Proceedings of 226th meeting of State Expert Appraisal Committee (SEAC) held on 06.08.2022 (Saturday) at 11:00 AM in the Room No. 311, DECC Office, MGSIPA Complex, Sector-26, Chandigarh.

The following were present:

Sr. No.	Name of SEAC Member	Designation in SEAC
1.	Er. Yogesh Gupta	Chairman
2.	Sh. Pardeep Garg	Member Secretary
3.	Sh. Anil Kumar Gupta	Member
4.	Sh. Satish Kumar Gupta	Member
5.	Dr. Pawan Krishan	Member (through VC)
6.	Sh. K.L Malhotra	Member
7.	Dr. Sunil Mittal	Member (through VC)

Item No. 01: **Confirmation of the proceedings of 225th meeting of State Level Expert Appraisal Committee held on 25.07.2022.**

The proceedings of 225th meeting of State Level Expert Appraisal Committee held on 25.07.2022 were prepared and circulated through email on 29.07.2022. No Comments have been received from any of the Members. Therefore, SEAC confirmed the same.

Item No. 02: **Action taken on the proceedings of the 225th meeting of State Level Expert Appraisal Committee held on 25.07.2022.**

The action taken on the decisions of 225th meeting of State Level Expert Appraisal Committee held on 25.07.2022 has been completed. The Committee noted the same.

Item no. 226.01: Application for obtaining Terms of Reference under the EIA notification dated 14.09.2006 for Group Housing project "Medallion" located at, Site No. 4 & 5, IT City, Sector 82-Alpha, SAS Nagar, Punjab by M/s JMT Housing Private Limited (Proposal No. SIA/PB/MIS/80175/2022).

The Project Proponent was granted Environmental Clearance under EIA notification dated 14.09.2006 by MoEF&CC vide letter no. 21-97/2020-IA-III dated 13.01.2021 for total site area of 8.61 acres having built up area 1,23,276.087 sqm consisting of 660 residential flats, 1 Club House, 30 Shops along with basketball court, tennis court, cricket practice area.

The Project Proponent was granted Consent to Establish under the provisions of the Water Act 1974 & Air Act 1981 for the construction of group housing project having residential flats @ 660 no., shops @ 30 no. & club house @ 1 no.

The Project Proponent has proposed to carryout expansion by increase in built up area from 1,23,276.087 sqm to 1,74,550.98 sqm. The said project proposed under expansion shall attract the provisions of the category 8(b) of the schedule appended with the EIA Notification dated 14.09.2006.

The Project Proponent has deposited Rs. 12,820/- (25% of the total amount required to be deposited) vide UTR no. AXSK221920013566 dated 11.07.2022 as verified by the supporting staff of SEIAA.

The Project Proponent undertake that the information given in the application are true to the best of his knowledge & belief and no facts have been concealed thereof. Further, he is aware that in case, if any information submitted was found to be false or misleading at any stage, the project will be rejected and clearance given, if any to the project will be revoked at their risk and cost.

Deliberations during 226th meeting of SEAC held on 06.08.2022.

The meeting was attended by the following:

(i) Sh. Sukhpreet Singh, authorized signatory, on the behalf of Project Proponent.
(ii) Mrs. Jyoti Rani, EC Coordinator M/s Eco Paryavaran Laboratories & Consultant Private Limited.

SEAC allowed the Environmental Consultant of the Project Proponent to present the salient features of the project. He, thereafter, presented the case as under:

Sr. No.	Description	Details
1	**Basic Details**	
1.1	Name of Project & Project Proponent:	Expansion of Group Housing project namely "Medallion" by M/s JMT Housing Pvt. Ltd.

1.2	Proposal:	SIA/PB/MIS/80175/2022
1.3	Location of Project:	Located at Site No. 4 & 5, IT City, Sector 82-Alpha, S.A.S. Nagar (Mohali), Punjab.
1.4	Details of Land area & Built up area:	Total Site Area = 8.61 acres (34,843.378 m^2) Built-up Area = 1,74,550.98 m^2
1.5	Category under EIA notification dated 14.09.2006	The project falls under S.No. 8(b) - 'Township and Area Development' as the built-up area of the project is 1,74,550.98 sq. m.
1.6	Cost of the project	Rs. 150 Crores for expansion
2.	**Site Suitability Characteristics**	
2.1	Whether project is suitable as per the provisions of Master Plan:	Environmental Clearance had already been granted for total land area of 8.61 acres. Further, Consent to Establish under the Water Act 1974 & Air Act already granted which was valid up to 27.06.2022.
2.2	Whether supporting document submitted in favour of statement at 2.1, details thereof: (CLU/building plan approval status)	The land was allotted by GMADA vide Memo No. 22335 dated 17.05.2018 for the total land area measuring 4.04 acres and Memo No. EO/2019/26102 dated 02.05.2019 for the total land area measuring 4.57 acres. The copies of the allotment letters submitted.
3	**Forest, Wildlife and Green Area**	
3.1	Whether the project required clearance under the provisions of Forest Conservations Act 1980 or not:	No forest land is involved in the project. Undertaking regarding the same is enclosed with the application.
3.2	Whether the project required clearance under the provisions of Punjab Land Preservation Act (PLPA), 1900.	Project is not covered under PLPA Act, 1900.
3.3	Whether project required clearance under the provisions of Wildlife Protection Act 1972 or not:	Not applicable. Wildlife clearance is not required.
3.4	Distance of the project from the Critically Polluted Area.	The nearest critical polluted area is Ludhiana which is approx. 82 km from project location.
3.5	Whether the project falls within the influence of Eco-Sensitive Zone or not.	No
3.6	Green area requirement and proposed No. of trees:	Total green area: 9,216.51 sq.m. Proposed trees to be planted: 440 trees
4.	**Configuration & Population**	
4.1	Proposal & Configuration **<u>Tower Wise Unit Details</u>**	

Tower	Floors	Type of Flat	Units (in no.)

	T-1	2 Stilt to 24th Floor	Type 1 (4 BHK)	1
			Type 2 (4 BHK)	43
			Pent House	2
	T-2	2 Stilt to 24th Floor	Type 1 (4 BHK)	1
			Type 2 (4 BHK)	43
			Pent House	2
	T-3	2 Stilt to 24th Floor	Type 1 (4 BHK)	1
			Type 2 (4 BHK)	43
			Pent House	2
	T-4	2 Stilt to 24th Floor	3 BHK (Mini)	88
			Pent House	4
	T-5	2 Stilt to 24th Floor	3 BHK	88
			Pent House	4
	T-6	2 Stilt to 24th Floor	3 BHK (Mini)	88
			Pent House	4
	T-7	2 Stilt to 24th Floor	3 BHK	88
			Pent House	4
	T-8	2 Stilt to 24th Floor	3 BHK	88
			Pent House	4
	T-9	2 Stilt to 24th Floor	3 BHK	88
			Pent House	4
			Total Flats	**690 Flats**
	Club House	G+3	-	1 no.
	Commercial Shops	G	-	47 no.
	Basement Stores	B	-	47 no.

4.2	Population details	**Existing**	**Proposed**	**Total**
		4496	484	4,980 Persons
5	**Water**			
5.1	Total Water requirement	541 KLD		
5.2	Total fresh water requirement:	358 KLD		
5.3	Source:	GMADA supply or Borewells		

<table>
<tr><td>5.4</td><td>Whether Permission obtained for abstraction/supply of the fresh water from the Competent Authority (Y/N)
Details thereof</td><td>Yes. NOC from GMADA has been obtained for Water Supply, Sewerage Connection, Solid waste disposal. Copy of the same submitted.

Approval for abstraction of ground water @ 440.8 KLD has been obtained from PWRDA; Copy of permission letter issued by PWRDA submitted.</td></tr>
<tr><td>5.5</td><td>Total wastewater generation:</td><td>433 KLD</td></tr>
<tr><td>5.5</td><td>Treatment methodology:
(STP capacity, technology & components)</td><td>433 KLD of sewage will be generated from the project which will be treated in proposed STP of capacity 500 KLD.</td></tr>
<tr><td>5.6</td><td>Treated wastewater for flushing purpose:</td><td>183 KLD</td></tr>
<tr><td>5.7</td><td>Treated wastewater for green area in summer, winter and rainy season:</td><td>Summer: 51 KLD
Winter: 17 KLD
Monsoon: 5 KLD</td></tr>
<tr><td>5.8</td><td>Utilization/Disposal of excess treated wastewater.</td><td>Excess will be disposed to GMADA Sewer as per allotment letter.</td></tr>
<tr><td>5.9</td><td colspan="2">Cumulative Details:
<table>
<tr><th>Sr. No.</th><th>Total water Requirement</th><th>Total wastewater generated</th><th>Treated wastewater</th><th>Flushing water requirement</th><th>Green area requirement</th><th>Into sewer</th></tr>
<tr><td>1.</td><td>541 KLD</td><td>433 KLD</td><td>424 KLD</td><td>183 KLD</td><td>Summer: 51 KLD
Winter: 17 KLD
Monsoon: 5 KLD</td><td>Summer: 190 KLD
Winter: 224 KLD
Monsoon: 236 KLD</td></tr>
</table></td></tr>
<tr><td>5.10</td><td>Rain water harvesting proposal:</td><td>Ground water recharging will be done by 5 nos. of Rain water recharging pits to compensate the abstraction of ground water.</td></tr>
<tr><td>6</td><td colspan="2">Air</td></tr>
<tr><td>6.1</td><td>Details of Air Polluting machinery:</td><td>8 DG sets (2x630 KVA, 4x 750 KVA and 2x500 KVA each capacity)</td></tr>
<tr><td>6.2</td><td>Measures to be adopted to contain particulate emission/Air Pollution</td><td>DG sets will be equipped with acoustic enclosure to minimize noise generation and adequate stack height for proper dispersion.</td></tr>
<tr><td>7</td><td>Waste Management</td><td></td></tr>
<tr><td>7.1</td><td>Total quantity of solid waste generation</td><td>1,725 kg/day</td></tr>
<tr><td>7.2</td><td>Details of management and disposal of solid waste (Mechanical Composter/Compost pits)</td><td>Biodegradable waste will be composted by use of Mechanical Composters of total capacity 1,000 kg/day. Inert waste will be dumped to</td></tr>
</table>

		authorized dumping site. The recyclable waste shall be sold to resellers.
7.5	Details of management of Hazardous Waste.	Hazardous waste in the form of used oil from DG set will be generated which will be sold to authorized vendors as per The Hazardous & Other Wastes (Management & Transboundary Movement) Rules, 2016 and its amendments.
8	**Energy Saving & EMP**	
8.1	Power Consumption:	3,848.63 KW
8.2	Energy saving measures:	• LEDs have been proposed to be used instead of CFLs. • Solar panels have been proposed on the roof top of the project.
8.3	Details of activities under Environment Management Plan.	Details regarding Environmental Management Plan will be submitted with EIA Report.

During meeting, the Committee asked the Project Proponent to present the breakup of total built up area of 1,23,276.087 sqm as per earlier Environmental Clearance granted to the project and as per the application proposal for expansion in built up area to 1,74,550.98 sqm. In this regard, the Project Proponent has presented the details as under:

Tower	**As per EC granted**			**Total After Expansion**			**Construction Status**
	Floors	**Units**	**Built-up Area**	**Floors**	**Units**	**Built-up Area**	
T-1	Stilt to 22nd Floor	44	10,973.701	B+ 2 Stilt to 24th Floor	46	12,074.342	No construction started
T-2	Stilt to 22nd Floor	44	11,043.834	B+ 2 Stilt to 24th Floor	46	12,109.729	Only excavation for foundation done
T-3	Stilt to 22nd Floor	44	10,973.701	2 Stilt to 24th Floor	46	12,047.042	Constructed till 10th floor
T-4	Stilt to 22nd Floor	88	12,070.85	2 Stilt to 24th Floor	92	13,564.396	Raft completed; plinth beam work is in progress
T-5	Stilt to 22nd Floor	88	15,944.925	2 Stilt to 24th Floor	92	17,607.88	Constructed till 3rd floor
T-6	Stilt to 22nd Floor	88	12,070.85	2 Stilt to 24th Floor	92	13,564.396	Constructed till 11th floor
T-7	Stilt to 22nd Floor	88	15,944.925	2 Stilt to 24th Floor	92	17,607.88	Constructed till 12th floor

T-8	Stilt to 22nd Floor	88	15,944.925	B+ 2 Stilt to 24th Floor	92	17,607.88	Only excavation for foundation done
T-9	Stilt to 22nd Floor	88	15,944.925	B+ 2 Stilt to 24th Floor	92	17,635.772	No construction started
Club House	S+G+1+ toilets	1 No.	1,360.101	G+3	1 nos.	2,191.68	No construction started
Commercial Shops/Stores	G	30 No.	1,003.353	G	47 nos.	1,563.575	30 nos. of shops have been constructed
Basement Area	-	-	-	B	-	12,248.751	No construction started

The Project Proponent, thereafter, submitted the building plan approved by GMADA based on which the earlier Environmental Clearance was granted to the promoter company. He also submitted the acknowledgment of the letter submitted to GMADA for approving the revised plan based on which the fresh proposal for carrying out expansion has been proposed. The Committee took these documents on record.

After detailed deliberations, SEAC decided to the forward the application to SEIAA for grant of Terms of Reference for carrying out expansion under EIA notification dated 14.09.2006 for construction of Group Housing project "Medallion" located at, Site No. 4 & 5, IT City, Sector 82-Alpha, SAS Nagar, Punjab by increasing the built-up area from 1,23,276.087 sqm to 1,74,550.98 sqm.

I. Project Details

i. Need and benefits of the project.

ii. Submit data for built-up area for each building, the use and occupancy classification in line with NBC 2016 also to be indicated [for differential functional requirements].

iii. The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.

II. Land Environment

i. Examine details of land use as per Master Plan and land use around 10 km radius of the

project site. Analysis should be made based on latest satellite imagery for land use with raw images. Check on flood plain of any river.

III. Land acquisition and R&R

i. Submit details of environmentally sensitive places, land acquisition status, rehabilitation of communities/villages and present status of such activities.

IV. Environmental Monitoring and Management

ii. Examine baseline environmental quality along with projected incremental load due to the project.

iii. Environmental data to be considered in relation to the project development would be (a) land, (b) groundwater, (c) surface water, (d) air, (e) bio-diversity, (f) noise and vibrations, (g) socio economic and health.

iv. Submit Roles and responsibility of the developer etc for compliance of environmental regulations under the provisions of EP Act.

v. Examine separately the details for construction and operation phases both for Environmental Management Plan and Environmental Monitoring Plan with cost and parameters.

vi. Possible carbon footprint contribution from each activities and mitigation measures proposed shall be included as part of Environment Management Plan.

V. Drainage

i. Submit a copy of the contour plan with slopes, drainage pattern of the site and surrounding area. Any obstruction of the same by the project.

VI. Forest

i. Submit the details of the trees to be felled for the project, if any .

ii. Submit the present land use and permission required for any conversion such as forest, agriculture etc.

VII. Water Environment

i. Ground water classification as per the Central Ground Water Authority.

VIII. Water Management

i. Examine the details of Source of water, water requirement, use of treated waste water and prepare a water balance chart.

ii. Rain water harvesting proposals should be made with due safeguards for ground water quality.

iii. Maximize recycling of water and utilization of rain water. Examine details.

iv. Examine soil characteristics and depth of ground water table for rainwater harvesting.

v. Permission from CGWA for abstraction of groundwater, if any, including dewatering during basement excavation.

IX. Waste Management

i. Examine details of solid waste generation treatment and its disposal.

ii. Construction & Demolition Waste Management Plan shall be prepared as part of EMP providing details of demolition activities involved along with quantification and disposal mechanism.

X. Energy Requirements

i. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project.

ii. Examine and submit details of use of solar energy and alternative source of energy to reduce the fossil energy consumption. Energy conservation and energy efficiency.

iii. DG sets are likely to be used during construction and operational phase of the project. Emissions from DG sets must be taken into consideration while estimating the impacts on air environment.

XI. Road and Traffic

i. Examine road/rail connectivity to the project site and impact on the traffic due to the proposed project. Present and future traffic and transport facilities for the region should be analysed with measures for preventing traffic congestion and providing faster trouble-free system to reach different destinations in the city.

ii. A detailed traffic and transportation study should be made for existing and projected passenger and cargo traffic.

iii. Examine the details of transport of materials for construction which should include source and availability.

XII. Disaster Management Plan

i. Submit details of a comprehensive Disaster Management Plan including emergency evacuation during natural and man-made disaster. This should cover details of vulnerabilities due to natural and manmade hazards (earthquake, flooding, cyclone, landslides, fire etc.) and details of disaster mitigation efforts for buildings and infrastructure through structural sufficiency and Fire and Life Safety compliance in line with National Building Code NBC, 2016.

XIII. Court Cases

ii. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.

XIV. Miscellaneous

i. Any further clarification on carrying out the above studies including anticipated impacts due to the project and mitigative measure, project proponent can refer to the model ToR available on Ministry website "http://moef.nic.in/Manual/Townships".

Item no. 226.02: Application for Environmental Clearance under the EIA notification dated 14.09.2006 for construction of residential township at Sector 97, 106 & 107, SAS Nagar, Punjab by M/s Unitech Limited (Proposal No. SIA/PB/MIS/61949/2019).

The Project Proponent was granted Environmental Clearance by MoEF&CC vide letter no. 21-660/2006-IA.III dated 30.07.2007 under EIA notification dated 14.09.2006 for the development of residential colony in the plot area of 135.6 hectare (335 acres). Area under plotted development is 51.86 Ha. Area under group housing is 8.28 Ha. Area under Green belt is 9.33 Ha.

The Project Proponent was granted Terms of Reference by SEIAA Punjab vide letter no. SEIAA/2020/1986 dated 08.09.2020 for carrying out modernization by decrease in total plot area to 284.04 acres having built up area of 1375958.676 sqm.

The Project Proponent has submitted the Final EIA report along with the application for consideration of the grant of Environmental Clearance for carrying out modernization. The Project Proponent has submitted Form-1, 1A along with the requisite documents as per the checklist approved by SEIAA. The Project Proponent has deposited Rs. 10,38,624 vide DD No. 150297 dated 09.03.2022 as verified by the supporting staff.

The Project Proponent undertake that the information given in the application are true to the best of his knowledge & belief and no facts have been concealed thereof. Further, he is aware that in case, if any information submitted was found to be false or misleading at any stage, the project will be rejected and clearance given, if any to the project will be revoked at their risk and cost.

The Project Proponent has submitted a copy of certified compliance report issued by Regional Office of MoEF&CC vide letter no. 5-88/2007-RO(NZ)/725 dated 21.10.2020.

Punjab Pollution Control Board vide letter no. 2429 dated 20.04.2022 has sent the latest construction status report with details as under:

"The Project site was visited by the officer on 21/3/2022 and it was observed as under:

1) *No construction work has been started of the revised component.*
2) *The project proponent has provided STPs of capacity 150 KLD and 75 KLD.*
3) *The domestic waste from the residential houses is collected by a third-party vendor. However, the project proponent has not provided mechanical composter for composting of bio-degradable component.*
4) *NO MAH industry/ cement plant/ grinding unit/ rice sheller/ saila plant/ stone crunching/ screening cum washing unit / hot mic plant/ brick kiln within a radius of 500 m from the boundary of the proposed site of the project. No Air polluting industry is located within 100 mtr of the proposed site. A marriage palace M/s Mystic Arc is located in Sector- 109, Mohali which is at a distance of around 300 mtr from sector- 106. Therefore, the site of*

the project is conforming to the sitting guidelines laid down by the Govt. of Punjab, Department of Science Technology and Environment vide order dated 25/7/2008 as amended on 30/10/2009.

It is pertinent to mention here that the proposed site is situated within the jurisdiction of M.C, Mohali/ GMADA. However, the STP installed by GMADA authorities is not adequate to cater the quantity of additional effluent of this project. However, the upgradation of exiting STP installed by GMADA authorities is yet to be made. Moreover, the project proponent has not submitted the alternate proposal for mode of disposal."

Summary of the case as per the application proposal is as under:

Sr. No.	**Description**	**Details**
1	**Basic Details**	
1.1	Name of Project & Project Proponent:	Modernization of Residential Township located at sector- 97, 106 & 107, Mohali, Punjab by M/s Unitech Limited
1.2	Proposal No.:	SIA/PB/MIS/61949/2019
1.3	Location of Project:	Located at sector- 97, 106 & 107, Mohali, Punjab
1.4	Details of Land area & Built up area:	Total Site Area = 1149470.114 m^2 (284.04 Acres) Built-up Area = 13,75,958.676 m^2
1.5	Category under EIA notification dated 14.09.2006	The project falls under S.No. 8(b) - 'Township and Area Development' as the built-up area of the project is **1375958.676 m^2**
1.6	Cost of the project	Estimated cost of project will be Rs 371.33 crores (For Modernization- Rs 196.2 Crores)
2.	**Site Suitability Characteristics**	
2.1	Whether project is suitable as per the provisions of Master Plan:	Yes, the existing site is allocated for residential use as per the Master Plan of SAS Nagar, 2031. the same is enclosed with the application.
2.2	Whether supporting document submitted in favour of statement at 2.1, details thereof: (CLU/building plan approval status)	A copy of permission for CLU of the land measuring 218 acres falling in Sector 97, 106 & 107, SAS Nagar issued by Department of Housing and Urban Development vide letter no. 490

		dated 16.01.2007 for residential purpose submitted. A copy of permission for CLU of the land measuring 60.04 acres issued by Department of Town and Country Planning Punjab vide letter no. 6506 CTP (PB) SP-432R dated 06.08.2008 for residential purpose submitted. It has been mentioned in the CLU that the area of 6 acres proposed for acquisition shall be issued separately.
3	**Forest, Wildlife and Green Area**	
3.1	Whether the project required clearance under the provisions of Forest Conservations Act 1980 or not:	No forest land is involved in the project. A self-declaration in this regard submitted.
3.2	Whether the project required clearance under the provisions of Punjab Land Preservation Act (PLPA), 1900.	Project is not covered under the PLPA Act, 1900.
3.3	Whether project required clearance under the provisions of Wildlife Protection Act 1972 or not:	Not applicable. Wildlife clearance is not required.
3.5	Whether the project falls within the influence of Eco-Sensitive Zone or not.	No
3.6	Green area requirement and proposed No. of trees:	Total green area of 347855.638 m^2 (30.26 % of plot area) i.e. 73,114.620 m^2 (Mandatory green) & 274,741.018 m^2 (Other green area) will be developed after modernisation. The Green Area of 11.761 Acres has already been developed. » Total No. of trees required = Total plot area/80 = 11,49,470.114/80= 14368 Nos. » Total No of trees proposed = 14427 Nos. » No of trees already planted = 2627 » No of shrubs already planted = 347 » No of trees yet to be planted = 11800
4.	**Configuration & Population**	

4.1 Land Breakup for the residential components to be constructed/developed as per earlier Environmental Clearance and after modernization is as under:

Particular	**As per previous EC**		**Total after modernization**		**Impact**
	Hectare	**Acres**	**Hectare**	**Acres**	
Plots	51.86	128.09	44.23	109.3	Decrease
Group Housing	8.28	20.4516	8.43	20.823	Increase
Commercial	4.69	11.5843	2.99	7.4	Decrease
EWS	6.92	17.0924	5.52	13.65	Decrease
Institutional	10.5	25.93201	10.49	25.932	No Change
Utility	-	-	3.14	7.759	Increase
STP	--	--	0.41	1.02	Increase
Green area	9.3	22.971	34.78	85.9	Increase
Road and Open area	44.04	108.8282	32.43	80.089	Decrease
Total	**135.6**	**335**	**114.95 (142.22)**	**284.04 (351.8)**	**Decrease**

4.2 **Built up area breakup as under:**

Particulars(m^2)	**Already constructed**	**To be Constructed**	**Total after modernization**
Area under Plot	43,653.68	822120.1	**865773.78**
Group Housing	49,993.54	234492.85	**284486.39**
Commercial	-	100647.396	**100647.396**
Institutional	-	125051.11	**125051.11**
Total	93647.22	1282311.456	**13,75,958.676**

4.3 **Population details**

The total population after modernization is estimated as 31561. The details are tabulated as under:

Population details (After Modernization)	
Description	**Population**
Group Housing Residents	5840
Plots residents	17520
Group Housing & Plots staff	350
Group Housing & Plot Visitors	2110
Commercial & Institute Staff	1024
Total	**31561**

5	**Water**

Total water requirement for the complete township

Summer						
Particulars	**Population**		**Total Water requirement in KLD**			
	Total	**LPCD**	**Demand**	**Fresh**	**Flushing**	**Waste water**
Resident GH	5840	200	1168	905	263	
Staff GH	100	45	5	3	2	
Visitors GH	610	15	9	3	6	
Resident plots	17520	200	3504	3504	0	
Staff Plots	250	45	11	11	0	
Visitors Plots	1500	15	23	23	0	
Commercial and Institutional Staff	1024	45	46	26	20	
Commercial and Institutional Visitors	4717	15	71	24	47	
Sub Total	**31561**		**4837**	**4499**	**339**	
				3598	**339**	**3937**
			Summer			
Gardening	347855.638 sqm		1739			
Cooling			100			10
Misc			10			8
Total Water requirement			6686			
Total Waste water generation			3955			3955

5.1	Total fresh water requirement:	4499 KLD
5.2	Source:	Groundwater

<table>
<tr><td>5.3</td><td>Whether Permission obtained for abstraction/supply of the fresh water from the Competent Authority (Y/N)

Details thereof</td><td>Yes, acknowledgement of the application submitted to PWRDA for abstraction of 4499 KLD of ground water submitted.</td></tr>
<tr><td>5.4</td><td>Total wastewater generation:</td><td>3955 KLD</td></tr>
<tr><td>5.5</td><td>Treatment methodology:

(STP capacity, technology & components)</td><td>In-house Modular STP of combined capacity 4490 KLD (1890 KLD STP in Sector 97 & 106 & STP in Sector 107 of capacity 2600 KLD) (75 KLD & 150 KLD- Existing -SAFF Technology & 4265 KLD- Proposed-MBBR technology).</td></tr>
<tr><td>5.6</td><td>Treated wastewater for flushing purpose:</td><td>339 KLD</td></tr>
<tr><td>5.7</td><td>Utilisation/Disposal of excess treated wastewater.</td><td>Summer: 1570 KLD

Winter: 2283 KLD

Rainy: 2649 KLD</td></tr>
<tr><td>5.8</td><td colspan="2">Cumulative Details:
<table>
<tr><th>Sr. No.</th><th>Total water Requirement</th><th>Total wastewater generated</th><th>Treated wastewater</th><th>Flushing water requirement</th><th>Green area requirement</th><th>Into sewer</th></tr>
<tr><td>1.</td><td>6686 KLD</td><td>3955 KLD</td><td>3758 KLD</td><td>339 KLD</td><td>Summer: 1739 KLD
Winter: 1044 KLD
Monsoon: 696 KLD</td><td>Summer: 1570 KLD
Winter: 2283 KLD
Monsoon: 2649 KLD</td></tr>
</table></td></tr>
<tr><td>5.10</td><td>Rain water harvesting proposal:</td><td>Ground water recharging will be done by 5 total 24 Nos. of rainwater harvesting pits (Existing- 10 & Proposed- 14) to compensate the abstraction of ground water.</td></tr>
</table>

<table>
<tr><td>6</td><td colspan="2">Air</td></tr>
<tr><td>6.1</td><td>Details of Air Polluting machinery:</td><td>DG sets of 2x62.5 kVA (Already Existing) & 5x1010 kVA (Proposed)</td></tr>
<tr><td>6.2</td><td>Measures to be adopted to contain particulate emission/Air Pollution</td><td>DG sets will be equipped with acoustic enclosure to minimise noise generation and stack height of 6 m for DG set of 5x1010 kVA & in-built stack for 2x62.5 kVA for proper dispersion.</td></tr>
<tr><td>7</td><td colspan="2">Waste Management</td></tr>
<tr><td>7.1</td><td>Total quantity of solid waste generation</td><td>After modernization: 11744 kg/day</td></tr>
<tr><td>7.2</td><td>Details of management and disposal of solid waste (Mechanical Composter/Compost pits)</td><td>Biodegradable waste will be treated in 5 nos. of Organic Waste Convertor. Recyclable & Plastic waste will be given to Authorised Vendors.</td></tr>
<tr><td>7.3</td><td>Details of management of Hazardous Waste.</td><td>Hazardous waste in the form of used oil from DG set will be generated which will be sold to authorised vendors as per The Hazardous & Other Wastes (Management & Transboundary Movement) Rules, 2016 and its amendments.</td></tr>
<tr><td>8</td><td colspan="2">Energy Saving & EMP</td></tr>
<tr><td>8.1</td><td>Power Consumption:</td><td>34000 (1000 kVA already connected) (Source: Punjab State Power Corporation Ltd.)</td></tr>
<tr><td>8.2</td><td>Energy saving measures:</td><td>● Total solar power to be installed(solar energy per tower*no. of tower) = 2.5 X 16 = 40 KW.
● LEDs have been proposed to be used instead of CFLs.</td></tr>
<tr><td>8.3</td><td colspan="2">Details of activities under the Environment Management Plan.
Capital Cost:
<table>
<tr><th>Sr. No.</th><th>Description</th><th>Already Spent</th><th>Proposed Total Cost</th><th>Total cost in (Lacs)</th></tr>
<tr><td>1.</td><td>Landscaping</td><td>60</td><td>83</td><td>143</td></tr>
<tr><td>2.</td><td>STP</td><td>92</td><td>400</td><td>492</td></tr>
<tr><td>3.</td><td>DG Stack & Acoustic Treatment</td><td>4</td><td>16</td><td>20</td></tr>
<tr><td>4.</td><td>Solid Wate management</td><td>12</td><td>80</td><td>92</td></tr>
</table></td></tr>
</table>

5.	RWH	160	60	220
6.	Miscellaneous	19.3	77.1	96.4
	Total	**347.30**	**716.1**	**1063.4**

Recurring Cost:

Sr. No.	Description	Rs. in Lacs/year
1.	Landscaping	30
2.	Water management (STP & RWH)	25
3.	Air Management	5
4.	Environment Management	2.5
5.	Solid Wate Management	10
6.	Miscellaneous	2
	Total	**74.5 Lacs/year**

During meeting, the Committee noted that the Project Proponent vide letter dated 05.08.2022 informed that due to non-availability of the technical experts, it is not possible to attend the meeting of SEAC scheduled to be held on 06.08.2022 as such a request was made by him to consider the case in the next meeting.

The Committee, considered the project, in pursuance of OM issued by MoEF&CC vide no. 22-35/2020-IA.III dated 18.11.2020, wherein it has been mentioned that all projects, placed in the agenda, should be considered by the EAC notwithstanding the non-attendance of the Project Proponent or his consultant in the EAC meeting to make a presentation.

The Committee further observed that the Project Proponent has submitted the request letter for providing exemption in the funds to be allocated under CER activities due to the financial crunch being faced by the promoter company. In this regard, the Committee observed that the proposed project is very big in size with projected population as 31561 persons, total built up area as 13,75,958.676 sqm, total water demand as 4499 KLD, waste water generation as 3955 KLD & solid waste generation as 11744 kg/day and has significant impact on the environment. As such the exemption in the funds to be allocated under CER activities in Environment Management Plan (EMP) cannot be given.

Further, the Committee was apprised regarding the latest decision taken in the 14th joint meeting of SEIAA/SEAC held on 13.07.2022 that the project proponent shall allocate appropriate funds in lieu of CER activities in the EMP of the project. This expenditure would be in addition to the other statutory components of the EMP and would be incurred proportionally to the amount spent on the construction activities inter alia on the following activities:

a) Development of Mini Forests (Nanak Bagchi), raising of Avenue Plantations & Plantations in public/community areas.

b) Rejuvenation of Village Ponds

c) Development of Infrastructure for utilization of treated effluent of STPs.

d) Provision of solar panels in the Govt./ Municipal / other public schools, hospitals and dispensaries, etc.

e) Rainwater harvesting in Public Buildings

f) Alternatives to Single Use Plastic.

g) Solid Waste Management

h) Other activities relating to amelioration of Air, Water and Soil pollution as prescribed in the applicable District Environment Plan (DEP)

i) Activities as proposed by the Project Proponent / their accredited consultants for the amelioration of Air, Water, and Soil pollution on the basis of field surveys and approved by SEIAA / SEAC."

The Committee accordingly considered the proposal of the applicant and observed that there are lot of gaps in the information submitted by the Project Proponent and made the following observations:

1. The Project Proponent shall submit clarification pertaining to decrease in the land area from 335 acres to 284.04 acres based on which the Environmental Clearance for modernization has been sought. Further, the details of 50.96 acres (335-284.04) are to be provided.
2. The Project Proponent shall submit the revised calculation pertaining to the sum of total land area mentioned in various components under the head i.e. (total after modernization).
3. The Project Proponent shall submit the details pertaining to No. of Plots, No. of Dwelling Units in Group Housing, No. of Shops/SCOs in Commercial Component of the project and Institutional Components as per the earlier Environmental Clearance granted to the Project viz-a-viz modernization proposal.
4. The Project Proponent shall submit component wise built-up area details (FAR & Non-FAR separately) proposed to be constructed as per earlier EC granted to the project viz-a-viz modernization proposal.
5. The Project Proponent shall submit revised calculation after considering the factors of 5.5, 1.8 & 0.5 ltr/sqm/day while calculating the utilization of treated wastewater for green area.
6. The Project Proponent shall submit the alternate proposal for utilization of the excess treated waste water within the project premises, till permission for disposing treated water in the sewer of GMADA is obtained.
7. The Project Proponent shall submit the basis for estimating the population for various components of the project.
8. The Project Proponent shall submit the adequate proposal for management of wet and dry component of Solid Waste and submit the solid waste management plan by earmarking the location of the dedicated area for SWM.
9. The Project Proponent shall allocate appropriate funds in lieu of Corporate Environmental Responsibility (CER) activities in the Environment Management Plan (EMP), in addition to other

statuary component of the EMP, to be incurred proportionally to the amount spent on the construction activities, inter alia on the following activities:

(i) Development of Mini Forests (Nanak Bagchi), raising of Avenue Plantations and Plantations in public/community areas

(ii) Rejuvenation of Village Ponds

(iii) Development of Infrastructure for utilization of treated effluent of STPs

(iv) Provision of solar panels in the Government / Municipal / other public schools, hospitals and Dispensaries, etc.

(v) Rainwater harvesting in Public Buildings

(vi) Alternatives to Single Use Plastic

(vii) Solid waste Management

(viii) Other activities relating to amelioration of Air, Water and Soil pollution as prescribed in the applicable District Environment Plan

(ix) Activities as proposed by the Project Proponent / their accredited consultants for the amelioration of Air, Water, and Soil pollution on the basis of field surveys and approved by SEIAA / SEAC

The Committee decided to defer the case till the receipt of reply of the above-mentioned observations made by the Committee.

Item No. 226.03: Application for obtaining Terms of Reference for steel manufacturing unit at Village Bhagwanpura, Tehsil-Dehlon, District Ludhiana, Punjab by M/s SRV Steel Private Limited. (Proposal No. SIA/PB/IND/81418/2022).

The industry is an existing steel manufacturing unit and had already obtained Consent to Operate under the provisions of the Air Act 1981 & Water Act 1974, which is valid up to 30.06.2025. The Consents have issued for the manufacturing of MS Ingots @ 78 MTD (27,300 TPA) at village Bhagwanpur, Tehsil Dehlon, District Ludhiana, Punjab.

The industry has applied for obtaining Terms of Reference for carrying out expansion by manufacturing of steel ingots/billets @56000 TPA of Steel Billets/Ingots. The industry has proposed to replace existing 01 no. Induction Furnace of capacity 7 TPH to 01 no. of Induction furnace of capacity 10 TPH and one concast. The project is covered under category 3(a) of the schedule appended with the EIA notification dated 14.09.2006. The total cost of the project including expansion is Rs. 8.98 Crore.

The industry has submitted Form-1 and Pre-Feasibility Report along with other relevant documents on Parivesh Portal. The industry has deposited Rs. 22,450/- through NEFT No. 235094095 dated 19.07.2022 as verified by the supporting staff of SEIAA.

The Project Proponent undertake that the information given in the application are true to the best of his knowledge & belief and no facts have been concealed thereof. Further, he is aware that in case, if any information submitted was found to be false or misleading at any stage, the project will be rejected and clearance given, if any to the project will be revoked at their risk and cost.

Deliberations during 226th meeting of SEAC held on 06.08.2022.

The meeting was attended by the following:

(i) Sh. Ravinder Kumar, General Manager, M/s SRV Steel Private Limited.
(ii) Sh. Sandeep Singh, Environmental Consultant, M/s. Chandigarh Pollution Testing Laboratory.

SEAC allowed the Environmental Consultant of the Project Proponent to present the salient features of the project. He, thereafter, presented the case as under:

Sr. No.	Description	Details
1.	Online Proposal No.	**SIA/PB/IND/81418/2022**
2.	Name and Location of the project	M/s SRV Steels Pvt. Ltd. located at Village- Bhagwanpura, Tehsil-Dehlon, District Ludhiana, Punjab.
3.	In case of expansion projects, whether	Existing (MS Ingots) @ 78 MTD (27,300 TPA) Proposed (steel ingots/billets) @56000 TPA

	granted EC earlier, if Yes, then provide its details	The production capacity exceeds the 30,000 TPA as such the said project now attracts the provisions of category 3(a) of the schedule appended with the EIA notification dated 14.09.2006
4.	Nature of project (Fresh EC/EC for Expansion/New)	Expansion
5.	a) Category b) Activity (As per schedule appended to EIA Notification, 2006 as amended time to time.)	(a) B (b) Metallurgical Industries (ferrous & non-ferrous) (8), Schedule 3(a) as per EIA notification-2006.
6.	Whether project falls within 5km from the boundary of critically polluted area (Yes/No)	The site of the industry is located at a distance of 6.1 KM from the MC limits of Ludhiana.
7.	Whether the industry required clearance under the provisions of Forest Conservation Act 1980 or not.	No land of the falls under the purview of Forest Conservation Act 1980 or PLPA 1900. A self-declaration in this regard submitted.
8.	Whether industry falls within the protected areas notified under Wildlife Protection Act 1972 or not.	Not applicable, as there is no Wildlife protected area falls within 5km or project site.
9.	Whether the industry falls within the ambit of Eco-sensitive areas or not.	Not applicable, as there is no eco-sensitive area falls within 5km or project site.
10.	Inter-State boundaries and International boundaries	Not applicable, as there is no Inter-State boundary or international boundary falls within 5km or project site.
11.	Existing production Capacity (TPA)	Steel Ingots/billets- 27,300 TPA
12.	Undertaking to affect that project is neither located near to PLPA area nor fall in the PLPA area	The project site is neither located near to PLPA area nor fall in PLPA area.

13.	Classification/Land use pattern as per Master Plan	The site falls in Industry zone as per Master Plan of Ludhiana.

14. **Project Area Details:**

S. No.	Details	Existing Land	Proposed Additional Land	Total land after Expansion
1.	Plot Area (in sqm)	6070	Nil	6070

15. **Raw Material requirement as per following format:**

S. No.	Raw Material	Existing (TPA)	Proposed (TPA)	After Expansion (TPA)
1.	MS Scrap, CI, Sponge Iron, Ferro Alloys	30,450	31,200	61,650

16. **Production Capacity as per following format:**

S. No.	Product name	Existing (TPA)	Proposed (TPA)	After Expansion (TPA)
1.	Steel Ingots/billets,	27,300	28,700	56,000

17. **Details of major productive machinery/plant**

S. No.	Particulars	Existing	Proposed	After Expansion
1.	Induction Furnace	1X7TPH (to be replaced)	1X10 TPH,	1X10 TPH
2.	Concast	Nil	01 No.	01 No.

18. **Water Requirements & its source:**

S. No.	Description	Existing water demand (KLD)	Proposed water demand (KLD)	Total water demand (KLD)
1.	Domestic water demand	1.0 KLD	1.0 KLD	2.0 KLD
2.	Cooling (makeup water)	2.0 KLD	7.0 KLD	9.0 KLD
Total		**3.0 KLD**	**8.0 KLD**	**11.0KLD**

Sources of water:

S. No.	Purposes	Source of water
1.	Domestic	Own tubewell
2.	Make-up water demand for cooling	Own tubewell
3.	Green area water demand	Treated waste water

19. **Details of Effluent**

Sr. No.	Details	Existing Quantity (KLD)	Expected after expansion (KLD)	Details of existing & proposed Effluent Control Device
i)	Industrial Effluent	Nil	Nil	---
ii)	Domestic Effluent	0.8	1.6	Will be treated in STP of 6 KLD capacity. Treated water will be reused in plantation.

20. **Details of Emissions (After expansion)**

Sr. No.	Source	Capacity (TPH)	Chimney Height (m)	Details of existing & proposed Air Pollution Control Device
i)	Induction Furnace	1X10 TPH,	30	Side Suction Hood, Spark Arrestor, Bag House, ID Fan (Offline cleaning pulsejet bag filter)

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

Sr. No.	Hazardous Waste	Category	Quantity (TPA) (After expansion)	Disposal arrangement

<table>
<tr><td></td><td><table>
<tr><td>1.</td><td>Gas Cleaning Residue (APCD dust)- Bag filter</td><td>35.1</td><td>0.8</td><td>Sent to TSDF site/Madhav Alloys</td></tr>
<tr><td>2.</td><td>Used Oil (kl/annum)</td><td>5.1</td><td>0.05 kl/annum</td><td>Used as Lubricant within the industry/sent to authorized recyclers.</td></tr>
</table></td></tr>
<tr><td>22.</td><td>Solid waste generation and its disposal (After expansion)<table>
<tr><th>Sr. No.</th><th>Solid Waste</th><th>Quantity (TPD) (After Expansion)</th><th>Disposal arrangement</th></tr>
<tr><td>(i)</td><td>Slag</td><td>8.8</td><td>Sent to cement plant/Tile manufacturers for final disposal</td></tr>
</table></td></tr>
<tr><td>23.</td><td>Energy Requirements (After expansion)</td><td>7000 KW</td></tr>
</table>

During meeting, the Committee observed that the proposed industrial activity attracts the provisions of the General Conditions applicable to category 3(a) of the schedule appended with the EIA notification dated 14.09.2006. In this regard, the industry submitted the drawing earmarking the location of the industry w.r.t distance from MC limits of Ludhiana. As per the said drawing, the site of the industry is located at a distance of 6.1 KM from the MC limits of Ludhiana.

Further, the industry vide letter dated 06.08.2022 informed that all the Conditions stipulated under General Conditions applicable to category 3(a) of the schedule appended with EIA notification dated 14.09.2006 does not satisfy w.r.t proposed site of the industry. The industry further undertakes that 15% of the total plot area shall be developed into green area by planting trees and remaining green belt will be developed in other land owned by project proponent at a distance of 250m from project site.

The Committee observed that the industry falls in the industrial zone as per the Master Plan of Ludhiana. After detailed deliberations, SEAC decided to recommend the case to SEIAA to approve & issue the Terms of Reference (ToR) to the industry M/s SRV Steel Private Limited for preparing Environmental Impact Assessment (EIA) report by carrying out public consultation as required under the EIA notification dated 14.09.2006:

Standard ToR-

1. Introduction

i. Background about the project
ii. Need of the project
iii. Purpose of the EIA study
iv. Scope of the EIA study

Project description

A. Site Details

i. Location of the project site covering village, Taluka/Tehsil, District and State.
ii. Site accessibility
iii. Adigital toposheet in pdf or shape file compatible to google earth of the study area of radius of 10km and site location preferably on 1:50,000 scale. (including all eco-sensitive areas and environmentally sensitive places).
iv. Latest High-resolution satellite image data having 1m-5m spatial resolution like quickbird, Ikonos, IRS P-6 pan sharpened etc., along with delineation of plant boundary co-ordinates. Area must include at least 100m all around the project location.
v. Environment settings of the site and its surrounding along with map.
vi. A list of major industries with name, products and distance from plant site within study area (10km radius) and the location of the industries shall be depicted in the study area map.
vii. In case if the project site is in vicinity of the water body, 50 meters from the edge of the water body towards the site shall be treated as no development/construction zone. If it's near the wetland, Guidelines for implementing Wetlands (Conservation and Management) Rules, 2017 may be followed.
viii. In case if the project site is in vicinity of the river, the industry shall not be located within the river flood plain corresponding to one in 25 years flood, as certified by concerned District Magistrate/Executive Engineer from State Water Resources Department (or) any other officer authorized by the State Government for this purpose as per the provisions contained in the MoEF&CC Office Memorandum dated 14/02/2022.
ix. Type of land, land use of the project site.
x. Status of acquisition of land. If acquisition is not complete, stage of the acquisition process as per the MoEF&CC O.M. dated 7/10/2014 shall be furnished.
xi. Engineering layout of the area with dimensions depicting existing unit as well as proposed unit indicating storage area, plant area, greenbelt area, utilities etc. If located within an Industrial area/Estate/Complex, layout of Industrial Area indicating location of unit within the Industrial area/Estate.

B. Forest and wildlife related issues (if applicable):

i. Status of Forest Clearance for the use of forest land shall be submitted.
ii. Copy of application submitted for clearance under the Wildlife (Protection) Act, 1972, to the Standing Committee of the National Board for Wildlife if the project site located within notified Eco-Sensitive Zone, 10km radius of national park/sanctuary wherein final ESZ notification is not in place as per MoEF&CC Office Memorandum dated 8/8/2019.
iii. The projects to be located within 10 km of the National Parks, Sanctuaries, Biosphere Reserves, Migratory Corridors of Wild Animals, Eco-sensitive Zone and Eco-sensitive areas, the project proponent shall submit the map duly authenticated by Divisional Forest Officer showing the distance between the project site and the said areas.
iv. Wildlife Conservation Plan duly authenticated by the Competent Authority of the State Government for conservation of Schedule I fauna, if any exists in the study area.

C. Salient features of the project

i. Products with capacities in **Tons per Annum** for the proposed project.
ii. If expansion project, status of implementation of existing project, details of existing/proposed

products with production capacities in Tons per Annum.

iii. Site preparatory activities.

iv. List of raw materials required and their source along with mode of transportation.

v. Other than raw materials, other chemicals and materials required with quantities and storage capacities.

vi. Manufacturing process details along with process flow diagram of proposed units.

vii. Consolidated materials and energy balance for the project.

viii. Total requirement of surface/ ground water and powerwith their respective sources, status of approval.

ix. Water balance diagram

x. Details of Emission, effluents, hazardous waste generation and mode of disposal during construction as well as operation phase.

xi. Man-power requirement.

xii. Cost of project and scheduled time of completion.

xiii. Brief on present status of compliance (Expansion/modernization proposals)

a. Cumulative Environment Impact Assessment for the existing as well as the proposed expansion/modernization shall be carried out.

b. In case of ground water drawl for the existing unit, action plan for phasing out of ground water abstraction in next three years except for domestic purposes and shall switch over to 100 % use of surface water from nearby source.

c. Copy of all the Environment Clearance(s) including Amendments thereto obtained for the project from MoEF&CC/SEIAA shall be attached as an Annexure. A certified copy of the latest Monitoring Report of the Regional Office of the Ministry of Environment and Forests as per circular dated 30th May, 2012 on the status of compliance of conditions stipulated in all the existing environment clearances including amendments shall be provided.

d. In case the existing project has not obtained Environment Clearance, reasons for not taking EC under the provisions of the EIA Notification 1994 and/or EIA Notification 2006 shall be provided. Copies of Consent to Establish/No Objection Certificate and Consent to Operate (in case of units operating prior to EIA Notification 2006, CTE and CTO of FY 2005-2006) obtained from the SPCB shall be submitted. Further, compliance report to the conditions of consents from the Regional Office of the SPCB shall be submitted.

D. Description of the Environment

v. Study period

vi. Approach and methodology for data collection as furnished below.

Attributes	Sampling		Remarks
	Network	Frequency	
A. Air Environment			

Micro-Meteorological • Wind speed (Hourly) • Wind direction • Dry bulb temperature • Wet bulb temperature • Relative humidity • Rainfall • Solar radiation • Cloud cover • Environmental Lapse Rate	Minimum 1 site in the project impact area	1 hourly continuous	• IS 5182 Part 1-20 • Site specific primary data is essential • Secondary data from IMD, New Delhi • CPCB guidelines to be considered.
Pollutants • PM2.5 • PM10 • SO_2 • NOx • CO • HC • Other parameters relevant to the project and topography of the area	At least 8-12 locations	As per National Ambient Air Quality Standards, CPCB Notification.	• Sampling as per CPCB guidelines • Collection of AAQ data (except in monsoon season) • Locations of various stations for different parameters should be related to the characteristic properties of the parameters. • The monitoring stations shall be based on the NAAQM standards as per GSR 826(E) dated 16/11/2009 and take into account the predominant wind direction, population zone and sensitive receptors including reserved forests, • Raw data of all AAQ measurement for 12 eeks of all stations as

Attributes	Sampling		Remarks
	Network	Frequency	
			per frequency given in the NAAQM Notification of 16/11/2009 along with min., max., average and 98% values for each of the AAQ parameters from data of all AAQ stations should be provided as an annexure to the EIA Report.
B. Noise			
• Hourly equivalent noise levels	least 8-12 locations	per CPCB norms	
C. Water			
ameters for water quality • pH, temp, turbidity, magnesium hardness, total alkalinity, chloride, sulphate, nitrate, uoride, sodium, potassium, salinity • Total nitrogen, total phosphorus, DO, BOD, COD, Phenol • Heavy metals • Total coliforms, faecal coliforms • Phyto plankton • Zoo plankton	amples for water quality should be collected and analyzed as per: • IS: 2488 (Part 1-5) methods for sampling and testing of Industrial effluents • Standard methods for examination of water and wastewater analysis published by American Public Health Association.		
For River Bodies • Total Carbon • pH • Dissolved Oxygen • Biological Oxygen Demand • Free NH4 • Boron • Sodium Absorption Ratio • Electrical	• Surface water quality of the nearest River (60m upstream and downstream and other surface water	• Yield of water sources to be measured during critical season • Standard methodology for collection of surface water (BIS standards)	

Attributes	Sampling		Remarks
	Network	Frequency	
Conductivity	bodies		
For Ground Water	• Ground water monitoring data should be collected at minimum of 8 locations (from existing wells /tube wells/existing current records) from the study area and hall be included.		
D. Traffic Study			
• Type of vehicles • Frequency of vehicles for transportation of materials • Additional traffic due to proposed project • Parking arrangement			
E. Land Environment			
Soil • Particle size distribution • Texture • pH • Electrical conductivity • Cation exchange capacity • Alkali metals • Sodium Absorption Ratio (SAR) • Permeability • Water holding capacity • Porosity	Soil samples be collected as per BIS specifications		
Land use/Landscape • Location code • Total project area • Topography • Drainage (natural) • Cultivated, forest, plantations, water bodies, roads and settlements			
F. Biological Environment			

Attributes	Sampling		Remarks
	Network	Frequency	
Aquatic • Primary productivity • Aquatic weeds • Enumeration of phyto plankton, zoo plankton and benthos • Fisheries • Diversity indices • Trophic levels • Rare and endangered species • Marine Parks/ Sanctuaries/ closed areas /coastal regulation zone (CRZ) **Terrestrial** • Vegetation-species list, economic importance, forest produce, medicinal value • Importance value index (IVI) of trees • Fauna • Avi fauna • Rare and endangered species • Sanctuaries / National park / Biosphere reserve • Migratory routes	• Detailed description of flora and fauna (terrestrial and aquatic) existing in the study area shall be given with special reference to rare, endemic and endangered species. Indicator species which indicate ecological and environment degradation should be identified and included to clearly state whether the proposed project would result in to any adverse effect on any species. • Samples to collect from upstream and downstream of discharge point, nearby tributaries at downstream, and also from dug wells close to activity site. • For forest studies, direction of wind should be considered while selecting forests. • Secondary data to collect from Government offices, NGOs, published literature.		
F. socio-economic			
• Demographic structure • Infrastructure resource base • Economic resource base • Health status: Morbidity pattern • Cultural and aesthetic attributes	• Socio-economic survey is based on proportionate, stratified and random sampling method. • Primary data collection through questionnaire • Secondary data from census records, statistical hard books, topo sheets, health records and relevant official records available with Govt. Agencies		

Attributes	Sampling		Remarks
	Network	Frequency	
• Education			

vii. Interpretation of each environment attribute shall be enumerated and summarized as given below:

- Ambient air quality
- Ambient Noise quality
- Surface water quality
- Ground water quality
- Soil quality
- Biological Environment
- Land use
- Socio-economic environment

E. Anticipated Environment Impacts and mitigation measures (In case of expansion, cumulative impact assessment shall be carried out)

i. Identification of potential impacts in the form of a **matrix** for the construction and operation phase for all the environment components

Activity	Environment	Ecological	Socio-economic
Construction phase			
Operation phase			

ii. Impact on ambient air quality (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)

a. Construction phase

b. Operation phase

- Details of stack emissions from the existing as well as proposed activity.
- Assessment of ground level concentration of pollutants from the stack emission based on AQIP Modelling The air quality contours shall be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any along with wind rose map for respective period
- Impact on ground level concentration, under normal, abnormal and emergency conditions. Measures to handle emergency situations in the event of uncontrolled release of emissions.

iii. Impact on ambient noise quality (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)

a. Construction phase

b. Operation phase

iv. Impact on traffic (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)

a. Construction phase

b. Operation phase

v. Impact on soil quality (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
    a. Construction phase
    b. Operation phase
vi. Impact on land use (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
    a. Construction phase
    b. Operation phase
vii. Impact on surface water resource and quality (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
    a. Construction phase
    b. Operation phase
viii. Impact on ground water resource and quality (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
    a. Construction phase
    b. Operation phase
ix. Impact on terrestrial and aquatic habitat (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
    a. Construction phase
    b. Operation phase
x. Impact on socio-economic environment (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
    a. Construction phase
    b. Operation phase
xi. Impact on occupational health and safety (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
    a. Construction phase
    b. Operation phase

2. Analysis of Alternatives (Technology & Site)

i. No project scenario
ii. Site alternative
iii. Technical and social concerns
iv. Conclusion

3. Environmental Monitoring Program

i. Details of the Environment Management Cell
ii. Performance monitoring schedule for all pollution control devices shall be furnished.
iii. Corporate Environment Policy

a. Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.
b. Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environment or forest norms / conditions? If so, it may be detailed in the EIA.
c. What is the hierarchical system or Administrative order of the company to deal with the environment issues and for ensuring compliance with the environment clearance conditions?

Details of this system may be given.

d. Does the company have system of reporting of non-compliances / violations of environment norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism shall be detailed in the EIA report

iv. Action plan for **post-project environment monitoring matrix**:

Activity	Aspect	Monitoring Parameter	Location	Frequency	Responsibility
Construction phase					
Operation phase					

4. Additional Studies

i. Public consultation details (Entire proceedings as separate annexurealong with authenticated English Translation of Public Consultation proceedings).

ii. Summary of issues raised during public consultation along with action plan to address the same as per MoEF&CC O.M. dated 30/09/2020

S	Physical activity and action plan		Year of implementation (Budget in INR)			Total Expenditure (Rs. in Crores)
	Name of the Activity	Physical Targets	1st	2nd	3rd	

iii. Risk assessment

- Methodology
- Hazard identification
- Frequency analysis
- Consequence analysis
- Risk assessment outcome

iv. Emergency response and preparedness plan

5. Project Benefits

i. Environment benefits
ii. Social infrastructure
iii. Employment and business opportunity
iv. Other tangible benefits

6. Environment Cost Benefit Analysis

i. Net present value
ii. Internal rate of return
iii. Benefit cost ratio

iv. Cost effectiveness analysis

7. Environment Management Plan (Construction and Operation phase)

i. Air quality management plan
ii. Noise quality management plan

iii. Solid and hazardous waste management plan
iv. Effluent management plan
v. Storm water management plan
vi. Rain water harvesting plan
vii. Occupational health and safety management plan
viii. Green belt development plan
ix. Socio-economic management plan
x. Wildlife conservation plan (In case of presence of schedule I species)
xi. Total capital cost and recurring cost/annum for environment pollution control measures shall be included.

8. Conclusion of the EIA study

9. In addition to the above, any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof shall also be included. Has the unit received any notice under the Section 5 of Environment (Protection) Act, 1986 or relevant Sections of Air and Water Acts? If so, details thereof and compliance/ATR to the notice(s) and present status of the case.

SPECIAL CONDITIONS-

1. For Large ISPs, a 3-D view i.e. DEM (Digital Elevation Model) for the area in 10 km radius from the proposal site. MRL details of project site and RL of nearby sources of water shall be indicated.
2. Plan for the implementation of the recommendations made for the steel plants in the CREP guidelines.
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11. No tailing pond is permitted for Iron ore slimes. Dewatering and filtration system shall be

provided.

12. Emission/effluent norms as per G.S.R 894 (E) dated 4/12/2019.

Item No. 226.04: Application for Terms of Reference for steel rolling unit at Village Barmalipur and Jaspalon, Doraha Khanna Road, Tehsil Khanna, District Ludhiana, Punjab by M/s Arora Iron and Steel Rolling Mills Private Limited Unit-II, (Proposal No. SIA/PB/IND/81453/2022).

The industry is a new unit and has applied for obtaining Terms of Reference for establishment of steel rolling unit for production of 2,10,000 TPA of MS Rounds/Bars/Flats/Squares by installing 2 no. of rolling mills each of capacity 20 Ton/hr or 300 TPD. The project is covered category 3(a) of the schedule appended with the EIA notification dated 14.09.2006. The cost of the project is Rs. 47.8 Crore.

The industry was granted Consent to Establish under the provisions of the Air Act 1981 & Water Act 1974, which is valid up to 18.05.2023 for establishment of the steel rolling mill for manufacturing of MS Rounds/Bars/Flats/Squares@ 2,10,000 TPA.

The industry has submitted Form-1 and Pre-Feasibility Report along with other relevant documents through Parivesh Portal. The industry has deposited Rs. 1,19,500/- through NEFT No. N2029222054593279 dated 28.07.2022 as checked & verified by supporting staff SEIAA.

The Project Proponent undertake that the information given in the application are true to the best of his knowledge & belief and no facts have been concealed thereof. Further, he is aware that in case, if any information submitted was found to be false or misleading at any stage, the project will be rejected and clearance given, if any to the project will be revoked at their risk and cost.

Deliberations during 226th meeting of SEAC held on 06.08.2022.

The meeting was attended by the following:

(i) Sh. Raminderpal, Director, M/s Arora Iron and Steel Rolling Mills Private Limited Unit II.
(ii) Sh. Sandeep Singh, Environmental Consultant, M/s. Chandigarh Pollution Testing Laboratory.

SEAC allowed the Environmental Consultant of the Project Proponent to present the salient features of the project. He, thereafter, presented the case as under:

Sr. No.	Description	Details
1.	Online Proposal No.	SIA/PB/IND/81453/2022
2.	Name and Location of the project	M/s Arora Iron and Steel Rolling Mills Private Limited Unit -II located at Village- Barmalipur and Jaspalon, Doraha- Khanna, Tehsil Payal District- Ludhiana, Punjab

3.	In case of expansion projects, whether granted EC earlier, if Yes, then provide its details	Not applicable, as it's a new project.
4.	a) Category b) Activity (As per schedule appended to EIA Notification, 2006 as amended time to time.)	(a) B (b) Metallurgical Industries (ferrous & non-ferrous) Schedule 3(a) as per EIA notification-2006.
5.	Whether project falls within 5km from the boundary of critically polluted area (Yes/No)	The site of the industry is located at a distance of 20 Km from the critically polluted areas of Ludhiana.
6.	Whether the industry required clearance under the provisions of Forest Conservation Act 1980 or not.	No land of the falls under the purview of Forest Conservation Act 1980 or PLPA 1900. A self-declaration in this regard submitted.
7.	Whether industry falls within the protected areas notified under Wildlife Protection Act 1972 or not.	Not applicable, as there is no Wildlife protected area falls within 5km or project site.
8.	Whether the industry falls within the ambit of Eco-sensitive areas or not.	Not applicable, as there is no eco-sensitive area falls within 5km or project site.
9.	Inter-State boundaries and International boundaries	Not applicable, as there is no Inter-State boundary or international boundary falls within 5km or project site.
10.	Classification/Land use pattern as per Master Plan	The site falls in Industrial zone as per master plan of Ludhiana.

11. **Project Area Details:**

S. No.	Details	Proposed Land
1.	Plot Area (in sqm)	31746 sqm

12. **Raw Material requirement as per following format:**

S. No.	Raw Material	Proposed (TPA)
1.	Billets/Ingots	2,22,000TPA

13. **Production Capacity as per following format:**

S. No.	Product name	Proposed (TPA)
1.	MS Rounds/ Bars/Flat/Squares	2,10,000TPA

14. **Details of major productive machinery/plant**

S. No.	Particulars	Proposed
1.	2 no. rolling mill to be installed with an independent Reverberatory Furnace	Capacity of each rolling mill is 20 TPH or 300 TPD

15. Water Requirements & its source:

DESCRIPTION	PROPOSED

Domestic	4.2
Makeup water in cooling tower	32.0
Total	**36.2 KLD**

Sources of water:

S. No.	Purposes	Source of water
1.	Domestic	Own tubewell
2.	Make-up water demand for cooling	Own tubewell
3.	Green area water demand	Treated waste water

16. Details of Effluent

Sr. No.	Details	Expected Effluent (KLD)	Details of existing & proposed Effluent Control Device
i)	Industrial Effluent	Nil	---
ii)	Domestic Effluent	3.36 KLD	Will be treated in Septic tank. Treated water will be reused in plantation.

17. Details of Emissions

Sr. No.	Source	Capacity (TPH)	Chimney Height (m)	Details of existing & proposed Air Pollution Control Device
i)	2 no. rolling mill to be installed with an independent Reverberatory Furnace	Capacity of each rolling mill is 20 TPH or 300 TPD	30	Alkali scrubber

18. Details of Hazardous waste and its disposal

Sr. No.	Hazardous Waste	Category	Quantity (TPA) (After expansion)	Disposal arrangement
1.	Gas Cleaning Residue (APCD dust)- Bag filter	35.1	0.0024	Sent to common **TSDF at** Nimbuan, Dera Bassi for final disposal

	2.	Used Oil (kl/annum)	5.1	0.22 kl/annum	Used as Lubricant within the industry/sent to authorized recyclers.
	3.	Scrap	-	18.15 TPD	Will be sold to open market
19.	Energy Requirements (After expansion)			7000 KW	

During meeting, the Committee perused the OM issued by MoEF&CC dated 20.07.2022, wherein it has been mentioned that in exercise of the powers conferred by section 3 of Environment (Protection) Act 1986, the Central Govt. hereby directs that all the standalone re-rolling units or cold rolling units, which are in existence and in operation as on the date of this notification, with valid Consent to Establish & Consent to Operation from concerned State Pollution Control Board shall apply online for the grant of Terms of Reference (ToR) followed by Environment Clearance and the said units shall be granted standard Terms of Reference as per item 3(a) of the said notification and shall be exempted from the requirement of public consultation.

The Committee further observed that the proposed industrial activity attracts the provisions of the General Conditions applicable to category 3(a) of the schedule appended with the EIA notification dated 14.09.2006. In this regard, the industry vide letter dated 06.08.2022 informed that all the Conditions mentioned under General Conditions applicable to category 3(a) of the schedule appended with EIA notification dated 14.09.2006 does not satisfy w.r.t proposed site of the industry. The industry further apprised the Committee that it shall develop 34% of the green area within the industry.

The Committee observed that the industry falls in the industrial zone as per the Master Plan of Ludhiana. After detailed deliberations, SEAC decided to recommend the case to SEIAA to approve & issue the following Terms of Reference (ToR) to the industry M/s Arora Iron and Steel Rolling Mills Pvt Ltd for preparing Environmental Impact Assessment (EIA) report:

Standard ToR-

1. Introduction

i. Background about the project
ii. Need of the project
iii. Purpose of the EIA study
iv. Scope of the EIA study

Project description

A. Site Details

i. Location of the project site covering village, Taluka/Tehsil, District and State.

ii. Site accessibility
iii. Adigital toposheet in pdf or shape file compatible to google earth of the study area of radius of 10km and site location preferably on 1:50,000 scale. (including all eco-sensitive areas and environmentally sensitive places).
iv. Latest High-resolution satellite image data having 1m-5m spatial resolution like quickbird, Ikonos, IRS P-6 pan sharpened etc., along with delineation of plant boundary co-ordinates. Area must include at least 100m all around the project location.
v. Environment settings of the site and its surrounding along with map.
vi. A list of major industries with name, products and distance from plant site within study area (10km radius) and the location of the industries shall be depicted in the study area map.
vii. In case if the project site is in vicinity of the water body, 50 meters from the edge of the water body towards the site shall be treated as no development/construction zone. If it's near the wetland, Guidelines for implementing Wetlands (Conservation and Management) Rules, 2017 may be followed.
viii. In case if the project site is in vicinity of the river, the industry shall not be located within the river flood plain corresponding to one in 25 years flood, as certified by concerned District Magistrate/Executive Engineer from State Water Resources Department (or) any other officer authorized by the State Government for this purpose as per the provisions contained in the MoEF&CC Office Memorandum dated 14/02/2022.
ix. Type of land, land use of the project site.
x. Status of acquisition of land. If acquisition is not complete, stage of the acquisition process as per the MoEF&CC O.M. dated 7/10/2014 shall be furnished.
xi. Engineering layout of the area with dimensions depicting existing unit as well as proposed unit indicating storage area, plant area, greenbelt area, utilities etc. If located within an Industrial area/Estate/Complex, layout of Industrial Area indicating location of unit within the Industrial area/Estate.

B. Forest and wildlife related issues (if applicable):

i. Status of Forest Clearance for the use of forest land shall be submitted.
ii. Copy of application submitted for clearance under the Wildlife (Protection) Act, 1972, to the Standing Committee of the National Board for Wildlife if the project site located within notified Eco-Sensitive Zone, 10km radius of national park/sanctuary wherein final ESZ notification is not in place as per MoEF&CC Office Memorandum dated 8/8/2019.
iii. The projects to be located within 10 km of the National Parks, Sanctuaries, Biosphere Reserves, Migratory Corridors of Wild Animals, Eco-sensitive Zone and Eco-sensitive areas, the project proponent shall submit the map duly authenticated by Divisional Forest Officer showing the distance between the project site and the said areas.
iv. Wildlife Conservation Plan duly authenticated by the Competent Authority of the State Government for conservation of Schedule I fauna, if any exists in the study area.

C. Salient features of the project

i. Products with capacities in Tons per Annum for the proposed project.
ii. If expansion project, status of implementation of existing project, details of existing/proposed products with production capacities in Tons per Annum.
iii. Site preparatory activities.

iv. List of raw materials required and their source along with mode of transportation.
v. Other than raw materials, other chemicals and materials required with quantities and storage capacities.
vi. Manufacturing process details along with process flow diagram of proposed units.
vii. Consolidated materials and energy balance for the project.
viii. Total requirement of surface/ ground water and powerwith their respective sources, status of approval.
ix. Water balance diagram
x. Details of Emission, effluents, hazardous waste generation and mode of disposal during construction as well as operation phase.
xi. Man-power requirement.
xii. Cost of project and scheduled time of completion.
xiii. Brief on present status of compliance (Expansion/modernization proposals)

e. Cumulative Environment Impact Assessment for the existing as well as the proposed expansion/modernization shall be carried out.

f. In case of ground water drawl for the existing unit, action plan for phasing out of ground water abstraction in next three years except for domestic purposes and shall switch over to 100 % use of surface water from nearby source.

g. Copy of all the Environment Clearance(s) including Amendments thereto obtained for the project from MoEF&CC/SEIAA shall be attached as an Annexure. A certified copy of the latest Monitoring Report of the Regional Office of the Ministry of Environment and Forests as per circular dated 30th May, 2012 on the status of compliance of conditions stipulated in all the existing environment clearances including amendments shall be provided.

h. In case the existing project has not obtained Environment Clearance, reasons for not taking EC under the provisions of the EIA Notification 1994 and/or EIA Notification 2006 shall be provided. Copies of Consent to Establish/No Objection Certificate and Consent to Operate (in case of units operating prior to EIA Notification 2006, CTE and CTO of FY 2005-2006) obtained from the SPCB shall be submitted. Further, compliance report to the conditions of consents from the Regional Office of the SPCB shall be submitted.

D. Description of the Environment

i. Study period
ii. Approach and methodology for data collection as furnished below.

Attributes	Sampling		Remarks
	Network	Frequency	
A. Air Environment			

Micro-Meteorological • Wind speed (Hourly) • Wind direction • Dry bulb temperature • Wet bulb temperature • Relative humidity • Rainfall • Solar radiation • Cloud cover • Environmental Lapse Rate	Minimum 1 site in the project impact area	1 hourly continuous	• IS 5182 Part 1-20 • Site specific primary data is essential • Secondary data from IMD, New Delhi • CPCB guidelines to be considered.
Pollutants • PM2.5 • PM10 • SO_2 • NOx • CO • HC • Other parameters relevant to the project and topography of the area	At least 8-12 locations	As per National Ambient Air Quality Standards, CPCB Notification.	• Sampling as per CPCB guidelines • Collection of AAQ data (except in monsoon season) • Locations of various stations for different parameters should be related to the characteristic properties of the parameters. • The monitoring stations shall be based on the NAAQM standards as per GSR 826(E) dated 16/11/2009 and take into account the predominant wind direction, population zone and sensitive receptors including reserved forests, • Raw data of all AAQ measurement for 12 eeks of all stations as

Attributes	Sampling		Remarks
	Network	Frequency	
			per frequency given in the NAAQM Notification of 16/11/2009 along with min., max., average and 98% values for each of the AAQ parameters from data of all AAQ stations should be provided as an annexure to the EIA Report.
B. Noise			
• Hourly equivalent noise levels	least 8-12 locations	per CPCB norms	
C. Water			
ameters for water quality • pH, temp, turbidity, magnesium hardness, total alkalinity, chloride, sulphate, nitrate, uoride, sodium, potassium, salinity • Total nitrogen, total phosphorus, DO, BOD, COD, Phenol • Heavy metals • Total coliforms, faecal coliforms • Phyto plankton • Zoo plankton	amples for water quality should be collected and analyzed as per: • IS: 2488 (Part 1-5) methods for sampling and testing of Industrial effluents • Standard methods for examination of water and wastewater analysis published by American Public Health Association.		
For River Bodies • Total Carbon • pH • Dissolved Oxygen • Biological Oxygen Demand • Free NH4 • Boron • Sodium Absorption Ratio • Electrical	• Surface water quality of the nearest River (60m upstream and downstream and other surface water	• Yield of water sources to be measured during critical season • Standard methodology for collection of surface water (BIS standards)	

Attributes	Sampling		Remarks
	Network	Frequency	
Conductivity	bodies		
For Ground Water	• Ground water monitoring data should be collected at minimum of 8 locations (from existing wells /tube wells/existing current records) from the study area and hall be included.		
D. Traffic Study			
• Type of vehicles • Frequency of vehicles for transportation of materials • Additional traffic due to proposed project • Parking arrangement			
E. Land Environment			
Soil • Particle size distribution • Texture • pH • Electrical conductivity • Cation exchange capacity • Alkali metals • Sodium Absorption Ratio (SAR) • Permeability • Water holding capacity • Porosity	Soil samples be collected as per BIS specifications		
Land use/Landscape • Location code • Total project area • Topography • Drainage (natural) • Cultivated, forest, plantations, water bodies, roads and settlements			
F. Biological Environment			

Attributes	Sampling		Remarks
	Network	Frequency	
Aquatic • Primary productivity • Aquatic weeds • Enumeration of phyto plankton, zoo plankton and benthos • Fisheries • Diversity indices • Trophic levels • Rare and endangered species • Marine Parks/ Sanctuaries/ closed areas /coastal regulation zone (CRZ) **Terrestrial** • Vegetation-species list, economic importance, forest produce, medicinal value • Importance value index (IVI) of trees • Fauna • Avi fauna • Rare and endangered species • Sanctuaries / National park / Biosphere reserve • Migratory routes	• Detailed description of flora and fauna (terrestrial and aquatic) existing in the study area shall be given with special reference to rare, endemic and endangered species. Indicator species which indicate ecological and environment degradation should be identified and included to clearly state whether the proposed project would result in to any adverse effect on any species. • Samples to collect from upstream and downstream of discharge point, nearby tributaries at downstream, and also from dug wells close to activity site. • For forest studies, direction of wind should be considered while selecting forests. • Secondary data to collect from Government offices, NGOs, published literature.		
F. socio-economic			
• Demographic structure • Infrastructure resource base • Economic resource base • Health status: Morbidity pattern • Cultural and aesthetic attributes	• Socio-economic survey is based on proportionate, stratified and random sampling method. • Primary data collection through questionnaire • Secondary data from census records, statistical hard books, topo sheets, health records and relevant official records available with Govt. Agencies		

Attributes	Sampling		Remarks
	Network	Frequency	
• Education			

iii. Interpretation of each environment attribute shall be enumerated and summarized as given below:

- Ambient air quality
- Ambient Noise quality
- Surface water quality
- Ground water quality
- Soil quality
- Biological Environment
- Land use
- Socio-economic environment

E. Anticipated Environment Impacts and mitigation measures (In case of expansion, cumulative impact assessment shall be carried out)

xii. Identification of potential impacts in the form of a **matrix** for the construction and operation phase for all the environment components

Activity	Environment	Ecological	Socio-economic
Construction phase			
Operation phase			

xiii. Impact on ambient air quality (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)

c. Construction phase

d. Operation phase

- Details of stack emissions from the existing as well as proposed activity.
- Assessment of ground level concentration of pollutants from the stack emission based on AQIP Modelling The air quality contours shall be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any along with wind rose map for respective period
- Impact on ground level concentration, under normal, abnormal and emergency conditions. Measures to handle emergency situations in the event of uncontrolled release of emissions.

xiv. Impact on ambient noise quality (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)

c. Construction phase

d. Operation phase

xv. Impact on traffic (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)

c. Construction phase

d. Operation phase

xvi. Impact on soil quality (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
   c. Construction phase
   d. Operation phase

xvii. Impact on land use (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
   c. Construction phase
   d. Operation phase

xviii. Impact on surface water resource and quality (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
   c. Construction phase
   d. Operation phase

xix. Impact on ground water resource and quality (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
   c. Construction phase
   d. Operation phase

xx. Impact on terrestrial and aquatic habitat (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
   c. Construction phase
   d. Operation phase

xxi. Impact on socio-economic environment (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
   c. Construction phase
   d. Operation phase

xxii. Impact on occupational health and safety (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
   c. Construction phase
   d. Operation phase

2. Analysis of Alternatives (Technology & Site)

i. No project scenario
ii. Site alternative
iii. Technical and social concerns
iv. Conclusion

3. Environmental Monitoring Program

i. Details of the Environment Management Cell
ii. Performance monitoring schedule for all pollution control devices shall be furnished.
iii. Corporate Environment Policy

e. Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.

f. Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environment or forest norms / conditions? If so, it may be detailed in the EIA.

g. What is the hierarchical system or Administrative order of the company to deal with the environment issues and for ensuring compliance with the environment clearance conditions?

Details of this system may be given.

h. Does the company have system of reporting of non-compliances / violations of environment norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism shall be detailed in the EIA report

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