

**Proceedings of 181<sup>st</sup> meeting of State Expert Appraisal Committee held on 11.07.2019 at 09:15 AM in Conference Hall-II (I<sup>st</sup> Floor) Punjab State Council for Science & Technology, MGSIPA Complex, Sector 26, Chandigarh.**

The following members were present: -

<b>Sr. No.</b>	<b>Name of SEAC Member</b>	<b>Designation in SEAC</b>
1.	Er. Yogesh Gupta	Chairman
2.	Er. R K Ratra	Secretary
3.	Er. Parminder Singh Bhogal	Member
4.	Er. Gurinder Jit Singh	Member
5.	Er. Nirmal Singh Kahlon	Member
6.	Sh. A.K. Bhatia	Member
7.	Dr. Pawan Krishan	Member
8.	Dr. Harpreet Kaur	Member
9.	Dr. V.K. Singhal	Member
10.	Sh. K.L. Malhotra	Member
11.	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 and through Google drive. Thereafter, the agenda was taken up for consideration.

**Item No. 1): Confirmation of the proceedings of 178<sup>th</sup>, 179<sup>th</sup> and 180<sup>th</sup> meetings of State Level Expert Appraisal Committee held on held on 15.04.2019, 02.05.2019 and 10.05.2019 respectively.**

SEAC was apprised that the proceedings of 178<sup>th</sup> , 179<sup>th</sup> and 180<sup>th</sup> meeting of State Level Expert Appraisal Committee held on 15.04.2019, 02.05.2019 and 10.05.2019 were circulated to all members of SEAC vide email dated 02.06.2019 & letter no. 421-434 dated 03.06.2019 , vide email dated 09.06.2019 & letter no. 472-486 dated 10.06.2019 and vide email dated 10.06.2019 & letter no. 489-503 dated 27.06.2019 respectively & also uploaded the same on the official website of MoEF&CC.

No observation has been received from any of the member except from Sh. AK Bhatia, Member (SEAC) w.r.t. item no. 179.5-Recharge plan is not as per CGWA guidelines, to be revised, 179.07- PP shall apply for CGWA NOC & shall submit recharge plan and 179.10- Recharge plan not submitted. These observations were discussed in detail in the 181<sup>st</sup> meeting of SEAC held on 11.07.2019. SEAC observed that the project proponents of these items have addressed the issues as per the norms followed in the various previous meetings of SEAC, wherein, Sh. Bhatia was also present. As such, SEAC found that it will not be appropriate to raise observation in particular cases at this stage. However, SEAC opined that uniform pattern may be given to the project proponent and the environmental consultants for submitting recharge/harvesting Plan while submitting their applications for TOR/EC

SEAC decided that a sub-committee of the members of the SEAC having expertise in the field consisting of Sh.A.K Bhatia and Sh.Deepak Sethi shall be constituted for prescribing some uniform parameters to be considered by the environmental consultants of the project proponents while submitting the recharge/harvesting plan of rain water before the next meeting of SEAC. In light of the above discussions, SEAC also confirmed the proceedings of 178<sup>th</sup> meeting, 179<sup>th</sup> meeting and 180<sup>th</sup> meeting held on 15.04.2019, 02.05.2019 & 10.05.2019 respectively.

**Item No. 2): Action taken on the proceedings of 178<sup>th</sup> and 179<sup>th</sup> meeting of State Level Expert Appraisal Committee held on 15.04.2019 and 02.05.2019 respectively.**

The action on the proceedings of 178<sup>th</sup> and 179<sup>th</sup> meetings of SEAC held on 15.04.2019 and 02.05.2019 were taken and action taken report of the aforesaid meetings was seen by SEAC. The action on the 180<sup>th</sup> meeting of SEAC is being taken and shall be placed in its next meeting. The gist of 178<sup>th</sup> meeting is as under:

- Item no.178.04, 178.09, 178.14 are the cases of environmental clearance, Item no.178.08 is case of amendment in environmental clearance, Item no. 178.11 is a case of extension in validity of environmental clearance and these cases have been recommended to SEIAA for grant / issuance of amendment letter / extension letter.

- Item no. 178.05 has been recommended to SEIAA for issuance of notice to delist the application.
- Item no. 178.06 was deferred as the project proponent could not attend the meeting and shall be placed in the next meeting of SEAC.
- Item no. 178.07,178.15 & 178.18 were deferred due to additional details sought from the project proponents of these projects and shall be placed in the next meeting of SEAC after the receipt of replies.
- Item no.178.10, 13 are the cases of Terms of References (TORs) and have been recommended to SEIAA for issuance of TORs.
- Item no. 178.12 has been deferred as no EIA co-ordinator was present and has been listed at Item no. 179.03 in the 179<sup>th</sup> meeting held on 02.05.2019.
- Item no. 178.16 & 178.17 were the cases that could not be taken up due to paucity of time and have been placed in the 179<sup>th</sup> meeting held on 02.05.2019 at 179.01 & 179.02 item respectively.

The gist of 179<sup>th</sup> meeting is as under:

- Item no.179.01, 179.02, 179.03 & 179.07 are the cases of Terms of References (TORs) and have been recommended to SEIAA for issuance of TORs.
- Item no. 179.04 & 179.06 were deferred due to additional details sought from the project proponents of these projects and shall be placed in the next meeting of SEAC after the receipt of replies.
- Item no.179.05 is a case of environmental clearance, Item no.179.09 is case of amendment in environmental clearance and these cases have been recommended to SEIAA for grant / issuance of amendment letter.
- Item no.179.09 & 179.10 are the cases which have been deferred as construction status report has been sought from PPCB and project proponent have been asked to submit the reply w.r.t ADS.
- Item no. 179.11 to 179.16 could not be taken up due to paucity of time and same have been considered in 180<sup>th</sup> meeting of SEAC held on 10.05.2019.  
The action on the 180<sup>th</sup> meeting of SEAC is being taken and shall be placed in its next meeting.

**Item No.181.01: Application for obtaining Environmental Clearance (EC) under EIA notification dated 14.09.2006 for establishment of a Group Housing project namely "SBP Homes Gardenia" at Village Chajjumajra, Kharar, SAS Nagar, Punjab by M/s SBP Shine Star Pvt. Ltd. (Proposal No. SIA/PB/NCP/89801/2018)**

The SEAC observed as under: -

The project proponent has filed an application for obtaining Environment Clearance under EIA notification, 2006 for establishment of a Group Housing project namely "SBP Homes Gardenia" at Village Chajjumajra, Kharar, SAS Nagar, Punjab by M/s SBP Shine Star Pvt. Ltd.

After initial scrutiny of the online application, the following EDS were sought online to which the project proponent has replied as under:

<b>Sr. No.</b>	<b>EDS</b>	<b>Reply given by the PP</b>
1.	KML File not attached.	Submitted
2.	As Forest land is involved. Please submit the acknowledgement along with complete set of application submitted to the DFO.	No Forest land is involved.
3.	a) In case(s) 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.	Submitted.
4.	Photograph submitted from 3 side. Please provided the 4th photograph.	Submitted.
5.	Firefighting equipment not marked on the layout.	Marked on the layout.
6.	Quantity of wastewater to be discharged, in the MC permission letter not mentioned.	Submitted.
7.	Water balance chart for summer, rainy and winter seasons indicating critical requirements. Submitted but not as per the Table-1.	Submitted the plan and the quantity of grey and black water.
8.	Drawing showing plumbing systems for use of fresh, treated and hot water submitted but not as per the annexure-1.	Revised plan submitted.
9.	Cost of project not mentioned.	50 Crore.
10.	Please recheck the water balance	Corrected

11.	Mark the location of public sewer	Marked on page 22 A
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The case was considered by the SEAC in its 179<sup>th</sup> meeting held on 02.05.2019 and the same was attended by the following on behalf of the project proponent: -

- (i) Sh. Sahil Bansal, General Manager and Sh. Deepak Gupta, Environmental Advisor, of the project proponent.
- (ii) Sh. Sital Singh, EIA-Coordinator, M/s CPTL Pvt. Ltd., Mohali, Environment Consultant of the promoter company.

SEAC was apprised that Environmental Engineer, PPCB, Regional Office, SAS Nagar was requested vide dated 20.03.2019 and reminder dated 29.03.2019 to send the report on the following:

1. Construction status at the site along with physical structures within 500 mt radius of the site including the status of industries if any
2. To verify the as to whether any (i) Protected Areas notified under the Wild Life (Protection) Act, 1972, (ii) Critically Polluted areas as notified by the Central Pollution Control Board from time to time, (iii) Notified Eco-sensitive areas, (iv) inter-State boundaries and international boundaries falls within 5 km radius from the boundary of the project site
3. As to whether the site of the project is meeting with the siting guidelines farmed by Punjab Pollution Control Board for such type of projects.

SEAC was apprised that construction status report has not been received from PPCB so far inspite of the necessary follow up.

SEAC observed that Regional Office of PPCB, Mohali was requested vide email dated 20.03.2019 to send the status report of project site and again an email dated 29.03.2019. However, Regional Office, Mohali has failed to send the report well within time. Due to non-availability of the report, the Committee was unable to consider the case resulting in unnecessary wastage of time of the SEAC to SEAC and the project proponent. SEAC took serious note of the same.

After detailed deliberations, SEAC decided as under: -

- a) Member Secretary, PPCB be requested to call an explanation of the concerned Regional Officer responsible for not sending the report in time in spite of the various reminders and send the action taken report.
- b) Member Secretary, PPCB be requested to ask the concerned Regional Office to send the status report immediately to SEAC so that further action in the matter can be taken.

The decision of the SEAC has been conveyed to the PPCB vide letter no. 487 dated 14.06.2019.

The case was considered by the SEAC in its 181<sup>st</sup> meeting held on 11.07.2019 and the same was attended by the following on behalf of the project proponent: -

- (i) Sh. Rohit Saroha, Legal Advisor and Sh. Deepak Gupta, Environmental Advisor, of the project proponent.
- (ii) Sh. Sital Singh, EIA-Coordinator, M/s CPTL Pvt. Ltd., Mohali, Environment Consultant of the promoter company
- (iii) Sh. Sandeep Singh, FAE, M/s CPTL Pvt. Ltd., Mohali, Environment Consultant of the promoter company

SEAC was apprised that Environmental Engineer, PPCB, Regional Office, Mohali vide letter no. 2279 dated 07.05.2019 has intimated that the site of the project was visited by the AEE of their office on 02.05.2019. It was observed that no construction work has been started by the promoter company, however, the boundary has been demarcated with iron sheets. The site is surrounded by an upcoming commercial project which is under construction on one side. On others side Nijjar Road exists and on the front some temporary encroachments are there. Towards Nijjar Road opposite to the project site, a residential project i.e. SBP Homes Extension 3 exists. There are residential and commercial buildings within 250 mtrs radius of the site. There is no brick kiln/ rice sheller/ cement plant/stone crushing unit or any MAH industry within a radius of 500 m from the boundary of the project site. Furthermore, as per master plan of SAS Nagar sector 115 is meant for residential purpose. Therefore, the site of the project is conforming to the siting criteria laid down by the Govt. vide order dated 25.07.2008 as amended on 30.10.2009.

Sh. Rohit Saroha submitted an authority letter dated 11.07.2019 wherein he and Sh. Deepak Gupta, Environmental Advisor of the Company have been authorized by Director of the promoter company to submit any reply, documents on behalf of company. Any commitment made be him during the presentation will be binding / acceptable to the company. Before taking said authority letter on record, SEAC took a serious view and made it clear to the Environmental Consultant that as per guidelines of MoEF&CC, sufficiently senior representative shall be present before the Committee

but today as an exception (as the case already got delayed for want of the visit report of PPCB), they are allowed to present the case. From next time, same shall not be entertained.

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

1)	Activity or Item No. as per EIA Notification, 2006 (in schedule)	8(a): Building & Construction Project. Area less than 50 ha or /and built up area less than 1,50,000 sqm		
	Category as per EIA Notification, 2006 (in schedule)	Category B2		
2)	Requirement of Public consultation	Not required being Building Construction Project under B2 category.		
3)	Requirement of EIA	Not required being B2 category project.		
4)	Applicability of GC	Not applicable being Building Construction Project under B2 category project.		
5)	Name and Location of the project	"SBP Homes Gardenia" at Village Chajjumajra, Kharar, SAS Nagar, Punjab by M/s SBP Shine Star Pvt. Ltd.		
6)	Total cost of the project	Rs. 50 Crores.		
7)	Total Plot area, Built-up Area and Green area	The details of the group housing project is as under:		
		Sr. No.	Description	Details
		1.	Total Project land Area	20969 sqm.
		2.	Built-up Area	44324 sqm.
3.	Green Area	3595 sqm.		
8)	Population (when fully inhabited)	2172 Persons.		
9)	Water Requirements & source	<b>Break up of water requirement</b>	<b>Source</b>	
		Total: 290 KLD in operation phase (194 KLD fresh water.  Total: 10-12 KLD in construction phase.	1. Groundwater (Main source). 2. Public supply (Not available but in future, it is proposed) 3. Treated effluent from the STP of MC.	

10)	Disposal Arrangement of Waste water	<p>Total = 232 KLD, which will be treated in the STP of capacity 350 KLD to be installed in the project premises.</p> <table border="1"> <thead> <tr> <th>S. No.</th> <th>Season</th> <th>For Flushing purposes (KLD)</th> <th>Green Area (KLD)</th> <th>Into sewer (KLD)</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Summer</td> <td>96</td> <td>20</td> <td>116</td> </tr> <tr> <td>2.</td> <td>Winter</td> <td>96</td> <td>06</td> <td>130</td> </tr> <tr> <td>3.</td> <td>Rainy</td> <td>96</td> <td>02</td> <td>134</td> </tr> </tbody> </table>	S. No.	Season	For Flushing purposes (KLD)	Green Area (KLD)	Into sewer (KLD)	1.	Summer	96	20	116	2.	Winter	96	06	130	3.	Rainy	96	02	134
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1.	Summer	96	20	116																		
2.	Winter	96	06	130																		
3.	Rainy	96	02	134																		
11)	Rain water recharging detail	9863 KL/year rainwater shall be recharged with adequate treatment as per the norms of CGWA.																				
12)	Solid waste generation and its disposal	<ul style="list-style-type: none"> <li>a) 862 kg/day</li> <li>b) Solid wastes will be appropriately segregated at source as Bio-degradable and non-biodegradable as per MSW Rules, 2016.</li> <li>c) Chute and mechanical composter will be provided.</li> <li>d) Non-biodegradable &amp; recyclable waste will be sold to recyclers.</li> </ul>																				
13)	Hazardous Waste & E-waste	<ul style="list-style-type: none"> <li>1. Spent/used oil from DG sets will be sold to approved recyclers as per EPA, 1986.</li> <li>2. E-waste generated will be stored in an isolated room and will be sent to the manufacturers as per the EPA Rules.</li> </ul>																				
14)	Energy Requirements & Saving	<ul style="list-style-type: none"> <li>a) 2250 KW from State Power Supply.</li> <li>b) 1 x 500 KVA, 1x125 KVA and 1 x 240 KVA DG sets with canopy as standby arrangements will be provided.</li> <li>c) Solar energy will be used for street lights on the road as well as in the parks in phased manner.</li> <li>d) Use of LED will be encouraged.</li> <li>e) Energy efficient electrical gadgets will be used.</li> <li>f) Use of solar water heating system shall be encouraged.</li> <li>g) 207 KWHD total energy will be saved by installing solar lights (10 Nos), replacing common area lights (300) with LED and Solar water heater for total water requirement.</li> </ul>																				
15)	Environment Management Plan along with Budgetary break up phase wise and responsibility to implement	General Manager Projects will be responsible for implementation of EMP during construction phase. During operational phase, Partner will be responsible for implementation of the EMP till the handing over of project to MC or Association of residents. Thereafter, Association of residents or MC who so ever takes over the project will be responsible for implementation of																				



		<p>EMP. The budgetary breakup phasewise of the EMP is as under:</p> <table border="1"> <thead> <tr> <th>Description</th> <th>Capital Cost</th> <th>Recurring Cost including the monitoring charges (per annum)</th> </tr> </thead> <tbody> <tr> <td>Construction</td> <td>Rs. 86 lacs</td> <td>Rs.13.4 Lacs</td> </tr> <tr> <td>Operation</td> <td>-</td> <td>Rs.17.4 Lac</td> </tr> </tbody> </table>	Description	Capital Cost	Recurring Cost including the monitoring charges (per annum)	Construction	Rs. 86 lacs	Rs.13.4 Lacs	Operation	-	Rs.17.4 Lac
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16)	CER activities alongwith budgetary break up and responsibility to implement	<ol style="list-style-type: none"> <li>1. Director will be responsible for implementation of the CER activities.</li> <li>2. Rs 30 Lakh will be spent for the following activities: <ol style="list-style-type: none"> <li>a) Tree plantation in MC, Kharar in year 2020-21.</li> <li>b) Road repair in Vill. Chajjumajra in 2021.</li> </ol> </li> </ol>									
17)	Other important facts	<ul style="list-style-type: none"> <li>➤ CLU has been granted vide no. 23983 dated 05/12/2018.</li> <li>➤ MC, Kharar vide its certificate no. 1679 dated 06/08/2018 has certified that the project proponent has applied for CLU for group housing project and after the approval of the same Solid Waste generated from this group housing will be disposed off at the dumping site or will be collected by MC, Kharar on payment. This area falls in residential zone as per master plan of SAS Nagar.</li> <li>➤ MC, Kharar vide its certificate no. 229 dated 14/02/2019 has certified that the project proponent has applied for CLU for group housing project and after the approval of the same MC, Kharar has no objection for discharging their 134 KLD treated sewerage into sewer system of MC, Kharar after depositing charges.</li> <li>➤ The project is in critical zone as per the CGWA. There will be no significant impact on the groundwater as treated wastewater will be utilized for the flushing purposes and rainwater recharging will be provided within the project site.</li> <li>➤ The project proponent has submitted copy of the application for abstraction of ground water applied to CGWA.</li> </ul>									

SEAC asked the project proponent and his Environmental Consultant to clarify the following observations to which he replied as under: -

<b>Sr. No.</b>	<b>Observations</b>	<b>Reply submitted by the project proponent and his Environmental Consultant</b>																				
1.	As to whether the permission from Deptt. of Forest under the Forest (Conservation) Act, 1980 and Wildlife (Protection) Act, 1972 has been obtained.	The project site is at distance of more than 14 kms from the Sukhna Wildlife Sanctuary. Further, there is no national park present in 10 km radius of project site. Even, there is no forest land is involved at the project site.																				
2.	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.	The area is permissible for the establishment of the project and CLU has been granted vide no. 23983 dated 05/12/2018.																				
3.	As to whether, the plans have been approved by the Competent Authority or still are Conceptual plans. If so, is there any change from the conceptual plans.	At present, they are having conceptual plan.																				
4.	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.																				
5.	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 and treated waste water shall be discharged onto land for plantation.																				
6.	Whether provision of module system shall be kept during installation of STP?	STP shall be installed on module basis.																				
7.	As to whether provision for segregating grey and black streams of waste water and separate treatment for both the streams and utilization has been made.	The provision has been kept for segregating grey and black water streams in the project.																				
8.	Whether the project proponent is proposing CER activities in accordance to the OM dated 01.05.2018. If yes, then how much % has been kept reserved for the proposed activities as per the said OM?	Rs. 30 Lakhs (approx. 0.6%) has been kept reserved for completing the CER activities as per OM dated 01.05.2018. The activities shall be before the completion of the project. The activities are given below: - <table border="1"> <thead> <tr> <th><b>Sr. No</b></th> <th><b>Proposed activity</b></th> <th><b>CER</b></th> <th><b>Amount (INR)</b></th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Rain water harvesting in Village School, Desu majra</td> <td></td> <td>2,00,000/-</td> </tr> <tr> <td>2.</td> <td>Provision of solar panel of 20KW in Village School, Desu majra</td> <td></td> <td>12,00,000/-</td> </tr> <tr> <td>3.</td> <td>Provision of Tree plantation, toilets, water coolers in Village School, Desu majra</td> <td></td> <td>14,00,000/-</td> </tr> <tr> <td></td> <td><b>TOTAL</b></td> <td></td> <td><b>30,00,000/-</b></td> </tr> </tbody> </table>	<b>Sr. No</b>	<b>Proposed activity</b>	<b>CER</b>	<b>Amount (INR)</b>	1.	Rain water harvesting in Village School, Desu majra		2,00,000/-	2.	Provision of solar panel of 20KW in Village School, Desu majra		12,00,000/-	3.	Provision of Tree plantation, toilets, water coolers in Village School, Desu majra		14,00,000/-		<b>TOTAL</b>		<b>30,00,000/-</b>
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	<b>TOTAL</b>		<b>30,00,000/-</b>																			

SEAC took a copy of presentation along with reply given by the project proponent and his environmental consultant on record.

SEAC after deliberating the application has awarded '**Silver Grading**' to the project proposal and decided that case be forwarded to SEIAA with the recommendations to grant environmental for establishment of a Group Housing project namely "SBP Homes Gardenia " having built up area 44324 sqm in total land area of 20969 sqm at Village Chajjumajra, Kharar, SAS Nagar, 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:

**Standard EC 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.

## **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. PM<sub>10</sub> and PM<sub>2.5</sub>) 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 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murrum and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
- vi) Sand, murrum, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.
- vii) All the topsoil excavated during construction activities should be stored for use in horticulture / landscape development within the project site.
- viii) Wet jet shall be provided for grinding and stone cutting.
- ix) Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
- x) All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed.

All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules 2016.

- xi) 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.
- xii) 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.
- xiii) For indoor air quality the ventilation provisions as per National Building Code of India.

**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 290 KL/day, out of which 194 KL /day shall be met through own tubewell and remaining 96 KL/day 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 232 KL/day, which will be treated in a separate STPs i.e. of capacity @210 KLD on SBR technology for black stream (60%) and of capacity 140 KLD on MBBR technology for grey stream (40%) to be installed on module system within the project premises. As proposed, reuse of treated wastewater and discharge of surplus treated wastewater shall be as under:-

<b>S. No.</b>	<b>Season</b>	<b>For Flushing purposes (KLD)</b>	<b>Green Area (KLD)</b>	<b>Into sewer (KLD)</b>
1.	Summer	96	20	116
2.	Winter	96	06	130
3.	Rainy	96	02	134

- 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-Laws 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) Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.
- xv) 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:

<b>Sr. No</b>	<b>Nature of the Stream</b>	<b>Color code</b>
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

- xvi) Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- xvii) The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rain water harvesting recharge pits (4 Nos) /storage tanks shall be provided for ground water recharging as per the CGWB norms.
- xviii) 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.
- xix) All recharge should be limited to shallow aquifer.
- xx) 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.
- xxi) 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.
- xxii) 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.

- xxiii) 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. As proposed, no treated water shall be disposed in to municipal drain.
- xxiv) No sewage or untreated effluent water would be discharged through storm water drains. xix. 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.
- xxv) Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.
- xxvi) 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 neighboring 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) Chute system, 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 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 1<sup>st</sup> 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

<b>Sr. No</b>	<b>Proposed CER activity</b>	<b>Amount (INR)</b>	<b>Likely date of completion</b>
1.	Rain water harvesting in Village School, Desu majra	2,00,000/-	March, 2021
2.	Provision of solar panel of 20KW in Village School, Desu majra	12,00,000/-	March, 2021
3.	Provision of Tree plantation, toilets, water coolers in Village School, Desu majra	14,00,000/-	December, 2022
	<b>TOTAL</b>	<b>30,00,000/-</b>	

However, CER activities shall strictly be in accordance with the activities listed out in the OM dated 01.05.2018 and as per the following 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 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 86 Lacs towards capital cost and Rs 13.4 Lacs/annum towards recurring cost in Construction phase of the project and shall spend minimum amount of Rs 17.4 lacs/annum towards recurring cost in operation phase of the project. 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 condition 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.

**Item No. 181.02 Application for obtaining Environmental Clearance (EC) under EIA notification dated 14.09.2006 for establishment of a Warehouse project located at NH-1 (New NH-44), Vill. Baprou, Rajpura, Distt. Patiala, Punjab by M/s Indoswift Logistics (Proposal No. SIA/PB/MIS/99617/2019).**

The SEAC observed as under: -

The project proponent has filed an application for obtaining Environment Clearance under EIA notification, 2006 for establishment of a Warehouse project located at NH-1 (New NH-44), Village Baprou, Rajpura, Distt. Patiala, Punjab by M/s Indoswift Logistics.

The case was considered by the SEAC in its 181<sup>st</sup> meeting held on 11.07.2019 and the same was attended by the following on behalf of the project proponent: -

- (i) Sh. Neeraj Gupta, Partner, of the Promoter Company
- (ii) Sh. Sandeep Garg, EIA-Coordinator cum CEO, M/s Eco Laboratories Pvt. Ltd., Mohali, Environment Consultant of the promoter company
- (iii) Ms. Simranjit Kaur, EIA Co-ordinator cum AGM, M/s Eco Laboratories Pvt. Ltd Mohali, Environment Consultant of the promoter company

SEAC was apprised that Environmental Engineer, PPCB, Regional Office, Patiala was requested vide dated 08.05.2019 to send the report on the following:

1. Construction status at the site along with physical structures within 500 m radius of the site including the status of industries if any
2. As to whether the site of the project is meeting with the siting guidelines farmed by Punjab Pollution Control Board for such type of projects.

Environmental Engineer, PPCB, Regional Office, Patiala vide letter no. 1807 dated 14/05/2019 has intimated that the site of the subject cited project was visited by AEE of his office on 10.05.2019 and Sh. Yogendra Sharma, representative of the project was contacted. During visit, it was observed that the site falls on right hand side of Rajpura-Ambala Road. The site falls on the backside of another project namely M/s Indoswift Warehouse for which the report is being sent separately. On the backside of the site, the railway track exists. On left hand side of the site, the industry namely M/s JSW Vallabh Tin Plate, Village Baprou exist within 500 m. On the right-hand site, a petrol pump of Reliance Industries exists within 500 m. Also, one playway school in the name of Angle Paradise exists at about 365 m from the site. Also, one residential house exists within 500m of the site. Across the road, a residential project namely M/s Parsavnath King City exists, Star Resorts hotel, Petrol Pump of Bharat Petroleum and Star Punjabi Dhaba exists within 500 m distance. Also another industry namely M/s Partap Industries Limited (Denim Unit), Village Baprou exists within 500 m of the site.

The pointwise reply as sought through email is given as under:-

<b>Sr. No.</b>	<b>Location</b>	<b>Distance</b>
1.	Construction status at site alongwith physical structures within 500 m radius of the site	No construction activity has started. Only earmarking on the site has been done by using small burjis. The status of existence of physical

	including the status of the industries if any	structures is given above. The photographs of the site taken during the visit have been attached with the visit report.
2.	As to whether the site of the project is meeting with the siting guidelines framed by Punjab Pollution Control Board for such type of projects.	No project specific siting criteria has been notified by the Board. Apparently, the site is meeting with the general siting criteria as per policy of the Board. A detailed report in this regard may be obtained from the revenue authorities (SDM Rajpura) as per policy of the Board dated 30.04.2013

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

1)	Activity or Item No. as per EIA Notification, 2006 (in schedule)	8(a): Building & Construction Project. Area less than 50 ha or /and built up area less than 1,50,000 sqm															
	Category as per EIA Notification, 2006 (in schedule)	Category B2															
2)	Requirement of Public consultation	Not required being Building Construction Project under B2 category.															
3)	Requirement of EIA	Not required being B2 category project.															
4)	Applicability of GC	Not applicable being Building Construction Project under B2 category project.															
5)	Name, Location of the project and Co-ordinates of the site	Warehouse project located at NH-1 (New NH-44), Vill. Baprou, Rajpura, Distt. Patiala, Punjab by M/s Indoswift Logistics. Coordinates Corner A- 30°25'13.27"N, 76°41'50.44"E Corner B- 30°25'06.30"N, 76°42'01.83"E Corner C- 30°25'11.02"N, 76°42'02.76"E Corner D- 30°25'12.92"N, 76°42'02.95"E Corner E- 30°25'12.93"N, 76°42'04.49"E Corner F- 30°25'15.22"N, 76°42'04.65"E Corner G- 30°25'19.48"N, 76°41'53.61"E															
6)	Total cost of the project	26 crores															
7)	Total Plot area, Built-up Area and Green area	The details of the group housing project is as under: <table border="1" style="margin-left: 20px;"> <thead> <tr> <th>Sr. No.</th> <th>Description</th> <th>Details</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Total Project land Area</td> <td>86379.15 sqm. (21.34 Acre)</td> </tr> <tr> <td></td> <td><b>Particulars</b></td> <td><b>Area(m<sup>2</sup>)</b></td> </tr> <tr> <td></td> <td>Site Area</td> <td>86,379.15</td> </tr> <tr> <td></td> <td>Permissible Ground Coverage (@ 60%)</td> <td>51,827.49</td> </tr> </tbody> </table>	Sr. No.	Description	Details	1.	Total Project land Area	86379.15 sqm. (21.34 Acre)		<b>Particulars</b>	<b>Area(m<sup>2</sup>)</b>		Site Area	86,379.15		Permissible Ground Coverage (@ 60%)	51,827.49
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Toilet Block	43.47																										
Driver's Block	56.25																										
<b>Total Built-Up Area (3 + 4 + 5 + 6)</b>	<b>39,667.43</b>																										
Permissible Green Area (@ 10%)	8,637.92																										
Proposed Green Area (@ 11.05%)	9,551.0																										
Permissible Parking Area (@ 15%)	12,956.87																										
Proposed Parking Area (@ 17.76%)	15,339.0																										
		2.	Built-up Area	39667.43 sqm.																							
		3.	Green Area	9551 sqm. <ul style="list-style-type: none"> <li>• Green Area Required = 10% of plot area = 8,637.92 sq.m.</li> <li>• Green Area Proposed = 9,551.0 sq.m. (@ 11.05 % of total plot area)</li> <li>• No. of trees required = 1 tree / 80 sq.m. of plot area = 1079 trees</li> <li>• Required Trees = 1080 nos.</li> <li>• Proposed Trees = 1100 nos.</li> </ul>																							
		4.	Parking	15339 sqm.																							
8)	Population (when fully inhabited)	100 Persons (Staff 90 & Visitors 10)																									
9)	Water Requirements & source	<table border="1"> <thead> <tr> <th>Break up of water requirement</th> <th>Source</th> </tr> </thead> <tbody> <tr> <td>Total: 54 KLD in operation phase including 51 KLD for Horticulture purpose</td> <td>Groundwater</td> </tr> </tbody> </table>		Break up of water requirement	Source	Total: 54 KLD in operation phase including 51 KLD for Horticulture purpose	Groundwater																				
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10)	Disposal Arrangement of Waste water	3.6 KLD of sewage will be generated, which will be treated in STP of 5 KLD capacity based on MBBR Technology with UF technology. The treated water @3.5 KLD shall be utilized as given below: <table border="1"> <thead> <tr> <th>S.</th> <th>Season</th> <th>For</th> <th>Green Area (KLD)</th> </tr> </thead> <tbody> </tbody> </table>			S.	Season	For	Green Area (KLD)																			
S.	Season	For	Green Area (KLD)																								

		<b>No.</b>		<b>Flushing purposes (KLD)</b>	<b>(Treated water + Fresh Water = Total water)</b>										
		1.	Summer	1.5	2 + 51 = 53										
		2.	Winter	1.5	2 + 15 = 17										
		3.	Rainy	1.5	2 + 3 = 5										
11)	Rain water recharging detail	2859 m <sup>3</sup> /hour of rain water volume will be recharged with 8 no. of rain water harvesting pits.													
12)	Solid waste generation and its disposal	a) 20 kg/day b) Solid wastes will be appropriately segregated as Bio-degradable and non- bio-degradable as per MSW Rules, 2016. c) Separate area will be earmarked for segregation of solid waste. d) Bio-degradable waste will be composted by use of compost pit. e) Recyclable waste will be sold to recyclers. f) Inert waste will be dumped to authorized dumping site.													
13)	Hazardous Waste	Spent Oil from operation of DG sets													
14)	Energy Requirements & Saving	a) 490 KW from State Power Supply. b) 2 x 250 KVA DG set with canopy as standby arrangements will be provided. c) LED has been proposed to be used instead of CFL and 8 KW energy will be saved.													
15)	Environment Management Plan along with Budgetary break up phase wise and responsibility to implement	Mr. Yogesh Sharma of M/s Indoswift Logistics will be responsible for implementation of EMP. The budgetary breakup phase wise of the EMP is as under: <table border="1"> <thead> <tr> <th><b>Description</b></th> <th><b>Capital Cost</b></th> <th><b>Recurring Cost including the monitoring charges (per annum)</b></th> </tr> </thead> <tbody> <tr> <td>Construction</td> <td>Rs. 34 lacs</td> <td>Rs.3.85 Lacs</td> </tr> <tr> <td>Operation</td> <td>-</td> <td>Rs. 8.6 Lac</td> </tr> </tbody> </table>				<b>Description</b>	<b>Capital Cost</b>	<b>Recurring Cost including the monitoring charges (per annum)</b>	Construction	Rs. 34 lacs	Rs.3.85 Lacs	Operation	-	Rs. 8.6 Lac	
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Construction	Rs. 34 lacs	Rs.3.85 Lacs													
Operation	-	Rs. 8.6 Lac													
16)	CER activities alongwith budgetary break up and responsibility to implement	1. Mr. Yogesh Sharma of M/s Indoswift Logistics will be responsible for implementation of the CER activities. 2. Rs 26 Lakh has been planned for the following activities: <table border="1"> <thead> <tr> <th><b>Sr. No.</b></th> <th><b>Activities</b></th> <th><b>Annual Expenditure (in Lakh per year)</b></th> <th><b>Timeline (In year)</b></th> <th><b>Total Expenditure (in 5 years)</b></th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Health Facilities like ambulance and health checkup camps in Subsidiary Health Centre Baprou</td> <td>13</td> <td>2</td> <td>26</td> </tr> </tbody> </table>				<b>Sr. No.</b>	<b>Activities</b>	<b>Annual Expenditure (in Lakh per year)</b>	<b>Timeline (In year)</b>	<b>Total Expenditure (in 5 years)</b>	1.	Health Facilities like ambulance and health checkup camps in Subsidiary Health Centre Baprou	13	2	26
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		<b>Total</b>	<b>13</b>	<b>26 Lakhs</b>
17)	Other important facts	<ul style="list-style-type: none"> <li>➤ The project mainly comprises of 3 blocks for the storage of Non-Agro Products. The products to be stored within the warehouse project will be linked with the following:               <ol style="list-style-type: none"> <li>1. Retail/FMCG/Consumer Durables</li> <li>2. Logistics &amp; telecom</li> <li>3. Automobile &amp; Industrial Automation</li> <li>4. Health care/media</li> <li>5. E-commerce</li> </ol> </li> <li>➤ No wildlife or bird sanctuary falls within 10 km of project site.</li> <li>➤ The project has been allotted Change in Land Use from Department of Town and Country Planning, Punjab vide Memo no. 614- STP(P)/ SP-327 dated 26.02.2019. The site falls in Mixed Land Use Zone of statutory Master Plan, Rajpura.</li> <li>➤ Permission has been obtained from NHAI vide Letter No. 11029/NHAI/PIU/AMB/3198 dated 01.11.2018 for access</li> <li>➤ The project proponent has submitted application to Forest officer on 04.12.2018 for approach road.</li> <li>➤ The project proponent has submitted copy of the application for abstraction of ground water filed to CGWA vide Application No. 21-4/4784/PB /INF/2019 dated 07.03.2019.</li> </ul>		

SEAC asked the project proponent and his Environmental Consultant to clarify the following observations to which he replied as under: -

<b>Sr. No.</b>	<b>Observations</b>	<b>Reply submitted by the project proponent and his Environmental Consultant</b>
1.	As to whether the permission under Wildlife (Protection) Act, 1972 has been obtained.	There is no national park and wildlife sanctuary present in 10 km radius of project site. As such, the same is not applicable.
2.	a) 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.	a) CLU has been granted vide no. 614 dated 26/02/2019 wherein it has been mentioned that change of land use has been considered for an area 21.337 acres falling in village Baproun for warehouse (standalone) and the site falls in Mixed Land Use Zone of Statutory Master Plan, Rajpura. As per zoning regulations of Master Plan Rajpura, this activity is permissible in this land use zone. Permission is granted as CTP letter no. 1219-37 dated 27.02.2018.

3.	<p>Project proponent is proposing to allow the firms to store Non-agro products inside the premises. There is possibilities of storing hazardous waste/ hazardous goods at site. and</p> <p>Even the process of the firms might may include generation of industrial effluent/ emissions. How the PP shall ensure that these types of waste storage /effluent /emission generating manufacturing process shall not be allowed since the application has been applied under 8(a) category-Building and Construction projects.</p>	<p>They shall allow the firms to store only finished goods at site and no hazardous waste / hazardous goods/ e-waste shall be allowed for storage.</p> <p>Further, no industrial effluent / emissions will be generated from the project except emissions from DG set. An undertaking to the above effect was submitted by the project proponent.</p>
4.	As to whether, the plans have been approved by the Competent Authority or still are Conceptual plans. If so, is there any change from the conceptual plans.	At present, they are having conceptual plan.
5.	a) Calculations of rain water harvesting pits is not in consonance with rain water to be collected. Clarify.	a) Number of pits were calculated considering peak rainfall intensity for 20 minutes time. However, considering hourly basis peak rainfall, no. of pits will be 24 in place of 08 earlier calculated. They will provide 24 pits so as to handle the peak rainfall for atleast one hour.
	b) No recharging shall be carried out within 50 m radius of STP to be installed so as to avoid the contamination of ground water.	b) They agreed and requested to make this a condition of environmental clearance.
6.	a) Whether online application for obtaining NOC for abstraction of ground water has been applied CGWA?	a) 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.
	b) Whether the grass or trees have been proposed in the green belt as the fresh water abstraction is too much?	b) Trees will be planted in the proposed green belt. An undertaking to the above effect was submitted by the project proponent.
7.	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 and treated waste water shall be discharged onto land for plantation.
8.	Whether provision of module system shall be kept during installation of STP?	As the project is sort of commercial one, single STP of 5 KLD capacity shall be installed based on MBBR technology.
9.	As to whether provision for segregating grey and black streams of waste water and separate treatment for both the streams and utilization has been made.	Only black water stream shall be generated in the project.
10.	Whether any Public sewer is available nearby. If not, what will be the mode of disposal?	There is no Public sewer in the area. However, sufficient green belt is available within the premises which is sufficient for meager waste

		water of 3.6 KLD expected from the project.																												
11.	Whether the project proponent is proposing CER activities in accordance to the OM dated 01.05.2018. If yes, then how much % has been kept reserved for the proposed activities as per the said OM?	<p>Rs. 26 Lakhs (approx. 0.6%) has been kept reserved for completing the CER activities as per OM dated 01.05.2018. The CER activities shall be completed before the completion of the project. The revised activities shall be carried out in the Govt. Elementary School, Shambhu Kalan and Govt. Elementary School, Baprour and details are given below: -</p> <table border="1"> <thead> <tr> <th>Sr. No</th> <th>Proposed activity</th> <th>CER</th> <th>Amount (INR)</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Rain water harvesting pit</td> <td></td> <td>4,00,000/-</td> </tr> <tr> <td>2.</td> <td>Modernizations of Kitchen Building</td> <td></td> <td>3,00,000/-</td> </tr> <tr> <td>3.</td> <td>Maintenance of School Building</td> <td></td> <td>13,00,000/-</td> </tr> <tr> <td>4.</td> <td>Renovation of Toilets</td> <td></td> <td>2,00,000/-</td> </tr> <tr> <td>5.</td> <td>Upgradation of Library</td> <td></td> <td>4,00,000/-</td> </tr> <tr> <td></td> <td><b>TOTAL</b></td> <td></td> <td><b>26,00,000/-</b></td> </tr> </tbody> </table>	Sr. No	Proposed activity	CER	Amount (INR)	1.	Rain water harvesting pit		4,00,000/-	2.	Modernizations of Kitchen Building		3,00,000/-	3.	Maintenance of School Building		13,00,000/-	4.	Renovation of Toilets		2,00,000/-	5.	Upgradation of Library		4,00,000/-		<b>TOTAL</b>		<b>26,00,000/-</b>
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SEAC took a copy of presentation along with additional documents & reply given by the project proponent and his environmental consultant on record.

SEAC deliberated the application and Committee awarded '**Silver Grading**' to the project proposal and decided that case be forwarded to SEIAA with the recommendations to grant environmental for establishment of a Warehouse project located at NH-1 (New NH-44) having built up area 39667.43 sqm in total land area of 86,379.15 sqm at Vill. Baprour, 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:

**EC Conditions:**

**Special Condition:**

The project proponent shall not give this logistic park or part thereof to any firm or any person or any industry to store any hazardous chemical/ hazardous waste or for any such activity that may result in generation of any trade effluent or emission or hazardous waste (except emission from DG sets in controlled conditions).

**I. Statutory compliance:**

- i) The project proponent shall neither allow any firm to store any hazardous waste / hazardous goods / e-waste inside the project site nor allow any firm to

generate industrial effluent / emissions at the project site except the emission from the operation of DG sets.

- ii) 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.
- iii) 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.
- iv) 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.
- v) The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- vi) 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.
- vii) The project proponent shall obtain the necessary permission for drawl of ground water/ surface water required for the project from the competent authority.
- viii) 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.
- ix) 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.
- x) 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.
- xi) The project proponent shall follow the ECBC/ECBC-R prescribed by Bureau of Energy Efficiency, Ministry of Power strictly.
- xii) 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.
- xiii) 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.

## **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. PM<sub>10</sub> and PM<sub>2.5</sub>) 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 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murrum and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
- vi) Sand, murrum, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.
- vii) All the topsoil excavated during construction activities should be stored for use in horticulture / landscape development within the project site.
- viii) Wet jet shall be provided for grinding and stone cutting.
- ix) Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
- x) All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules 2016.
- xi) 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.
- xii) 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.

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

**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 57.5 KL/day, out of which 54 KL /day shall be met through own tubewell and remaining 3.5 KL/day 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 3.6 KL/day, which will be treated in a STP of capacity @5 KLD on MBBR technology with UF technology to be installed within the project premises. As proposed, reuse of treated wastewater @3.5 KLD and discharge of surplus treated wastewater shall be as under:

Sr. No.	Season	For Flushing purposes (KLD)	Green Area (KLD) (Treated water + Fresh Water= Total water)
1.	Summer	1.5	2 + 51 = 53
2.	Winter	1.5	2 + 15= 17
3.	Rainy	1.5	2 + 3 =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) if to be provided 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-Laws 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) Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.
- xv) 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:

<b>Sr. No</b>	<b>Nature of the Stream</b>	<b>Color code</b>
a)	Fresh water	Blue Color
b)	Untreated wastewater from Toilets/ urinal & from Kitchen	Black color
c)	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

d)	Treated wastewater (for reuse only for plantation purposes) from the STP treating black water	Green
e)	Treated wastewater (for reuse for flushing purposes or any other activity except plantation) from the STP treating grey water	Green with strips
f)	Storm water	Orange Color

- xvi) Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- xvii) The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rain water harvesting recharge pits (24 Nos) /storage tanks shall be provided for ground water recharging as per the CGWB norms.
- xviii) 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.
- xix) All recharge should be limited to shallow aquifer.
- xx) 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.
- xxi) 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.
- xxii) 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.
- xxiii) 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. As proposed, no treated water shall be disposed in to municipal drain.
- xxiv) 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.

- xxv) Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.
- xxvi) 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 neighboring 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) Chute system, 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 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 1<sup>st</sup> 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. 26 Lacs towards following CER activities to be done in Govt. Elementary School, Shambhu Kalan and Govt. Elementary School, Baprou. The details are given below: -

Sr. No	Proposed CER activity	Amount (INR)
1.	Rain water harvesting pit	4,00,000/-
2.	Modernizations of Kitchen Building	3,00,000/-
3.	Maintenance of School Building	13,00,000/-
4.	Renovation of Toilets	2,00,000/-

5.	Upgradation of Library	4,00,000/-
	<b>TOTAL</b>	<b>26,00,000/-</b>

However, CER activities shall strictly be in accordance with the activities listed out in the OM dated 01.05.2018 and as per the following 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 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 34 Lacs towards capital cost and Rs 3.85 Lacs/annum towards recurring cost in Construction phase of the project and shall spend minimum amount of Rs 8.6 lacs/annum towards recurring cost in operation phase of the project. 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 condition of CLU obtained vide memo no. 614- STP(P)/ SP-327 dated 26.02.2019.
- 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. 181.03: Application for obtaining Environmental Clearance (EC) under EIA notification dated 14.09.2006 for establishment of a Warehouse project located at NH-1 (New NH-44), Vill. Baprou, Rajpura, Distt. Patiala, Punjab by M/s Indoswift Warehousing (Proposal No. SIA/PB/MIS/99620/2019).**

The SEAC observed as under: -

The project proponent has filed an application for obtaining Environment Clearance under EIA notification, 2006 for establishment of a Warehouse project located at NH-1 (New NH-44), Vill. Baprou, Rajpura, Distt. Patiala, Punjab by M/s Indoswift Warehousing.

The case was considered by the SEAC in its 181<sup>st</sup> meeting held on 11.07.2019 and the same was attended by the following on behalf of the project proponent: -

- (i) Sh. Neeraj Gupta, Partner, of the Promoter Company
- (ii) Sh. Sandeep Garg, EIA-Coordinator cum CEO, M/s Eco Laboratories Pvt. Ltd., Mohali, Environment Consultant of the promoter company
- (iii) Ms. Simranjit Kaur, EIA Co-ordinator cum AGM, M/s Eco Laboratories Pvt. Ltd Mohali, Environment Consultant of the promoter company

SEAC was apprised that Environmental Engineer, PPCB, Regional Office, Patiala was requested vide dated 08.05.2019 to send the report on the following:

1. Construction status at the site alongwith physical structures within 500 mt radius of the site including the status of industries if any
2. As to whether the site of the project is meeting with the siting guidelines farmed by Punjab Pollution Control Board for such type of projects.

Environmental Engineer, PPCB, Regional Office, Patiala vide letter no. 1806 dated 14/05/2019 has intimated that the site of the subject cited project was visited by AEE of his office on 10.05.2019 and Sh. Yogendra Sharma, representative of the project was contacted. During visit it was observed that the site falls on right hand side of Rajpura-Ambala Road. On the backside of another project namely M/s Indoswift Logistics for which the report is being sent separately. On the backside of the site, the railway track exists. On left hand side of the site, the industry namely M/s JSW Vallabh Tin Plate, Village Baprou exist within 500 m. On the right-hand site, a petrol pump of Reliance Industries exists within 500 m. Also, one playway school in the name of Angle Paradise exists at about 365 m from the site. Also, one residential house exists within 500m of the site. Across the road, a residential project namely M/s Parsavnath King City exists, Star Resorts hotel, Petrol Pump of Bharat Petroleum and Star Punjabi Dhaba exists within 500 m distance. Also, another industry namely M/s Partap Industries Limited (Denim Unit), Vilaleg Baprou exists within 500 m of the site.

The pointwise reply as sought through email is given as under: -

<b>Sr. No.</b>	<b>Location</b>	<b>Distance</b>
1.	Construction status at site alongwith physical structures within 500 m radius of the site including the status of the industries if any	No construction activity has started. Only earmarking on the site has been done by using small burjis. The status of existence of physical structures is given above. The photographs of the site taken during the visit have been attached.
2.	As to whether the site of the project is meeting with the siting guidelines farmed by Punjab Pollution Control Board for such type of projects.	No project specific siting criteria has been notified by the Board. Apparently, the site is meeting with the general siting criteria as per policy of the Board.  A detailed report in this regard may be obtained from the revenue authorities (SDM Rajpura) as per policy of the Board dated 30.04.2013.

SEAC perused the report and observed that no construction work has been started.

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

1)	Activity or Item No. as per EIA Notification, 2006 (in schedule)	8(a): Building & Construction Project. Area less than 50 ha or /and built up area less than 1,50,000 sqm																									
	Category as per EIA Notification, 2006 (in schedule)	Category B2																									
2)	Requirement of Public consultation	Not required being Building Construction Project under B2 category.																									
3)	Requirement of EIA	Not required being B2 category project.																									
4)	Applicability of GC	Not applicable being Building Construction Project under B2 category project.																									
5)	Name, Location of the project and Co-ordinates of the project	Warehouse project located at NH-1 (New NH-44), village Baprou, Rajpura, Distt. Patiala, Punjab by M/s Indoswift Warehousing. Co-ordinates Corner A 30°25'28.17"N ;76°41'58.32"E Corner B 30°25'24.13"N ;76°42'05.19"E Corner C 30°25'19.83"N ;76°41'53.91"E Corner D 30°25'15.44"N ;76°42'04.60"E																									
6)	Total cost of the project	25.5 crores																									
7)	Total Plot area, Built-up Area and Green area	The details of the group housing project is as under:																									
		<table border="1"> <thead> <tr> <th>Sr. No.</th> <th>Description</th> <th>Details</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Total Project land Area</td> <td>75039.79 sqm. (18.54 Acre)</td> </tr> <tr> <td></td> <td>Particulars</td> <td>Area (sqm)</td> </tr> <tr> <td></td> <td>Total Plot area</td> <td>75,039.79 (or 18.54 acres)</td> </tr> <tr> <td></td> <td>Permissible Ground Coverage (@ 60% of the Plot Area)</td> <td>45,023.87</td> </tr> <tr> <td></td> <td>Total Proposed Coverage Area (@ 52.07% of the Plot Area)</td> <td>39,079.93 24,883.83</td> </tr> <tr> <td></td> <td>• Block A</td> <td>14,196.10</td> </tr> <tr> <td></td> <td>• Block B</td> <td></td> </tr> <tr> <td></td> <td>Fire safety tank</td> <td>232.2</td> </tr> </tbody> </table>	Sr. No.	Description	Details	1.	Total Project land Area	75039.79 sqm. (18.54 Acre)		Particulars	Area (sqm)		Total Plot area	75,039.79 (or 18.54 acres)		Permissible Ground Coverage (@ 60% of the Plot Area)	45,023.87		Total Proposed Coverage Area (@ 52.07% of the Plot Area)	39,079.93 24,883.83		• Block A	14,196.10		• Block B		
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10)	Disposal Arrangement of Waste water	<p>3.6 KLD of sewage will be generated, which will be treated in STP of 5 KLD capacity based on MBBR Technology with UF technology. The treated water @3.5 KLD shall be utilized as given below:</p> <table border="1"> <thead> <tr> <th>S. No.</th> <th>Season</th> <th>For Flushing purposes (KLD)</th> <th>Green Area (KLD) Treated water+ Fresh Water= Total water req.)</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Summer</td> <td>1.5</td> <td>2 + 39= 41</td> </tr> <tr> <td>2.</td> <td>Winter</td> <td>1.5</td> <td>2 + 12 = 14</td> </tr> <tr> <td>3.</td> <td>Rainy</td> <td>1.5</td> <td>2 + 2= 4</td> </tr> </tbody> </table>		S. No.	Season	For Flushing purposes (KLD)	Green Area (KLD) Treated water+ Fresh Water= Total water req.)	1.	Summer	1.5	2 + 39= 41	2.	Winter	1.5	2 + 12 = 14	3.	Rainy	1.5	2 + 2= 4
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3.	Rainy	1.5	2 + 2= 4																
11)	Rain water recharging detail	2542 m <sup>3</sup> /hour of rain water volume will be recharged with 8 no. of rain water harvesting pits.																	
12)	Solid waste generation and its disposal	<p>a) 20 kg/day  b) Solid wastes will be appropriately segregated as Bio-degradable and non- bio-degradable as per MSW Rules, 2016.  c) Separate area will be earmarked for segregation of solid waste.  d) Bio-degradable waste will be composted by use of compost pit.</p>																	

		<p>e) Recyclable waste will be sold to recyclers.</p> <p>f) Inert waste will be dumped to authorized dumping site.</p>																				
13)	Hazardous Waste	Spent oil from operation of DG sets																				
14)	Energy Requirements & Saving	<p>a) 490 KW from State Power Supply.</p> <p>b) 2 x 250 KVA DG set with canopy as standby arrangements will be provided.</p> <p>c) LED has been proposed to be used instead of CFL and 8 KW energy will be saved.</p>																				
15)	Environment Management Plan along with Budgetary break up phase wise and responsibility to implement	<p>Mr. Yogesh Sharma of M/s Indoswift Warehousing will be responsible for implementation of EMP. The budgetary breakup phase wise of the EMP is as under:</p> <table border="1"> <thead> <tr> <th>Description</th> <th>Capital Cost</th> <th>Recurring Cost including the monitoring charges (per annum)</th> </tr> </thead> <tbody> <tr> <td>Construction</td> <td>Rs. 34 lacs</td> <td>Rs.3.85 Lacs</td> </tr> <tr> <td>Operation</td> <td>-</td> <td>Rs. 8.6 Lac</td> </tr> </tbody> </table>	Description	Capital Cost	Recurring Cost including the monitoring charges (per annum)	Construction	Rs. 34 lacs	Rs.3.85 Lacs	Operation	-	Rs. 8.6 Lac											
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16)	CER activities alongwith budgetary break up and responsibility to implement	<p>1. Mr. Yogesh Sharma of M/s Indoswift Warehousing will be responsible for implementation of the CER activities.</p> <p>2. Rs 26 Lakh has been planned for the following activities:</p> <table border="1"> <thead> <tr> <th>Sr. No.</th> <th>Activities</th> <th>Annual Expenditure (in Lakh per year)</th> <th>Timeline (In year)</th> <th>Total Expenditure (in 5 years)</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Construction and maintenance of toilets of Rajpura Kanan School and Govt. High School, Gadarpur.</td> <td>8</td> <td>1</td> <td>8</td> </tr> <tr> <td>2.</td> <td>Scholarship to needy students in Rajpura Kanan School and Govt. High School, Gadarpur.</td> <td>9</td> <td>2</td> <td>18</td> </tr> <tr> <td colspan="2"><b>Total</b></td> <td><b>17</b></td> <td></td> <td><b>26 Lakhs</b></td> </tr> </tbody> </table>	Sr. No.	Activities	Annual Expenditure (in Lakh per year)	Timeline (In year)	Total Expenditure (in 5 years)	1.	Construction and maintenance of toilets of Rajpura Kanan School and Govt. High School, Gadarpur.	8	1	8	2.	Scholarship to needy students in Rajpura Kanan School and Govt. High School, Gadarpur.	9	2	18	<b>Total</b>		<b>17</b>		<b>26 Lakhs</b>
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17)	Other important facts	<p>➤ The project mainly comprises of 2 blocks for the storage of Non-Agro Products. The products to be stored within the warehouse project will be linked with the following:</p> <ol style="list-style-type: none"> <li>1. Retail/FMCG/Consumer Durables</li> <li>2. Logistics &amp; telecom</li> </ol>																				

		<p>3. Automobile &amp; Industrial Automation  4. Health care/media  5. E-commerce</p> <ul style="list-style-type: none"> <li>➤ No wildlife or bird sanctuary falls within 10 km of project site.</li> <li>➤ The project has been allotted Change in Land Use from Department of Town and Country Planning, Punjab vide Memo No. 627-STP(P)/SP-327 dated 26.02.2019. The site falls in Mixed Land Use Zone of statutory Master Plan, Rajpura.</li> <li>➤ Permission has been obtained from NHAI vide Letter No. RW/CH/PB/NH-1(44)/Km216.058/NOC/1310/2018/1771-73 dated 13.07.2018 for access.</li> <li>➤ The project proponent has submitted application to Forest officer on 01.08.2018 for approach road.</li> <li>➤ The project proponent has submitted copy of the application for abstraction of ground water filed to CGWA vide Application No. 21-4/4784/PB/INF/2019 dated 07.03.2019.</li> </ul>
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SEAC asked the project proponent and his Environmental Consultant to clarify the following observations to which he replied as under: -

<b>Sr. No.</b>	<b>Observations</b>	<b>Reply submitted by the project proponent and his Environmental Consultant</b>
1.	As to whether the permission under Wildlife (Protection) Act, 1972 has been obtained.	There is no national park and wildlife sanctuary present in 10 km radius of project site. As such, the same is not applicable.
2.	a) 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.	a) CLU has been granted vide no. 627 dated 26/02/2019 wherein it has been mentioned that change of land use has been considered for an area 18.536 acres falling in village Baprou for warehouse (standalone) and the site falls in Mixed Land Use Zone of Statutory Master Plan, Rajpura. As per zoning regulations of Master Plan Rajpura, this activity is permissible in this land use zone. Permission is hereby granted as CTP letter no. 1219-37 dated 27.02.2018.

3.	<p>Project proponent is proposing to allow the firms to store Non-agro products inside the premises. There is possibilities of storing hazardous waste/ hazardous goods at site. and</p> <p>Even the process of the firms might may include generation of industrial effluent/ emissions., How the PP shall ensure that these types of waste storage /effluent /emission generating manufacturing process shall not be allowed since the application has been applied under 8(a) category-Building and Construction projects.</p>	<p>They shall allow the firms to store only finished goods at site and no hazardous waste / hazardous goods/ e-waste shall be allowed for storage.</p> <p>Further, no industrial effluent / emissions will be generated from the project except emissions from DG set. An undertaking to the above effect was submitted by the project proponent.</p>
4.	As to whether, the plans have been approved by the Competent Authority or still are Conceptual plans. If so, is there any change from the conceptual plans.	At present, they are having conceptual plan.
5.	Calculations of rain water harvesting pits is not in consonance with rain water to be collected. Clarify.	Number of pits were calculated considering peak rainfall intensity for 20 minutes time. However considering hourly basis peak rainfall, no. of pits will be 24 in place of 08 earlier calculated. They will provide 24 pits so as to handle the peak rainfall for atleast one hour.
	b) No recharging shall be carried out within 50 m radius of STP to be installed so as to avoid the contamination of ground water.	b) They agreed and requested to make this a condition of environmental clearance.
6.	<p>a) Whether online application for obtaining NOC for abstraction of ground water has been applied CGWA?</p> <p>b) Whether the grass or trees have been proposed in the green belt as the fresh water abstraction is too much?</p>	<p>a) 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.</p> <p>b) Trees will be planted in the proposed green belt. An undertaking to the above effect was submitted by the project proponent.</p>
7.	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 and treated waste water shall be discharged onto land for plantation.
8.	Whether provision of module system shall be kept during installation of STP?	As the project is sort of commercial one, single STP of 5 KLD capacity shall be installed based on MBBR technology.
9.	As to whether provision for segregating grey and black streams of waste water and separate treatment for both the streams and utilization has been made.	Only black water stream shall be generated in the project.
10.	Whether any Public sewer is available nearby. If not, what will be the mode of disposal?	There is no Public sewer in the area. However, sufficient green belt is available within the premises which is sufficient for meager waste water of 3.6 KLD expected from the project.
11.	Whether the project proponent is	Rs. 26 Lakhs (approx. 0.6%) has been kept

	proposing CER activities in accordance to the OM dated 01.05.2018. If yes, then how much % has been kept reserved for the proposed activities as per the said OM?	reserved for completing the CER activities as per OM dated 01.05.2018. The CER activities shall be completed before the completion of the project. The revised activities shall be done by adopting cremation ground in Village Baprour and in Village Ali Majra and details are given below: -			
		<b>Sr. No</b>	<b>Proposed activity</b>	<b>CER</b>	<b>Amount (INR)</b>
		1.	Maintenance and development of cremation ground	and of	26,00,000/-
			<b>TOTAL</b>		<b>26,00,000/-</b>

SEAC took a copy of presentation along with additional documents & reply given by the project proponent and his environmental consultant on record.

SEAC deliberated the application and the Committee awarded '**Silver Grading**' to the project proposal and decided that case be forwarded to SEIAA with the recommendations to grant environmental for establishment of a Warehouse project located at NH-1 (New NH-44) having built up area 39,355.6 sqm in total land area of 75039.79 sqm at Vill. Baprour, 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:

**EC Conditions:**

**Special Condition:**

The project proponent shall not give this logistic park or part thereof to any firm or any person or any industry to store any hazardous chemical/ hazardous waste or for any such activity that may result in generation of any trade effluent or emission or hazardous waste (except emission from DG sets in controlled conditions).

**I. Statutory compliance:**

- i) The project proponent shall neither allow any firm to store any hazardous waste / hazardous goods / e-waste inside the project site nor allow any firm to generate industrial effluent / emissions at the project site except the emission from the operation of DG sets.
- ii) 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.



- iii) 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.
- iv) 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.
- v) The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- vi) 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.
- vii) The project proponent shall obtain the necessary permission for drawl of ground water/ surface water required for the project from the competent authority.
- viii) 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.
- ix) 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.
- x) 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.
- xi) The project proponent shall follow the ECBC/ECBC-R prescribed by Bureau of Energy Efficiency, Ministry of Power strictly.
- xii) 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.
- xiii) 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.

## **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. PM<sub>10</sub> and PM<sub>2.5</sub>) 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 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murrum and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
- vi) Sand, murrum, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.
- vii) All the topsoil excavated during construction activities should be stored for use in horticulture / landscape development within the project site.
- viii) Wet jet shall be provided for grinding and stone cutting.
- ix) Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
- x) All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules 2016.
- xi) 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.
- xii) 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.
- xiii) For indoor air quality the ventilation provisions as per National Building Code of India.

### **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-swaes, 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 45.5 KL/day, out of which 42 KL /day shall be met through own tubewell and remaining 3.5 KL/day 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 3.6 KL/day, which will be treated in a STP of capacity @5 KLD on MBBR technology with UF technology to be installed within the project premises. As proposed, reuse of treated wastewater @3.5 KLD and discharge of surplus treated wastewater shall be as under:

<b>Sr. No.</b>	<b>Season</b>	<b>For Flushing purposes (KLD)</b>	<b>Green Area (KLD) (Treated water + Fresh Water)</b>
1.	Summer	1.5	2 + 39= 41
2.	Winter	1.5	2 + 12 = 14
3.	Rainy	1.5	2 + 2 = 4

- 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) if to be provided 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-Laws 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) Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.
- xv) 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:

<b>Sr. No</b>	<b>Nature of the Stream</b>	<b>Color code</b>
a)	Fresh water	Blue Color
b)	Untreated wastewater from Toilets/ urinal & from Kitchen	Black color
c)	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
d)	Treated wastewater (for reuse only for plantation purposes) from the STP treating black water	Green
e)	Treated wastewater (for reuse for flushing purposes or any other activity except plantation) from the STP treating grey water	Green with strips
f)	Storm water	Orange Color

- xvi) Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- xvii) The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rain water harvesting recharge pits (24 Nos) /storage tanks shall be provided for ground water recharging as per the CGWB norms.
- xviii) 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.
- xix) All recharge should be limited to shallow aquifer.
- xx) 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.
- xxi) 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.
- xxii) 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.
- xxiii) 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. As proposed, no treated water shall be disposed in to municipal drain.
- xxiv) 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.
- xxv) Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.
- xxvi) 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 neighboring 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) Chute system, 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 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 1<sup>st</sup> 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. 26 Lacs towards following CER activities to be done in cremation ground of Village Baprou and Village Ali Majra and details are given below: -

<b>Sr. No</b>	<b>Proposed CER activity</b>	<b>Amount (INR)</b>
1.	Maintenance and development of cremation ground	26,00,000/-
	<b>TOTAL</b>	<b>26,00,000/-</b>

However, CER activities shall strictly be in accordance with the activities listed out in the OM dated 01.05.2018 and as per the following 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 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 34 Lacs towards capital cost and Rs 3.85 Lacs/annum towards recurring cost in Construction phase of the project and shall spend minimum amount of Rs 8.6 lacs/annum towards recurring cost in operation phase of the project. 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 condition of CLU obtained vide memo no. 627- STP(P)/ SP-327 dated 26.02.2019.
- 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. 181.04: Application 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)**

The SEAC observed as under:

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.

The project proponent submitted EIA report.

The case was considered by the SEAC in its 181<sup>st</sup> 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.

Environmental Consultant of the project proponent presented the salient features of the expansion project as under:

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

6. Raw Material requirement

S. No.	Chemical	State	Storage means	Size of storage means	Consumption (MT/Month)
<b>Product: Water based paint</b>					
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
<b>Product: Powder coating paint</b>					
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
<b>Product : Emulsion</b>					
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				
	Sr. 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.	41 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				
	<b>Sr. No.</b>	<b>Hazardous Waste Category</b>	<b>Quantity (After expansion)</b>	<b>Disposal</b>	
	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				

	<p>scrap, will be sold to recyclers.</p> <p>ii) The Sludge generated from the STP of ~14 kg/day will be used as manure for greenbelt development.</p> <p>iii) Kitchen / Canteen wastes and other biodegradable wastes will be sent to Vermi-composting.</p>
15.	<p><b>Energy Requirements</b></p> <p>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</p>

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	<p>Overall in-charge of operation of environmental management facilities</p> <p>Ensure environmental monitoring as per appropriate procedures</p> <p>Ensure correct records of generation, handling, storage, transportation and disposal of solid hazardous wastes.</p> <p>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</p>

The budgetary requirement for implementation of EMP is as under:-

Sr. No	Title	Capital Cost Rs. Lakh	Recurring Cost Rs. INR
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 1 <sup>st</sup> 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 17 <sup>th</sup> December 2018	

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.
- l) 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.

**Item No. 181.05: Application for obtaining Environmental clearance under EIA notification dated 14.09.2006 for Expansion of Steel Manufacturing Unit namely "Jogindra Castings Pvt. Ltd." at G.T Road, Sirhind Side, Mandi Gobindgarh, Teh. Amloh, Distt. Fatehgarh Sahib, Punjab by M/s. Jogindra Castings Pvt. Ltd. (Proposal no SIA/PB /IND /22600 /2018)**

The SEAC observed as under:

The project proponent has filed application for obtaining Environmental

clearance under EIA notification, 2006 for expansion of Steel Manufacturing Unit namely "Jogindra Castings Pvt. Ltd." At G.T Road, Sirhind Side, Mandi Gobindgarh, Tehsil Amloh, Distt. Fatehgarh Sahib, Punjab. The project proponent will replace already installed two Induction Furnaces of capacity 5 TPH and 3 TPH with High Efficiency Induction Furnaces having combined capacity of 80 TPH. The project is covered under category 3(a)- Secondary Metallurgical Industries (ferrous & non-ferrous) of the Schedule appended to the said notification.

The project was earlier granted TOR vide letter no. SEIAA/2018/697 dated 25.05.2018 with Standard Terms of Reference and additional specific TORs decided during meeting of SEAC.

Now, the project proponent has submitted EIA report.

The case was considered by the SEAC in its 181<sup>st</sup> meeting held on 11.07.2019 and the same was attended by the following on behalf of the project proponent: -

- (i) Sh. Sanjay Gupta, Director, of the Promoter Company
- (ii) Sh. Sandeep Garg, EIA-Coordinator cum CEO, M/s Eco Laboratories Pvt. Ltd., Mohali, Environment Consultant of the promoter company
- (iii) Ms. Simranjit Kaur, EIA Co-ordinator cum AGM, M/s Eco Laboratories Pvt. Ltd Mohali, Environment Consultant of the promoter company

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

- The existing industrial unit deals with the manufacturing of Billets/ Ingots/ TMT Bars/ Flats/ Structures @ 90 TPD or ERW pipes @ 200 TPD with 2 Induction Furnaces of capacity 3 TPH & 5 TPH and 1 Rolling Mill.
- Now, the industry wants to replace existing 2 IF's with 4 High Efficiency Induction Furnaces; out of which 2 IF's of capacity 15 TPH each and 2 IF's of capacity 25 TPH each. Also, there is addition of one more rolling mill along with the existing rolling mill. Hence, after expansion, production capacity of the industrial unit will become 1,000 TPD for manufacturing of Billets/ Ingots/ TMT Bars/ MS Bars/ Flats/ Structures/ HR Coils/ Pipes/ Wire Rods.
- Earlier the area of the project was 14,344.79 sq.m (or 3.54 acres). However, for expansion adjoining additional land of 27,351.28 sq.m (or 6.75 acres) has been purchased and 2,509.29 sq.m (or 0.62 acres) has been acquired on lease basis. Thus, total area of the project becomes 44,205.3 sq.m (or 10.92 acres).
- Project falls in the Industrial Zone as per the Master Plan of Mandi Gobindgarh.

- Letter has been obtained from District Town Planner stating that project falls in the notified Industrial Zone.
- The Current Directors of the company are as under:
  1. Sh. Adarsh Garg
  2. Sh. Sanjay Gupta
- Total cost of project after expansion: Rs. 43.34 Crores i.e. Cost of existing project: Rs. 20.5 Crores & Cost of proposed project: Rs. 22.77 Crores.
- Project Approvals/ Agreement

Description	Details
Letter from DTP	Obtained from District Town Planner vide Memo No. 604 dated 24.05.2019.
CTO from PPCB	Varied Consent to Operate has been obtained from PPCB under Water (Prevention & Control of Pollution) Act, 1974 vide Letter No. CTOW/Varied/FGS/2018/7568126 dated 30.08.2018; valid till 30/09/2022 and Air (Prevention & Control of Pollution) Act, 1981 vide Letter No. CTOA/Varied/FGS/2018/7568312 dated 30/08/2018; valid till 30/09/2022.
Authorization for Hazardous Waste	Authorization for Hazardous waste has been obtained from PPCB vide Authorization No. HWM/Fresh/FGS/2017/4624864 dated 12.01.2017 and valid till 31.03.2021.
Agreement for disposal of APCD dust	Agreement done with M/s Madhav Alloys Pvt. Ltd. for disposal of APCD dust vide dated 01.02.2019.
Agreement for disposal of slag	Agreement done with M/s Khanna Cement Products for utilization of slag for manufacturing of Concrete Blocks/ Paver Tiles/ Road Gullies/ Manholes etc. vide dated 08.01.2019
Approval for Power load	Obtained vide Memo No. 216 dated 10.01.2019 for additional load of 20.3 MW.
Certified Compliance Report from RO, PPCB	Obtained from RO, PPCB vide Letter No. 76 dated 10.01.2019.
NOC from Sarpanch for Pond adoption	a) NOC obtained from Sarpanch of the Village Roorki, Block Sirhind, Distt. Fatehgarh Sahib, Punjab vide dated 27.02.2019. b) NOC obtained from Sarpanch of the Village Harbanspura, Block Sirhind, Distt. Fatehgarh Sahib, Punjab vide dated 01.05.2019. c) NOC obtained from Sarpanch of the Village Wazirabad, Block Sirhind, Distt. Fatehgarh Sahib, Punjab vide dated 01.05.2019.
CGWA Approval	Application has been submitted vide application No. 21-4/5000/PB/IND/2019 dated 28.03.2019.

- Co-ordinates of the Project

A 30°39'21.72"N and 76°18'42.26"E      B 30°39'17.59"N and 76°18'46.26"E

C 30°39'18.55"N and 76°18'47.62"E      D 30°39'16.26"N and 76°18'50.06"E  
 E 30°39'20.22"N and 76°18'55.49"E      F 30°39'22.58"N and 76°18'53.21"E  
 G 30°39'22.29"N and 76°18'52.91"E      H 30°39'22.94"N and 76°18'52.30"E  
 I 30°39'23.46"N and 76°18'53.07"E      J 30°39'23.96"N and 76°18'52.70"E  
 K 30°39'21.49"N and 76°18'49.00"E      L 30°39'24.14"N and 76°18'46.09"E

➤ Brief of the Project

Details	Existing	Proposed	Total (After Expansion)
Plot Area	14,344.79 sq.m. (or 3.54 acres)	<ul style="list-style-type: none"> <li>Land on lease 2,509.29 sq.m. ( or 0.62 acres)</li> <li>Land Purchased 27,351.28 sq.m. (or 6.75 acres)</li> </ul>	44,205.3 sq.m. (or 10.92 acres)
Production Capacity	90 TPD of Billets/ Ingots/ TMT Bars/ Flats/ Structures or 200 TPD of ERW pipes	910 TPD of Billets/ Ingots/ TMT Bars/ Flats/ MS Bars Structures / HR Coil/ Pipes/ Wire Road	1,000 TPD of Billets/ Ingots/ TMT Bars/ Flats/ MS Bars/ Structures / HR Coil/ Pipes/ Wire Road
Induction Furnace	2 Induction Furnaces of capacity 5 TPH & 3 TPH, rolling mill	Replacement of existing 2 IF's and addition of 2 IF's & rolling mill	2 no's Induction Furnaces of capacity 25 TPH each and 2 no's Induction Furnaces of capacity 15 TPH each and two rolling mill
Raw Materials	Scrap: 95 TPD Ferro Alloys: 1 TPD	Scrap: 980 TPD Ferro Alloys: 24 TPD	Scrap: 1075 TPD Ferro Alloys: 25 TPD
Manpower	110 (both technical & non-technical); 5 workers are residing within project premises	250; out of which 20 will be residing within project premises	360 (both technical & non-technical); out of which, 25 workers will be residing within project premises
Project Cost (in Crores)	Rs. 20.5 Cr.	Rs. 22.9 Cr.	Rs. 43.4 Cr.
Total Water Demand (KLD)	25	139	164
Domestic Water Demand (KLD)	5	13	18
Cooling Water Demand (KLD)	18	48	66

Green Area demand (KLD)	3	77	80
Source of water supply	Ground water		
Power Load	9,698 KW	20,302 KW	30 MW
Source of Power	Punjab State Power Corporation Limited (PSPCL)		
Power Back up	1 DG set of 320 KVA	Replacement of existing DG set with 2 DG sets of 500 KVA	2 DG sets of capacity 500 KVA each

➤ Area Breakup of the project

Sr. No.	Description	Area (in sq.ft.)
1.	Total shed Covered area a) Existing shed covered area b) Proposed shed covered area	1,81,065 a) 92,242 b) 88,823
2.	Green area (@ 33.73 %)	1,60,400
3.	Road area	79,600
4.	Parking area	28,173
5.	Open area & Grid area	15,539
6.	Office block covered area	4,324
7.	Stores/ lab/ canteen/ office etc	6,149
8.	Proposed RCC covered area (hazardous waste storage area)	400
Total area of the project		47,56,50 sq.ft. or 44,205.39 m <sup>2</sup>
1.	Raw Material storage area	55,000
2.	Finished good area	52,000
3.	Slag storage area	3,375
4.	Working area/Furnace room /other shed area	70,690
Total covered area of the project		1,81,065 sq.ft.

- There is no use of the chemicals during the manufacturing process. Only small quantities of lab chemicals are used for in-house laboratory testing. Storage sheds have been provided for raw materials and products storage. The details of material quantities & storage capacities are given below:

Sr. No.	Particulars	Quantity which can be stored	No. of Days for storage
1.	Raw materials	74,250 T	68 Days
2.	Finished Goods	28,080 T	28 Days
3.	Slag	1,687.5 T	51 Days

4.	APCD dust	20 T	7 Days
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- The details of emissions are given below:

Source	Description	Capacity	APCD	Stack Height
Furnaces	Existing	5 TPH- 1 IF & 3 TPH- 1 IF	Common APCD (wet scrubber)	22 m
	After Expansion	25 TPH- 2 IF 15 TPH – 2 IF	Side suction hood followed by Pulse Jet Bag Filter	18 m
DG Set	Existing	1 No. 320 KVA	-----	5 m
	After Expansion	2 No. 500 KVA	-----	

- Details of Effluent & Hazardous Waste

Details	Existing	After Expansion	Remarks
Industrial Effluent	Nil	Nil	No industrial effluent generated.
Domestic Effluent	4.0 KLD	14.4 KLD	Wastewater generated from the project is being treated in the Septic tank. After expansion, wastewater will be treated in proposed STP of capacity 20 KLD.

- Details Hazardous Waste

Hazardous Waste Category	Existing	After Expansion	Disposal
Cat. 35.1 – Exhaust air or Gas cleaning Residue	10.8 TPA	962.5 TPA (2.75 TPD)	Agreement done with M/s Madhav Alloys Pvt. Ltd.
Cat. 5.1 – Used Oil	0.01 KL per annum	0.080 KL per annum	To authorized vendor

- Details of Water Requirement

Description	Water Requirement (KLD)	
	Existing	After Expansion
Cooling water demand	18	66
Drinking water demand	5	18
Green area	3	80
Total water demand	25	164
Source of water	Ground Water (bore well)	

➤ List of Machinery

Sr. No.	Machinery	Existing	After expansion
1.	Induction Furnace	02 (3 TPH & 5 TPH)	04 (2* 25 TPH & 2 *15 TPH each)
2.	Pipe Plant	1	2
3.	Rolling Mill	1	2
4.	APCD	1	4
5.	DG set	1 (320 KVA)	2 (500 KVA)
6.	Shearing Machine	2	6
7.	Magnets	7	12
8.	Overheard Cranes	12	30
9.	Bailing Press	1	3
10.	Continues Casting Machine (CCM)	1	2 (2 strands each)
11.	Weighbridge	1	3

➤ The detail of the capacity of furnace and total production at different stages is as under:

Year of Establishment	Installed Capacity	Power Load	Total Production Capacity	Whether covered under EIA Notification or Not
27.03.1997	3 TPH	1985 KW	40 TPD	The industry does not require EIA vide notification 1994 because industry is secondary metallurgical & not having EAF. SAC -cum - CSA approval dated 21.05.1993 has been obtained (copy submitted). However, the industry was established on 27.03.1997.
31.03.1999	3 TPH	2128 KW	40 TPD	The industry does not require EIA vide notification 1994 because industry is secondary metallurgical & not having EAF. Consent to operate was obtained from PPCB.(copy submitted)
03.09.2003	3 TPH & 5TPH	5898 KW	40 TPD	The industry does not require EIA vide notification 1994 because industry is secondary metallurgical & not having EAF.
01.01.2016	3 TPH & 5 TPH	9698 KW (Including	90 TPD	The industry does not require EIA vide notification S.O. 1533(E) DTD



		Rolling)		14.09.2006 because the production capacity is < 30,000 TPA. A copy of the valid consent has been submitted.
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➤ **Environmental Status**

- The climate of the district is characterized by dryness except a brief spell of monsoon season in a very hot summer and a bracing winter. Temperature starts increasing rapidly after February. May and June are the hottest months with daily average temperature going up to 41.2°C and minimum average daily temperature as 24.2°C. Hot scorching dust laden winds blow during the summer season and on individual day, the temperature sometimes goes upto 45°C to 47°C.
- The average annual rainfall is in the range of 660-700 mm. The annual number of rainy days on an average is about 51 days in a year, out of which, about 34 days falls in the monsoon period of July to September.
- In summer months of April, May and June, which is the driest part of the year, the afternoon humidity comes down to 23% while the relative humidity during monsoon months goes up-to about 81%.
- Annual trend indicates mean wind speed to be highest in the months of March, April, May, June and July (7.8-15.5 km/hour) and lowest in the month of October, November and December (2.5-3.5 km/hour).

➤ **Ambient Air Quality in the Study Area:**

1. P-98 of PM<sub>10</sub> and PM<sub>2.5</sub> respectively are outside the NAAQ standards of 100 and 60 µg/m<sup>3</sup> respectively.
2. The levels of SO<sub>2</sub> are much below the desired limits of 80 µg/m<sup>3</sup>. P98 is 12.74 µg/m<sup>3</sup>.
3. The levels of NO<sub>x</sub> are also below the desired limits of 80 µg/m<sup>3</sup>. P98 is 29.96 µg/m<sup>3</sup>.
4. The CO level at all the sampling points is less than 1.5 µg/m<sup>3</sup>.
5. The lead (Pb) level in Particulate Matter at all the sampling points is less than 0.04 µg/m<sup>3</sup> which is less than the desired limit of 1.0 µg/m<sup>3</sup>.
6. The Arsenic (As) level in Particulate Matter at all the sampling points is less than 0.01 ng/m<sup>3</sup> which is less than the desired limit of 6.0 ng/m<sup>3</sup>.
7. The Nickel (Ni) in Particulate Matter at all the sampling points is less than 10 ng/m<sup>3</sup> which is less than the desired limit of 20.0 ng/m<sup>3</sup>.
8. Aermod Model has been used to plot Wind Rose Diagram. The wind rose diagram indicates that the most predominant winds are mainly flowing from North West, with the secondary wind direction being from the South-East.
9. PM<sub>10</sub>- The maximum incremental pollutant concentration near sources and within 1000 m is 0.8 µg/m<sup>3</sup>, within 2000 m decreases to 0.3 µg/m<sup>3</sup> and beyond which the pollutant rapidly decreasing to the ambient value.
10. PM<sub>2.5</sub>- The maximum incremental pollutant concentration near sources and within 500 m is 0.5 µg/m<sup>3</sup>, within 1000 m decreases to 0.4 µg/m<sup>3</sup> and beyond which the pollutant slowly settles down to the ambient value. All values are much below the CPCB limits.
11. SO<sub>2</sub>- The maximum incremental pollutant concentration near pollution sources decreases to 1.0 µg/m<sup>3</sup> beyond it the pollutant rapidly disperses to 0.5 µg/m<sup>3</sup>.
12. CO- The maximum incremental pollutant concentration near sources and within 1000 m is 4.0 µg/m<sup>3</sup>, within 2000 m decreases to 2.0 µg/m<sup>3</sup> and beyond that, the pollutant

rapidly decreasing to 0.04 µg/m<sup>3</sup>. All values are much below the CPCB limits.

13. NOX- The maximum incremental pollutant concentration rapidly gets diffused to 0.90 µg/m<sup>3</sup> and further drops down to 0.4 µg/m<sup>3</sup>.

➤ Results of Surface Water Monitoring-

- a. The results of Bhakra Canal show that BOD is less than 20 mg/l & pH is nearly 7.
  - b. Similarly, for Amluh Minor canal, BOD is about 20 mg/l & pH is nearly 7.
  - c. For Sirhind choe canal, BOD is around 20 mg/l & pH is nearly 7.
  - d. For IR Distributary canal, BOD is less than 20 mg/l & pH is nearly 7.
- Water is fit for irrigation as well as industrial cooling.

➤ Ground Water Quality Results

1. pH varies from 7.21 -7.52 which is in between the acceptable limits i.e. 6.5 to 8.5 for potable water.
2. Calcium varies from 44.0 to 56.0 mg/l. The highest value was observed at Salana, which is less than the acceptable & permissible limits i.e. 75 and 200 mg/l respectively.
3. Magnesium varies from 17 to 24 mg/l. The highest value was observed at Taksus Steels which is located at distance of about 4.0 km from the Project location, which is less than the acceptable & permissible limits i.e. 30 and 100 mg/l respectively.
4. Chloride concentration which is also one of the important parameters varies from 47 to 66 mg/l. It was found maximum at Lohar Majra and minimum at Taksus Steels, which is less than the acceptable & permissible limits i.e. 250 and 1000 mg/l respectively.
5. Heavy metals like Cadmium, Chromium, Lead and Zinc were much below the permissible limit in all the samples.
6. Iron varies from 0.36 to 0.58 mg/l, which is more than the acceptable limit i.e. 0.3 mg/l.
7. Sulphate vary from 60 to 95 mg/l, which is less than the acceptable & permissible limits i.e. 200 and 400 mg/l respectively.

As per report of CGWA, Fatehgarh Sahib, the ground water of Mandi Gobindgarh is suitable for domestic, drinking & Irrigation purposes.

➤ Noise Monitoring Results

Minimum and maximum noise levels recorded during the day time were from 52.6 dB(A) and 68.4 dB(A) respectively during day and minimum and maximum level of noise during night time were 42.1 dB(A) and 57.6 dB(A) respectively. This may be attributed to the presence of machineries and vehicular movement nearby the project location.

➤ Traffic Study

- Project is located at a distance of 0.5 km from NH-1. The National Highway NH-1 connecting New Delhi to Amritsar is well designed to withstand the large vehicles count & heavy vehicles. However, vehicles passing on the road in front of the project are mainly trucks which are used for the transportation of raw materials & final products.
- Traffic study was conducted on 10<sup>th</sup> Jan, 2019 as well as 21<sup>st</sup>-23<sup>rd</sup> May, 2019 by team members of Eco along with employees of industry so as to assess the impact on local transport infrastructure due to proposed increased production of Jogindra Castings Pvt. Ltd. and adjoining projects who have proposed expansion.
- As per the traffic study, the road can take the increased load of expansion.
- Existing Traffic Scenario & LOS at different locations

Locations	V (Volume in PUC/day)	C (Capacity in PUC/day)*	Existing ratio V/C	LOS
A	243	1,900	0.12	A

B	727	1,900	0.38	B
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- LOS values in comparison to V/C:

V/C	LOS	Performance
0.0-0.2	A	Excellent
0.2-0.4	B	Very Good
0.4-0.6	C	Good/ Average/ Fair
0.6-0.8	D	Poor
0.8-1.0	E	Very Poor

- Details of trucks used for transportation of raw materials and final products of the industries located on road wherein traffic study was conducted

Sr. No.	Industry's Name	Details	Description	Production capacity	No. of trucks per day
12.	Jogindra Castings Pvt. Ltd.	Existing	Raw Materials	96 TPD	5
			Final Products	90 TPD	5
		Proposed	Raw Materials	904 TPD	46
			Final Products	910 TPD	46
<b>Additional traffic load due to industries</b>					$92 \times 3/4^a = 69$
<sup>a</sup> Considering an average capacity of truck as 20 MT and considering that few trucks carrying raw materials will also carry finished products.					

- Additional traffic load of nearby industries due to proposed expansion

Sr. No.	Vehicles Distribution	Number of Vehicles Distribution/Day	Passenger Car Unit (PCU)	Number of Vehicles Distribution/Day
		Road Connecting the project		Road Connecting the project
1.	Trucks	69+4 <sup>b</sup>	3	219
2.	Two-wheelers	40	0.5	20
	Total			239

- Modified Traffic Scenario & LOS at different locations (after expansion)

Locations	V (Volume in PUC/day)	C (Capacity in PUC/day)	Existing V/C ratio	LOS
A	243 + 239 = 482	1900	0.25	B
B	727 + 239 = 966	1900	0.50	C

- Inference for the Traffic Study conducted on 8<sup>th</sup> Jan 2019

The V/C ratio is found to be between 0.2-0.4 for location A which means that the performance of road will be Very good.

- The V/C ratio at location B is between 0.4-0.6 which means that the performance of road will be good.
- Similarly, Traffic Study was conducted on 21<sup>st</sup> -23<sup>rd</sup> May 2019 & Inference is as under:
- The V/C ratio is found to be between 0.2-0.4 for location A which means that the performance of road will be Very good.
- The V/C ratio at location B is between 0.4-0.6 which means that the performance of road will be good.

The LOS in both one day and three-day study are same which means that the carrying capacity of road is adequate to handle future load.

➤ Parking Details

- Maximum No. of Trucks required as per production capacity: 15 trucks per hour
- Total 48 trucks can be parked within the industry. Out of which 20 trucks can be parked in designated parking area and 28 trucks can be parked under sheds.
- Approx. 5 no. of trucks per day are used to carry raw materials for the existing unit. After expansion. approx. 55 no. of trucks per day will be used to carry raw materials. Since, the existing road is sufficient to cater to this meager increase in transportation; therefore, there will be less impact

➤ Air Pollution

- Major sources of air pollution will be provided with air pollution control systems to limit the air pollutant emissions within the permissible norms.
- Fugitive emissions of smoke, gases in and around the furnace will be removed by adequate ventilation systems.
- For adequate dispersion of gases, stack of adequate height will be provided that conforms to statutory requirements.
- For heat dissipation in the work zones arising from furnaces, adequate ventilation systems will be provided.
- Effective pollution control system i.e., Bag Filter, I.D. Fan & stack of adequate height has been provided for controlling the emissions from Induction Furnace.

➤ General Mitigation Measures

- Haulage roads are sprinkled with water at regular intervals for which water tankers with sprinkler arrangement are deployed.
  - Trucks carrying raw materials are having valid PUC Certificate.
  - No pressure horns will be permitted to control noise pollution.
  - Face masks are provided for the people working dust generating locations.
  - All internal roads in the premise are paved/ tarred.
  - Speed limit of 10 km/hr. is enforced for vehicles within the plant premises to prevent road dust emission.
  - Regular sweeping of roads is being practiced with regular sprinkling (in future with treated water) to minimize dust emissions.
- Measures for fugitive emission control are given below:
- Pucca roads within premises, water sprinkling in dusty areas
  - Greenbelt/plantation to arrest fugitive dust emission.
  - Trucks carrying raw materials shall be covered with tarpaulin to prevent spreading of dust during transportation.

- Water sprinkling shall be practiced at loading-unloading locations.
- The conveyors shall be suitably covered to control fugitive emissions
- All internal roads in the premises are paved /tarred.
- After expansion, hazardous waste produced from the industrial unit is estimated to be 2.75 TPD in the form of Exhaust Air or Gas cleaning residue (APCD ash) under Category 35.1 and 0.08 KL/annum of spent oil under Category 5.1 of Schedule I. Used oil generated will be sold to Authorized vendor of PPCB. APCD dust is being given to M/s Madhav Alloys Pvt. Ltd., where metals such as zinc & lead is recovered.
- As there will be only construction of foundation for the Induction Furnace hence, there will be utilization of fly ash as per Fly Ash Notification, 2009. Fly ash-based cement i.e. Portland Pozzolana Cement (PPC) will be used for construction of foundation.
- The existing green area within the project premises is 604.08 sq.m. and 14,302.97 sq.m. is the proposed green area. Thus, total green area of the project becomes 14,907.06 sq.m. (or 33.73%). 12 trees are existing within the industry premises of Neem, Guava, Ashoka trees, etc. In addition to this, 553 trees are proposed overall after expansion. Details of proposed plantation along with Landscape plan have been submitted. Green Area A: 1,02,634 sq.ft. Green Area B: 46,166 sq.ft. Green Area C: 5,900 sq.ft Green Area D:3,700 sq.ft Green Area E:990 sq.ft Green Area F:6,10 sq.ft Green Area G:400 sq.ft
- No. of trees required as per guidelines =  $44205.39/80 = 553$  Trees
- Rain Water Harvesting
- Three ponds have been adopted for artificial rain water in the Sirhind block.

<b>Pond location</b>	<b>Area of the pond (in sq.m)</b>	<b>Depth of the pond</b>	<b>Volume/Storage capacity (m<sup>3</sup> per annum)</b>
Village Roorki	10,117.14	3	30,351
Village Harbanspura	8,093.71	3	24,281
Village Wazirabad	8,093.71	3	24,281
<b>Total</b>	<b>26,304.56</b>	-	<b>78,913</b>

- No. of fillings = 3 (max no. of fillings = 3)
- Total recharge in the pond (in cubic meter annually) =  $78,913 \times 3 = 2,36,739 \text{ m}^3$
- Total quantity of water recharge is 50 % of the volume of water available in the pond after de-silting i.e. 65 % of  $2,36,739 \text{ m}^3$  per annum =  $1,18,370 \text{ m}^3$  per annum
- Thus, as per the CGWA Guidelines, recharging of ground water is double of the ground water withdrawal. NOC has been obtained from the Sarpanches of respective Villages.
- Before disposing off the slag, metal is recovered. The quantity of slag is estimated to be 33 TPD after expansion of project. Out of this, approx. 16.5 TPD of metal will be recovered. After metal recovery, remaining will be sold to Khanna Cement Product for manufacturing for manufacturing of Concrete Blocks/ Paver Tiles/ Road Gullies/ Manholes, etc.
- APCD dust is being disposed off to M/s Madhav Alloys Pvt. Ltd., wherein metals such as

zinc & lead are recovered. Agreement has been done with M/s Madhav Alloys Pvt. Ltd. for disposal of APCD dust.

- 1 lakh will be allocated per year to ensure health & safety of all contract and casual workers.
- Details of the amount to be spent on EMP is given below:

Sr. No	Environmental Protection Measures	Capital Cost (Rs. in Lakhs)	Recurring Cost (Rs. in Lakhs/year)
1.	Air Pollution Control (Installation of APCD)	130	1.0
2.	Water Pollution Control (STP)	20	2.5
3.	Noise Pollution Control (Including cost of landscaping & green belt)	5.0	1.5
4.	Solid Waste Management	3.0	1.0
5.	Environment Monitoring & Management	3.0	5.0
6.	Health, Safety & Risk Assessment	3.0	0.5
7.	Rain Water Recharging outside the project premises	1.5	1.0
8.	Miscellaneous	1.0	0.5
Total		166.5	13

➤ Corporate Social Responsibility

- Mr. Sanjay Gupta (Director) of M/s Jogindra Castings Pvt. Ltd. will be responsible for implementation of CER (Corporate Environment Responsibility) within 1 year of time. The cost of proposed expansion is Rs. 22.77 Crores. Thus, Rs. 23 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. 19 Lakhs have been planned to be reserved for CER. The details of the activities proposed to be covered under CER are as under:

Sr. No.	CER Activities	Total Expenditure	Timeline (Starting from date of grant of EC)	Total Expenditure in 1 Year (in lakhs)
1.	Education Providing toilets in Government Girl School, Village Ajnali	2,00,000	1 year	2,00,000
2.	Providing medicines or ambulance to the Govt. Hospital located in the Mandi Gobindgarh	17,00,000	1 year	17,00,000
Total		Rs. 19,00,000		Rs. 11,50,000

➤ Public Hearing

- Action Plan
- ✓ STP has been proposed of capacity 20 KLD to treat the wastewater generated after expansion. The treated water will be used for horticulture purpose within project premises.

- ✓ Agreement has already been done with M/s Madhav Alloys Pvt. Ltd. for disposal of APCD dust.
  - ✓ Interlocking tiles has been provided in few parking area and same will be completely developed once EC is granted to the project.
  - ✓ For air pollution control, pulse jet bag filters will be installed along with side hood suction as per the design provided by PSPCT, Chandigarh. Thus, there will be no air pollution from the project after expansion of industry. Further, online monitoring system will be installed on the APCD as per the guidelines of PPCB.
  - ✓ Floor of the school will be made pucca, playground will be constructed for children and uniforms will be distributed to the poor and needy students. All above said activities are part of CER and will be done once EC is granted to the project. Jobs will be provided to handicapped persons of village Talwara.
  - ✓ Amount of Rs. 4 lakhs will be spent on action plan of Public Hearing.
- The details of the activities proposed to be covered under public hearing action plan are as under:

Sr. No.	Expenditure on Public Hearing Action Plan	Total Expenditure	Timeline (Starting from date of grant of EC)	Total Expenditure in 1 Year (in lakhs)
1.	Floor of the Govt. School made pucca	1,00,000	1 Year	1,00,000
2.	Construction of playground for children in Govt. School	2,00,000	1 year	2,00,000
3.	Distribution of uniform to poor and needy students	1,00,000	1 year	1,00,000
Total		Rs. 4,00,000		Rs. 4,00,000

SEAC asked the project proponent and environmental consultant to clarify the following observations to which they replied as under:

Observation 1

**It has been proposed to add additional land to accommodate 33% green belt. As to whether this additional land also confirms to the provision of Master Plan.**

Reply of Project Proponent

The company has also obtained CLU from District Town Planner vide Memo No. 604 dated 24.05.2019 for 10.91 acre and the said area is outside the MC limit of Mandi Gobindgarh but falls in designated zone i.e. in the industrial zone as per the provision of master plan. Further, the land of the adjoining units namely Arihant Rolling Mills and Arihant Pipes which are in operation from 1999, have been incorporated in the said letter. The said area being industrial before the issuance of CLU policy i.e. 17.08.2007 do not require CLU. However, the industry shall get its building plan approved from the Competent Authority.

Observation 2

**Proposed CER activities are not in line with the OM dated 01.05.2018**

Reply of Project Proponent

The project proponent submitted the revise CER activities along with amount to be spent (1 % of the total proposed expansion i.e. Rs.23 lac, as under:

Sr. No.	CER Activities	Annual Expenditure (in Rs.)
1.	Adoption of Parbhatpuri Charitable hospital located at Mandi Gobindgarh to improve its infrastructure & providing basic facilities and solar system	23,00,000/-
	Total	Rs.23,00,000

### Observation 3

**Further, the details of activities to be undertaken as per the commitment made during public hearing of the industry be provided.**

### Reply of Project Proponent

The company has made commitment of Rs. 4.0 lacs/- during Public Hearing and the details of same are as under:

Sr. No.	Expenditure on Public Hearing Action Plan	Expenditure (in Rs.)
1.	To make pucca floor in the Govt. School	1,00,000
2.	Construction of playground for children in Govt. School	2,00,000
3.	Distribution of uniform to poor and needy students	1,00,000
	Total	Rs.4,00,000/-

### Observation 4

**As to whether the project site is located in the notified area/ overexploited area of the central Ground Water Authority. If yes, then how, the project proponent will meet the requirement of water intake for project.**

### Reply of Project Proponent

Sirhind Block is non-notified area. However, they had already applied to the CGWA for the necessary permission for abstraction of ground water for the project.

### Observation 5

**As to whether the industry has installed side suction hood as per design given by PSCST.**

### Reply of Project Proponent

The work of providing side suction hood is under progress and shall be installed and commissioned by 31<sup>st</sup> July 2019 as per the feasibility report approved by the PSCST. After the completion of said work, completion certificate from PSCST shall be taken for submitting the same to SEIAA, Punjab at the earliest.

### Observation 6

**a) How many truck can be parked inside the premises.**



- b) **Slag storage area is located near the office area, which not be seem practical feasible.**
- c) **Time period of lease for the additional land taken by the industry.**
- d) **Submit the revised layout map after incorporating parking area and green area.**

Reply of Project Proponent

- a) 28 trucks can be parked inside the premises. No truck is to be allowed to park outside the industry.
- b) Slag storage area can be shifted near to the parking area as lot of space is available after considering the requirement of parking.
- c) Lease land is for 99 years. After considering the additional land, total area of 10.91 acres is sufficient for incorporating parking as well as 33% green area & other utilities.
- d) Copy of the revised layout plan was submitted which was taken on record.

Observation 7

**Whether any proposal has been made for paving the approach road to the gate and weighing bridge area for the vehicle movement within the premises to reduce the dust emissions.**

Reply of Project Proponent

The area within the premises for vehicle movement as well as approach road to the gate and weighing bridge area has already been paved.

Observation 8

**There are chances of contamination of underground water upon recharging of rainwater due to probable deposition of pollutants on rooftop due to highly dense air polluting industrial cluster in adjoining area.**

Reply of Project Proponent

Rain water harvesting shall be done outside the premises and shall adopt 3 ponds for harvesting of total rain water @ 1,18,370 m<sup>3</sup> per annum with details given in the table below:

<b>Pond location</b>	<b>Area of the pond (in sq.m)</b>	<b>Depth of the pond</b>	<b>Volume/Storage capacity (m<sup>3</sup> per annum)</b>
Village Roorki	10,117.14	3	30,351
Village Harbanspura	8,093.71	3	24,281
Village Wazirabad	8,093.71	3	24,281
<b>Total</b>	<b>26,304.56</b>	-	<b>78,913</b>

SEAC took the reply and copy of presentation on record.

SEAC after deliberating the application has awarded '**Silver Grading**' to the project proposal and decided that case be forwarded to SEIAA with the

recommendations to grant environmental clearance for expansion of unit in the existing premises as well as additional land taken on lease and purchased located at G.T Road, Sirhind Side, Mandi Gobindgarh, Teh. Amloh, Distt. Fatehgarh Sahib, Punjab, Punjab, 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:

1	Name and Location of the project	M/s Jogindra Castings Pvt. Ltd., G.T Road, Sirhind Side, Mandi Gobindgarh, Teh. Amloh, Distt. Fatehgarh Sahib, Punjab		
2.	Nature of project (Fresh/Expansion Amendment/Others)	Expansion project		
3.	a) Category b) Activity  (as per schedule appended to EIA Notification, 2006 as amended time to time.)	a) B-1 b) 3(a)  Metallurgical Industries (Ferrous & Non Ferrous Alloys).		
4.	Area Details			
	<b>Details</b>	<b>Existing</b>	<b>Additional Land</b>	<b>After Expansion</b>
	Plot Area	14,344.79 sq.m.  (or 3.54 acres)	<ul style="list-style-type: none"> <li>• Land on lease 2,509.29 sq.m. ( or 0.62 acres)</li> <li>• Land Purchased 27,351.28 sq.m. (or 6.75 acres)</li> </ul>	44,205.3 sq.m.  (or 10.92 acres)
4.	Co-ordinates of the project site	A 30°39'21.72"N and 76°18'42.26"E B 30°39'17.59"N and 76°18'46.26"E C 30°39'18.55"N and 76°18'47.62"E D 30°39'16.26"N and 76°18'50.06"E E 30°39'20.22"N and 76°18'55.49"E F 30°39'22.58"N and 76°18'53.21"E G 30°39'22.29"N and 76°18'52.91"E H 30°39'22.94"N and 76°18'52.30"E I 30°39'23.46"N and 76°18'53.07"E J 30°39'23.96"N and 76°18'52.70"E K 30°39'21.49"N and 76°18'49.00"E L 30°39'24.14"N and 76°18'46.09"E		
5.	Project Cost (After expansion)	Rs. 43.34 Crores		
6.	Raw Material requirement (After expansion)	Scrap@ 1075 TPD & Ferro Alloys @25 TPD		
7.	Production Capacity (After expansion)	1000 TPD of Ingots/Billets/Flats/Structures/ TMT Bars/M.S Bars/H.R Coils		
8	Details of major productive	2 no's Induction Furnaces of capacity 25 TPH each		

	machinery/plant (After expansion)		and 2 no's Induction Furnaces of capacity 15 TPH each and two rolling mill		
9.	Manpower(After expansion)		360 persons		
10.	Water Requirements & its source (After expansion)		<p>Total Water Demand:164 KLD</p> <p>i) Domestic: 18 KLD</p> <p>ii) Cooling: 66 KLD</p> <p>iii) Green Area: 80 KLD</p> <p>Water demand shall be met through existing tubewells after obtaining permission from CGWA. In case permission is not granted, then alternative sources like treated sewage water or surface water shall be used.</p>		
11.	Details of Effluent(After expansion)				
	Sr. No.	Details	Quantity (After Expansion)	Remarks	
	i)	Industrial Effluent	Nil	No industrial effluent generated except purge water which shall confirmed to the prescribed standards before discharge onto land for plantation.	
	ii)	Domestic Effluent.	14.4 KLD	Wastewater generated from the project will be treated in the STP of capacity 20 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	25 TPH- 2 IF 15 TPH-2 IF	18 m	Side suction hood followed by Pulse Jet Bag Filter
	ii)	DG sets	2 X 500 KVA	5.0 m each	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	962.5 TPA	Shall be reprocessed through M/s Madhav Alloys, Fatehgarh Sahib, for recovery of metal. In case non acceptance by the reprocessor, the hazardous waste to be given CSTDF, Nimbua	
	ii)	Cat.5.1 – Used Oil	0.080 KL per annum	Shall be reprocessed through authorized recyclers of waste oil	
14.	Solid waste generation and its disposal (After expansion)				
	Sr. No.	Solid Waste	Quantity (After Expansion)	Disposal	
	(i)	Slag	33 TPD	Shall be reprocessed through M/s Khanna Cement Products	
15.	Energy Requirements(After expansion)		<p>i) Power load 30000 KW through PSPCL.</p> <p>ii) Two Silent DG sets of capacity 500 KVA as stand-by arrangement.</p>		
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	Environmental Protection Measures	Capital Cost (Rs. in Lakhs)	Recurring Cost (Rs. in Lakhs/year)
1.	Air Pollution Control (Installation of APCD)	130	1.0
2.	Water Pollution Control (STP)	20	2.5
3.	Noise Pollution Control (Including cost of landscaping & green belt)	5.0	1.5
4.	Solid Waste Management	3.0	1.0
5.	Environment Monitoring & Management	3.0	5.0
6.	Health, Safety & Risk Assessment	3.0	0.5
7.	Rain Water Recharging outside the project premises	1.5	1.0
8.	Miscellaneous	1.0	0.5
Total		166.5	13

## **EC Conditions for Induction/ Electric Arc Furnace & Rolling Mills**

### **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 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.
- viii. 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.
- ix. The project proponent shall comply with conditions imposed by the District Town Planner, Fatehgarh Sahib vide Memo No. 479 dated 28.04.2015.

## **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 31<sup>st</sup> March 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<sub>10</sub> and PM<sub>2.5</sub> in reference to PM emission, and SO<sub>2</sub> and NO<sub>x</sub> in reference to SO<sub>2</sub> and NO<sub>x</sub> 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 31<sup>st</sup> March 2012 (applicable to IF/EAF) as amended from time to time; S.O. 3305 (E) dated 7<sup>th</sup> 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. (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) 31<sup>st</sup> March 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. 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

- ix. The project proponent shall practice rainwater harvesting to maximum possible extent. The project proponent shall not adopt ground water recharge with in plant premises to avoid underground contamination due to deposition of pollutants on roof top being highly dense industrial area. However, industry may adopt some village pond for rain water harvesting. As committed, the industry shall adopt 3 ponds for harvesting of total rain water @ 1,18,370 m<sup>3</sup> per annum with details given in the table below:

<b>Pond location</b>	<b>Area of the pond (in sq.m)</b>	<b>Depth of the pond(in meters)</b>	<b>Volume/Storage capacity (m<sup>3</sup> per annum)</b>
Village Roorki	10,117.14	3	30,351
Village Harbanspura	8,093.71	3	24,281
Village Wazirabad	8,093.71	3	24,281
<b>Total</b>	<b>26,304.56</b>	-	<b>78,913</b>

The stream carrying waste water of the village shall be first treated in the septic tank of adequate capacity to be constructed beside pond and the over flow of the septic tank will be sent to the pond. 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

- x. 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 (having canopy type structure and especially trees not grass) in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant as assured during the presentation. 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. Canopy trees shall also be planted around the parking area to provide shade to the parked vehicles.
- 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 following activities and spent an amount as committed during the Public Hearing:

Sr. No.	Expenditure on Public Hearing Action Plan	Expenditure (in Rs.)
1.	To make pucca floor in the Govt. School	1,00,000
2.	Construction of playground for children in Govt. School	2,00,000
3.	Distribution of uniform to poor and	1,00,000



	needy students	
	Total	Rs.4,00,000/-

## 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 1<sup>st</sup> 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.23 Lacs towards following CER activities:

Sr. No.	CER Activities	Annual Expenditure (in Rs.)
1.	Adoption of Parbhatpuri Charitable hospital located at Mandi Gobindgarh to improve its infrastructure & providing basic facilities and solar systaem	23,00,000/-
	Total	Rs.23,00,000

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 166.5 Lacs towards capital cost and Rs 13 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; PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub> (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 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.
  - i. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
  - ii. 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.
- viii. 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).

- ix. 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.
- x. The SEIAA/Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xi. The SEIAA/ Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xii. 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.
- xiii. 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.
- xiv. 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 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.
- ii. 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.
- iii. The project proponent shall reserve adequate 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.
- iv. The project proponent shall comply with the standard operating procedures and upgrade the suction and treatment arrangement for the secondary emissions as prescribed by the State Pollution Control Board or by CPCB/MoEF&CC.
- v. 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.

- vi. 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.
- vii. 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.
- viii. The project proponent shall use natural gas (if available) as substitute fuel wherever possible in the existing industry/ for expansion project.
- ix. The project proponent shall obtain mandatory clearances under Pollution Control laws.

**Item No. 181.06: Application for obtaining Environmental clearance under EIA notification dated 14.09.2006 for Expansion of Steel Manufacturing Unit namely "Oasis Enterprises Pvt. Ltd." at Village Talwara, Talwara Road, Mandi Gobindgarh, Teh. Amloh, Distt. Fatehgarh Sahib, Punjab by M/s. Oasis Enterprises Pvt. Ltd. (Proposal no SIA/PB/IND/22227 /2018)**

The SEAC observed as under:

The project proponent has filed application for obtaining Environmental clearance under EIA Notification, 2006 for expansion of Steel Manufacturing Unit namely "Oasis Enterprises Pvt. Ltd." at Village Talwara, Talwara Road, Mandi Gobindgarh, Teh. Amloh, Distt. Fatehgarh Sahib, Punjab. The project proponent will replace already installed two Induction Furnaces of capacity 12 TPH each and one Ladle Refining Furnace of capacity 20 TPH with High Efficiency Induction Furnaces having combined capacity of 80 TPH. The project is covered under category 3(a)- Secondary Metallurgical Industries (ferrous & non ferrous) of the Schedule appended to the said notification.

The project was earlier granted TOR vide letter no. SEIAA/2018/720 dated 24.05.2018 with Standard Terms of Reference and additional specific TORs decided during meeting of SEAC.

Now, the project proponent has submitted EIA report.

The case was considered by the SEAC in its 181<sup>st</sup> meeting held on 11.07.2019 and the same was attended by the following on behalf of the project

proponent: -

- (i) Sh. Sanjay Gupta, Director, of the Promoter Company
- (ii) Sh. Sandeep Garg, EIA-Coordinator cum CEO, M/s Eco Laboratories Pvt. Ltd., Mohali, Environment Consultant of the promoter company
- (iii) Ms. Simranjit Kaur, EIA Co-ordinator cum AGM, M/s Eco Laboratories Pvt. Ltd Mohali, Environment Consultant of the promoter company

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

### **Introduction of the Project-**

- The existing production capacity of the industrial unit is 260 TPD with 2 no's of Induction Furnaces having capacity 12 TPH each, one ladle refining furnace of capacity 20 TPH and rolling mill. The industry wants to increase their production capacity by replacing the existing 2 no's Induction Furnaces with 4 no's of High Efficiency Induction Furnaces of capacity 20 TPH each. Thus, after expansion, production capacity of the industrial unit will become 1,000 TPD for manufacturing of Ingots/Billets/Flats/Structures/TMT Bars/M.S Bars/H.R coils by 4 no's of High Efficiency Induction Furnaces of capacity 20 TPH each along with existing one Ladle Refining Furnace of capacity 20 TPH and rolling mill.
- For expansion, no additional land is required as the expansion has been proposed within the project premises. However, adjoining land for green belt development has been acquired. Project falls in the Industrial Zone as per the Master Plan of Mandi Gobindgarh.
- Letter has been obtained from District Town Planner stating that project falls in the notified Industrial Zone.
- The Current Directors of the company are as under:
  1. Sh. Adarsh Garg
  2. Sh. Sanjay Gupta
- Total cost of project after expansion: Rs. 48.0 Crores i.e. Cost of existing project: Rs. 17.0 Crores & Cost of proposed project: Rs. 31.0 Crores.

### **Project Approvals/ Agreement**

Description	Details
SCA-Cum-SAC approval	Obtained from State Competent Authority vide letter No. CSA/05/0-10/12470 dated 31.08.2005
Letter from DTP	Obtained from District Town Planner vide Memo No. 479 dated 28.04.2015 for owned land.
CTO from PPCB	Varied Consent to Operate has been obtained from PPCB under Water (Prevention & Control of Pollution) Act, 1974 vide Letter No. CTOW/Varied/FGS/2017/4755162 dated 14/03/2017; valid till 31/03/2021 and Air (Prevention & Control of Pollution) Act, 1981 vide Letter No. CTOA/Varied/FGS/2017/4767285 dated

	14/03/2017; valid till 31/03/2021.
Authorization for Hazardous Waste	Authorization for Hazardous waste has been obtained from PPCB vide Authorization No. HWM/Fresh/FGS/2017/4773681 dated 14.03.2017 and valid till 30.06.2021.
Agreement for disposal of APCD dust	Agreement done with M/s Madhav Alloys Pvt. Ltd. for disposal of APCD dust vide dated 14.12.2017.
Agreement for disposal of slag	Agreement done with M/s Khanna Cement Products for utilization of slag for manufacturing of Concrete Blocks/ Paver Tiles/ Road Gullies/ Manholes etc. vide dated 08.01.2019
Approval for Power load	Obtained vide Memo No. 217 dated 10.01.2019 for additional load of 14 MW.
Certified Compliance Report from RO, PPCB	Obtained from RO, PPCB vide Letter No. 157 dated 17.01.2019.
NOC from Sarpanch for Pond adoption	NOC obtained from Sarpanch of Village Talwara, Block Bassi Pathania vide dated 18.02.2019
CGWA Approval	Application has been submitted vide application No. 21-4/4994/PB/IND/2019 dated 28.03.2019.

➤ Co-ordinates of the Project

A: 30°39'13.56"N and 76°19'34.74"E    B: 30°39'15.01"N and 76°19'32.19"E

C: 30°39'14.60"N and 76°19'23.27"E    D: 30°39'11.52"N and 76°19'23.19"E

E: 30°39'11.48"N and 76°19'32.14"E

➤ Brief of the Project

Details	Existing	Proposed	Total (After Expansion)
Plot Area	5.40 acres (or 21,875.55 m <sup>2</sup> )		
Production Capacity	260 TPD of Billets/TMT bars/Flats/Structure	740 TPD of Ingots/Billets/Flats/Structures/TMT Bars/ M.S Bars/H.R Coils	1000 TPD of Ingots/Billets/Flats/Structures/TMT Bars/M.S Bars/H.R Coils
Induction Furnace	2 Induction Furnaces of capacity 12 TPH each, One ladle furnace of capacity 20 TPH and rolling mill	Replacement of existing 2 IF's (12 TPH to 20 TPH) and addition of 2 IF's of 20 TPH each.	4 no's Induction Furnaces of capacity 20 TPH each One ladle furnace of capacity 20 TPH and rolling mill
Raw Materials	Scrap: 277 TPD Ferro Alloys: 9 TPD	Scrap: 798 TPD Ferro Alloys: 16 TPD	Scrap: 1075 TPD Ferro Alloys: 25 TPD
Manpower	95 (both technical & non-technical); 5 workers are residing within project premises	265; out of which 20 will be residing within project premises	360 (both technical & non-technical); out of which, 25 workers will be residing within project premises

Project Cost (in Crores)	Rs. 31 Cr.	Rs. 17 Cr.	Rs. 48 Cr.
Total Water Demand (KLD)	25	99	124
Domestic Water Demand (KLD)	2	16	18
Cooling Water Demand (KLD)	21	45	66
Green Area demand (KLD)	2	38	40
Source of water supply	Ground water		
Power Load	16 MW	14 MW	30 MW
Source of Power	Punjab State Power Corporation Limited (PSPCL)		
Power Backup	1 DG set of 500 KVA	1 DG set of 500 KVA	2 DG sets of capacity 500 KVA each

➤ Area Breakup of the project

Sr. No.	Description	Area (in sq.ft.)
1.	Covered area	84,172
2.	Green area (@ 33.42 %)	78,684
3.	Road area	37,192
4.	Parking area	2,200
5.	Open area & Grid area	23,157
6.	Covered area Store / lab / canteen / office etc.	9,976
Total area of the project		2,35,381 sq.ft. or 21,875.55 m <sup>2</sup>
1.	Raw Material storage area	30,000
2.	Finished good area	20,000
3.	Slag storage area	2,400
4.	Working area/Furnace room /other shed area	31,772
Total covered area of the project		84,172 sq.ft.

- There is no use of the chemicals during the manufacturing process. Only small quantities of lab chemicals are used for in-house laboratory testing. Storage sheds have been provided for raw materials and products storage. The details

of material quantities & storage capacities are given below:

Sr. No.	Particulars	Quantity which can be stored	No. of Days for storage
1.	Raw materials	40,500 T	39 Days
2.	Finished Goods	10,800 T	11 Days
3.	Slag	1,200 T	37 Days
4.	APCD dust	9.65 T	4 Days

➤ The details of emissions are given below:

Source	Description	Capacity	APCD	Stack Height
Furnaces and Ladle Refining Furnace	Existing	12 TPH- 1 IF & LRF of 20 TPH	Common APCD (Spark arrestor, Twin Cyclone followed by Bag Filter)	22 m
		12 TPH – 1 IF	Wet Scrubber	
	After Expansion	20 TPH- 1 IF & LRF of 20 TPH	Side suction hood followed by Pulse Jet Bag Filter	22 m
		20 TPH – 3 IF's	Side suction hood followed by Pulse Jet Bag Filter	18 m
DG Set	Existing	1 No. 500 KVA	-----	5 m
	After Expansion	2 No. 500 KVA	-----	

➤ Details of Effluent & Hazardous Waste

Details	Existing	After Expansion	Remarks
Industrial Effluent	Nil	Nil	No industrial effluent generated.
Domestic Effluent	1.6 KLD	14.4 KLD	Wastewater generated from the project is being treated in the Septic tank. After expansion, wastewater will be treated in proposed STP of capacity 20 KLD.

➤ Details Hazardous Waste

Hazardous Waste Category	Existing	After Expansion	Disposal
Cat. 35.1 – Exhaust air or Gas cleaning Residue	12 TPA	962.5 TPA (2.75 TPD)	Agreement done with M/s Madhav Alloys Pvt. Ltd.
Cat. 5.1 – Used Oil	0.020 KL per annum	0.040 KL per annum	To authorized vendor



➤ Details of Water Requirement

Description	Water Requirement (KLD)	
	Existing	After Expansion
Cooling water demand	21	66
Drinking water demand	2	18
Green area	2	40
Total water demand	25	124
Source of water	Ground Water (bore well)	

➤ List of Machinery

Sr. No.	Machinery	Existing	After expansion
1.	Induction Furnace	02 (12 TPH each)	04 (20 TPH each)
2.	Ladle Furnace	01 No. of 20 TPH	01 No. of 20 TPH
3.	APCD	2	4
4.	DG set	1 (500 KVA)	2 (500 KVA)
5.	Scrap Processing Unit, Shearing Machine & Bundling Press	1 + 2	3 + 3
6.	Magnets	8	11
7.	Overheard Cranes	14	30
8.	Rolling Mill	1	1
9.	Continues Casting Machine (CCM)	1	1 (4 strands)
10.	Mobile cranes	-	4
11.	Weighbridge	1	2

➤ The detail of the capacity of furnace and total production at different stages is as under:

Year of Establishment	Capacity of Furnace	Total Production	Whether covered Under EIA notification or not?
2005	12 TPH- 2 (Induction Furnace)	260 TPD	The Industry does not cover under EIA notification 1994 because industry is secondary metallurgical & not having Electric Arc Furnace. SAC-cum-SCA approval has been obtained vide Letter No. CSA/05/0-10/12470 dated 31.08.2005 is enclosed as Annexure 8(a).
2006	12 TPH (Induction Furnace)	160 TPD	The Industry does not cover under EIA notification S.O. 1533(E) dated 14.09.2006 because the project was issued NOC before 14th Sept., 2006. Clearance Certificate has

			been obtained from PPCB vide Letter No. EE(P)/2006 /FGS/LM/12 9 dated 04.10.2006. is enclosed as Annexure as 8(a).
2012	12 TPH- 2 (Induction Furnace)	260 TPD	Revalidation of SACcum-SCA approval has been obtained vide Letter No. CSA/2012/0/3049 dated 12.07.2012. is enclosed as Annexure 8(a).
2015	12 TPH	160 TPD	The Industry does not cover under EIA notification S.O. 1533(E) dated 14.09.2006 because the project was issued NOC before 14th Sept., 2006. Consent to Operate has been obtained dated 17.07.2015; valid till 31.03.2020 is enclosed as Annexure 8(a).
2017	12 TPH- 2 (Induction Furnace)	260 TPD	Varied Consent to Operate has been obtained vide dated 14.03.2017; valid till 31.03.2021 is enclosed as Annexure 8(a).
The actual production for financial year 2016-17 was 66,529 MT against the approved capacity of 85,800 @ 330 days			

➤ Environmental Status

- The climate of the district is characterized by dryness except a brief spell of monsoon season in a very hot summer and a bracing winter. Temperature starts increasing rapidly after February. May and June are the hottest months with daily average temperature going up to 41.2°C and minimum average daily temperature as 24.2°C. Hot scorching dust laden winds blow during the summer season and on individual day, the temperature sometimes goes upto 45°C to 47°C.
- The average annual rainfall is in the range of 660-700 mm. The annual number of rainy days on an average is about 51 days in a year, out of which, about 34 days falls in the monsoon period of July to September.
- In summer months of April, May and June, which is the driest part of the year, the afternoon humidity comes down to 23% while the relative humidity during monsoon months goes up-to about 81%.
- Annual trend indicates mean wind speed to be highest in the months of March, April, May, June and July (7.8-15.5 km/hour) and lowest in the month of October, November and December (2.5-3.5 km/hour).

➤ Ambient Air Quality in the Study Area:

- P-98 of PM<sub>10</sub> and PM<sub>2.5</sub> respectively are outside the NAAQ standards of 100 and 60 µg/m<sup>3</sup> respectively.
- The levels of SO<sub>2</sub> are much below the desired limits of 80 µg/m<sup>3</sup>. P98 is 11.38 µg/m<sup>3</sup>.
- The levels of NO<sub>x</sub> are also below the desired limits of 80 µg/m<sup>3</sup>. P98 is 26.4 µg/m<sup>3</sup>.
- The CO level at all the sampling points is less than 1.5 µg/m<sup>3</sup>.
- The lead (Pb) level in Particulate Matter at all the sampling points is less than

- 0.04  $\mu\text{g}/\text{m}^3$  which is less than the desired limit of 1.0  $\mu\text{g}/\text{m}^3$ .
- The Arsenic (As) level in Particulate Matter at all the sampling points is less than 0.01  $\text{ng}/\text{m}^3$  which is less than the desired limit of 6.0  $\text{ng}/\text{m}^3$
  - The Nickel (Ni) in Particulate Matter at all the sampling points is less than 10  $\text{ng}/\text{m}^3$  which is less than the desired limit of 20.0  $\text{ng}/\text{m}^3$ .
  - Aermod Model has been used to plot Wind Rose Diagram. The wind rose diagram indicates that the most predominant winds are mainly flowing from North West-West, with the secondary wind direction being from the South-East.
  - PM10- The maximum incremental pollutant concentration near sources and within 500 m is 0.5  $\mu\text{g}/\text{m}^3$ , within 1500 m decreases to 0.5  $\mu\text{g}/\text{m}^3$  and beyond which the pollutant rapidly decreasing to the ambient value.
  - PM2.5- The maximum incremental pollutant concentration near sources and within 200m is 1.0  $\mu\text{g}/\text{m}^3$ , within 1000 m decreases to 0.5  $\mu\text{g}/\text{m}^3$  and beyond which the pollutant slowly settles down to the ambient value. All values are much below the CPCB limits.
  - SO<sub>2</sub>- The maximum incremental pollutant concentration near pollution sources and within 500 m is 1.77  $\mu\text{g}/\text{m}^3$ , and within 1 km decreases to 0.5  $\mu\text{g}/\text{m}^3$  beyond it the pollutant rapidly disperses to 0.3  $\mu\text{g}/\text{m}^3$ .
  - CO- The maximum incremental pollutant concentration near sources and within 500 m is 0.01  $\mu\text{g}/\text{m}^3$ , within 2000 m decreases to 0.007  $\mu\text{g}/\text{m}^3$  and beyond 2000 m, the pollutant rapidly decreasing to below detection level. All values are much below the CPCB limits.
- Results of Surface Water Monitoring-
- The results of Bhakra Canal show that BOD is less than 20 mg/l & pH is nearly 7.
  - Similarly, for Amlah Minor canal, BOD is about 20 mg/l & pH is nearly 7.
  - For Sirhind choe canal, BOD is around 20 mg/l & pH is nearly 7.
  - For IR Distributary canal, BOD is less than 20 mg/l & pH is nearly 7.
  - Water is fit for irrigation as well as industrial cooling.
- Ground Water Quality Results
- pH varies from 7.21 -7.52 which is in between the acceptable limits i.e. 6.5 to 8.5 for potable water.
  - Calcium varies from 44.0 to 56.0 mg/l. The highest value was observed at Sirhind City and Salana, which is less than the acceptable & permissible limits i.e. 75 and 200 mg/l respectively.
  - Magnesium varies from 17 to 24 mg/l. The highest value was observed at Taksus Steels which is located at distance of about 3.8 km from the Project location, which is less than the acceptable & permissible limits i.e. 30 and 100 mg/l respectively.
  - Chloride concentration which is also one of the important parameters varies from 47 to 59 mg/l. It was found maximum at Lohar Majra and minimum at Taksus Steels, which is less than the acceptable & permissible limits i.e. 250 and 1000 mg/l respectively.
  - Heavy metals like Cadmium, Chromium, Lead and Zinc were much below the permissible limit in all the samples.
  - Iron varies from 0.38 to 0.58 mg/l, which is more than the acceptable limit i.e. 0.3 mg/l.

- Sulphate vary from 60 to 95 mg/l, which is less than the acceptable & permissible limits i.e. 200 and 400 mg/l respectively.
- As per report of CGWA, Fatehgarh Sahib, the ground water of Mandi Gobindgarh is suitable for domestic, drinking & Irrigation purposes.
- **Noise Monitoring Results**  
Minimum and maximum noise levels recorded during the day time were from 52.6 dB(A) and 70.6 dB(A) respectively during day and minimum and maximum level of noise during night time were 42.1 dB(A) and 60.0 dB(A) respectively. This may be attributed to the presence of machineries and vehicular movement nearby the project location.
- **Traffic Study**
  - Project is located at a distance of 1 km from NH-1. The National Highway NH-1 connecting New Delhi to Amritsar is well designed to withstand the large vehicles count & heavy vehicles. However, vehicles passing on the road in front of the project are mainly trucks which are used for the transportation of raw materials & final products.
  - Traffic study was conducted on 8<sup>th</sup> Jan, 2019 as well as 21<sup>st</sup>-23<sup>rd</sup> May, 2019 by team members of Eco along with employees of industry so as to assess the impact on local transport infrastructure due to proposed increased production of Oasis Enterprises Pvt. Ltd. and adjoining projects who have proposed expansion.
  - As per the traffic study, the road can take the increased load of expansion.
  - Existing Traffic Scenario & LOS at different locations

Locations	V (Volume in PUC/day)	C (Capacity in PUC/day)*	Existing ratio	V/C	LOS
	Per day count				
A (In front of project location)	434	1,900	0.22		B
B (At the Intersection of approach road and NH-1 )	753	1,900	0.39		B

- LOS values in comparison to V/C:

V/C	LOS	Performance
0.0-0.2	A	Excellent
0.2-0.4	B	Very Good
0.4-0.6	C	Good/ Average/ Fair
0.6-0.8	D	Poor
0.8-1.0	E	Very Poor

- Details of trucks used for transportation of raw materials and final products of the industries located on road wherein traffic study was conducted

Sr. No.	Industry's Name	Details	Description	Production capacity	No. of trucks per day
1.	K.L Alloys Pvt. Ltd.	Existing	Raw Materials	33 TPD	2
			Final Products	31 TPD	2
		Proposed	Raw Materials	280 TPD	14

			Final Products	290 TPD	15
2.	Oasis Enterprises Pvt. Ltd.	Existing	Raw Materials	286 TPD	14
			Final Products	260 TPD	13
		Proposed	Raw Materials	814 TPD	41
			Final Products	740 TPD	37
<b>Additional traffic load due to industries</b>					$(14+15+41+37) \times 3/4^a = 81$
<sup>a</sup> Considering an average capacity of truck as 20 MT and considering that few trucks carrying raw materials will also carry finished products.					

- Additional traffic load of nearby industries due to proposed expansion

Sr. No.	Vehicles Distribution	Number of Vehicles Distribution/Day	Passenger Car Unit (PCU)	Number of Vehicles Distribution/Day
		Road Connecting the project		Road Connecting the project
1.	Trucks	81+4 <sup>b</sup>	3	255
2.	Two-wheelers	40	0.5	20
	Total			275

- Modified Traffic Scenario & LOS at different locations (after expansion)

Locations	V (Volume in PUC/day)	C (Capacity in PUC/day)	Existing V/C ratio	LOS
A	434 + 275 = 709	1900	0.37	B
B	753 + 275 = 1028	1900	0.54	C

- Inference for the Traffic Study conducted on 8<sup>th</sup> Jan 2019  
The V/C ratio is found to be between 0.2-0.4 for location A which means that the performance of road will be Very good.
  - The V/C ratio at location B is between 0.4-0.6 which means that the performance of road will be good.
  - Similarly, Traffic Study was conducted on 21<sup>st</sup> -23<sup>rd</sup> May 2019 & Inference is as under:
  - The V/C ratio is found to be between 0.2-0.4 for location A which means that the performance of road will be Very good.
  - The V/C ratio at location B is between 0.4-0.6 which means that the performance of road will be good.
- The LOS in both one day and three-day study are same which means that the carrying capacity of road is adequate to handle future load.

➤ Parking Details

- Maximum No. of Trucks required as per production capacity: 15 trucks per hour
- Total 25 trucks can be parked within the industry. Out of which 5 trucks can be parked in designated parking area and 20 trucks can be parked under sheds.
- Approx. 14 no. of trucks per day are used to carry raw materials for the existing unit.

After expansion. approx. 55 no. of trucks per day will be used to carry raw materials. Since, the existing road is sufficient to cater to this meager increase in transportation; therefore, there will be less impact

➤ Air Pollution

- Major sources of air pollution will be provided with air pollution control systems to limit the air pollutant emissions within the permissible norms.
- Fugitive emissions of smoke, gases in and around the furnace will be removed by adequate ventilation systems.
- For adequate dispersion of gases, stack of adequate height will be provided that conforms to statutory requirements.
- For heat dissipation in the work zones arising from furnaces, adequate ventilation systems will be provided.
- Effective pollution control system i.e., Bag Filter, I.D. Fan & stack of adequate height has been provided for controlling the emissions from Induction Furnace.

➤ General Mitigation Measures

- Haulage roads are sprinkled with water at regular intervals for which water tankers with sprinkler arrangement are deployed.
- Trucks carrying raw materials are having valid PUC Certificate.
- No pressure horns will be permitted to control noise pollution.
- Face masks are provided for the people working dust generating locations.
- All internal roads in the premise are paved/ tarred.
- Speed limit of 10 km/hr. is enforced for vehicles within the plant premises to prevent road dust emission.
- Regular sweeping of roads is being practiced with regular sprinkling (in future with treated water) to minimize dust emissions.
- Measures for fugitive emission control are given below:
  - Pucca roads within premises, water sprinkling in dusty areas
  - Greenbelt/plantation to arrest fugitive dust emission.
  - Trucks carrying raw materials shall be covered with tarpaulin to prevent spreading of dust during transportation.
  - Water sprinkling shall be practiced at loading-unloading locations.
  - The conveyors shall be suitably covered to control fugitive emissions
  - All internal roads in the premises are paved /tarred.

➤ After expansion, hazardous waste produced from the industrial unit is estimated to be 2.75 TPD in the form of Exhaust Air or Gas cleaning residue (APCD ash) under Category 35.1 and 0.020 KL/annum of spent oil under Category 5.1 of Schedule I. Used oil generated will be sold to Authorized vendor of PPCB. APCD dust is being given to M/s Madhav Alloys Pvt. Ltd., where metals such as zinc & lead is recovered.

➤ As there will be only construction of foundation for the Induction Furnace hence, there will be utilization of fly ash as per Fly Ash Notification, 2009. Fly ash-based cement i.e. Portland Pozzolana Cement (PPC) will be used for construction of foundation.

➤ The existing green area within the project premises is 297.39 sq.m. and 7,015.24 sq.m. is the proposed green area. Thus, total green area of the project becomes 7,312 sq.m. (or 33.42%). 7 trees are existing within the industry premises of Neem, Guava, Ashoka trees, etc. In addition to this, 144 trees are proposed overall after expansion. Details of proposed plantation along with Landscape plan have been submitted. Green Area A:

71,604 sq.ft. Green Area B: 6,000 sq.ft. Green Area C: 1,080 sq.ft No. of trees required as per guidelines =  $21,875.55/80 = 273$  Trees

- Rain Water Harvesting
  - Pond located in the Village Talwara, Block Bassi Pathania, Mandi Gobindgarh has been adopted for artificial rain water.
  - Area of the pond = 12,140.56 sq.m. (or 3 acres)
  - Average Depth of the Pond = 3.5 m
  - Volume/Storage capacity of Pond = 42,492 m<sup>3</sup>
  - No. of fillings = 3 (max no. of fillings = 3)
  - Total recharge in the pond (in cubic meter annually) = 1,27,476 m<sup>3</sup>
  - Total quantity of water recharge is 65% of the volume of water available in the pond after de-silting i.e. 65 % of 1,27,476 m<sup>3</sup> per annum = 82,859 m<sup>3</sup> per annum
  - Thus, as per the CGWA Guidelines, recharging of ground water is double of the ground water withdrawal. NOC has been obtained from the Sarpanch of Village Talwara.
- Before disposing off the slag, metal is recovered. The quantity of slag is estimated to be 33 TPD after expansion of project. Out of this, approx. 16.5 TPD of metal will be recovered. After metal recovery, remaining will be sold to Khanna Cement Product for manufacturing for manufacturing of Concrete Blocks/ Paver Tiles/ Road Gullies/ Manholes, etc.
- APCD dust is being disposed off to M/s Madhav Alloys Pvt. Ltd., wherein metals such as zinc & lead are recovered. Agreement has been done with M/s Madhav Alloys Pvt. Ltd. for disposal of APCD dust.
- 1 lakh will be allocated per year to ensure health & safety of all contract and casual workers.
- Details of the amount to be spent on EMP is given below:

Sr. No.	Environmental Protection Measures	Capital Cost (Rs. in lakhs)	Recurring Cost (Rs. in lakhs/year)
1.	Air Pollution Control (Installation of APCD)	130.0	1.0
2.	Noise Pollution Control (Including cost of landscaping & green belt)	5.0	1.5
3.	Solid Waste Management	3.0	1.0
4.	Water Pollution Control (STP)	20	2.5
5.	Environment Monitoring & Management	3.0	5.0
6.	Health, Safety & Risk Assessment	3.0	0.5
7.	Rain Water Recharging outside the project premises	1.0	0.1
8.	Miscellaneous	1.0	0.5
Total		166.0	12.1

- Corporate Social Responsibility
  - Mr. Sanjay Gupta (Director) of M/s Oasis Enterprises Pvt. Ltd. will be responsible for implementation of CER (Corporate Environment Responsibility) within 1 year of time.

The cost of proposed expansion is Rs. 17.0 Crores. Thus, Rs. 17 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. 11.5 Lakhs have been planned to be reserved for CER. The details of the activities proposed to be covered under CER are as under:

Sr. No.	CER Activities	Total Expenditure	Timeline (Starting from date of grant of EC)	Total Expenditure in 1 Year (in lakhs)
1.	Education RO system in Government Girl School, Mandi Gobindgarh and Government Elementary School, Mandi Gobindgarh	6,00,000	1 year	6,00,000
2.	Plantation in community Tree Plantation along road side and in the village of Talwara.	3,00,000	1 year	3,00,000
3.	Public health camps in the nearby villages	2,50,000	1 year	2,50,000
Total		Rs. 11,50,000		Rs. 11,50,000

➤ Public Hearing (Action Plan)

- Expansion of the project will generate more employment which will be given to the local unemployed youth once EC is granted to the expansion project.
  - APCD's will be installed as soon as EC is granted. Thus, controlling the air pollution.
  - No domestic effluent will be discharged from the project. Treated water from STP will be reused in green area development after expansion. Also, pond in Village Talwara has been adopted for its maintenance.
  - Rs. 3 lakhs have been reserved for providing winter uniforms, provision of interlocking tiles as well as maintenance of Govt. School in Village Talwara.
  - Rs. 2 lakhs have been reserved for installation of CCTV cameras & lights near the under bridge of Village Talwara. Also, Rs. 50,000 has been reserved for air ticket for girl child of Village Talwara.
  - All these activities are reserved under CER and will be done after getting EC to the project.
- ✓ Rs. 5.5 Lakhs will be spent on the action plan of Public Hearing.
- The details of the activities proposed to be covered under public hearing action plan are as under:

Sr. No.	Expenditure on Public Hearing Action Plan	Total Expenditure	Timeline (Starting from date of grant of EC)	Total Expenditure in 1 Year (in lakhs)
1.	Provision of winter uniforms, interlocking tiles as well as maintenance of Govt. School in	3,00,000	1 year	3,00,000



	Village Talwara.			
2.	Provide air ticket to the girl child of Talwara village.	50,000	1 year	50,000
3.	Installation of CCTV camera & Lights near the under bridge of the village Talwara.	2,00,000	1 year	2,00,000
Total		Rs. 5,50,000		Rs. 5,50,000

SEAC asked the project proponent and environmental consultant to clarify the following observations to which they replied as under:

Observation 1

**As to whether the site of the project confirms to the provision of Master Plan.**

Reply of Project Proponent

The company has also obtained CLU from District Town Planner vide Memo No. 479 dated 28.04.2015 land and the site falls outside MC limit but in the designated use zone i.e. industrial zone as per Master Plan of Mandi Gobindgarh.

Observation 2

**Proposed CER activities are not in line with the OM dated 01.05.2018.**

Reply of Project Proponent

The project proponent submitted the revise CER activities along with amount to be spent (1 % of the total proposed expansion i.e. Rs.17 lac, as under:

Sr. No.	CER Activities	Annual Expenditure (in Rs.)
1.	Adoption of Govt. Primary School and Govt. Middle School in the Village Talwara to improve its education quality and infrastructure in the form of Library, solar system, drinking water RO system, washrooms & badminton court etc.	17,00,000/-
	Total	Rs.17,00,000

Observation 3

**Further, the details of activities to be undertaken as per the commitment made during public hearing of the industry be provided.**

Reply of Project Proponent

The company has made commitment of RS. 5.5 lacs/- during Public Hearing and the details of same are as under:

Sr. No.	Expenditure on Public Hearing Action Plan	Expenditure (in Rs.)
1.	Provision of Winter uniforms, interlocking tiles as well as maintenance of Govt. School in Village Talwara	3,00,000/-

2.	Air ticket already provided to the girl child of Talwara village (certificate from Sarpanch has been submitted)	50,000/-
3.	Installation of CCTV camera & lights near the under bridge of the village Talwara	2,00,000/-
	Total	Rs.5,50,000/-

#### Observation 4

**As to whether the project site is located in the notified area/ overexploited area of the central Ground Water Authority. If yes, then how, the project proponent will meet the requirement of water intake for project.**

#### Reply of Project Proponent

Amlah is a notified area by the CGWA. They will obtain the necessary permission from the regulatory authority for abstraction of ground water for the project for which application has been submitted . If they will not be able to get the permission for the same then either they will be utilizing surface water or treated waste water from nearby STPs after obtaining permission from competent authority.

#### Observation 5

**There are chances of contamination of underground water upon recharging of rainwater due to probable deposition of pollutants on rooftop due to highly dense air polluting industrial cluster in adjoining area.**

#### Reply of Project Proponent

Rain water harvesting shall be done outside the premises i.e. pond shall be adopted in the Village Talwara, Block Bassi Pathania, Mandi Gobindgarh. Total quantity of water recharge is 82,859 m<sup>3</sup> per annum against the annual pumpage of 40,920 m<sup>3</sup> per annum which is double the rate of abstraction.

#### Observation 6

**Whether any proposal has been made for paving the approach road to the gate and weighing bridge area for the vehicle movement within the premises to reduce the dust emissions.**

#### Reply of Project Proponent

The area within the premises for vehicle movement as well as approach road to the gate and weighing bridge area has already been paved.

#### Observation 5

**As to whether the industry has installed side suction hood as per design given by PSCST.**

#### Reply of Project Proponent

The work of providing side suction hood is under progress and shall be installed and commissioned by 31<sup>st</sup> July 2019 as per the feasibility report approved by the PSCST. After the completion of said work, completion certificate from PSCST shall be taken for submitting the same to SEIAA, Punjab at the earliest.

SEAC took the reply and copy of presentation on record.

SEAC after deliberating the application has awarded '**Silver Grading**' to the project proposal and 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 Talwara, Talwara Road, Mandi Gobindgarh, Teh. Amloh, Distt. Fatehgarh Sahib, Punjab, 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:

1	Name and Location of the project	M/s. Oasis Enterprises Pvt. Ltd. at Village Talwara, Talwara Road, Mandi Gobindgarh, Teh. Amloh, Distt. Fatehgarh Sahib, Punjab		
2.	Nature of project (Fresh/Expansion Amendment/Others)	Expansion project		
3.	a) Category b) Activity (as per schedule appended to EIA Notification, 2006 as amended time to time.)	a) B-1 b) 3(a) Metallurgical Industries (Ferrous & Non Ferrous Alloys).		
4.	Area Details			
	<b>Details</b>	<b>Existing</b>	<b>Additional Land</b>	<b>After Expansion</b>
	Plot Area	5.40 acre	Nil	5.40 acre
4.	Co-ordinates of the project site	A: 30°39'13.56"N and 76°19'34.74"E B: 30°39'15.01"N and 76°19'32.19"E C: 30°39'14.60"N and 76°19'23.27"E D: 30°39'11.52"N and 76°19'23.19"E E: 30°39'11.48"N and 76°19'32.14"E		
5.	Project Cost (After expansion)	Rs. 31.0 Crores		
6.	Raw Material requirement (After expansion)	Scrap@ 1075 TPD & Ferro Alloys @25 TPD		
7.	Production Capacity (After expansion)	1000 TPD of Ingots/Billets/Flats/Structures/ TMT Bars/M.S Bars/H.R Coils		

8	Details of major productive machinery/plant (After expansion)	(i) 4 no's Induction Furnaces of capacity 20 TPH each (ii) One ladle furnace of capacity 20 TPH and rolling mill			
9.	Manpower(After expansion)	360 persons			
10.	Water Requirements & its source (After expansion)	Total Water Demand:124 KLD i) Domestic: 18 KLD ii) Cooling: 66 KLD iii) Green Area: 40 KLD Water demand shall be met through existing tubewells after obtaining permission from CGWA. In case permission is not granted, then alternative sources like treated sewage water or surface water shall be used.			
11.	Details of Effluent(After expansion)				
	Sr. No.	Details	Quantity (After Expansion)	Remarks	
	iii)	Industrial Effluent	Nil	No industrial effluent generated except purge water which shall confirmed to the prescribed standards before discharge onto land for plantation.	
	iv)	Domestic Effluent.	14.4 KLD	Wastewater generated from the project will be treated in the STP of capacity 20 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 & LRF	4 x 20 TPH each & 1 x 20 TPH	18 m with 3 IF of 20 TPH each But 22 m with one IF of 20 TPH and one LRF of 20 TPH	Side suction Hood followed by Bag Filter with one IF of 20 TPH IF & one LRF of 20 TPH Side suction hood followed by Pulse Jet Bag Filter with 3 IF of 20 TPH
	ii)	DG sets	500 KVA	5.0 m each	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	962.5 TPA	Shall be reprocessed through M/s Madhav Alloys, Fatehgarh Sahib, for recovery of metal. In case non acceptance by the reprocessor, the hazardous waste to be given CSTDF, Nimbua	
	ii)	Cat.5.1 – Used Oil	0.040 KL per annum	Shall be reprocessed through authorized recyclers of waste oil	
14.	Solid waste generation and its disposal (After expansion)				
	Sr. No.	Solid Waste	Quantity (After	Disposal	

		Expansion)																																									
	(i) Slag	33 TPD	Shall be reprocessed through M/s Khanna Cement Products																																								
15.	Energy Requirements(After expansion)	iii) Power load 30000 KW through PSPCL. iv) Two Silent DG sets of capacity 500 KVA as stand-by arrangement.																																									
16.	<p>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:-</p> <table border="1"> <thead> <tr> <th>Sr. No.</th> <th>Environmental Protection Measures</th> <th>Capital Cost (Rs. in lakhs)</th> <th>Recurring Cost (Rs. in lakhs/year)</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Air Pollution Control (Installation of APCD)</td> <td>130.0</td> <td>1.0</td> </tr> <tr> <td>2.</td> <td>Noise Pollution Control (Including cost of landscaping &amp; green belt)</td> <td>5.0</td> <td>1.5</td> </tr> <tr> <td>3.</td> <td>Solid Waste Management</td> <td>3.0</td> <td>1.0</td> </tr> <tr> <td>4.</td> <td>Water Pollution Control (STP)</td> <td>20</td> <td>2.5</td> </tr> <tr> <td>5.</td> <td>Environment Monitoring &amp; Management</td> <td>3.0</td> <td>5.0</td> </tr> <tr> <td>6.</td> <td>Health, Safety &amp; Risk Assessment</td> <td>3.0</td> <td>0.5</td> </tr> <tr> <td>7.</td> <td>Rain Water Recharging outside the project premises</td> <td>1.0</td> <td>0.1</td> </tr> <tr> <td>8.</td> <td>Miscellaneous</td> <td>1.0</td> <td>0.5</td> </tr> <tr> <td colspan="2">Total</td> <td>166.0</td> <td>12.1</td> </tr> </tbody> </table>			Sr. No.	Environmental Protection Measures	Capital Cost (Rs. in lakhs)	Recurring Cost (Rs. in lakhs/year)	1.	Air Pollution Control (Installation of APCD)	130.0	1.0	2.	Noise Pollution Control (Including cost of landscaping & green belt)	5.0	1.5	3.	Solid Waste Management	3.0	1.0	4.	Water Pollution Control (STP)	20	2.5	5.	Environment Monitoring & Management	3.0	5.0	6.	Health, Safety & Risk Assessment	3.0	0.5	7.	Rain Water Recharging outside the project premises	1.0	0.1	8.	Miscellaneous	1.0	0.5	Total		166.0	12.1
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## Standard EC Conditions for Induction/ Electric Arc Furnace & Rolling Mills

### 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.

- i. 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.
- v. The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.
- vi. The project proponent shall comply with conditions imposed by the District Town Planner, Fatehgarh Sahib vide Memo No. 479 dated 28.04.2015.
- vii. 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.
- viii. 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.

## **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 31<sup>st</sup> March 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<sub>10</sub> and PM<sub>2.5</sub> in reference to PM emission, and SO<sub>2</sub> and NO<sub>x</sub> in reference to SO<sub>2</sub> and NO<sub>x</sub> 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 7<sup>th</sup> 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. (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) 31<sup>st</sup> March 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. 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
- ix. The project proponent shall practice rainwater harvesting to maximum possible extent. The project proponent shall not adopt ground water recharge with in plant premises to avoid underground contamination due to deposition of pollutants on roof top being highly dense industrial area. However, industry may adopt some public place like educational institutions, religious place or monuments for underground recharging or may store and use the rain water within premises or may adopt some village pond for rain water harvesting. As committed, the industry shall adopt pond having 3 acre area located in the Village Talwara, Block Bassi Pathania, Mandi Gobindgarh for harvesting of total rain water @ 82,859 m<sup>3</sup> per annum. The stream carrying waste water of the village shall be first treated in the septic tank of adequate capacity to be constructed beside pond and the over flow of the septic tank will be sent to the pond. 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
- x. 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 (having canopy type structure and especially trees not grass) in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant as assured during the presentation. 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. Canopy trees shall also be planted around the parking area to provide shade to the parked vehicles.
- 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 following activities and spent an amount as committed during the Public Hearing:

Sr. No.	Expenditure on Public Hearing Action Plan	Expenditure (in Rs.)
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1.	Provision of Winter uniforms, interlocking tiles as well as maintenance of Govt. School in Village Talwara	3,00,000/-
2.	Air ticket provided to the girl child of Talwara village	50,000/-
3.	Installation of CCTV camera & lights near the under bridge of the village Talwara	2,00,000/-
	Total	Rs.5,50,000/-

## 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 1<sup>st</sup> 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.17 Lacs towards following CER activities:

Sr. No.	CER Activities	Annual Expenditure (in Rs.)
1.	Adoption of Govt. Primary School and Govt. Middle School in the Village Talwara to improve its education quality and infrastructure in the form of Library, soalr system, drinking water RO system, washrooms & badminton court etc.	17,00,000/-
	Total	Rs.17,00,000

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 166 Lacs towards capital cost and Rs 12.1 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; PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub> (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 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.

- i. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- ii. 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.
- viii. 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).
- ix. 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.
- x. The SEIAA/Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xi. The SEIAA/ Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xii. 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.
- xiii. 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.
- xiv. 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**

- x. 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.
- xi. 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.
- xii. The project proponent shall reserve adequate 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.

- xiii. 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.
- xiv. 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.
- xv. 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.
- xvi. 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.
- xvii. The project proponent shall use natural gas (if available) as substitute fuel wherever possible in the existing industry/ for expansion project.
- xviii. The project proponent shall obtain mandatory clearances under Pollution Control laws.
- xix. The project proponent shall submit the proof of amount spent towards the commitment made during the public hearing i.e. 2 lakhs have been reserved for installation of CCTV cameras & lights near the under bridge of Village Talwara and Rs. 50,000 has been reserved for air ticket for girl child of Village Talwara

**Item No. 181.07: Application for obtaining Environmental Clearance (EC) under EIA notification dated 14.09.2006 for establishment of a Group Housing project namely "Royal Residency" located at 66 ft. Road, Vill. Kadianwali (HB No. 292), Jalandhar, Punjab by M/s Triworld Developers (Proposal No. SIA/PB/MIS/101630/2019).**

The SEAC observed as under: -

The project proponent has filed an application for obtaining Environment Clearance under EIA notification, 2006 for establishment of a Group Housing project namely "Royal Residency" located at 66 ft. Road, Vill. Kadianwali (HB No. 292), Jalandhar, Punjab by M/s Triworld Developers.

The case was considered by the SEAC in its 181<sup>st</sup> meeting held on 11.07.2019 and the same was attended by the following on behalf of the project proponent: -

- (i) Sh. Joginder Singh, Managing Director of the Promoter Company

- (ii) Sh. Sandeep Garg, EIA-Coordinator cum CEO, M/s Eco Laboratories Pvt. Ltd., Mohali, Environment Consultant of the promoter company
- (iii) Ms. Simranjit Kaur, EIA Co-ordinator cum AGM, M/s Eco Laboratories Pvt. Ltd Mohali, Environment Consultant of the promoter company

SEAC was apprised that Environmental Engineer, PPCB, Regional Office, Jalandhar was requested vide email dated 08.05.2019 to send the report on the following:

1. Construction status at the site along with physical structures within 500 mt radius of the site including the status of industries if any
2. To verify the as to whether any (i) Protected Areas notified under the Wild Life (Protection) Act, 1972, (ii) Critically Polluted areas as notified by the Central Pollution Control Board from time to time, (iii) Notified Eco-sensitive areas, (iv) inter-State boundaries and international boundaries falls within 5 km radius from the boundary of the project site
3. As to whether the site of the project is meeting with the siting guidelines framed by Punjab Pollution Control Board for such type of projects.

Environmental Engineer, PPCB, Regional Office, Jalandhar vide return email dated 13.05.2019 has intimated that the site of M/s Triworld Developers in the revenue estate of Village Qadianwali, Tehsil & Distt. Jalandhar, Punjab was visited by AEE of their office on 10.05.2019 and the point wise reply to the queries raised vide e-mail dated 08.05.2019 is as under:-

1. During visit, it was observed that the boundary wall of the colony has been done. Apart from office block & a sample flat, no other construction activity has been carried out. There exists 2 no. cold storage, 1 no. filling station, 1 no. Govt. High School and 1 no. menthe plant within the radius of 500 mtr from the boundary of project site. The menthe plant was not in operation during visit and the physical condition of the mentha plant suggests that it has not been operated since long. The owner of the menthe plant was contacted telephonically and he informed that menthe plant is in scrap condition and they do not wish to operate it in foreseeable future.
2. It is requested that the details w.r.t queries raised regarding certain points to be checked from 5 KM radius of project site, may be obtained from revenue authorities.
2. There is no MAH industry/Rice sheller/ saila plants/ stone crushers/brick kilns/ cement plants/ cement grinding units/ hot mix plants within 500 meter of the

site. Hence the site is suitable for establishment of residential colony. Moreover, the project proponent, during visit, has produced the CLU obtained for an area measuring 10.61 Acre issued vide STP letter no. 2462 dated 04.10.2017 for establishment of residential colony.

SEAC perused the visit report and observed that boundary wall of the colony has been done and Office Block & sample flat has been constructed. SEAC asked the project proponent to clarify as to why the project may not be dealt as violation case as per the provisions of EIA notification,14.03.2017 amended on 08.03.2018. To this query, project proponent replied that initially in the conceptual plan, the project was initially planned for development of 67 residential plots and 10 commercial plots with laying of all the basis amenities in plot area of 10.68 acres. The layout plan was approved by Senior Town Planner, Jalandhar vide no. 643 dated 01/03/2018. Copy of the same was submitted. Consent to establish has been obtained from Board vide certificate no. 7495138 dated 24/03/2018 till 23/05/2019. To give picture of the project to the client, a sample house and site Office was constructed. The plot bearing no. 30 for construction of sample house has been marked on the layout plan. However, after detailed planning and market assessment, the project proponent realized more demand for independent floors rather than plots. Accordingly, the development strategy was revised to ensure the sale of project facilities and fulfilling the housing requirement of larger spectrum of clientele in the region. Layout plan was again revised and was approved by Senior Town Planner, Jalandhar vide no.2946 dated 21/12/2018 for development of 65 residential plots (260 independent floors) and 10 commercial plots within total area of 10.68 acres. Copy of the revised layout plan has been submitted. The sample house has been constructed as per the previous layout plan will be dismantled and the proposed planning shall be put into place after the grant of environmental clearance. Moreover, this house was constructed only after getting the layout plan of this house approved from the competent authority and exhibited the plans and approvals accorded to the earlier project. In light of the above contentions, Project proponent requested the SEAC not to consider the project as violation case and also requested to allow them to present the salient features of the project.

SEAC after taking aforesaid submissions alongwith documentary evidence on record and perusing the application form wherein the project proponent

has mentioned that earlier layout plan was approved for residential colony and later on same was revised for making flats, accepted the request of project proponent to the effect that the case shall not be dealt as per the provisions of EIA notification dated 14.03.2017 as amended on 08.03.2018. SEAC further allowed the project proponent and his environmental consultant to present the salient features of the project.

1)	Activity or Item No. as per EIA Notification, 2006 (in schedule)	8(a): Building & Construction Project. Area less than 50 ha or /and built up area less than 1,50,000 sqm		
	Category as per EIA Notification, 2006 (in schedule)	Category B2		
2)	Requirement of Public consultation	Not required being Building Construction Project under B2 category.		
3)	Requirement of EIA	Not required being B2 category project.		
4)	Applicability of GC	Not applicable being Building Construction Project under B2 category project.		
5)	Name and Location of the project	Group Housing project namely "Royal Residency" located at 66 ft. Road, Vill. Kadianwali (HB No. 292), Jalandhar, Punjab by M/s Triworld Developers		
6)	Total cost of the project	67.33 crores		
7)	Total Plot area, Built-up Area and Green area	The details of the group housing project is as under:		
		Sr. No.	Description	Details
		1.	Total Project land Area	43220.42 sqm. (10.68 Acre)
		2.	Net Plot Area	42937.147 sqm. (10.61 Acre)
		3.	Built-up Area	83340.99 sqm.
		4.	Green Area	3712.91 sqm.
		5.	Parking	581 ECS (Residential Stilt Parking) 40 ECS (Commercial Surface Parking)
8)	Population (when fully inhabited)	1490 Persons		
9)	Water Requirements & source	<b>Break up of water requirement</b>	<b>Source</b>	
		Total: 192 KLD in operation phase (149 KLD fresh water.	Groundwater	
Treated wastewater from private water tanker will be				



		used in construction phase.																				
10)	Disposal Arrangement of Waste water	<p>Total waste <a href="#">water@153.6</a> KLD out of which 76.8 KLD of sewage (Black Water) will be generated, which will be treated in STP of 125 KLD capacity and 76.8 KLD of wastewater (Grey Water) will be generated, which will be treated in WWTP of 125 KLD.</p> <table border="1"> <thead> <tr> <th>S. No.</th> <th>Season</th> <th>For Flushing purposes (KLD)</th> <th>Green Area (KLD)</th> <th>Into sewer (KLD)</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Summer</td> <td>43</td> <td>20.5</td> <td>90.7</td> </tr> <tr> <td>2.</td> <td>Winter</td> <td>43</td> <td>6.68</td> <td>104.5</td> </tr> <tr> <td>3.</td> <td>Rainy</td> <td>43</td> <td>1.8</td> <td>109.4</td> </tr> </tbody> </table>	S. No.	Season	For Flushing purposes (KLD)	Green Area (KLD)	Into sewer (KLD)	1.	Summer	43	20.5	90.7	2.	Winter	43	6.68	104.5	3.	Rainy	43	1.8	109.4
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11)	Rain water recharging detail	1385.574 m <sup>3</sup> /hour of rain water volume will be recharged with 8 no. of rain water harvesting pits.																				
12)	Solid waste generation and its disposal	<p>a) 575 kg/day  b) Solid wastes will be appropriately segregated as Bio-degradable and non- bio-degradable as per MSW Rules, 2016.  c) Separate area will be earmarked for handling Bio-degradable waste including segregation.  d) Mechanical composter will be provided for composting Bio-degradable waste.  e) Recyclable waste will be sold to recyclers.  f) Inert waste will be dumped to authorized dumping site.</p>																				
13)	Hazardous Waste	No details given.																				
14)	Energy Requirements & Saving	<p>a) 1763 KW from State Power Supply.  b) 1 x 500 KVA and 1 x 320 KVA DG sets with canopy as standby arrangements will be provided.  c) Solar street lighting facilities will be proposed.  d) 16.64 KW shall be saved by using CFL instead of LEDs.  e) 31% of terrace area will be covered by Solar Panels to generate 493 KW of power.</p>																				
15)	Environment Management Plan along with Budgetary break up phase wise and responsibility to implement	<p>The budgetary breakup phase wise of the EMP is as under:</p> <table border="1"> <thead> <tr> <th>Description</th> <th>Capital Cost</th> <th>Recurring Cost including the monitoring charges (per annum)</th> </tr> </thead> <tbody> <tr> <td>Construction</td> <td>Rs. 525 lacs</td> <td>Rs.4.85 Lacs</td> </tr> <tr> <td>Operation</td> <td>-</td> <td>Rs.11 Lac</td> </tr> </tbody> </table>	Description	Capital Cost	Recurring Cost including the monitoring charges (per annum)	Construction	Rs. 525 lacs	Rs.4.85 Lacs	Operation	-	Rs.11 Lac											
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Operation	-	Rs.11 Lac																				
16)	CER activities alongwith budgetary break up and	1. Mr. Joginder Singh of M/s Triworld Developers will be responsible for implementation of the CER																				

	responsibility to implement	<p>activities.</p> <p>2. Rs 134 Lakh has been planned for the following activities:</p> <table border="1"> <thead> <tr> <th>Sr. No.</th> <th>Activities</th> <th>Annual Expenditure (in Lakh per year)</th> <th>Timeline (In year)</th> <th>Total Expenditure (in 5 years)</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Ambulance donation to SHC (Subsidiary Health Centre) and local Govt. Hospital near Kadianwali.</td> <td>4</td> <td>5</td> <td>20</td> </tr> <tr> <td>2.</td> <td>Construction and maintenance of toilets of Government High School, Kadianwali.</td> <td>9</td> <td>5</td> <td>45</td> </tr> <tr> <td>3.</td> <td>Maintenance of Village Roads</td> <td>4</td> <td>5</td> <td>20</td> </tr> <tr> <td>4.</td> <td>Providing solar lights on village rasta.</td> <td>6</td> <td>5</td> <td>30</td> </tr> <tr> <td>5.</td> <td>Books and Annual Scholarship to needy students in government high school, near Kadianwali</td> <td>1.8</td> <td>5</td> <td>9</td> </tr> <tr> <td>6.</td> <td>Installation and maintenance of domestic water purification systems in village Kadianwali.</td> <td>2</td> <td>5</td> <td>10</td> </tr> <tr> <td></td> <td><b>Total</b></td> <td><b>26.8</b></td> <td></td> <td><b>134 Lakhs</b></td> </tr> </tbody> </table>	Sr. No.	Activities	Annual Expenditure (in Lakh per year)	Timeline (In year)	Total Expenditure (in 5 years)	1.	Ambulance donation to SHC (Subsidiary Health Centre) and local Govt. Hospital near Kadianwali.	4	5	20	2.	Construction and maintenance of toilets of Government High School, Kadianwali.	9	5	45	3.	Maintenance of Village Roads	4	5	20	4.	Providing solar lights on village rasta.	6	5	30	5.	Books and Annual Scholarship to needy students in government high school, near Kadianwali	1.8	5	9	6.	Installation and maintenance of domestic water purification systems in village Kadianwali.	2	5	10		<b>Total</b>	<b>26.8</b>		<b>134 Lakhs</b>
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17)	Other important facts	<p>➤ The project was initially planned for development of 65 residential plots and 10 commercial plots with laying out of all basic amenities and planning in plot area of 10.68 acres. The layout has been approved vide letter No. 643, STP(J) 1- 114(10) A dated 01/03/2018 from Senior Town Planner, Jalandhar. CTE was obtained from PPCB, vide Certificate No. CTE/ Fresh/ JAL/ 2018/7495138 dated 24/03/2018 valid till 23/05/2019. Consequently, development works for laying of roads, sewerage and storm water system, community centre/ club, Nursery school was initiated after obtaining CTE in April 2018.</p> <p>➤ However, after detailed planning and market</p>																																								

		<p>assessment, the project proponent realized more demand for Independent floors rather than Plots and thus revised its development strategy, to ensure sale of its project facilities and fulfill housing requirement of a larger spectrum of clientele in the region.</p> <ul style="list-style-type: none"> <li>➤ Thus, the layout plan has been revised and therefore, the layout plan was again approved by Senior Town Planner, Jalandhar, vide letter No. 2946, STP (J) 1-114-10 (A) dated- 21/12/2018 for development of 65 residential plots (260 Independent floors) and 10 commercial plots within the total plot area of 10.68 acres.</li> <li>➤ The project comprises of Residential plots, EWS area, Commercial area, Club / Community Centre, Nursery School etc.</li> <li>➤ The CLU has been obtained for net plot area i.e. 10.61 acre or 42947.26 sqm (after leaving the area for road widening from 10.68 acre) vide no. 2460/STP(J)/CLU(J) dated 04/10/2017 for residential purpose.</li> <li>➤ MC, Jalandhar has granted NOC regarding disposal of sewage treated water into main sewer Municipal Corporation and disposal of solid waste at main solid waste collection center of MC vide memo no. 1021/SE/O&amp;M dated 10/01/2018 with certain conditions including one of the conditions that project proponent will obtain actual demand notice before starting disposal of treated water into sewer.</li> <li>➤ The project proponent has also submitted an undertaking stating that excess treated wastewater after recycling will be disposed of to Municipal sewer or disposed on to 1.37 acre of adjoining land, which will be developed under Karnal Technology till sewer is connected to the project site. It is further mentioned in the undertaking that we will not use this patch of land for any other purpose till Municipal sewer is connected.</li> <li>➤ The project proponent has submitted an affidavit from Ritu Kumari, stating that having land adjoining to the proposed land for residential colony "Royal Residency" developed by M/s Triworld Developers have no objection in allotting land of 1 Acre to M/s Triworld Developers on</li> </ul>
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		<p>lease, which will be developed under Karnal Technology for disposing excess treated wastewater from the project.</p> <ul style="list-style-type: none"> <li>➤ The project proponent has submitted copy of application for abstraction of ground water filed to CGWA vide application no. 21-4/5326/PB/INF/2019 dated 08.04.2019.</li> <li>➤ The project proponent submitted a copy of license granted vide license no. JDA-2018/26 dated 06.02.2018 valid upto 05.02.2023.</li> </ul>
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SEAC asked the project proponent and his Environmental Consultant to clarify the following observations to which he replied as under: -

<b>Sr. No.</b>	<b>Observations</b>	<b>Reply submitted by the project proponent and his Environmental Consultant</b>
<b>1.</b>	As to whether the permission under Wildlife (Protection) Act, 1972 has been obtained.	There is no national park and wildlife sanctuary present in 10 km radius of project site. As such, the same is not applicable.
<b>2.</b>	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.	The CLU has been obtained for net plot area i.e. 10.61 acre or 42947.26 sqm (after leaving the area for road widening from 10.68 acre) vide no. 2460/STP(J)/CLU(J) dated 04/10/2017 for residential purpose.
<b>3.</b>	As to whether, the plans have been approved by the Competent Authority or still are Conceptual plans. If so, is there any change from the conceptual plans.	The layout plan has been approved by the Senior Town Planner vide no. vide letter No. 2946, STP (J) 1-114-10 (A) dated- 21/12/2018 for development of 65 residential plots (260 Independent floors) and 10 commercial plots within the total plot area of 10.68 acres
<b>4.</b>	<p>a) Whether online application for obtaining NOC for abstraction of ground water has been applied CGWA?</p> <p>b) On perusal of CGWA application, it has been observed that there are three borewells which are existing at site. As to whether these borewells have been made during making of sample house or thereafter.</p> <p>c) Existing borewells cannot be used for any activity till the permission is obtained by the promoter company from CGWA.</p>	<p>a) 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.</p> <p>b) The borewell area existing at site prior to the purchase of land as the earlier land was used for agricultural purpose. They have not constructed any borewell.</p> <p>c) They submitted an undertaking to the effect that no ground water from the project site will be extracted without obtaining NOC/permission from CGWA for 3 no. of bore wells which was taken on record by SEAC.</p>
<b>5.</b>	a) What will be the treatment proposal for the sewage expected from the labours / employees during the construction phase?	<p>a) Septic tank will be provided for the treatment of waste water generated during construction phase and treated waste water shall be discharged onto land for plantation.</p> <p>b) Treated waste water shall be managed by</p>

	b) Sewer is located at an distance of 1 km from the project site and connectivity is yet to be established. As such, in absence of sewer, how the treated waste water shall be managed?	<p>disposing the same in a scientific manner by adopting any of the following strategies for the same:</p> <p>I. Treated water shall be discharged into Municipal Sewer as allowed in the NOC granted by Municipal Corporation Jalandhar Vide Memo No. - 1021/SE/O&amp;M Date 10-01-2018.</p> <p>II. In case, the MC sewer is not connected with the project site at the operational stage of the project than the project proponent will lay down the sewer line connecting to main MC Sewer which is only 1.5 km (approx.) from project site at its own cost arrangement.</p> <p>III. Alternatively, project proponent would purchase, adjacent agricultural land or obtain land of 1.5 acre on lease for 10 years if required, in case of delay in connection with MC sewer for disposal of treated sewage through Karnal Technology (to utilize maximum 110 KLD of treated wastewater @ 80 KLD/ acre) on purchase land.</p> <p>IV. In case of lack of arrangement of disposal of treated sewage, project proponent will not sell any flat to occupants under the project.</p>								
6.	Whether provision of module system shall be kept during installation of STP?	Both the STPs shall be installed on module basis and initially STPs with capacity 50 % of the proposed shall be installed and another 50 % shall be enhanced on 100 % occupancy in the project. However, the civil work of whole STP shall be done before taking it to full operating efficiency.								
7.	As to whether provision for segregating grey and black streams of waste water and separate treatment for both the streams and utilization has been made.	Provision has been kept and separate STPs have been proposed for treatment of black water and grey water.								
8.	The project has 83340.99 sqm built up area. As to whether 8 no. of rain water harvesting pits will fulfill the MoEF&CC/CGWA criteria.	Considering one recharge bore per 5,000 square meters of built up area, 17 No. Pits will be provided.								
9.	Whether the project proponent is proposing CER activities in accordance to the OM dated 01.05.2018. If yes, then how much % has been kept reserved for the proposed activities as per the said OM?	<p>Rs. 134 Lakhs (approx. 0.6%) has been kept reserved for completing the CER activities as per OM dated 01.05.2018. The activities shall be completed before the completion of the project. The details area as under:</p> <table border="1"> <thead> <tr> <th>Sr. No.</th> <th>Activities</th> <th>Timeline for completion</th> <th>Amount reserved in Lacs</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Adoption of school by providing</td> <td>Jan. 2020 - Feb. 2021</td> <td>40</td> </tr> </tbody> </table>	Sr. No.	Activities	Timeline for completion	Amount reserved in Lacs	1.	Adoption of school by providing	Jan. 2020 - Feb. 2021	40
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1.	Adoption of school by providing	Jan. 2020 - Feb. 2021	40							

		its library, computer, furniture and girls toilets as well as repair of complete building as per the requirement		
		2. Modification and repair of Cremation ground.	Mar 2021 – Jan. 2022	24
		3. Installation of rain water harvesting system and water cooler in local government hospital.	Feb. 2022 – Mar 2024	70
		<b>Total</b>		134

SEAC took a copy of presentation along with additional documents & undertaking given w.r.t the submissions made in the reply given by the project proponent and his environmental consultant on record.

SEAC 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 that case be forwarded to SEIAA with the recommendations to grant environmental for establishment of a Group Housing project namely "Royal Residency" having built up area 83,340.99 sqm in total land area of 43,220.42 sqm with net plot area 42,937.147 sqm located at 66 ft. Road, Vill. Kadianwali (HB No. 292), Jalandhar, 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:

Standard EC Conditions:

**I. Statutory compliance:**

- i) The project proponent shall not use existing three borewells till the permission for ground water abstraction is obtained from CGWA.
- ii) 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.
- iii) 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.
- iv) 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.
- v) The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- vi) 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.
- vii) The project proponent shall obtain the necessary permission for drawl of ground water/ surface water required for the project from the competent authority.
- viii) 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.
- ix) 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.
- x) 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.
- xi) The project proponent shall follow the ECBC/ECBC-R prescribed by Bureau of Energy Efficiency, Ministry of Power strictly.
- xii) 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.
- xiii) 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.

## **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. PM<sub>10</sub> and PM<sub>2.5</sub>) 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 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murrum and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
- vi) Sand, murrum, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.
- vii) All the topsoil excavated during construction activities should be stored for use in horticulture / landscape development within the project site.
- viii) Wet jet shall be provided for grinding and stone cutting.
- ix) Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
- x) All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules 2016.
- xi) 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.
- xii) 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.
- xiii) For indoor air quality the ventilation provisions as per National Building Code of India.



### 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 192 KL/day, out of which 149 KL /day shall be met through own tubewell and remaining 43 KL/day 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 153.6 KL/day, which will be treated in a separate STPs i.e. of capacity @125 KLD for black stream (50%) and of capacity 125 KLD for grey stream (50%) to be installed on module system 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)	Into sewer (KLD)*
1.	Summer	43	20.5	90.7
2.	Winter	43	6.68	104.5
3.	Rainy	43	1.8	109.4

Note-\*In case, the MC sewer is not connected with the project site at the operational stage of the project than the project proponent will lay down the sewer line connecting to main MC Sewer which is only 1.5 km (approx.) from project site at its own cost arrangement as undertaken. Alternatively, project proponent shall purchase, adjacent agricultural land of 1.5 acre, in case of delay in connection with MC sewer for disposal of treated sewage through Karnal Technology (to utilize maximum 110 KLD of treated wastewater) on purchase land as undertaken by Project Proponent.

In case of lack of arrangement of disposal of treated sewage as proposed above , project proponent will not sell any flat to occupants under the project

- 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-Laws 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) Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.
- xv) 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
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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

- xvi) Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- xvii) The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rain water harvesting recharge pits (17 Nos) /storage tanks shall be provided for ground water recharging as per the CGWB norms.
- xviii) 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.
- xix) All recharge should be limited to shallow aquifer.
- xx) 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.
- xxi) 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.
- xxii) 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.
- xxiii) 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. As proposed, no treated water shall be disposed in to municipal drain.

- xxiv) 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.
- xxv) Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.
- xxvi) 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 neighboring 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) Chute system, 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 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 1<sup>st</sup> 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. 134 Lacs towards following CER activities:

Sr. No.	Activities	Timeline for completion	Amount reserved in Lacs
1.	Adoption of school by providing its library, computer,	Jan. 2020 - Feb.	40

	furniture and girls toilets as well as repair of complete building as per the requirement	2021	
2.	Modification and repair of Cremation ground.	Mar 2021 – Jan. 2022	24
3.	Installation of rain water harvesting system and water cooler in local government hospital.	Feb. 2022 – Mar 2024	70
	<b>Total</b>		134

However, CER activities shall strictly be in accordance with the activities listed out in the OM dated 01.05.2018 and as per the following 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 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 525 Lacs towards capital cost and Rs 4.85 Lacs/annum towards recurring cost in Construction phase of the project and shall spend minimum amount of Rs 11 Lacs/annum towards recurring cost in operation phase of the project. 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 condition 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.

**Item No. 181.08: Application for obtaining Environmental clearance under EIA notification dated 14.09.2006 for installation of Common Bio Medical Waste Treatment Facility in the revenue estate of Village Bir Pind, Tehsil Nakodar, District Jalandhar, Punjab by M/s Meridian Milieu Care Pvt. Ltd. (SIA/PB/MIS/35114/2018)**

The SEAC observed as under:

M/s Meridian Milieu Care Pvt. Ltd. has applied online for obtaining Environmental clearance under EIA notification dated 14.09.2006 for installation of Common Bio Medical Waste Treatment Facility in the revenue estate of Village Bir Pind, Tehsil Nakodar, District Jalandhar, Punjab. The project of the promoter pertains to category 'B-1' with activity listed at 7 (d) of the Schedule appended to the said notification.

The project was earlier granted TOR vide letter no. SEIAA/2019/04 dated 07.01.2019 with Standard Terms of Reference and additional specific TORs decided during meeting of SEAC. The detail of salient features of the project have already been given in the agenda.

The case was placed before SEAC in its 181<sup>st</sup> meeting held on 20.06.2019. However, no one on behalf of the promoter company attended the meeting. SEAC was also apprised that vide email 18.06.2019, Sh. Suhab Partap Singh Sekhon on behalf of the promoter company intimated that, he was not able to attend the said meeting due to personal reasons and requested to consider the case in the next meeting.

After deliberation, SEAC decided to accept the request of the representative of the promoter company, defer the case and same be placed in the next meeting of SEAC as & when scheduled.

**Item No. 181.09: Application for obtaining Environmental Clearance (EC) under EIA notification dated 14.09.2006 for modernisation of in mining method for the mining of minor mineral in an area of 4.5583 ha located in Village Rana, Tehsil Fazilka, District Fazilka by Sh. Surjeet Singh. (Proposal No. SIA/PB/MIN/35045/2017)**

The SEAC observed as under:

Sh. Surjeet Singh has applied online for obtaining Environmental clearance under EIA notification dated 14.09.2006 for modernisation of in mining method for the mining of minor mineral in an area of 4.5583 ha located in Village Rana, Tehsil Fazilka, District Fazilka. The project of the promoter pertains to category 'B-2' with activity listed at 1 (a) of the Schedule appended to the said notification. Further, the details of the cases based upon the submissions made by the project proponent have been mentioned in the agenda note.

The case was placed in the 181<sup>st</sup> meeting of SEAC. But no one on behalf of project proponent as well as Environmental Consultant attended the said meeting.

After deliberation, SEAC decided to defer the case in light of OM dated 25.02.2010 and to place the case in the next meeting of SEAC as and when scheduled.

**Item No. 181.10 Application for obtaining Environmental Clearance (EC) under EIA notification dated 14.09.2006 for establishment of a Logistic Park located in revenue estate of Vill. Shambu Khurd, Rajpura, Distt. Patiala, Punjab by M/s Erisha Infratech Pvt. Ltd. (Proposal No. SIA/PB/NCP/85629 /2018).**

The SEAC observed as under: -

The project proponent has filed an application for obtaining

Environment Clearance under EIA notification, 2006 for establishment of a Logistic Park located in revenue estate of Vill. Shambu Kalan, Rajpura, Distt. Patiala, Punjab, by M/s Erisha Infratech Pvt. Ltd.

The case was considered by the SEAC in its 181<sup>st</sup> meeting held on 11.07.2019 and the same was attended by the following on behalf of the project proponent: -

- (i) Sh. Vishal Goyal, CEO and Sh. Deepak Gupta, Environmental Advisor, of the project proponent.
- (ii) Sh. Sital Singh, EIA-Coordinator, M/s CPTL Pvt. Ltd., Mohali, Environment Consultant of the promoter company
- (iii) Sh. Sandeep Singh, FAE, M/s CPTL Pvt. Ltd., Mohali, Environment Consultant of the promoter company.

SEAC was apprised that the Environmental Engineer, PPCB, Regional Office, Patiala was requested vide dated 10.04.2019 to send the report on the following:

- i. Construction status at the site alongwith physical structures within 500 mt radius of the site including the status of industries if any
- ii. To verify the as to whether any (i) Protected Areas notified under the Wild Life (Protection) Act, 1972, (ii) Critically Polluted areas as notified by the Central Pollution Control Board from time to time, (iii) Notified Eco-sensitive areas, (iv) inter-State boundaries and international boundaries falls within 5 km radius from the boundary of the project site
- iii. As to whether the site of the project is meeting with the siting guidelines farmed by Punjab Pollution Control Board for such type of projects.

Environmental Engineer, PPCB, Regional Office, Patiala vide return email dated 16.04.2019 intimated that the site of the subject cited project was visited by AEE of their office on 11.04.2019 and Sh. Neeraj Gupta, representative of the project was contacted. As per the e-mail the site falls in village Shambhu Kalan, Tehsil Rajpura, but on visit it was observed that the site falls in village Shambhu Khurd. The location of the site is latitude 30.439927 and longitude 76.672683. During visit it was observed that the site falls on right hand side of Rajpura-Ambala Road. Near the site the railway track exists. On left hand side of the site private plantation exists. In front side across the road and on back side beyond the

railway track only agricultural land exists. One industry namely M/s Jai Shri Oil Mills, Village Bhari Majra, Tehsil Rajpura exists at about 500 meter from the boundary of the site. The said unit is a cattle and poultry feed unit and was granted consent to operate by the Board under the Water Act, 1974 vide no. ZO-I/PTA/WPC/2013-18/F-204 dated 9.12.2013 and under the Air Act, 1981 vide no. ZO-I/PTA/APC/2013-18/F-200 dated 9.12.2013 for the production of poultry feed/ cattle feed @ 65000 TPA, both of which had expired on 30.09.2018.

No construction activity has been started till date. The distance of the site from various parameter as per visit of AEE are given as under:

<b>Sr. No.</b>	<b>Location</b>	<b>Distance</b>
1.	Protected Areas notified under the Wild Life (Protection) Act, 1972.	As per enquiry from local area no protected areas notified under the Wild Life (Protection) Act, 1972 fall within 5 KM, but detailed report in this regard may be obtained from the Department of Forest and Wild life Preservation.
2.	Critically Polluted areas as notified by the Central Pollution Control Board from time to time.	As per list notified by the CPCB (list attached herewith) two no. critically polluted areas i.e. Ludhiana and Mandi Gobindgarh and two no. severely polluted area i.e. Batala and Jalandhar have been notified in State of Punjab.
3.	Notified Eco-sensitive areas.	As per enquiry from local area no notified eco-sensitive area fall within 5 KM, but detailed report in this regard may be obtained from the Department of Forest and Wild life Preservation.
4.	Inter-State boundaries and international boundaries falls within 5 km radius from the boundary of the project site	The Haryana Punjab Boundary falls within 5 KM of the site. A detailed report in this regard may be obtained from the revenue authorities (SDM Rajpura).
5.	As to whether the site of the project is meeting with the siting guidelines farmed by Punjab Pollution Control Board for such type of projects.	No project specific siting criteria has been notified by the Board. Apparently the site is meeting with the general siting criteria as per policy of the Board. A detailed report in this regard may be obtained from the revenue authorities (SDM Rajpura) as per policy of the Board dated 30.04.2013.

SEAC perused the report and observed that no construction work has been started.

Thereafter, Sh. Vishal Goyal submitted an authority letter wherein it has been mentioned that he and Sh. Deepak Gupta working as Environmental Advisor, have been authorized by Director of the promoter company to submit any reply, documents

on behalf of company. Any commitment made by him during the presentation will be binding / acceptable to the company. SEAC took authority letter on record.

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

1)	Activity or Item No. as per EIA Notification, 2006 (in schedule)	8(a): Building & Construction Project. Area less than 50 ha or /and built up area less than 1,50,000 sqm		
	Category as per EIA Notification, 2006 (in schedule)	Category B2		
2)	Requirement of Public consultation	Not required being Building Construction Project under B2 category.		
3)	Requirement of EIA	Not required being B2 category project.		
4)	Applicability of GC	Not applicable being Building Construction Project under B2 category project.		
5)	Name and Location of the project	Logistic Park located in revenue estate of Vill. Shambu Kalan, Rajpura, Distt. Patiala, Punjab		
6)	Total cost of the project	29 crores		
7)	Total Plot area, Built-up Area and Green area	The details of the group housing project is as under:		
		Sr. No.	Description	Details
		1.	Total Project land Area	82252 sqm.
		2.	Built-up Area	33736 sqm.
		3.	Green Area	9383 sqm.
4.	Parking	16760 sqm.		
8)	Population (when fully inhabited)	200 Persons.		
9)	Water Requirements & source	<b>Break up of water requirement</b>	<b>Source</b>	
		Total: 4.5 KLD in operation phase. Further, treated waste water from nearby STP shall be taken for green area.	Groundwater	
10)	Disposal Arrangement of Waste water	3.6 KLD of sewage will be generated, which will be treated in septic tank. The entire treated waste water shall be discharged onto green area in all the seasons.		
11)	Rain water recharging detail	49580 cum/year of rain water volume will be recharged with the help of 14 no. rain water harvesting pits.		
12)	Solid waste generation and its disposal	a) 50 kg/day b) Solid wastes will be appropriately segregated as Bio-degradable and non- bio-degradable as per		

		MSW Rules, 2016. c) Separate area will be earmarked for segregation of solid waste. d) Bio-degradable waste will be composted by use of mechanical composter. e) Recyclable waste will be sold to recyclers.									
13)	Hazardous Waste & e -waste	The spent oil from the D.G. sets (defined as hazardous waste) will be sold to approved recyclers as per E.P.A. The e-waste generated will be stored in an isolated room and will be sent to the manufacturers and will follow EPA Rules.									
14)	Energy Requirements & Saving	a) 700 KW from State Power Supply. b) 1 x 240 KVA and 1 x 125 KVA DG sets with canopy as standby arrangements will be provided. c) 10 nos. Solar lights and 200 no. LED lights have been proposed to be used instead of CFL and total 123 KW /day energy will be saved.									
15)	Environment Management Plan along with Budgetary break up phase wise and responsibility to implement	Director of the Company shall be responsible for implementation of EMP. The budgetary breakup phase wise of the EMP is as under: <table border="1"> <thead> <tr> <th>Description</th> <th>Capital Cost</th> <th>Recurring Cost including the monitoring charges (per annum)</th> </tr> </thead> <tbody> <tr> <td>Construction</td> <td>Rs. 40.5 lacs</td> <td>Rs.11.60 Lacs</td> </tr> <tr> <td>Operation</td> <td>-</td> <td>Rs. 12.9 Lac</td> </tr> </tbody> </table>	Description	Capital Cost	Recurring Cost including the monitoring charges (per annum)	Construction	Rs. 40.5 lacs	Rs.11.60 Lacs	Operation	-	Rs. 12.9 Lac
Description	Capital Cost	Recurring Cost including the monitoring charges (per annum)									
Construction	Rs. 40.5 lacs	Rs.11.60 Lacs									
Operation	-	Rs. 12.9 Lac									
16)	CER activities alongwith budgetary break up and responsibility to implement	i. Director of the Company shall be responsible for implementation of the CER activities. ii. Total Fund for CER is Rs. 18 Lacs and will be spend as per given below activities <ul style="list-style-type: none"> <li>• Widening of road in the vicinity of the project.</li> <li>• A fund of Rs 10 Lac has been earmarked for Government senior secondary school at village Shambu kalan Ghanour. Facilities for the school as per there requirement. ( The activity will be started after 8 months from the project construction is undertaken.</li> <li>• Providing solar lights in the Village Shambu kalan.</li> <li>• 15 solar lights @ Rs 15000/ light = Rs 225000/-</li> <li>• Solar Lights will be provided to the village in the year February 2020</li> <li>• Ambulance will be donated to the near by Government Dispensary by December 2020</li> </ul>									

SEAC asked the project proponent and his Environmental Consultant to

clarify the following observations to which he replied as under: -

<b>Sr. No.</b>	<b>Observations</b>	<b>Reply submitted by the project proponent and his Environmental Consultant</b>
<b>1.</b>	<p>a) As to whether the permission under Wildlife (Protection) Act, 1972 has been obtained.</p> <p>b) As to whether application has been filed with the Forest Department for access to the site.</p>	<p>a) There is no national park and wildlife sanctuary present in 10 km radius of project site. As such, the same is not applicable.</p> <p>b) Online Application has been filed and copy of the same has been submitted.</p>
<b>2.</b>	<p>a) 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</p> <p>b) How the project proponent ensures that for rest of the land, they will obtain CLU as the environmental clearance application is 20.324 acres.</p> <p>c) It is apprehended that Project proponent might allow the firms to store hazardous waste/ hazardous goods at site and even the process of the firms might include generation of industrial effluent/ emissions. As such, how the PP shall ensure that these types of waste storage /effluent /emission generating manufacturing process shall not be allowed since the application has been applied under 8(a) category-Building and Construction projects.</p>	<p>a) CLU has been granted vide no. 2688 dated 01/08/2018 for 14.88 acres wherein it has been mentioned that change of land use has been considered for an area 14.88 acres falling in village Shambhu Khurd for warehouse and the site falls in Mixed Land Use Zone of Statutory Master Plan, Rajpura. As per zoning regulations of Master Plan Rajpura, this activity is permissible in this land use zone. Permission is hereby granted as CTP letter no. 1219-37 dated 01.08.2018. However, the proposal is for 20.324 acres out of which for 5.444 acres land, they have agreement.</p> <p>b) An undertaking to the effect that they will get revised CLU after getting the registry of remaining area in own hands was submitted</p> <p>c) They submitted that they shall allow the firms to store only finished goods at site and no hazardous waste / hazardous goods/ e-waste shall be allowed for storage. Further, no industrial effluent / emissions will be generated from the project except emissions from DG set. An undertaking to the above effect was submitted by the project proponent.</p>
<b>3.</b>	<p>As to whether, the plans have been approved by the Competent Authority or still are Conceptual plans. If so, is there any change from the conceptual plans.</p>	<p>At present, they are having conceptual plan.</p>
<b>4.</b>	<p>The application is made for Logistic Park located in revenue estate of Vill. Shambu Kalan, Rajpura, Distt. Patiala, whereas as per field report and CLU granted, it is located in Vill. Shambu Khurd. Clarify.</p>	<p>Site is located in in Vill. Shambu Khurd but inadvertently mentioned in Shambhu Kalan. It may be considered as Shambu Khurd.</p>
<b>5.</b>	<p>a) Whether online application for obtaining NOC for abstraction of</p>	<p>a) Online application has been submitted on the portal of CGWA for obtaining permission</p>



	ground water has been applied CGWA? b) Whether the grass or trees have been proposed in the green belt as the fresh water abstraction is too much?	for abstraction of ground water and a copy of the same has been submitted. b) Trees will be planted in the proposed green belt. An undertaking to the above effect was submitted by the project proponent.																
6.	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 and treated waste water shall be discharged onto land for plantation.																
7.	Whether provision of module system shall be kept during installation of STP?	As the project is sort of commercial one, single STP of 5 KLD capacity shall be installed based on MBBR technology.																
8.	As to whether provision for segregating grey and black streams of waste water and separate treatment for both the streams and utilization has been made.	Only black water stream shall be generated in the project.																
9.	c) Calculations of rain water harvesting pits is not in consonance with rain water to be collected. Clarify. d) No recharging shall be carried out within 50 m radius of STP to be installed so as to avoid the contamination of ground water.	c) Number of pits will be 22 as by typographical error, it has been mentioned as 14.  d) They agreed and requested to make this a condition of environmental clearance.																
10.	Solar power plant shall be installed on the roof top so as to save energy at the maximum side.	They agreed to install 5KW solar power plant on the roof top and requested to make this condition in environmental clearance letter.																
11.	Whether the project proponent is proposing CER activities in accordance to the OM dated 01.05.2018. If yes, then how much % has been kept reserved for the proposed activities as per the said OM?	Rs. 18 Lakhs (approx. 0.6%) has been kept reserved for completing the CER activities as per OM dated 01.05.2018. The activities shall be completed before the completion of the project. The revised activities shall be done in Govt. Senior Secondary School, Shambhu Kalan, Ghanour and details are as under:																
		<table border="1"> <thead> <tr> <th>Sr. No</th> <th>Proposed activity</th> <th>CER</th> <th>Amount (INR)</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Solar power generation plant of capacity 12 KW shall be installed</td> <td></td> <td>8,00,000/-</td> </tr> <tr> <td>2.</td> <td>Water cooler, toilets, rain water harvesting pits</td> <td></td> <td>10,00,000/-</td> </tr> <tr> <td colspan="3"><b>TOTAL</b></td> <td><b>18,00,000/-</b></td> </tr> </tbody> </table>	Sr. No	Proposed activity	CER	Amount (INR)	1.	Solar power generation plant of capacity 12 KW shall be installed		8,00,000/-	2.	Water cooler, toilets, rain water harvesting pits		10,00,000/-	<b>TOTAL</b>			<b>18,00,000/-</b>
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SEAC took a copy of presentation along with additional documents & undertaking to the submissions given by the project proponent and his environmental consultant on record.

SEAC 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 that case be forwarded

to SEIAA with the recommendations to grant environmental for establishment of a Logistic Park for ware house having built up area 33,736 sqm in total land area of 82,252 sqm located in revenue estate of Vill. Shambu Kalan, 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:

**EC Conditions:**

**Special Condition:**

The project proponent shall not give this logistic park or part thereof to any firm or any person or any industry to store any hazardous chemical/ hazardous waste or for any such activity that may result in generation of any trade effluent or emission or hazardous waste (except emission from DG sets in controlled conditions).

**I. Statutory compliance:**

- i) The project proponent shall neither allow any firm to store any hazardous waste / hazardous goods / e-waste inside the project site nor allow any firm to generate industrial effluent / emissions at the project site except the emission from the operation of DG sets.
- ii) 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.
- iii) 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.
- iv) 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.
- v) The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- vi) 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.
- vii) The project proponent shall obtain the necessary permission for drawl of ground water/ surface water required for the project from the competent authority.
- viii) 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.

- ix) 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.
- x) 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.
- xi) The project proponent shall follow the ECBC/ECBC-R prescribed by Bureau of Energy Efficiency, Ministry of Power strictly.
- xii) 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.
- xiii) The Project Proponent has been granted Change of land use vide no. 2688 dated 01/08/2018 for 14.88 acres against the proposal of 20.324 acres. The Project Proponent shall obtain and submit CLU for remaining land immediate after getting the registry of remaining area.
- xiv) 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.

## **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. PM<sub>10</sub> and PM<sub>2.5</sub>) 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 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murrum and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.

- vi) Sand, murrum, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.
- vii) All the topsoil excavated during construction activities should be stored for use in horticulture / landscape development within the project site.
- viii) Wet jet shall be provided for grinding and stone cutting.
- ix) Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
- x) All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules 2016.
- xi) 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.
- xii) 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.
- xiii) For indoor air quality the ventilation provisions as per National Building Code of India.

### **III. Water quality monitoring and preservation**

- i) Recharging within 50 m radius of the STP shall be avoided by the project proponent.
- ii) The natural drain system should be maintained for ensuring unrestricted flow of water.
- iii) 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.
- iv) Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.
- v) The total water requirement for the project will be 4.5 KL/day which shall be met through own tubewell. Total fresh water use shall not exceed the proposed requirement as provided in the project details.
- vi) a) The total wastewater generation from the project will be 3.6 KL/day, which will be treated in a septic tank and treated waste water shall be utilized onto green area.

- 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.
- vii) The project proponent shall ensure safe drinking water supply to the habitants. Adequate treatment facility for drinking water shall be provided, if required.
  - viii) The waste water generated from swimming pool(s) if to be provided shall not be discharged and the same shall be reused within the premises for purposes such as horticulture, HVAC etc.
  - ix) 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.
  - x) 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.
  - xi) At least 20% of the open spaces as required by the local building bye-Laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.
  - xii) 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.
  - xiii) 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.
  - xiv) 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.

- xv) Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.
- xvi) 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:

<b>Sr. No</b>	<b>Nature of the Stream</b>	<b>Color code</b>
a)	Fresh water	Blue Color
b)	Untreated wastewater from Toilets/ urinal & from Kitchen	Black color
c)	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
d)	Treated wastewater (for reuse only for plantation purposes) from the STP treating black water	Green
e)	Treated wastewater (for reuse for flushing purposes or any other activity except plantation) from the STP treating grey water	Green with strips
f)	Storm water	Orange Color

- xvii) Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- xviii) The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rain water harvesting recharge pits (22 Nos) /storage tanks shall be provided for ground water recharging as per the CGWB norms.
- xix) 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.
- xx) All recharge should be limited to shallow aquifer.
- xxi) 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.
- xxii) 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.

- xxiii) 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.
- xxiv) Sewage shall be treated in the septic tank. The treated effluent from septic tank shall be recycled/re-used for flushing, AC make up water and gardening. As proposed, no treated water shall be disposed in to municipal drain.
- xxv) 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.
- xxvi) Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.
- xxvii) 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) Solar power plant of capacity 5 KW as undertaken shall be installed on the roof top at site.
- ii) 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.
- iii) Outdoor and common area lighting shall be LED.

- iv) 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.
- v) 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.
- vi) 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.
- vii) 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 neighboring 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) Chute system, 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 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 1<sup>st</sup> 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. 18 Lacs towards following CER activities to be done in Govt. Senior Secondary School, Shambhu Kalan, Ghanour. The details are given below: -

<b>Sr. No</b>	<b>Proposed CER activity</b>	<b>Amount (INR)</b>
1.	Solar power generation plant of capacity 12 KW shall be installed	8,00,000/-
2.	Water cooler, toilets, rain water harvesting pits	10,00,000/-
	<b>TOTAL</b>	<b>18,00,000/-</b>

However, CER activities shall strictly be in accordance with the activities listed out in the OM dated 01.05.2018 and as per the following 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 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 40.5 Lacs towards capital cost and Rs 11.60 Lacs/annum towards recurring cost in Construction phase of the project and shall spend minimum amount of Rs 12.9 lacs/annum towards recurring cost in operation phase of the project. 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 condition of CLU obtained vide memo no. 2688 dated 01.08.2018.
- 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.181.11: Application for obtaining Environmental Clearance (EC) under EIA notification dated 14.09.2006 for establishment of a Commercial project namely "Social Square" at Zirakpur-Patiala Road, VIP Road, SAS Nagar, Punjab by M/s Home and Land Planners LLP. (Proposal No. SIA/PB/NCP/81260/2018)**

The SEAC observed as under:

The project proponent has filed an application for obtaining Environment Clearance under EIA notification, 2006 for establishment of a Commercial project namely "Social Square" at Zirakpur-Patiala Road, VIP Road, SAS Nagar, Punjab by M/s Home and Land Planners LLP.

The case was considered by the SEAC in its 179<sup>th</sup> meeting held on 02.05.2019 and the same was attended by the following on behalf of the project proponent: -

- (i) Sh.Charanjit Singh, Director of the project proponent.
- (ii) Dr. Sandeep Garg, EIA-co-ordinator, M/s Eco Laboratories Pvt. Ltd., Mohali, Environment Consultant of the promoter company.

SEAC was apprised that Environmental Engineer, PPCB, Regional Office, SAS Nagar was requested vide email dated 20.03.2019 and reminder dated 29.03.2019 to send the report on the following:

1. Construction status at the site along with physical structures within 500 mt radius of the site including the status of industries if any.
2. To verify the as to whether any (i) Protected Areas notified under the Wild Life (Protection) Act, 1972, (ii) Critically Polluted areas as notified by the Central Pollution Control Board from time to time, (iii) Notified Eco-sensitive areas, (iv) inter-State boundaries and international boundaries falls within 5 km radius from the boundary of the project site
3. As to whether the site of the project is meeting with the siting guidelines farmed by Punjab Pollution Control Board for such type of projects.

Environmental Engineer, PPCB, Regional Office, SAS Nagar vide letter no. 2218 dated 01.05.2019 has sent the report which is reproduced as under:

“The site of the subject cited project was visited by AEE of his office on 25.03.2019. It was observed that no construction work has been started by the promoter company. However, of building has been constructed there and boundary has been demarcated with iron sheets. The site was surrounded by agricultural on one side. On other side VIP road exists and on the front Zirakpur-Patiala road is there. Towards VIP road, small shops are there. There are commercial and residential buildings within 250 m from the site.”

It was observed that there is no industry such as rice sheller/ saila plant/ brick kiln / stone crushing/ screening cum washing unit/ hot mix plant/cement unit etc. within a radius of 500 m. There is no MAH industry within a radius of 250 m radius from the boundary of the proposed site. Therefore, the site of the project is conforming to the siting guidelines laid down by the Govt. or Punjab, Department of Science

Technology and Environment vide order dated 25/ 07/2008 as amended on 30/ 10/ 2009.

As regards to distance of site of the project from the stipulation of general condition, this office is unable to comment in the absence of proper reports from the concerned departments i.e. report regarding protected area and notified eco-sensitive area from the Dept. of Forest & Wildlife Preservation and Interstate and International boundaries from the revenue authorities (concerned SDM).”

SEAC perused aforesaid the visit report and observed that report of regional office is ambiguous. On one hand, it is being reported that no construction work has been started by the promoter company, whereas, on the other hand, it has been mentioned that a building has been constructed.

SEAC also asked the project proponent to submit the copies of NOC from Forest Department for the approach road and CLU from Town and Country Planning Department so as to confirm land use pattern. To this, the project proponent sought time to submit the same.

After detailed deliberation, SEAC decided as under:

- (i) Regional Office of PPCB be asked to send the clear-cut report as to whether the project has carried out any construction at the project site and has violated the provisions of EIA notification, 14.09.2006 or not.
- (ii) Project proponent shall submit the copies of NOC from Forest Department regarding approach of road and CLU from the Town and Country Planning Department.

In compliance to decision no.(i), Environmental Engineer, PPCB, Regional Office, SAS Nagar vide letter no. 488 dated 14.06.2019 to send the clear-cut report. In reply, Environmental Engineer, PPCB, Regional Office, SAS Nagar vide letter no.3065 dated 18.06.2019 has send the report which was annexed with the agenda.

In compliance to decision no. (ii) mentioned above, Additional details were sought online on 10.06.2019 to which project proponent submitted the reply online. The copies of NOC from Forest Department regarding approach of road and CLU from the Town and Country Planning Department which were annexed with the agenda.

The case was considered by the SEAC in its 181<sup>st</sup> meeting held on 11.07.2019 and the same was attended by the following on behalf of the project proponent: -

- (i) Sh.Charanjit Singh, Director of the project proponent.
- (ii) Dr. Sandeep Garg, EIA-co-ordinator, M/s Eco Laboratories Pvt. Ltd., Mohali, Environment Consultant of the promoter company.

SEAC perused the report sent by the Environmental Engineer, PPCB, Regional Office, SAS Nagar. It has been reported that no construction activity has been carried out. However, an office building has already been constructed in the premises. It has been clarified that the said structure is a porta cabin and promoter company has not carried out construction of any RCC & company has not started any digging work. The representative of the promoter company has informed that said porta cabin was not built by them. They had purchased the land with the existing structure at site. The promoter company submitted a copy of an agreement dated 23.03.2018 wherein it has been mentioned that land measuring 11 bigha 17 biswa existing on Zirakpur-Patiala main highway, Village Nabha, has porta cabin in it. Regional Office, SAS Nagar in nutshell has mentioned that it is temporary set up and can be demolished at later stage.

SEAC perused the agreement and was not satisfied with the submission/ document submitted by the project proponent to the Regional Office, SAS Nagar. To this, the project proponent claimed that the structure has not built by them and it is an old structure. SEAC asked the project proponent to submit a concrete documentary evidence which could establish the fact that the structure is old one and has not built by the promoter company. To this, the project proponent and his environmental consultant sought time and requested to consider the case in the next meeting of SEAC.

After deliberations, SEAC decided to accept the request of project proponent, defer the case and placed the same in the next meeting of SEAC as and when scheduled.

Meeting ended with vote of thanks to the Chair.

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