as per the decisions taken by SEIAA &SEAC in the meetings in similar type of cases.	For rain water harvesting, a village pond has been adopted. NOC from village Panchayat for the same is submitted
4.	The green belt shall be developed on all the boundary as per conditions of TOR. But the industry has shown the same only on three sides, clarify.	Revised layout plan with green belt all around boundary is submitted

EDS were again raised and project proponent submitted the reply vide letter dated 26.11.2019 as under:

Sr. No.	Detail of the documents	Submitted/ Not submitted	Mention page no. as per the hard copy while submitting reply to EDS
1.	As the case is at security stage and project proponent submitted the application on 26/08/2019 as per web portal, the project proponent is required to deposit EC fee @ Rs. 10,000 per crore of total project cost as per the notification no.10/167/2013-STE)5/1510178/1 dated 27/06/2019. Thus Rs. 2,60,800/- is required to be deposited through NEFT/RTGS on the following detail:- **Account Detail** Punjab State Council for Science & Technology Corporation Bank, Sector- 8, Chandigarh Account NO.- 520101262451298 IFSC code no.- CORP0000319.	Not submitted.	Submitted
2.	Properly filled Form 2 with signed declaration	Please take the print of Form-2 and attached the	Submitteed.

<table>
<tr><td></td><td></td><td>signed undertaking given on the Form-2</td><td></td></tr>
<tr><td>3.</td><td>Whethertheprojectfallsinthecritic alpollutedareanotifiedbyMoEF&C C.</td><td>Please submit evidence of distance of industry from MC limit of MGG & Ludhiana.</td><td>The unit does not fall in whole or partially within 5.0 Km from the boundary of critical polluted area notified by MoEF&CC.</td></tr>
<tr><td>4.</td><td>(a) In case where land has already been purchased/acquired:
Proof of ownership of land

(b) In case where land is yet to be purchased/acquired:
Proof of ownership of land (existing owner) such as copy of latest Jamabandi (not more than one month old) and credible document showing status of land acquisition w.r.t. project site as prescribed in OM dated 07.10.2014 issued by MoEF)</td><td>Please submit followings:-
i) Khasra no. mentioned in the application is not matching with Annexure-2 (Land papers). Please attach latest Jamabandi not older than 6 months.
ii) Please provide the following details
<table><tr><td>Khasra no.</td><td>Area in Sqm</td><td>O h</td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr></table></td><td>Land papers records submitted</td></tr>
<tr><td>5.</td><td>Layout plan duly approved by the Competent Authority / Conceptual plan of the project on full drawing sheet</td><td>Not readable. Please submit readable colored copy on full drawing sheet.</td><td>Layout Plan submitted</td></tr>
<tr><td>6.</td><td>Location plan showing the exact location of the project site w.r.t. some permanent/important features of the area and site plan of the project showing the following:
i) Location of STP, ETP and APCD
ii) Solid waste storage area and slag area</td><td>Submit layout plan having legend indicating location of:
Legend on the drawing not submitted. Please submit readable colored hard copy</td><td>Layout Plan submitted</td></tr>
</table>

	iii) Hazardous waste storage area iv) Green belt with marking of tree v) Parking space vi) Firefighting equipment layout vii) First aid room viii) Location of tubewell ix) DG sets and transformers x) Any other utilities	on full drawing sheet.	
7.	The project proponent shall submit a copy of acknowledgement along with set of application filed to CGWA /Competent Authority for obtaining permission for abstraction of ground water.	Copy of the permission letter not found attached. However, application was found attached. Please provide the latest status of CGWA application dated 07/09/2018.	Application has already been submitted vide letter no.- 21-4/441/PB/IND/2018.
8.	Analysis reports of ambient air, ground water and noise levels from NABL/MoEF accredited laboratories as per detail below:- (i) The field data sheets as prescribed by SEIAA, Punjab which are available on the official website of SEIAA, Punjab along with exact location of sampling/monitoring point marked on the layout map should be filled at the time of sample collection/monitoring by the Lab and should be attached with the water, air, noise & soil monitoring reports. (ii) Water, air, noise & soil monitoring reports more than 6 months old or prior to date of signing of consent	Not found attached.	Submitted

	letter/agreement with the land owner shall not be accepted w.e.f. June, 1st, 2015 onwards. (iii) Atleast one groundwater sample from the shallow/first aquifer and in case groundwater is to be abstracted for drinking purposes then atleast one groundwater sample from the said aquifer should be mentioned and reports be attached accordingly.		
9.	Energy conservation measures, quantification of energy saved and renewable energy devices used.	Not found attached.	All th exterior lights will be standalone solar lights and the internal lighting will be LED based. The induction furnace will be energy efficient processing the same charge in lesser time. By using solar lights for external lighting and LED for internal lighting, there will be energy savings of 100% and 80 % resp. By employing Induction Furnace with 90 mins per heat time as compared to 120 mins in vogue, there will be 25% saving in energy. By using high melting furnace, the holding time will be shortened.
10.	Construction schedule (PERT/CPM chart)	Not found attached.	No new construction will be done.

11.	Theexistingbuildingplanmaybegotsuperimposedwiththeproposed buildingplanandbemarkedindifferentcolors.Submitcoloreddrawing on Appropriate readablesize.	Not found attached.	Layout plan submitted
12.	A copy of presentation in PPT format.	Not found attached.	PPT will be presented at the time of SEAC/SEIAA meeting.

2.0 Deliberations during the 186th meeting of SEAC held on 26.12.2019

The case was considered by the SEAC in 186th meeting held on 26.12.2019, which was attended by Sh Navinder Pal Chopra- Partner and his environment consultant from M/s Chandigarh Pollution Testing Laboratory.

Before allowing the project proponent to present salient feature of the project, to a query of SEAC, project proponent submitted that project falls within the 5.0 Km radius from the boundary of MC Limit/ Critically Polluted Area of Mandi Gobindarh. But , now CEPI Score of Mandi Gobindarh has been reduced form 75.08 to 53.91, which indicates that MandiGobindarh no more falls in the list of Critically Polluted Area as per the definition mentioned in OM dated 13.01.2010 and NGT order 10.07.2019.

SEAC was further apprised that Member Secretary, PPCB vide letter dated 38244 dated 23.12.2019, in reference to the SEIAA letter no 942 dated 05.11.2019, informed as under:

1 Hon'ble NGT in OA No. 1038/2018 titled "News item published in "The Asian Age" Authored by Sanjay Kaw Titled "CPCB to rank industrial units on pollution levels" in the order dated 10.07.2019 mentioned as under: -

i) Where the CEPI score crossed 70, the areas are designated as "Critically Polluted Areas", where the CEPI score is between 60 -70, the areas are designated as "Severely Polluted Areas" & where the CEPI score is below 60, the areas are designated as "Other Polluted Areas".

ii) The CEPI score w.r.t areas of Punjab as calculated by CPCB on the basis of the monitoring done in the year 2017-18 has been mentioned as under:

i) Jalandhar 74.76
ii) Ludhiana 73.48
iii) Batala 68.92
iv) Mandi Gobindgarh 53.91

2 Further, CPCB vide letter dated 29.11.2019 addressed to the Member Secretary, PPCB regarding compliance to order dated 14.11.2019 (as corrected on 19.11.2019) passed by the Hon'ble NGT in OA NO. 1038/2018, has forwarded the details of CEPI score of Polluted Industrial Areas in Punjab based on the environmental quality monitoring data of 2017-18 with details as under:

i) Jalandhar 74.76
ii) Ludhiana 73.48

iii) Batala 68.92
iv) Mandi Gobindgarh 53.91

3. Further, CPCB vide its letter dated 25.10.2019 addressed to the worthy Chief Secretary, Punjab, has conveyed the mechanism for environmental management of Critically & Severely Polluted Areas & consideration of activities /projects in such areas in compliance to Hon'ble NGT order dated 23.08.2019 in the matter of O.A no.1038/2018. In the said letter, under Head B (ii) tilted " Consideration of proposals for grant of Environmental Clearance for new and expansion activities listed in "Red" and "Orange" categories located in Critically Polluted Area & Severely Polluted Areas, CPCB mentioned as under:-

Proposals located in CPAs and SPAs may be examined by the sectoral Expert Appraisal Committee (EAC) during scoping/appraisal based on the CEPI score of Air/Water/Land Environment as published by CPCB time to time.

4. In a similar matter, in compliance to the decision of SEAC, MoEF&CC was requested vide letter no 1098 dated 04.12.2019, to clarify whether the projects falling in the cluster of Mandi Gobindgarh and Ludhiana, where the moratorium has been lifted, would be treated as category 'A' Projects or category 'B' projects. The said letter has also emailed on 04.12.2019. However, no reply has been received in this regard.

In view of the above, the matter was deliberated in length and SEAC was of the opinion that

i) the Mandi Gobindgarh with revised CEPI score of 53.91, no more falls in the list of Critically Polluted Areas, as per the assessment made by the CPCB in 2017-18. Therefore, the projects of environmental clearance falling in the area of Mandi Gobindgarh be considered by the SEAC, which otherwise appraised at the Central level as B1 projects.

ii) the Jalandhar and Ludhiana with revised CEPI score of 74.76 and 73.48 respectively, falls in the list of Critically Polluted Areas, based on the assessment made by the CPCB in 2017-18. Therefore, the projects of environmental

clearance falling in the area of Jalandhar and Ludhiana be appraised at the Central level as B1 projects

In view of the above opinion of SEAC, the project proponent presented the salient features of the project as under: -

<table>
<tr><td>1.</td><td>Name and Location of the project</td><td>M/s H.L Chopra Steel Rolling Mills Village- Alour, Bhadla Road, Khanna, Ludhiana, Punjab</td></tr>
<tr><td>2.</td><td>Nature of project (Fresh/Expansion Amendment/
Others)</td><td>Fresh</td></tr>
<tr><td>3.</td><td>a) Category
b) Activity
(As per schedule appended to EIA Notification, 2006 as amended time to time.)</td><td>a) B-1
b) 3(a)
Metallurgical Industries (Ferrous &Non-Ferrous Alloys).</td></tr>
<tr><td>4.</td><td>Area Details
<table>
<tr><th>Details</th><th>Existing</th><th>Additional Land</th><th>After Expansion</th></tr>
<tr><td>Plot Area</td><td>19647.76 Sqm.</td><td>---</td><td>19647.76 Sqm.</td></tr>
</table>
</td><td></td></tr>
<tr><td></td><td>Co-ordinates of the project site</td><td>Latitude: -
$30^0$40’57.88”N, $30^0$40’56.05”N
$30^0$40’51.43”N, $30^0$40’55.14”N
Longitude:-
$76^0$16’18.65”E, $76^0$16’22.17”E,
$76^0$16’25.92”E, $76^0$16’16.25”E</td></tr>
<tr><td>5</td><td>Classification/Land Use as per Master Plan</td><td>Project is located within the industrial zone as per master plan of Khanna</td></tr>
<tr><td>6</td><td>Project Cost (After expansion)</td><td>Rs. 26.08 Crores</td></tr>
<tr><td>7</td><td>Environmental Clearance fee</td><td>Rs 260000 deposited on 13.09.2019
Rs 800 deposited on 13.12.2019</td></tr>
<tr><td>8</td><td>Raw Material requirement</td><td>The detail is as under: -</td></tr>
<tr><td>9</td><td colspan="2">
<table>
<tr><th>Raw Materials</th><th>Existing (TPA)</th><th>Proposed (TPA)</th></tr>
<tr><td>MS Scrap, Ferro Alloys</td><td>Nil</td><td>1,67,832</td></tr>
<tr><td>Steel Billets/Ingots</td><td>55125</td><td>91,875</td></tr>
</table>
</td></tr>
<tr><td>10</td><td>Production Capacity</td><td>The detail is as under:-</td></tr>
<tr><td></td><td colspan="2">
<table>
<tr><th>Product Name</th><th>Existing (TPA)</th><th>Additional (TPA)</th><th>Total (TPA)</th></tr>
<tr><td>Steel Ingots/Billets</td><td>Nil</td><td>1,51,200</td><td>1,51,200</td></tr>
<tr><td>Flats, Bars, H.R. Coil, Patra</td><td>52,500</td><td>87,500</td><td>1,40,000</td></tr>
</table>
</td></tr>
<tr><td>11</td><td colspan="2">Details of major productive machinery/plant</td></tr>
</table>

S. No.	Equipments / Machinery	Existing	Proposed	After Expansion
1.	Induction Furnaces	NIL	3X12 TPH	3X12 TPH
2.	Rolling Mill	01 No.	Capacity enhancement of existing Rolling Mill	01 No.
3.	Concast Machine	NIL	01 No.	01 No.
4.	EOT Cranes	01 No.	02 No.	03 No.
5.	D.G sets	63 kVA – 01 No.	NIL	63 kVA – 01 No.

12	Manpower	100+150=250 persons
13.	Water Requirements & its source(After expansion)	Total Water Demand: 37.5 KLD i) Domestic: 11.5 KLD ii) Cooling: 26.0 KLD Water demand shall be met through existing tubewells .

14. Details of Effluent (After expansion)

Sr. No.	Details	Quantity (After Expansion)	Remarks
i)	Industrial Effluent	Nil	No industrial effluent generated
ii)	Domestic Effluent.	9.2 KLD	Wastewater generated from the project will be treated in the STP of capacity 15 KLD and same shall be utilized onto green area or recirculated through cooling tower.

Sr No.	Season	Green Area water Demand In KLD	Source of water
1	Summer	36	
2	Winter	12	STP
3	Rainy	3.3	STP

15. Details of Emissions (After expansion)

Sr. No.	Source	Capacity	Chimney Height (m)	Air Pollution Control Device
i)	Induction Furnace	3 x 12 TPH each	30 m each	Side suction Hood followed by Pulse jet Bag Filter& Offline cleaning
ii)	DG sets	63KVA	2.5 m	Equipped with Canopy

16. Details of Hazardous waste and its disposal(After expansion)

Sr. No.	Hazardous Waste Category	Quantity (After	Disposal

			expansion)	
	i)	Cat.35.1 – Exhaust air or Gas cleaning Residue	21.0 TPA	Shall be reprocessed through M/s Madhav Alloys, Fatehgarh Sahib, for recovery of metal. In case non acceptance by the reprocessors, the hazardous waste to be given TSDF site, Nimbua
	ii)	Cat.5.1 – Used Oil	0.015 KL per annum	Shall be reprocessed through authorized recyclers of waste oil or used as lubricant within the industry

17	Solid waste generation and its disposal(After expansion)			
	Sr. No.	Solid Waste	Quantity (After Expansion)	Disposal
	(i)	Slag	26.0 TPD	Shall be reprocessed through M/s Vohra Industries after recovery of metals for manufacturing of bricks
18	Energy Requirements (After expansion)			i) Power load: 17,997 KW through PSPCL. ii) Single silent DG set of capacity 63 KVA as stand-by arrangement.
19	Rain Water Harvesting			28674 m3 rain water will be recharged through village pond of Bullepur. .

20 Environment Management Plan

Environment Management Cell (EMC) shall be responsible for implementation of EMP which consists of Director of the company, representative of management, process-in-charge, in-charge maintenance and a representative of environmental consultant. The budgetary requirement for implementation of EMP is as under:-

Sr. No	Title	Capital Cost Rs. Lakh	Recurring Cost Rs. Lakh
1.	Pollution Control during construction stage	10.0	25.0
2.	Air Pollution Control (Installation of APCD)	40.0	
3.	Water Pollution Control / septic tank upgradation	12.0	
4.	Noise Pollution Control (Including cost of Landscaping, Green Belt)	10.0	
5.	Solid Waste Management	5.0	
6.	Environment Monitoring and Management	5.0	

	7.	Occupational Health, Safety and Risk Management	10.0	
	8.	RWH	10.0	
	9.	Miscellaneous	8.0	
		Total	110.0	25.0

21	CER activities along with budge break up and responsibility implement	Director of the industry will be responsible for the implementation of CER. The details of activities have been mentioned in the CER condition.

S.No.	**Activity**	**Environment Aspect**	**Cost (Rs. Lac)**	**Period of Completion**
1.	Solar Lights in Village- Alaur 30 No's	Energy saving/Resource Conservation	4.5	One year
2.	Development of Crematorium and tree plantation in Village- Alaur	Aesthetic & Pollution Control	5.0	One year
3.	Education, training and supply of bio-fertilizer to farmers of Village- Alaur	Soil moisture conservation & enrichment	10.5	Continuing program for 5 years
		Total =	**20.0**	

SEAC raised the following queries to the project proponent to which he replied as under:-

Observation 1 : Submit the revised proposal on pond recharging well w.r.t. CGWA guidelines.

Reply 1: Reply submitted by the project proponent reproduced as under:-

Rain Water Harvesting & Recharging inside the steel industry and roof top may contain various metallic constituents, air born from the process activity as well as from the stacks of various industries. So, the industry has adopted a pond situated at Bullepur:

Water required to be harvested:

Total water requirement of the Industry - 37.5m^3,

Annual water abstraction- 13125 m^3,

Quantity of RW required to be harvested as per CGWA - 26250 m^3

Recharge through School premises:

The industrial unit has adopted one pond (area of 5910 m^2) for rain water harvesting. The detailed calculations for rain water harvesting through pond is given in table given below:-

S. No.	Village name	Area of pond (m^2)	Enhanced depth or depth of pond (m)	Volume of the pond (m^3)	No. of fillings	Total water to be filled in the pond during rainy days (vol. of pond m^3)	50% is recharged (50 % is evaporated)
1.	Bullepur	5910	3	17730	3	53190	26595
Total							**26595 m^3**

Further, all the waste water of the nearby Bullepur village which will be directed towards the village ponds will be first treated in trenches through CSIR-NEERI's Phytorid wastewater treatment technology and overflow water will be discharged into the pond.

It is relevant to mention here that project proponent has also submitted No objection certificate from the Sarpanch of the village, which was taken on record by the SEAC.

Observation 2 : Submit the revised water balance diagram for Green area w.r.t. summer, winter and rainy season

Reply 2: The project proponent submitted the water balance diagram as under: -

S.No.	Season	Green area water demand in KLD	Source of water
1	Summer	36	STP of the industry and STP of Khanna
2	Winter	12	
3	Rainy	3.3	Treated water from STP

It is was informed that balance water requirement for green belt in summer season will be met from the STP of MC Khanna and nearby Industries.

Observation 3 : Submit the detail calculation of the green area to be developed by the project proponent.

Reply 3: The project proponent submitted that green area has been kept to an extent of6538.10 m2 (33%) of the total project area, wherein 200 trees have already been planted and another 734 trees will be planted in the industry premises. The native plant species like Jamun, Arjun,

Mulberry, Poplar, Shisham, Kikkar will be planted in the industry premises. The detail calculations of green area submitted as under:-

Description	Area (m^2)	No. of plants
A block green area	2447.90	351
B block green area	1266.17	180
C block green area	1873.65	268
D block green area	157.93	22
E block green area	130.06	18
F block green area	131.92	19
G block green area	338.17	49
H block green area	192.30	27
Total	**6538.10**	**934**

Observation 4 : Submit the various component of the project cost such as cost of Land, Building and machinery etc.

Reply 4: The project proponent submitted an undertaking to the effect that the gross value (comprising existing and proposed cost) of the project having land, building and plant & machinery etc. in the project named as M/s H.L.Chopra Steel Rolling Mill at Village- Alour, Bhadla Road, Tehsil- Khanna, District- Ludhiana, Punjab is Rs 26.08 Crores.The breakup of project cost is as follows:-

S. No.	Description	Existing (Rs. in Crores)	Proposed (Rs. in Crores)	Total Cost (Rs. in Crores)
1.	Land	2.15	Nil	2.15
2.	Building	0.80	1.55	2.35
3.	Machinery	2.33	13.91	16.24
4.	Others	0.80	4.54	5.34
Total		6.08	20.00	26.08

Observation 5 : The project proponent was asked to install Pulse-jet Bag Filter APCD with offline cleaning technology.

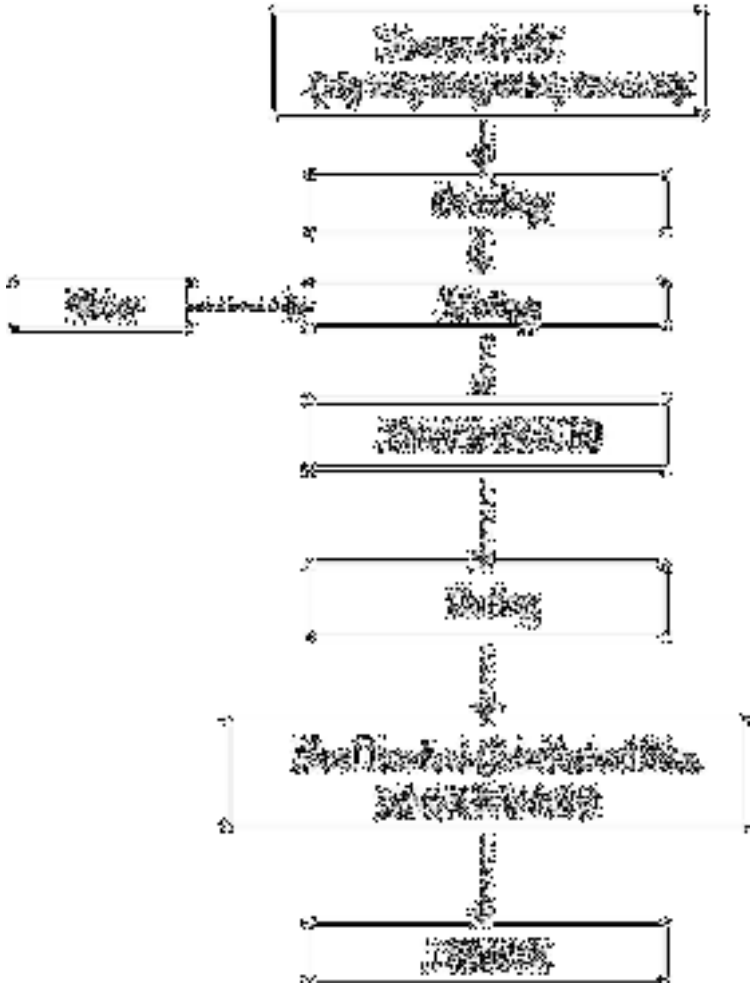
Reply : The project proponent agreed to install Pulse-jet Bag Filter APCD with offline cleaning technology.

Observation 6: The industry is located in the overexploited zone. The project proponent was asked to apply to District Advisory Committee for obtaining permission to extract ground water. What shall be source of water till the permission is not obtained from the competent authority for abstraction of ground water

Reply 6: The project proponent agreed and submitted and undertaking to the effect that he will apply to District Advisory Committee for obtaining permission to extract ground water. He will use treated water of STP of Khanna or STP of nearby industries for industrial purpose.

Observation 7 : The project proponent was asked to submit the Slag utilization certificate along with process details of manufacturing interlocking tiles.

Reply : The project proponent submitted that M/s Vohra Industries having its registered office at village- Misri, near Varun castings, Mandi Gobindgarh is engaged in manufacturing of interlocked tiles. Our slag utilization capacity is 125 TPD.They have made an agreement with M/s H.L. Chopra Steel rolling mills located at village Alour, Bhadla road, Tehsil- Khanna, District- Ludhiana (Pb.) to slag offtake of 25 TPD. The manufacturing process flow diagram is as under:-



Observation 8 : Submit revised CER as per the OM dated 01.05.2018.

Reply 8 : The project proponent submitted revised CER as per the OM dated 01.05.2018. as under:-

S. No.	Activity	Environment Aspect	Cost (Rs. Lac)	Time frame	
				Start	End
1.	Solar Lights in Village- Alour 50 No's	Energy saving/Resource Conservation	6.0	Mar. 2021	Apr. 2021
2.	Repair and maintenance and new construction of	Water pollution	4.0	Oct. 2020	Nov. 2020

	Panchayat Toilets of Alaur village				
3.	Development of Crematorium in Village- Alour	Hygiene & health	6.5	Apr. 2022	May 2022
4.	Providing ambulance to nearby village dispensary - Alour	Health	10.5	Dec., 2023	--
Total			**27.0**		

The entire activities proposed under CER shall be treated as project and shall be monitored. The monitoring report shall be submitted to the regional office as a part of half-yearly compliance report and to the District Collector

The SEAC observed that the project proponent has provided adequate, satisfactory clarifications to the observations raised by it and awarded 'Silver Grading' to the project proposal

3.0 Recommendations

If SEIAA agree with the opinion of SEAC regarding that Mandi Gobindgarh no more falls in the list of critically polluted area on the basis of revised CEPI Score as per the assessment made by CPCB in 2017-18, it may consider grant of environmental clearance for expansion of its existing unit located in the revenue estate of village Alour at Bhadla road , Khanna, Distt. Ludhiana, Punjab by M/s H.L Chopra Steel Rolling Mills, as per the details mentioned in the EIA study & subsequent presentation / clarifications made by the project proponent and his consultant with aforesaid salient features and conditions as under:-

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 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 concerned State pollution Control Board/ Committee.

v. The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water from the competent authority concerned 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.

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

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 vide G.S.R 277 (E) dated 31stMarch 2012 (applicable to IF/EAF) as amended from time to time; S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time) and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized 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 laboratories recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.

iii. The project proponent shall install system carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM_{10} and $PM_{2.5}$in reference to PM emission, and $S0_2$ and NOx in reference to S02 and NOx emissions) within and outside the plant area (at least at four locations one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions. (case to case basis small plants: Manual; Large plants: Continuous).

iv. The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality/ fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six monthly monitoring report.

v. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources.

vi. The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.

vii. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.

viii. Recycle and reuse iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/ agglomeration.

ix. The project proponent shall use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.

x. The project proponent shall provide covered sheds for raw materials like scrap and sponge iron, lump ore, coke, coal, etc.

xi. The project proponent shall provide primary and secondary fume extraction system at all melting furnaces.

xii. Design the ventilation system for adequate air changes as per ACGIH document for all tunnels, motor houses, Oil Cellars.

III. Water quality monitoring and preservation

i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R 277 (E) dated 3151 March 2012 (applicable to IF/EAF) as amended from time to time; S.O. 3305 (E) dated 7thDecember 2015 (Thermal Power Plants) as amended from time to time) and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories. (case to case basis small plants: Manual; Large plants: Continuous)

ii. The project proponent shall monitor regularly ground water quality at least twice a year (pre and post monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.

iii. The project proponent shall submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.

iv. Adhere to 'Zero Liquid Discharge'.

v. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.

vi. The project proponent shall provide the ETP for effluents of rolling mills to meet the standards prescribed in G.S.R 277 (E) 31stMarch 2012 (applicable to IF/EAF) as amended from time to time.

vii. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off

viii. The project proponent shall practice rainwater harvesting to maximum possible extent i.e. pond located in the Village Bhullepur shall be adopted with rain water recharging after desilting @ 26595 m3/annum.As an additional safety measure, the stream carrying waste water of the village shall be diverted in one corner of Phytorid plants trench (designed based on the technology developed by CSIR-NEERI's) divided in different parts, the overflow of each chamber shall be allowed to enter into another chamber which will ultimately lead to purification of water and collected into pond to avoid any contamination of ground water aquifer. 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.

ix. The project proponent shall make efforts to minimize water consumption in the steel plant complex by segregation of used water, practicing cascade use and by recycling treated water.

IV. Noise monitoring and prevention

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

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

V. Energy Conservation measures

i. The project proponent shall provide waste heat recovery system (pre-heating of combustion air) at the flue gases of reheating furnaces.

ii. Practice hot charging of slabs and billets/blooms as far as possible.

iii. Ensure installation of regenerative type burners on all reheating furnaces.

iv. Provide solar power generation on rooftops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly.

v. Provide the project proponent for LED lights in their offices and residential areas.

VI. Waste management

i. Used refractories shall be recycled as far as possible.

ii. Oily scum and metallic sludge recovered from rolling mills ETP shall be mixed, dried, and briquetted and reused melting Furnaces

iii. 100% utilization of fly ash shall be ensured. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding in this regard shall be submitted to the Ministry's Regional Office.

iv. The waste oil, grease and other hazardous waste shall be disposed of as per the Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016.

v. Kitchen waste shall be composted or converted to biogas for further use.(to be decided on case to case basis depending on type and size of plant)

VII. Green Belt

i) Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant. The industry shall ensure that most of the periphery shall be provided with green belt by removing the unwanted/non-productive structures already provided in the existing project near the boundary wall.

ii) The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration including plantation.

VIII. 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 project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms of Factory Act.

iii. 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.

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

v. The project proponent shall carry out the activities and spent an amount as committed during the Public Hearing and give preference to the local person as per the qualification to be employed in the expansion project.

IX. Corporate Environment Responsibility

i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility. The project proponent shall adhere to the commitments made in the proposal for CER activities for spending atleast minimum amount of Rs. 27 Lacs towards following CER activities:

S. No.	Activity	Environment Aspect	Cost (Rs. Lac)	Time frame	
				Start	End
1.	Solar Lights in Village- Alour 50 No's	Energy saving/Resource Conservation	6.0	Mar. 2021	Apr. 2021
2.	Repair and maintenance and new construction of Panchayat Toilets of Alaur village	Water pollution	4.0	Oct. 2020	Nov. 2020
3.	Development of Crematorium in Village- Alour	Hygiene & health	6.5	Apr. 2022	May 2022
4.	Providing ambulance to nearby village dispensary - Alour	Health	10.5	Dec., 2023	--
Total			**27.0**		

However, CER activities shall strictly be in accordance with the activities listed out in the OM dated 01.05.2018 and as per the proposal submitted by the project proponent. 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 must be completed with the completion of the project.

ii. The company shall have a well laid down environmental policy duly approve 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.

iii. 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.

iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. The project proponent shall spend minimum amount of Rs 110 Lacs towards capital cost and Rs 25 Lacs / annum towards recurring cost. The entire cost of the environmental management plan will continue to be borne by the project proponent. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

v. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six-Monthly Compliance Report.

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

vii. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the plants shall be implemented.

XI. Validity

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

XII. Miscellaneous

i. 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.

ii. 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.

iii. 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.

iv. 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.

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

vi. 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.

vii. 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.

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

ix. 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 Expert Appraisal Committee.

x. 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).

xi. 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.

xii. The SEIAA/Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

xiii. The SEIAA/ Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

xiv. 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 by furnishing the requisite data / information/monitoring reports.

xv. 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.

xvi. 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.

ADDITIONAL SPECIFIC CONDITIONS DECIDED DURING MEETING OF SEAC

i. The project proponent shall minimize the water consumption in the steel plant complex by segregation of used water, practicing cascade use and by recycling treated water.

ii. The project proponent shall provide STP for treatment of waste water & reutilization of the treated water for core/non-core activities so as to achieve the Zero Liquid Discharge Condition as per the III (iv) of OM dated 09/08/2018 issued by the MoEF&CC for such units.

iii. The project proponent shall reuse of cooling tower blow down, simultaneously ensuring the standards prescribed for such purge waters. If required, necessary arrangements shall be made to keep this waste stream within the parameters required for reuse.

iv. A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site. Sand, murram, loose soil, cement, stored on site shall be covered adequately and Water sprinkling system be put in place so as to prevent dust pollution.

v. The project proponent shall reserve land for loading or unloading of raw material, products, slag, hazardous waste as well as for storage of these materials and the area to be reserved for parking. The area to be reserved by considering the time required for loading and unloading of vehicles for respective activities and minimum/maximum period for which storage of the above material is required in the premises. The areas for the respective activities to be marked on the layout plan.

vi. The project proponent shall comply with the standard operating procedures and upgradation of suction and treatment arrangement for the secondary emissions as prescribed by the State Pollution Control Board or by CPCB/MoEF&CC.

vii. Whole of the vehicle movement area as well as approach road to the gate /weighing bridge shall be paved with pucca / metalled / cement concrete road to control the dust emissions expected from the vehicle movement.

viii. The vehicles to be used for loading / unloading purpose shall not be parked along roadside so as to avoid the traffic congestion and dedicated parking place to be provided for the same.

ix. The project proponent shall adopt green technologies to conserve the water and energy including shearing / cutting / bundling machines. Also to provide abrasive resistant fire bricks in the crucibles to reduce the periodic maintenance & disposal of discarded fire bricks.

x. The project proponent shall use natural gas (if available) as substitute fuel wherever possible in the existing industry/ for expansion project.

xi. The project proponent shall take necessary action w.r.t. the following:-

a) Recovery of iron from slag before disposing it off.

b) Identify the areas for utilization of slag in scientific manner and its usage in cement / construction industry / road laying etc.

c) Recovery of precious metals like Zinc, lead and iron etc. from the APCD dust (Hazardous waste) through authorized re-processor.

xii. The project proponent shall install the pulse jet bag filter APCD with offline cleaning technology with the proposed induction furnace.

xiii. The project proponent shall not abstract ground water without the permission of District Advisory committee for its proposed expansion. The project proponent shall maintain proper record regarding use of STP water of MC Khanna or nearby industries for industrial use and submit a copy of the same to regional office of PPCB every month for verification.

Item No.186.11: Application for obtaining environmental Clerance under EIA notification dated 14.09.2006 for expansion of steel manufacturing unit by addition of two induction furnace in Village Jalalpur, Amloh Road, Mandi Gobindgarh, District Fatehgarh Sahib by M/s HANSCO IRON & STEEL (P) LIMITED(Proposal no SIA/PB/IND/36904/ 2017)

1.0 Background

Earlier, the project proponent filed application for issuance of TOR under EIA notification, 2006 for expansion of steel manufacturing unit by addition of two induction furnace in Village Jalalpur, Amloh Road, Mandi Gobindgarh, District Fatehgarh Sahib.The project is covered under category 3(a) - Secondary Metallurgical Industries (ferrous & non ferrous) of the Schedule appended to the said notification.

The case was considered by SEAC in the 162nd meeting held on 15.02.2018 and was forwarded to SEIAA with recommendation to grant TORs. Accordingly, SEIAA in its 128th meeting held on 06.03.2018 decided to issue the TORs. In compliance to the said decision, TORs were issued to the project proponent vide letter no. 357 dated 21.03.2018.

The project proponent has now submitted the EIA report. EIA report was scrutinized and EDS were raised to which project proponent replied on 07.08.2019 as under:

S.No.	EDS	REPLY
4.	The additional documents annexed with EIA report are not feasible. Please attach the legible documents at specified place. As such further scrutiny w.r.t. supporting documents shall be done once they are in legible them.	The legible documents were submitted (as **Annexure-I)**
5.	Valid copies of consent to operate under both the acts/authorization have not been attached.	Valid copy of consents and authorization were submitted**(Annexure-II)**
6.	Details of CER activities (concrete proposal) be provided in compliance to the provisions of OM dated 01.05.2018 as well as per the decisions taken by SEIAA & SEAC in the meetings in similar type of cases.	The industry has adopted Govt. Primary School, Bazigar Basti, Village- Bhadla, Tehsil- Khanna, District- Ludhiana for undertaking the CER activities. The details were submitted as per **Annexure-III**
7.	Total water requirement has been filled as 80KLD in application form whereas the total water requirement as per EIA report is 37.5KLD. Clarify.	The total water requirement which has been inadvertently mentioned as 37.5 KLD may please be considered as 80 KLD.
8.	The water abstraction in CGWA application has been filled as 25 KLD whereas as per EIA report. Cooling water requirement is 63.5KLD. As such from where cooling water requirement shall be met.	The requirement of cooling water shall be met from the treated water of STP of Mandi Gobindgarh. A copy of agreement with Mandi Gobindgarh municipality shall be submitted to this effect.
9.	The industry shall be installing separate rolling mill. Clarify as to whether the industry is planning to use CNG as fuel.	The industry will use CNG as fuel as and when the same is made available. An Undertaking in this regard was submitted**(Annexure- IV)**
10.	Details of Rain water harvesting (concrete proposal) shall be provided as per the decisions taken by SEIAA & SEAC in the meetings in similar type of cases.	For rain water harvesting, a village pond has been adopted. NOC from village Panchayat for the same is attached as **Annexure- V.**
11.	The green belt shall be developed on the entire boundary as per conditions of TOR. But the industry has shown the same only on three sides, clarify.	Revised layout plan with green belt all around boundary was submitted as **Annexure-VI**

EDS were again raised and project proponent submitted the reply vide letter dated 18.11.2019 as under:

S. No.	Detail of the documents	Submitted/ Not submitted	Mention page no. as per the hard copy while submitting reply to EDS
1.	Properly filled form 2 along with singed declaration attached in the hard copy	Please submit in the hard copy.	
2.	Certificate of accreditation of EIA consultant.	Validity till 09.08.2019, submit letter of extension validity.	The EIA consultant accreditation is listed in Sr. 26 in the list of Accredited consultants. Same was submitted as **(Annexure- I.)**
3.	Whether the project area falls in whole or partially within 5.0 Km from the boundary of critical polluted area notified by MoEF&CC. (Please specify in yes/No)	Please specify in Yes/No & NOC from PPCB regarding expansion of the project in critically polluted area.	The unit does not fall in whole or partially within 5.0 Km from the boundary of critical polluted area notified by MoEF&CC.
4.	27.9 TPD of slag generated will be supplied to manufactures of cement concrete blocks, pavers & tiles under proper agreement.	Submit the agreement copy.	Slag after iron recovery will be sent to M/s Nav Durga Gram Udyog Smiti under an agreement. Same was submitted as **Annexure-II**.
5.	As per TOR, 1500 tress/hectare are required to be planted	In 14060 sqm green area of project site, only 100 no. trees are proposed to be planted which needs to be revised as per TOR condition.	In addition to the existing 300no. of trees, 1800 more trees will be planted to maintain the tree density of 1500 trees/ha
6.	Various documents to be submitted along with the EC are listed as under:- a) Is the project covered under PLPA, 1900, if no but located near to PLPA area then the project proponent is required to submit NOC from the concerned DFO to the effect that project area does not fall under the provision of PLPA act, 1900. b) Is the project covered under PLPA, 1900, if yea then status of the NOC w.r.t. PLPA, 1900.	a. Submit undertaking to reflect that project is neither located near to PLPA area nor fall in the PLPA area.	Undertaking was submitted as **Annexure-III.**
7.	Colored Topographical map of the area showing contour plan & including all eco-sensitive area & environmentally sensitive areas.	Submit readable copy of topography sheet in A1 sheet.	Topography sheet was submitted as **Annexure-IV** .
8.	Location plan showing the exact location of the project site w.r.t. some permanent/important	Submit layout plan having legend indicating location of:	Layout Plan was submitted as **Annexure- V.**

	features of the area and site plan of the project showing the following: i) Location of STP, ETP and APCD ii) Solid waste storage area and slag area iii) Hazardous waste storage area iv) Green belt with marking of tree v) Parking space vi) Firefighting equipment layout vii) First aid room viii) Location of tubewell ix) DG sets and transformers x) Any other utilities	i) Location of STP, ETP and APCD. ii) Solid waste storage area and slag area iii) Hazardous waste storage area iv) Green belt with marking of tree v) Parking space vi) Firefighting equipment layout vii) First aid room viii) Location of tubewell ix) DG sets and transformers Any other utilities	
9.	Max. Domestic waste water quantity (KLD), STP capacity and technology used to treat the waste water.	Specify STP technology to be used to treat the waste water along with its implementation plan.	MBBR technology will be used to treat waste water in STP.
10.	Action plan for control of air emissions by APCD.	Specify in detail technology to be adopted for APCD as per SOPs of PPCB.	Air pollution will be controlled through APCS comprising movable suction hood, spark arrestor, pulse jet bag filteration and ID fan. The design will be as per approved by Punjab State Council for Science & Technology. The spark arrestor works on impaction technique. and the dust from bag filter will be removed by pulse jet mechanism and discharged to hopper via needle valve. The filter cloth shall be non-woven polyester The whole system will be operated and maintained as per SOP for air pollution control in induction furnace units as prescribed by PPCB and circular vide no. - 19830-57 dated 27-06-2018.
11.	Analysis reports of ambient air, ground water and noise levels from NABL/MoEF accredited laboratories as per detail below:- (i) The field data sheets as prescribed by SEIAA, Punjab which are available on the official website of SEIAA, Punjab along with exact location of	i. Submit field data sheets.	(i) Field data sheets weresubmitted as **Annexure- VI**

	sampling/monitoring point marked on the layout map should be filled at the time of sample collection/monitoring by the Lab and should be attached with the water, air, noise & soil monitoring reports. (ii) Water, air, noise & soil monitoring reports more than 6 months old or prior to date of signing of consent letter/agreement with the land owner shall not be accepted w.e.f. June, 1st, 2015 onwards. (iii) Atleast one groundwater sample from the shallow/first aquifer and in case groundwater is to be abstracted for drinking purposes then atleast one groundwater sample from the said aquifer should be mentioned and reports be attached accordingly.	ii. Specify page no. of water, air, noise & soil monitoring test reports & if not attached please attach.	ii) Test reports were submitted as **Annexure- VII**
12.	Energy conservation measures, quantification of energy saved and renewable energy devices used.	Submit the details & quantify energy saved.	All the exterior lights will be standalone solar lights and the internal lighting will be LED based. The induction furnace will be energy efficient processing the same charge in lesser time. By using solar lights for external lighting and LED for internal lighting, there will be energy savings of 100% and 80 % resp. By employing Induction Furnace with 90 mins per heat time as compared to 120 mins in vogue, there will be 25% saving in energy. By using high melting furnace, the holding time will be shortened.
13.	Construction schedule (PERT/CPM chart)	Submit PERT/CPM chart	No new construction will be done.
14.	Environmental Management Plan indicating the following: a) All mitigation measures for each item-wise activity to be undertaken during the construction, operation and the entire life cycle to minimize adverse environmental impacts as	a) Specify EMP on solid waste management, solar and energy conservation etc.	The only solid waste is furnace slag which after recovery of iron will be sold to manufactures of cement concrete blocks, pavers & tiles. An agreement to this affect has already been made.

	a result of the activities of the project. i) Sewage Treatment Plant ii) Landscaping iii) Rain water harvesting iv) Power backup for environment infrastructure. v) Environment monitoring vi) Solid waste management\ vii) Solar and energy conservation viii) Public hearing compliance.		Energy will be conserved by using standalone solar lights on the internal roads and LED lights for interior lighting. Energy efficient I.F. with low heating time will be used.

2.0 Deliberations during the 186th meeting of SEAC held on 26.12.2019

The case was considered by the SEAC in 186th meeting of SEAC held on 26.12.2019, which was attended by Sh. Manu Bansal- Director and his environment consultant from M/s Chandigarh Pollution Testing Laboratory.

Hon'ble NGT in OA No. 1038/2018 titled "News item published in "The Asian Age" Authored by Sanjay Kaw Titled "CPCB to rank industrial units on pollution levels" in the order dated 10.07.2019 mentioned as under: -

i) Where the CEPI score crossed 70, the areas are designated as "Critically Polluted Areas", where the CEPI score is between 60 -70, the areas are designated as "Severely Polluted Areas" & where the CEPI score is below 60, the areas are designated as "Other Polluted Areas".

ii) The CEPI score w.r.t areas of Punjab as calculated by CPCB on the basis of the monitoring done in the year 2017-18 has been mentioned as under:

i) Jalandhar 74.76
ii) Ludhiana 73.48
iii) Batala 68.92
iv) Mandi Gobindgarh 53.91

2 Further, CPCB vide letter dated 29.11.2019 addressed to the Member Secretary, PPCB regarding compliance to order dated 14.11.2019 (as corrected on 19.11.2019) passed by the Hon'ble NGT in OA NO. 1038/2018, has forwarded the details of CEPI score of Polluted Industrial Areas in Punjab based on the environmental quality monitoring data of 2017-18 with details as under:

i) Jalandhar 74.76
ii) Ludhiana 73.48
iii) Batala 68.92
iv) Mandi Gobindgarh 53.91

1. Further, CPCB vide its letter dated 25.10.2019 addressed to the worthy Chief Secretary, Punjab, has conveyed the mechanism for environmental management of Critically & Severely Polluted Areas & consideration of activities /projects in such areas in compliance to Hon'ble NGT order dated

23.08.2019 in the matter of O.A no.1038/2018. In the said letter, under Head B (ii) tilted " Consideration of proposals for grant of Environmental Clearance for new and expansion activities listed in "Red" and "Orange" categories located in Critically Polluted Area & Severely Polluted Areas, CPCB mentioned as under:-

Proposals located in CPAs and SPAs may be examined by the sectoral Expert Appraisal Committee (EAC) during scoping/appraisal based on the CEPI score of Air/Water/Land Environment as published by CPCB time to time.

2. In a similar matter, in compliance to the decision of SEAC, MoEF&CC was requested vide letter no 1098 dated 04.12.2019, to clarify whether the projects falling in the cluster of Mandi Gobindgarh and Ludhiana, where the moratorium has been lifted, would be treated as category 'A' Projects or category 'B' projects. The said letter has also emailed on 04.12.2019. However, no reply has been received in this regard.

In view of the above, the matter was deliberated in length and SEAC was of the opinion that

i) the Mandi Gobindgarh with revised CEPI score of 53.91, no more falls in the list of Critically Polluted Areas, as per the assessment made by the CPCB in 2017-18. Therefore, the projects of environmental clearance falling in the area of Mandi Gobindgarh be considered by the SEAC, which otherwise appraised at the Central level as B1 projects.

ii) the Jalandhar and Ludhiana with revised CEPI score of 74.76 and 73.48 respectively, falls in the list of Critically Polluted Areas, based on the assessment made by the CPCB in 2017-18. Therefore, the projects of environmental clearance falling in the area of Jalandhar and Ludhiana be appraised at the Central level as B1 projects

In view of the above opinion of SEAC, the project proponent presented the salient features of the project as under:

<table>
<tr><td>1.</td><td>Name and Location of the project</td><td>M/s Hansco Iron & Steel (P) Limited, Village-Jalalpur, Amloh Road, Mandi Gobindgarh, District-Fatehgarh Sahib, Punjab.</td></tr>
<tr><td>2.</td><td>Nature of project (Fresh/Expansion Amendment/ Others)</td><td>Fresh</td></tr>
<tr><td>3.</td><td>a) Category
b) Activity
(As per schedule appended to EIA Notification, 2006 as amended time to time.)</td><td>a) B-1
b) 3(a)
Metallurgical Industries
(Ferrous &Non Ferrous Alloys).</td></tr>
<tr><td>4.</td><td colspan="2">Area Details
<table>
<tr><th>Details</th><th>Existing</th><th>Additional Land</th><th>After Expansion</th></tr>
<tr><td>Plot Area</td><td>42608.64 Sqm.</td><td>---</td><td>42608.64 Sqm.</td></tr>
<tr><td>Covered Area</td><td>-</td><td></td><td>9870.14 sqm</td></tr>
<tr><td>Green Area</td><td>-</td><td>-</td><td>14060.87 m^2(33%)</td></tr>
</table></td></tr>
<tr><td>4.</td><td>Co-ordinates of the project site</td><td>Latitude: -
$30^0$38’07.43”N, $30^0$38’07.41”N
$30^0$38’02.49”N, $30^0$38’02.31”N
Longitude:-
$76^0$15’45.54”E, $76^0$15’53.61”E,
$76^0$15’56.94”E, $76^0$15’45.59”E</td></tr>
<tr><td>5</td><td>Classification/Land use pattern as per Master Plan</td><td>Industrial Zone</td></tr>
<tr><td>5.</td><td>Project Cost (After expansion)</td><td>Rs. 29.83 Crores</td></tr>
<tr><td>6</td><td>Environmental Clearance. fee</td><td>Rs 2,98,300/- deposited on 03.10.2019.</td></tr>
<tr><td>6.</td><td>Raw Material requirement</td><td></td></tr>
<tr><td></td><td colspan="2">
<table>
<tr><th>RAW MATERIALS</th><th>EXISTING (TPA)</th><th>PROPOSED (TPA)</th><th>TOTAL (TPA)</th></tr>
<tr><td>MS Scrap</td><td>32,550</td><td>1,40,200</td><td>1,72,750</td></tr>
<tr><td>Ferro Alloys</td><td>250</td><td>1050</td><td>1300</td></tr>
</table></td></tr>
<tr><td>7.</td><td colspan="2">Production Capacity</td></tr>
<tr><td></td><td colspan="2">
<table>
<tr><th>Product Name</th><th>Existing (TPA)</th><th>Additional (TPA)</th><th>Total (TPA)</th></tr>
<tr><td>Furnace Division: Steel Billets/Ingots, Steel Castings, Metal Roll</td><td>29,800</td><td>1,26,000</td><td>1,55,800</td></tr>
<tr><td>Rolling Division: MS Bars, Round, Flats, TMT Bars, Angles, Wire Rod</td><td>NIL</td><td>1,20,000</td><td>1,20,000</td></tr>
</table></td></tr>
<tr><td>8</td><td colspan="2">Details of major productive machinery/plant</td></tr>
</table>

Type of Machinery	Existing	Proposed	After Expansion
Induction Furnace	1 TPH & 7 TPH	1 TPH, 7 TPH & 2X15 TPH VD, LRF & Concast	1 TPH, 7 TPH & 2X15 TPH VD, LRF & Concast
Rolling Mill	Nil	1 Rolling Mill	1 Rolling Mill
Heat Treatment Furnace	Two No.	One No.	Three No.

9.	Manpower	250+125=375 persons
10.	Water Requirements & its source (After expansion)	Total water requirement for the project after expansion will be 80 KLD and the break-up of the same is given below:

S. No.	Description	Existing water demand (KLD)	Water demand after expansion (KLD)	Source
1.	Domestic water demand	3.5	11.5	15.0
2.	Cooling water demand	1.5	63.5	65.0
3	Total	5.0	75.0	80.0

11 Details of Effluent (After expansion)

Sr. No.	Details	Quantity (After Expansion)	Remarks
i)	Industrial Effluent	Nil	-
ii)	Domestic Effluent.	12 KLD	Wastewater generated from the project will be treated in the STP of capacity 15 KLD and same shall be utilized onto green area or recirculated through cooling tower.

12. Details of Emissions(After expansion)

Sr. No.	Source	Capacity	Chimney Height (m)	Air Pollution Control Device
i)	Induction Furnace	1 TPH, 7 TPH & 2X15 TPH	30 m each	Side suction Hood spark arrestor followed by Bag Filter
ii)	DG sets	125KVA & 250KVA	2.5 m	Equipped with Canopy

13. Details of Hazardous waste and its disposal (After expansion)

Sr. No.	Hazardous Waste Category	Quantity (After expansion)	Disposal
i)	Cat.35.1 – Exhaust air or Gas cleaning Residue	28.4 TPA	Shall be reprocessed through M/s Madhav Alloys, Fatehgarh Sahib, for recovery of metal. In case non acceptance by the reprocessors, the hazardous waste to be given TSDF site, Nimbua
ii)	Cat.5.1 – Used Oil	0.015 KL per annum	Shall be reprocessed through authorized recyclers of waste oil or used as lubricant within the industry

14. Solid waste generation and its disposal(After expansion)

Sr. No.	Solid Waste	Quantity (After Expansion)	Disposal
(i)	Slag	27.9 TPD	Shall be reprocessed through M/s Nav Durga Gram Udyog Samti after recovery of metals for manufacturing of bricks

15.	Energy Requirements (After expansion)	i) Power load: 24,728KVA through PSPCL. ii) Two silent DG set of capacity 125KVA & 250KVA as stand-by arrangement.
	Rain water Harvesting	57002 m3 rain water will be recharged through village pond of Jallalpur

16. Environment Management Plan

Environment Management Cell (EMC) shall be responsible for implementation of EMP which consists of Director of the company, representative of management, process-in-charge, in-charge maintenance and a representative of environmental consultant. The budgetary requirement for implementation of EMP is as under:-

Sr. No	**Title**	**Capital Cost Rs. Lakh**	**Recurring Cost Rs. Lakh**
1.	Pollution Control during construction stage	5.0	---
2.	Air Pollution Control (Installation of APCD)	35.0	5.0
3.	Water Pollution Control / septic tank upgradation	10.0	0.5

4.	Noise Pollution Control (Including cost of Landscaping, Green Belt)	5.0	2.5
5.	Solid Waste Management	5.0	0.5
6.	Environment Monitoring and Management	5.0	0.5
7.	Occupational Health, Safety and Risk Management	5.0	0.5
8.	RWH	5.0	0.5
9.	Miscellaneous	5.0	---
	Total	80.0	10.0

17	Corporate Environment Responsibility	An amount of Rs. 14 Lakhs as capital expenditure and 1.0 lac/annum as recurring cost have been earmarked for CER.

S.No.	**Activity**	**Capital Cost (Rs. Lac)**	**Recurring Cost (Rs. Lac)**	**Timeline**
1.	Providing Solar power plant of 10 KW in village-Jalalpur	3.0	0.30	Within one year of grant of EC
2.	Development of green belt by plantation inside the school premises. Repairing of furniture & maintenance of toilets of Govt. elementary school of village Jalalpur.	3.0	0.20	Within 15 months of EC.
3	Cement benches for village Jalalpur	1.0	--	Within one year of grant of EC
4	Construction of rain water harvesting for pond (Mandir) of village-Jalalpur	7.0		Within one year of grant of EC

	Total	**14.0**	**1.0**	

SEAC raised the following queries to the project proponent to which he replied as under:-

Observation 1 : Submit the revised proposal on pond recharging well w.r.t. CGWA guidelines.

Reply 1: Reply submitted by the project proponent reproduced as under:-

Rain Water Harvesting & Recharging inside the steel industry and roof top may contain various metallic constituents, air born from the process activity as well as from the stacks of various industries. So, the industry has adopted a pond situated at village Jallapur:

Water required to be harvested:

Total water requirement of the Industry 80 KLD

Annual water abstraction- 28000 m^3,

Quantity of RW required to be harvested as per CGWA - 56000 m^3

Recharge through village pond

The industrial unit has adopted one village pond (12752 m^2) for rain water harvesting. The detailed calculations for rain water harvesting through village pond is given in table given below:-

S. No.	Village name	Area of pond (m^2)	Enhanced depth or depth of pond (m)	Volume of the pond (m^3)	No. of fillings	Total water to be filled in the pond during rainy days (vol. of pond m^3)	50% is recharged (50 % is evaporated)
1.	Jalalpur	12752	3	38256	3	114768	57384
Total							**57384 m^3**

From table it is clear that only 1 pond is sufficient for RWH of more than 200 % ground water.

Further, all the waste water of the nearby Jalalpur village which will be directed towards the village ponds will be first treated in trenches through CSIR-NEERI's Phytorid wastewater treatment technology and overflow water will be discharged into the pond

It is relevant to mention here that project proponent has also submitted no objection certificate from the Sarpanch of the village, which was taken on record by the SEAC.

Observation 2 : Submit the revised water balance diagram for Green area w.r.t. summer, winter and rainy season

Reply 2: The project proponent submitted the water balance diagram as under: -

S.No.	Season	Green area water demand in KLD	Source of water
1	Summer	77	Treated water from STP and STP of MC Mandi Gobindgarh
2	Winter	25	
3	Rainy	7	Treated water from STP

It is was informed that balance water requirement for green belt in summer and winter season will be met from the STP of MC Mandi Gobindgarh and nearby Industries.

Observation 3 : Submit the detail of the green area to be developed by the project proponent.

Reply 3: The project proponent submitted that green area has been kept to an extent of14060.87 m2 (33 %) of the total project area, wherein 300 trees have already been planted and another 1800 trees will be planted in the industry premises. The native plant species like Jamun, Arjun, Mulberry, Poplar, Shisham, Kikkar will be planted in the industry premises. The detail calculations of green area submitted as under:-

Description	Area	No. of plants
Green area-I	1932.54	286
Green area-II	3717.49	561
Green area-III	1951.69	280
Green area-IV	5018.61	767
Green area-V	1440.54	206
Total	**14060.87**	**2100**

Observation 4 : Submit the various component of the project cost such as cost of Land, Building and machinery etc.

Reply 4: The project proponent submitted an undertaking to the effect that the gross value (comprising existing and proposed cost) of the project having land, building and plant & machinery etc. in the project named as M/s Hansco Iron & Steel Pvt. Ltd. at Village-Jalalpur, Amloh Road, Mandigobindgarh, District- Fatehgarh Sahib, Punjab is Rs 29.83 Crores. Breakup of project cost is as follows:-

S. No.	Description	Existing (Rs. in Crores)	Proposed (Rs. in Crores)	Total Cost (Rs. in Crores)
1.	Land	2.55	Nil	2.55
2.	Building	1.25	1.10	2.35
3.	Machinery	5.33	14.56	19.89
4.	Others	0.70	4.34	5.04

Total	9.83	20.00	29.83

Observation 5 : The project proponent was asked to install Pulse-jet Bag Filter APCD with offline cleaning technology.

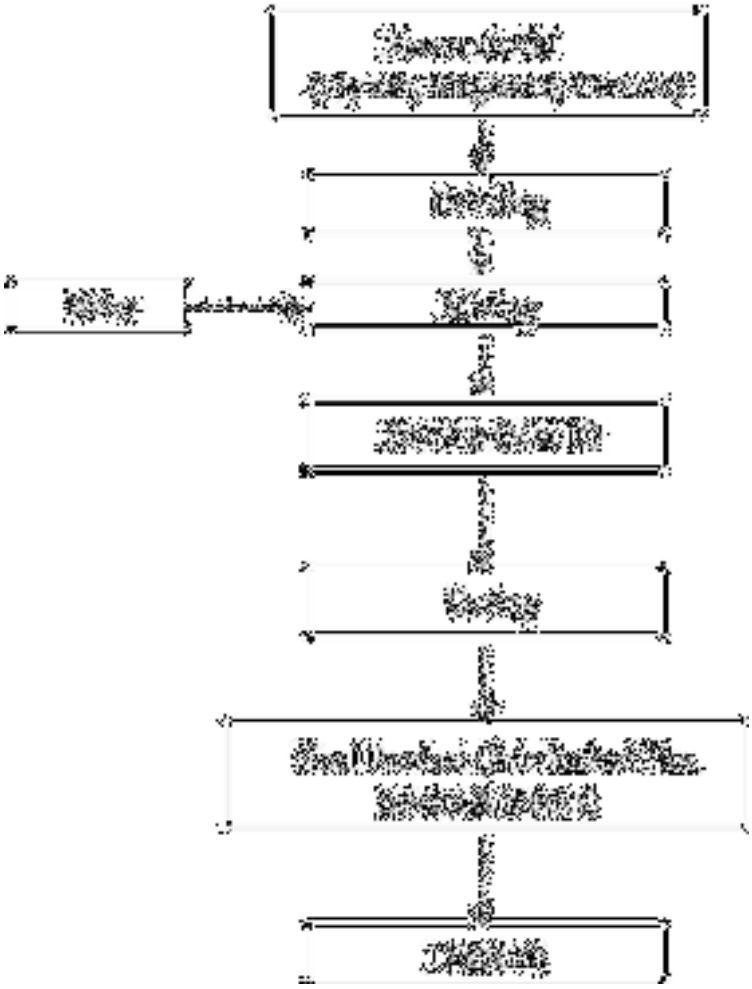
Reply : The project proponent agreed to install Pulse-jet Bag Filter APCD with offline cleaning technology.

Observation 6: The industry is located in the overexploited zone. The project proponent was asked to apply to District Advisory Committee for obtaining permission to extract ground water. What shall be source of water till the permission is not obtained from the competent authority for abstraction of ground water.

Reply: The project proponent agreed and submitted and undertaking to the effect that he will apply to District Advisory Committee for obtaining permission to extract ground water. He will use treated water of STP of Mandi Gobindarh or STP of nearby industries for industrial purpose

Observation 7 : The project proponent was asked to submit the Slag utilization certificate along with process details of manufacturing interlocking tiles.

Reply : The project proponent submitted that M/s Nav Durga Gram Udyog Samiti located at village- Saluri, District- Ludhiana is engaged in manufacturing of interlocked tiles. Our slag utilization capacity is 60 TPD. We have made an agreement with M/s Hansco Iron & Steels Pvt. located at village Jalalpur, Amloh road, Mandi Gobindgarh, District-Fatehgarh sahib (Pb,) to slag offtake of 27.9 TPD. The manufacturing process flow diagram is as under:-



Observation 8: Submit revised CER as per OM dated 01.05.2018
Reply 8 : Project Proponet submit revised CER as under:-

S.No.	Activity	Aspect	Cost (Rs. Lac)	Timeline	
				Start	End
1.	Providing cement benches in Village- Jalalpur	Social needs	4.0	Oct.2020	Nov.2020
2.	Providing Solar Lights in Village-Jalalpur 50 No's @ Rs. 12000/- each	Energy Saving	6.0	Jan. 2021	Mar. 2021
3.	Provide furniture and classroom in Govt. elementary school village-Jalalpur	Infrastructure for education	5.0	Feb. 2021	Mar. 2021
4.	Providing Bio-Toilets 02 No's in Village-	Water Pollution	4.0	Oct. 2022	Dec. 2022

	Jalalpur.				
5.	Providing ambulance to Govt. dispensary Jalalpur	Health infrastructure	9.0	June 2024	-
TOTAL			**30.0**		

The entire activities proposed under CER shall be treated as project and shall be monitored. The monitoring report shall be submitted to the regional office as a part of half-yearly compliance report and to the District Collector

The SEAC observed that the project proponent has provided adequate, satisfactory clarifications to the observations raised by it and awarded **'Silver Grading'** to the project proposal

3.0 Recommendations

If SEIAA agree with the opinion of SEAC regarding that Mandi Gobindgarh no more falls in the list of critically polluted area on the basis of revised CEPI Score as per the assessment made by CPCB in 2017-18, it may consider grant of environmental clearance for expansion of its existing unit located in the revenue estate of village Jallalpur at amlogh road, Mandi Gobindgarh by M/s Hansco Iron Steel Pvt. Ltd. as per the details mentioned in the EIA study & subsequent presentation / clarifications made by the project proponent and his consultant with aforesaid salient features after expansion and conditions as under:-

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 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 concerned State pollution Control Board/ Committee.

v. The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water from the competent

authority concerned 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.

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

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 vide G.S.R 277 (E) dated 31stMarch 2012 (applicable to IF/EAF) as amended from time to time; S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time) and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized 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 laboratories recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.

iii. The project proponent shall install system carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PMIO and PM25 in reference to PM emission, and S02 and NOx in reference to S02 and NOx emissions) within and outside the plant area (at least at four locations one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions. (case to case basis small plants: Manual; Large plants: Continuous).

iv. The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality/ fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six monthly monitoring report.

v. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources.

vi. The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.

vii. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.

viii. Recycle and reuse iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/ agglomeration.

ix. The project proponent shall use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.

x. The project proponent shall provide covered sheds for raw materials like scrap and sponge iron, lump ore, coke, coal, etc.

xi. The project proponent shall provide primary and secondary fume extraction system at all melting furnaces.

xii. Design the ventilation system for adequate air changes as per ACGIH document for all tunnels, motor houses, Oil Cellars.

III. Water quality monitoring and preservation

i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R 277 (E) dated 3151 March 2012 (applicable to IF/EAF) as amended from time to time; S.O. 3305 (E) dated 7thDecember 2015 (Thermal Power Plants) as amended from time to time) and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories. (case to case basis small plants: Manual; Large plants: Continuous)

ii. The project proponent shall monitor regularly ground water quality at least twice a year (pre and post monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.

iii. The project proponent shall submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.

iv. Adhere to 'Zero Liquid Discharge'.

v. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.

vi. The project proponent shall provide the ETP for effluents of rolling mills to meet the standards prescribed in G.S.R 277 (E) 31stMarch 2012 (applicable to IF/EAF) as amended from time to time.

vii. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off

viii. The project proponent shall practice rainwater harvesting to maximum possible extent i.e. pond located in the Village Jallalpur shall be adopted with rain water recharging after desilting @ 57384 m3/annum.As an additional safety measure, the stream carrying waste water of the village shall be diverted in one corner of Phytorid plants trench (designed based on the technology developed by CSIR-NEERI's) divided in different parts, the overflow of each chamber shall be allowed to enter into another chamber which will ultimately lead to purification of water and collected into pond to avoid any contamination of ground water aquifer. 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.

ix. The project proponent shall make efforts to minimize water consumption in the steel plant complex by segregation of used water, practicing cascade use and by recycling treated water.

IV. Noise monitoring and prevention

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

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

V. Energy Conservation measures

i. The project proponent shall provide waste heat recovery system (pre-heating of combustion air) at the flue gases of reheating furnaces.

ii. Practice hot charging of slabs and billets/blooms as far as possible.

iii. Ensure installation of regenerative type burners on all reheating furnaces.

iv. Provide solar power generation on rooftops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly.

v. Provide the project proponent for LED lights in their offices and residential areas.

VI. Waste management

i. Used refractories shall be recycled as far as possible.

ii. Oily scum and metallic sludge recovered from rolling mills ETP shall be mixed, dried, and briquetted and reused melting Furnaces

iii. 100% utilization of fly ash shall be ensured. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding in this regard shall be submitted to the Ministry's Regional Office.

iv. The waste oil, grease and other hazardous waste shall be disposed of as per the Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016.

v. Kitchen waste shall be composted or converted to biogas for further use.(to be decided on case to case basis depending on type and size of plant)

VII. Green Belt

i) Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant. The industry shall ensure that most of the periphery shall be provided with green belt by removing the unwanted/non-productive structures already provided in the existing project near the boundary wall.

ii) The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration including plantation.

VIII. 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 project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms of Factory Act.

iii. 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.

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

v. The project proponent shall carry out the activities and spent an amount as committed during the Public Hearing and give preference to the local person as per the qualification to be employed in the expansion project.

IX. Corporate Environment Responsibility

i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility. The project proponent shall adhere to the commitments made in the proposal for CER activities for spending atleast minimum amount of Rs. 30 Lacs towards following CER activities:

S.No.	Activity	Aspect	Cost (Rs. La	Timeline	
				Start	End
1.	Providing cement benches in Village- Jalalpur	Social needs	4.0	Oct.2020	Nov.2020
2.	Providing Solar Lights in Village-Jalalpur 50 No's @ Rs. 12000/- each	Energy Saving	6.0	Jan. 2021	Mar. 2021
3.	Provide furniture and classroom in Govt. elementary school village-Jalalpur	Infrastructure education	5.0	Feb. 2021	Mar. 2021
4.	Providing Bio-Toilets 02 No's in Village- Jalalpur.	Water Pollution	4.0	Oct. 2022	Dec. 2022
5.	Providing ambulance to Govt. dispensary Jalalpur	Health infrastructu	9.0	June 2024	-
TOTAL			**30.0**		

However, CER activities shall strictly be in accordance with the activities listed out in the OM dated 01.05.2018 and as per the proposal submitted by the project proponent. 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 must be completed with the completion of the project.

ii. The company shall have a well laid down environmental policy duly approve 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.

iii. 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.

iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. The project proponent shall spend minimum amount of Rs 80 Lacs towards capital cost and Rs 10 Lacs / annum towards recurring cost. The entire cost of the environmental management plan will continue to be borne by the project proponent. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

v. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six-Monthly Compliance Report.

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

vii. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the plants shall be implemented.

XIII. Validity

ii) 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

XIV. Miscellaneous

i. 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.

ii. 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.

iii. 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.

iv. 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.

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

vi. 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.

vii. 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.

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

ix. 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 Expert Appraisal Committee.

x. 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).

xi. 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.

xii. The SEIAA/Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

xiii. The SEIAA/ Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

xiv. 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 by furnishing the requisite data / information/monitoring reports.

xv. 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.

xvi. 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.

ADDITIONAL SPECIFIC CONDITIONS DECIDED DURING MEETING OF SEAC

i. The project proponent shall minimize the water consumption in the steel plant complex by segregation of used water, practicing cascade use and by recycling treated water.

ii. The project proponent shall provide STP for treatment of waste water & reutilization of the treated water for core/non-core activities so as to achieve the Zero Liquid Discharge Condition as per the III (iv) of OM dated 09/08/2018 issued by the MoEF&CC for such units.

iii. The project proponent shall reuse of cooling tower blow down, simultaneously ensuring the standards prescribed for such purge waters. If required, necessary arrangements shall be made to keep this waste stream within the parameters required for reuse.

iv. A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site. Sand, murram, loose soil, cement, stored on site shall be covered adequately and Water sprinkling system be put in place so as to prevent dust pollution.

v. The project proponent shall reserve land for loading or unloading of raw material, products, slag, hazardous waste as well as for storage of these materials and the area to be reserved for parking. The area to be reserved by considering the time required for loading and unloading of vehicles for respective activities and minimum/maximum period for which storage of the above material is required in the premises. The areas for the respective activities to be marked on the layout plan.

vi. The project proponent shall comply with the standard operating procedures and upgradation of suction and treatment arrangement for the secondary emissions as prescribed by the State Pollution Control Board or by CPCB/MoEF&CC.

vii. Whole of the vehicle movement area as well as approach road to the gate /weighing bridge shall be paved with pucca / metalled / cement concrete road to control the dust emissions expected from the vehicle movement.

viii. The vehicles to be used for loading / unloading purpose shall not be parked along roadside so as to avoid the traffic congestion and dedicated parking place to be provided for the same.

ix. The project proponent shall adopt green technologies to conserve the water and energy including shearing / cutting / bundling machines. Also to provide abrasive resistant fire bricks in the crucibles to reduce the periodic maintenance & disposal of discarded fire bricks.

x. The project proponent shall use natural gas (if available) as substitute fuel wherever possible in the existing industry/ for expansion project.

xi. The project proponent shall take necessary action w.r.t. the following:-

a) Recovery of iron from slag before disposing it off.

b) Identify the areas for utilization of slag in scientific manner and its usage in cement / construction industry / road laying etc.

c) Recovery of precious metals like Zinc, lead and iron etc. from the APCD dust (Hazardous waste) through authorized re-processor.

xii. The project proponent shall install the pulse jet bag filter APCD with offline cleaning technology with the proposed induction furnace.

xiii. The project proponent shall not abstract ground water without the permission of District Advisory committee for its proposed expansion. The project proponent shall maintain proper record regarding use of STP water of MC Gobindgarh or nearby industries for industrial purposes and submit a copy of the same to regional office of PPCB every month for verification.

xiv. @@

Table Item No.01: Application for obtaining Environmental Clearance under EIA notification dated 14.09.2006 for Expansion of Commercial Food Court Project "Mohali Walk" located at Site No. 1 & 2, Sector-62, SAS Nagar (Mohali), Punjab by M/s PP Buildwell Private Limited (Proposal no SIA/PB/MIS/114401/2019).

SEAC observed as under: -

Earlier, Environmental clearance was granted vide letter No. 2736-45 dated 28.06.2016 to the project proponent for the Commercial Project, Food Court Site No. 1 & 2 in an area of 8,322.46 sqm. (or 2.05 acres) and having total built up area as 28,693.40 sqm in Sector-62, SAS Nagar (Mohali), Punjab.

The project proponent has now filed an application for obtaining Environnemental Clearance (EC) under EIA notification dated 14.09.2006 for Expansion of Commercial Food Court Project "Mohali Walk" located at Site No. 1 & 2, Sector-62, SAS Nagar (Mohali), Punjab by M/s PP Buildwell Private Limited.

SEAC was apprised that the project proponent was raised EDS online to which the project proponent has submitted reply as under :

EDS Reply for the Proposal No. SIA/PB/MIS/114401/2019 dated 18.09.2019

S. No.	**Documents required for obtaining environmental clearance for commercial project**	**Observations**	**EDS Reply**
1.	EC processing fee (DD No. & date) For B1 projects : At the time of TOR 25% and at the time of EC 75% For B2 project: At the time of time of EC 100%	Submit EC fee @ Rs. 2/ sqm of the built up area as per the notification dated 27/06/2019	The project proponent has submitted Rs. 94,000/-vide DD No. 598580 dated 13.08.2019.
2.	Whether the project falls in the critical polluted area notified by MoEF&CC.	Not Submitted.	The project falls in District SAS Nagar which does not come under critical polluted area notified by MoEF&CC.
3.	Various documents to be submitted alongwith the EC are listed as under: 1. Is the project involves diversion of forest land. If yes, a) Extent of the forest land. b) Status of the forest clearance. c) In case, project involves diversion of forest land then the project proponent will file an application before the	Not Submitted.	1. No diversion of forest land is involved in the project; therefore no clearance is required under Forest (Conservation) Act, 1980.

	concerned DFO obtaining forest clearance under Forest (Conservation) Act, 1980 and submit acknowledgement along-with copy of application submitted to concerned DFO. 2. a) Is the project covered under PLPA,1900, if No but located near to PLPA area then the project proponent is required to submit NOC from the concerned DFO to the effect that project area does not fall under the provision of PLPA Act, 1900. b) Is the project covered under PLPA, if yes then Status of the NOC w.r.t PLPA, 1900.		2. The project is not covered under PLPA, 1900 and does not fall near any PLPA area.
	3. If the project falls within 10 km of eco-sensitive area. If yes, a. Name of eco-sensitive area and distance from the project site. b. Status of clearance from National Board for Wild Life (NBWL). c. The project proponent is required to submit either documentary proof to the effect that Wildlife Sanctuary is more than 10 kms from the project site or in case, the same is within 10 kms radius then, the project proponent will file an application before the concerned DFO, Wildlife for obtaining NBWL permission and submit acknowledgement along-with copy of application submitted to concerned DFO Wildlife for obtaining permission from NBWL.		City Bird Sanctuary and Sukhna Wildlife Sanctuary are at a distance of approx. 5.8 km & 12 km respectively from the project location. Thus, NBWL application has already been filed for City Bird Sanctuary.
4.	The project proponent shall submit a copy of acknowledgement alongwith set of application filed to CGWA /Competent Authority for	Not Submitted	Water supply will be provided from GMADA.

	obtaining permission for abstraction of ground water.		
5.	For expansion projects: i. In case of increase in no. of storey, Structural Safety/ Stability Certificate may be required from the Approved Engineer.	Not Submitted	Structural Safety Certificate is submitted.
6.	The project proponent is required to submit the following information on the email seiaapb2019@gmail.com:- i) Synopsis of the project (Annexure- A) in pdf file and MS word format. ii) A copy of presentation in PPT format.	Not Submitted	i) Synopsis of the project in both the formats is being mailed to the mentioned E- mail ID. ii) Copy of presentation will be submitted separately.

EDS Reply for the Proposal No. SIA/PB/MIS/114401/2019 dated 10.10.2019

S.No.	Documents required for obtaining environmental clearance for commercial project	EDS Reply
1.	Please submit the details of fresh water requirement for the project till the GMADA lays down the complete network. Also, submit the proposal for discharge of treated domestic effluent and the municipal solid waste to be generated from the project, till the time GMADA makes adequate arrangements.	GMADA has already laid water supply and sewer line in the nearby project area. Water supply and sewer connection will be obtained prior to commissioning of the project.
2.	Please submit proper structural safety certificate from the Approved Engineer mentioning in detail about the project and considering the expansion proposed. Also, submit letter of approval of the approved engineer.	Structural Safety Certificate mentioning the number of floors has been submitted. Further, the safety certificate has been issued by Sh. Amit Kumar Tiwari. He has submitted copy of M.Tech degree awarded to him by the VIT University as a letter of being Approved engineer to submit such certificates.

EDS Reply for the Proposal No. SIA/PB/MIS/114401/2019 dated 06.11.2019

Description	EDS Reply
1. Submit concrete proposal for fresh water requirement for the project, discharge of treated domestic effluent and the municipal solid waste to be generated from the project, till the time GMADA makes adequate arrangements, as per letter from GMADA. 2. In the absence of proposal, please submit proper timelines in which GMADA provides the arrangements for the sewer, water supply and MSW. 3. In the absence of 1 and 2, Submit an affidavit to the effect that no sale deed will be executed till the time no adequate arrangement have been provided by GMADA.	Affidavit stating that no sale deed will be executed till adequate arrangement is provided by GMADA for water supply, excess treated sewage, storm and solid waste disposal has been submitted.

The case was considered by SEAC in its 186th meeting held on 26.12.2019 and was attended by the following on behalf of the project proponent:

i) Sh. Gitesh Aneja, representative of the Project proponent.

ii) Sh. Sandeep Garg, M/s ECO Laboratories & Consultants Pvt. Ltd.

SEAC was further appised that Regional office, MoEF Chandigarh vide email dated 22.10.2019 has sent the monitoring report of the project for the construction of Commercial Project Food Court Site No. 1 & 2 at Sector- 62, SAS Nagar, Mohali, Punjab being developed by M/s P.P Buildwell Pvt. Ltd.. As per the report following observations have been reported and the project proponent replied as under:

S. No.	Observation	Reply of the project proponent
1.	The unit has not provided any rain water harvesting structure.	The same will be constructed.
2.	Fresh Water through tankers is being used for construction.	Treatred wastewater will be utilised for the same.

SEAC allowed the project proponent to present the salient features of the project and the Environmental Consultant of the same presented as under:

<table>
<tr><th>S.No.</th><th>Item</th><th>Details</th></tr>
<tr><td>1.</td><td>Online Proposal No.</td><td>SIA/PB/MIS/114401/2019</td></tr>
<tr><td>2.</td><td>Name and Location of the project</td><td>Expansion of Commercial Food Court Project “Mohali Walk” located at Site No. 1 & 2, Sector-62, SAS Nagar (Mohali), Punjab by M/s PP Buildwell Private Limited.</td></tr>
<tr><td>3.</td><td>Latitude & Longitude</td><td>Corners coordinates:
<table>
<tr><th>Corner</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>Corner-1</td><td>30°41'48.99"N</td><td>76°43'56.10"E</td></tr>
<tr><td>Corner-2</td><td>30°41'51.87"N</td><td>76°43'59.76"E</td></tr>
<tr><td>Corner-3</td><td>30°41'50.37"N</td><td>76°44'01.04"E</td></tr>
<tr><td>Corner-4</td><td>30°41'47.59"N</td><td>76°43'56.69"E</td></tr>
</table></td></tr>
<tr><td>4.</td><td>Project/activity covered under item of scheduled to the EIA Notification, 14.09.2006</td><td>The project falls under Schedule 8(a) - ‘Building and Construction’ Category B.</td></tr>
<tr><td>5.</td><td>Whether the project is in critical polluted area or not.</td><td>No.</td></tr>
<tr><td>6.</td><td>If the project involves diversion of forest land. If yes,
a. Extent of the forest land.
b. Status of the forest clearance.</td><td>No diversion of forest land is involved in the project; therefore no clearance is required under Forest (Conservation) Act, 1980. Undertaking regarding the same has been submitted</td></tr>
<tr><td>7.</td><td>a. Is the project covered under PLPA, 1900, if No but located near to PLPA area then the project proponent is required to submit NOC from the concerned DFO to the effect that project area does not fall under the provision of PLPA Act, 1900.

b. Is the project covered under PLPA,1900, if yes then Status of the NOC w.r.t PLPA, 1900.</td><td>The project is not covered under PLPA, 1900 and does not fall near any PLPA area.

Undertaking regarding the same has been submitted</td></tr>
</table>

<table>
<tr><td>8.</td><td>If the project falls within 10 km of eco-sensitive area/ National park/Wild Life Sanctuary. If yes,
a. Name of eco-sensitive area/
National park/Wild Life Sanctuary and distance from the project site.
b. Status of clearance from National Board for Wild Life</td><td>City Bird Sanctuary and Sukhna Wildlife Sanctuary are at a distance of approx. 5.8 km & 12 km respectively from the project location. Thus, NBWL application has already been filed for City Bird Sanctuary; copy of the application has already been submitted</td></tr>
<tr><td>9.</td><td>Classification/Land use pattern as per Master Plan</td><td>The project falls under Commercial zone as per Master plan of SAS Nagar. Master plan showing project location has been submitted</td></tr>
<tr><td>10.</td><td>Cost of the project</td><td>The cost of the project after expansion is estimated to be Rs. 112.82 Crores.</td></tr>
<tr><td>11.</td><td>Total Plot area, Built- up Area and Green area</td><td>The details of project is as under:
<table><tr><th>S.No.</th><th>Description</th><th>Area</th></tr><tr><td>1.</td><td>Plot area (Total scheme area)</td><td>8,325 m^2 (or 2.05 acres)</td></tr><tr><td>2.</td><td>Built-up area</td><td>46,529.229 m^2</td></tr><tr><td>3</td><td>Green area</td><td>1,050 m^2</td></tr></table></td></tr>
<tr><td>12.</td><td>Population (when fully operational)</td><td>Estimated population: 10,867 Persons.</td></tr>
<tr><td>13.</td><td>Water Requirements & source in Construction Phase</td><td>During construction phase, water demand will be of approx. 20 KLD. The water requirement is being met by private water tankers. Domestic water demand for 125 workers during peak period @ 8 KLD is being provided by water tankers.</td></tr>
</table>

14. Break up of Water Requirements & source in Operation Phase (Summer, Rainy, Winter):

S.No.	Season	Fresh water		Reuse water			Total (KLD)
		Domestic (KLD)	Others (KLD)	Flushing (KLD)	Green area (KLD)	HVAC (KLD)	
1.	Summer	155	10	114	6	100	385
2.	Winter	155	10	114	2	-	281
3.	Rainy	155	10	114	0.5	100	380

S.No.	Description	Source of water
1.	Domestic	GMADA supply
2.	Others (Filter backwashing)	GMADA supply
3.	Flushing purposes	Treated wastewater

15.	Treatment & Disposal arrangements of waste water in Construction Phase	Septic tank. Wastewater generated during the construction phase is being treated in septic tank. Waste handling will be done by site contractor whose
16.	Disposal Arrangement of Waste water in Operation Phase	Total wastewater and sewage generation will be 225 KLD which will be treated in proposed STP of 200 KLD capacity and WWTP of 100 KLD capacity to be installed within project premises.
17.	Rain water recharging detail	269.71 m^3/hr rain water will be generated which will be collected in 5 no. of recharging pits with dual bore which will be provided to recharge the

Season	Flushing (KLD)	Green area (KLD)	GMADA Sewer (KLD)
Summer	114	6	48

<table>
<tr><td>18.</td><td>Solid waste generation and its disposal</td><td>a) 2,173 kg/day
b) Solid wastes will be appropriately segregated (at source) by providing bins into Bio-degradable and non-biodegradable Components.
c) 978 kg/day of bio-degradable will be Converted into Manure using 2 Mechanical Composters of size 500 kg each
d) 1152 kg/day of non-biodegradable or dry waste will be handed over to</td></tr>
<tr><td>19.</td><td>Hazardous Waste & E- Waste</td><td>Used oil from DG sets will be sold to registered recyclers and E-waste will be disposed off as per the E-waste</td></tr>
<tr><td>20.</td><td>Energy Requirements & Saving</td><td>a) 2,297 KW from PSPCL.
b) 3 DG Sets (2 No. of capacity 1,500 KVA each and 1 No. of capacity 600 KVA) (silent DG sets)
<u>Energy Saving measures:</u>
Solar panels have been proposed on the terrace of the building and thereby generating 30 KW of solar power generation.
Approx. 20% energy will be saved. Details of the same has been submitted</td></tr>
<tr><td>21.</td><td>Environment Management Plan along with Budgetary break up phase wise and responsibility to implement</td><td>During construction phase, Rs. 126 lakhs as capital & Rs. 6.1 lakhs as recurring will be spent on EMP. While, during operation phase, Rs. 23 lakhs will be spent as recurring cost per annum for implementation of the EMP.
<table>
<tr><th>Description</th><th>Capital cost (lakhs)</th><th>Recurring cost (lakhs)</th><th>Monitoring of Air, Noise, water (per annum) Rs.</th></tr>
<tr><td>Construction</td><td>126</td><td>6.1</td><td>1</td></tr>
</table>
</td></tr>
<tr><td>22.</td><td colspan="2">CER activities along with budgetary break up and responsibility to implement</td></tr>
<tr><td colspan="3">Mr. Naresh Kumar (Director) of M/s P.P. Buildwell Pvt. Ltd. will be responsible for implementation of CER (Corporate Environmental Responsibility) as well as</td></tr>
</table>

Environment Management Plan (EMP) till the project is handed over. As per Office Memorandum of CER dated 01.05.2018; project proponent needs to spend 1.5% of project cost i.e. Rs. 1.69 Crores. Thus, project proponent will spend Rs. 1.7 Crores as per the activities mentioned below:

S. No.	Activities	Annual expenditure (in Lakhs)	Timeline	Total expenditure in 5 years (in Lakhs)
1.	Government Public Library, Phase-4, Mohali. • Maintenance of the Building • Upgradation of the facilities in library by providing more aid in order to purchase books.	25	2 years	50
2.	Government High School, Sector-61, Mohali. • Adoption of school for their better regulation and expansion of facilities as per their needs.	30	3 years	90
3.	Government Dispensary Sector 49, Chandigarh. • Providing Ambulance	30	One time	30
		85 Lakhs		**1.7 Crores**

SEAC raised following queries to the project proponent and the project proponent replied as under:

Sr. No.	Observations	Reply submitted by the project proponent and his Environmental Consultant
1.	As to whether the permission from Deptt. of Forest under the Forest (Conservation) Act, 1980 and Wildlife (Protection) Act, 1972 has been obtained.	No forest land is involved at the project site.

2.	Whether online application for obtaining NOC for abstraction of ground water has been applied CGWA?	Water supply will be provided from GMADA.
3.	As to whether the land use of the area is permissible for the establishment of the project for which EC has been applied as per the provisions of Master Plan of the city.	GMADA has allotted the site for commercial food court vide memo no. 44370 dated 21.10.2015.
3.	What will be the treatment proposal for the sewage expected from the labours / employees during the construction phase?	Septic tank will be provided for the treatment of waste water generated during construction phase.
4.	The project proponent is required to submit rain water harvesting calculations after taking into account storm water retention time of 60 minutes.	The project proponent submitted as under: • Rainwater recharging will be done from Green area, Roof-top area and Paved Area i.e. 1050 sq.m., 3,456.505 sq.m. and 3,818.495 sq.m. respectively. • Thus, assuming peak hourly rainfall of 45 mm and specific runoff coefficients, total runoff available will be 269.71 m3/hr. • Five rain water recharging pits with dual bore are being proposed for artificial rain water recharge within the project premises. Calculations are given below:

S. No.	Type of Surface	Catchment's Area (m^2)	Runoff Coeff. [C]	Rainfall Intensity (I)	Discharge (Run Off) [Q=CIA] m^3/hr
1.	Rooftop Area	3,456.505	0.9	45 mm	139.98
2.	Green Area	1,050.00	0.2	45 mm	9.45
3.	Paved Area	3,818.495	0.7	45 mm	120.28
	Total				269.71
Taking 60 minutes retention time, total volume of storm water = 269.71					

Taking effective diameter & depth of a recharge pit as 4 m & 2.5 m respectively; Volume of recharge pit = 3.14 ×2×2×2.5 = 31.4 m^3
Total volume of single Recharge structure = 31.4 m^3
No. of recharge pits required = 269.71/31.4 = 8.58 Say 9 Pits.
But, as per MoEF&CC Notification, 1 bore is to be provided for 5,000 sq.m. of built-up area. Thus, No. of bores required = 46529.229 / 5000 = 9.3 or 10 Nos. However, total 5 no. of Rain Water Recharging pits with dual bore are proposed within the project premises.

5.	The proposed CER activities are general and the project proponent is required to submit CER proposal specifically mentioning the activities.	The project proponent agreed to the same and submitted that Mr. Naresh Kumar (Director) of M/s P.P. Buildwell Pvt. Ltd. will be responsible for implementation of CER (Corporate Environmental Responsibility) as well as Environment Management Plan (EMP) till the project is handed over. As per Office Memorandum of CER dated 01.05.2018; project proponent needs to spend 1.5% of project cost i.e. Rs. 1.69 Crores. Thus, project proponent will spend Rs. 1.7 Crores as per the activities mentioned below:

S. No.	**Activities**	**Annual expenditure (in Lakhs)**	**Timeline**	**Total expenditure in 5 years (in Lakhs)**
1.	Government Public Library, Phase-4, Mohali. • Maintenance of the Building • Upgradation of the facilities in library by providing more aid in order to purchase books.	25	2 years	50
2.	Government High School, Sector-61, Mohali. • Adoption of school for their better regulation and expansion of facilities as per their needs.	30	3 years	90

3.	Government Dispensary Phase 9, Mohali. • Providing Ambulance	30	One time	30
		85 Lakhs		**1.7 Crores**

SEAC took a copy of presentation along with reply given by the project proponent and his environmental consultant on record.

After deliberations SEAC decided to award 'Silver Grading' to the project proposal and to forward the application of the project proponent to SEIAA with the recommendations to grant Environmental Clearance for expansion of Commercial Food Court Project "Mohali Walk" establishment of warehouse project having built up area 46,529.229 sqm (After Expansion) in total land area of 2.05 Acres, located at Site no. 1 & 2, Sector- 62, SAS Nagar, as per the details mentioned in the Form 1, 1A, EMP & subsequent presentation / clarifications made by the project proponent and his consultant with, proposed measures, conditions:

Specific Conditions:

i) The project proponent shall not execute sale deed till adequate arrangement is provided by GMADA for water supply, excess treated sewage, storm and solid waste disposal.

II. Statutory compliance:

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

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

iii) 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.

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 Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board / Committee.

vi) The project proponent shall obtain the necessary permission for drawl of ground water/ 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 Chief Controller of Explosives, Fire Department, 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 confirm to the suitability as prescribed under the provisions laid down under the master plan of respective city/ town. For that, the project proponent shall either to submit the NOC/ land use conformity certificate from Deptt of Town and Country Planning or other concerned Authority under whom jurisdiction, the site falls.

xii) Besides 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 type of projects.

xiii) The project proponent shall get the layout plans approved from the Competent Authority for the activities / establishments to be set up at project site in consonance of the project proposal for which this environment clearance is applied.

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 ambient air quality at the site.

iii) The project proponent shall install system to carryout 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 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. The location of the DG sets may be decided with in consultation with State Pollution Control Board.

v) Construction site shall be adequately barricaded before the construction begins. Dust, smoke & 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, continuous dust/ wind breaking walls all around the site (at least 3m height or 1/3rd of the building height and maximum upto 10m). 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 & 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 area shall be prohibited. 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 earmarked area and road side 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 construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.

xiv) The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the 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 National Building Code of India.

xvi) Roads leading to or at construction site must be paved and blacktopped (i.e. metallic road)

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 measure be notified at the site. .

III. Water quality monitoring and preservation

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

ii) No construction shall be allowed to obstruct the natural drainage through the site, on 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 rain water.

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

iv) The total water requirement for the project will be 269 KL/day, which shall be met through GMADA supply. Total fresh water use shall not exceed the proposed requirement as provided in the project details.

v) a)The total wastewater generation at the outlet of STP and WWTP from the project will be 220 KLD out of which 154 KL/day (black water) and remaining quantity (66 KLD) , grey water which will be treated in STP of capacity @ 200 KLD and WWTP of 100 KLD receptivity, within the project premises. As proposed, reuse of treated wastewater and discharge of surplus treated wastewater shall be as under: -

S. No.	Season	For Flushing purposes (KLD)		HVAC (KLD)	Green Area (KLD)	Into GMADA Sewer (KLD)
		Treated Grey water	Treated Black Water	Treated Black Water	Treated Black Water	Treated Black Water
1.	Summer	66	48	100	6	0
2.	Winter	66	48	100	2	4
3.	Rainy	66	48	100	0.5	5.5

b) 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.

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

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

vii) The waste water generated from swimming pool(s) shall not be discharged and the same shall be reused within the premises for purposes such as horticulture, HVAC etc.

viii) The quantity of fresh water 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 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 water available. This should be specified separately for ground water 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-Jaws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.

xi) Installation of dual pipe plumbing 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, conditioning etc. shall be done.

xii) The respective project proponent shall discourage the installation of R.O. plants in their projects in order to save the wastage in form of RO reject. However, in case the requirement of installing RO plant is utmost necessary then the rejected stream from the RO shall be separated and shall be utilized by storing the same within the particular component i.e. (Tower/Mall) or in a common place in the project premises.

xiii) The project proponent shall also adopt the new/innovating technologies like less water discharging taps (faucet with aerators)/urinals with electronic sensor system /water less urinals / twin flush cisterns/ sensor based alarming system for overhead water storage tanks and make it a part of the environmental management plans / building plans so as to reduce the water consumption/ground water abstraction in their Building Construction & Industrial projects.

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

Sr. No	**Nature of the Stream**	**Color code**
a)	Fresh water	Blue Color

b)	Untreated wastewater from Toilets/ urinal & from Kitchen	Black color
c)	Untreated wastewater from Bathing/shower area, hand washing (Washbasin / sinks) and from Cloth Washing	Grey color
d)	Reject water streams from RO plants & 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 color
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 grey water	Green with strips
g)	Storm water	Orange Color

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

xvi) The CGWA provisions on rain water harvesting should be followed. Rain water harvesting recharge pits (10 Nos) /storage tanks shall be provided for ground water recharging as per the CGWB norms.

xvii) A rain water harvesting plan needs to be designed where the recharge bores of minimum one recharge bore per 5,000 square meters of built up area and storage capacity of minimum one day of total fresh water requirement shall be provided. In areas where ground water recharge is not feasible, the rain water should be harvested and stored for reuse. The ground water shall not be withdrawn without approval from the Competent Authority.

xviii) All recharge should be limited to shallow aquifer.

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

xx) Any ground water 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 ground water abstraction or dewatering.

xxi) The quantity of fresh water 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 along with six monthly Monitoring reports.

xxii) Sewage shall be treated in the STP with tertiary treatment. STP shall be installed in phased manner viz a viz in module system designed in a such a way so as to efficiently treat the waste water with increase in its quantity due to rise in occupancy. The treated effluent from STP shall be recycled/re-used for flushing, AC make up water and gardening. No treated water shall be disposed in to municipal stormwater drain.

xxiii) No sewage or untreated effluent water would be discharged through storm water drains. Onsite sewage treatment of capacity of treating

100% waste water to 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 before the project is commissioned for operation. Treated waste water shall be reused on site for landscape, flushing, cooling tower, and other end-uses. Excess treated water shall be discharged as per statutory norms notified by Ministry of Environment, Forest and Climate Change. Natural treatment systems shall be promoted.

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

xxv) Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed 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

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

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

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

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. day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.

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

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) Solar power by utilizing at least 30% of the roof top area shall be used for lighting in the apartment to reduce the power load on grid. 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. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.

VI. Waste Management

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

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

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

iv) Organic waste compost/ Vermiculture pit/ Organic Waste Converter within the premises with a minimum capacity of 0.3 kg /person/day must be installed for treatment and disposal of the waste.

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

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

vii) 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 environment friendly materials.

viii) Fly ash should be used as 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.

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

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

VII. Green Cover

i) No tree can be felled/transplant 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. Plantations to be ensured species (cut) to species (planted).

ii) At least 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. A minimum of one tree for every 80 sqm of total project land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. 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 provided as per SEIAA guidelines.

iii) Where the trees need to be cut with prior permission from the concerned local Authority, compensatory plantation in the ratio of 1: 10 (i.e. planting of 10 trees for every 1 tree that is cut) shall be done and maintained. Plantations to be ensured species (cut) to species (planted). Area for green belt development shall be provided as per the details provided in the project document.

iv) 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 plantation of the proposed vegetation on site.

v) 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.

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

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.

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

   j) Traffic calming measures.

   k) Proper design of entry and exit points.

   l) Parking norms as per local regulation.

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

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 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in 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 mask.

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

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

iv) Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, 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.

v) Occupational health surveillance of the workers shall be done on a regular basis.

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

X. Corporate Environment Responsibility

i) The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility. The project proponent shall adhere to the commitments made in the proposal for CER activities for spending at least minimum amount of Rs. 1.70 crore towards following CER activities. The details are given below: -

S. No.	Activities	Annual expenditure (in Lakhs)	Timeline	Total expenditure in 5 years (in Lakhs)
1.	Government Public Library, Phase-4, Mohali. • Maintenance of the Building • Upgradation of the facilities in library by providing more aid in order to purchase books.	25	2 years	50
2.	Government High School, Sector-61, Mohali. • Adoption of school for their better regulation and expansion of facilities as per their needs.	30	3 years	90
3.	Government Dispensary Phase 9, Mohali. • Providing Ambulance	30	One time	30

		85 Lakhs		**1.7 Crores**

ii) 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.

iii) 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.

iv) Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. The project proponent shall spend minimum amount of Rs 126 Lacs towards capital cost and Rs 6.1 Lacs/annum towards recurring cost in Construction phase of the project including the environmental monitoring cost and shall spend minimum amount of Rs 23 Lacs/annum towards recurring cost in 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 until the responsibility of environmental management plan is transferred to the occupier/residents society under proper MOU under intimation to SEIAA, Punjab. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

XI. Validity

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.

XII. Miscellaneous

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

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

iii) The project proponent shall prominently advertise it at least in 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 MoEFCC/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 has to 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 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 Environment Clearance portal.

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 on the website of the company.

viii) The project proponent shall inform the Regional Office as well as the Ministry, 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, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.

xi) 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).

xii) 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.

xiii) The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

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

xv) The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data/ information/monitoring reports.

xvi) 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.

xvii) 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.

The meeting ended with a vote of Thanks to the Chair

***