

**Item No. 191.10 Application for issuance of TORs for setting up of new steel Ingots/Billets manufacturing unit with capacity 1,78,200 TPA & Round, Coil, Flats, Wire rod, TMT Bars with capacity of 1,70,000 TPA by installing three Induction Furnaces of capacity 3×15 TPH, a concast machine & a rolling mill at Village- Wajirabad, Sirhind side, Tehsil & District- Fatehgarh Sahib, Punjab by M/s Pawanputra Steels (P) Ltd (Old Proposal No. SIA/PB/IND/51066/2020 and New Proposal No. SIA/PB/IND/55021/2020 ).**

SEAC observed that

## **1.0 Background**

The project proponent has applied for issuance of TORs for installing three Induction Furnaces of capacity 3×15 TPH, a concast machine for manufacturing of Steel Ingots/Billets with capacity 1,78,200 TPA & installing a Rolling Mill for manufacturing Round, Coil, Flats, Wire rod, TMT Bars with capacity of 1,70,000 TPA to M/s Pawanputra Steels Pvt. Ltd. Located at Village- Wajirabad, Sirhind side, Tehsil & District- Fatehgarh Sahib, Punjab. The Project is covered under Activity 3(a) & Category 'B1'.

The project proponent submitted the Form I, Pre-feasibility report and other requisite documents on online portal. He has also deposited the processing fee amounting to Rs. 75,000/- (25% of the total fee) through NEFT No. 000086304288 dated 21.04.20 w.r.t the project cost of Rs 30 Crores.

The application was scrutinized & Essential Details were sought to which project proponent replied vide Email dated 30.04.2020, 06.07.2020 and 21.07.20 respectively.

## **2.0 Deliberations during the 191st meeting of SEAC held on 04.03.2020**

The meeting was attended by Sh. Pawan Kumar Bansal, Director of the company through Video Conference and Sh .Sh. Sital Singh, EIA Coordinator, M/s CPTL, Mohali.

During the meeting, the project proponent submitted that earlier, an application for issuance of TOR having proposal no. SIA/PB/IND/51066/2020 was applied online and the said case was accepted on 22/07/2020. After accepting the case, online Auto TORs were generated through Parivesh Portal inconsonance with OM dated 17.02.2020 issued by the MoEF&CC, New Delhi. The Auto TOR was generated because the project proponent in the column no. 30 of Form-I, has mentioned that the project is located in the notified industrial area however, later on it was found that the project site does not fall in the notified industrial area, which was agreed by the Project proponent.

Thereafter, new application having proposal no SIA/PB/IND/55021/2020 has been submitted on 23.07.2020 for issuance of Terms of Reference with same salient features. A request letter dated 23.07.2020 regarding withdrawal of old application having proposal no

SIA/PB/IND/51066/2020 and consideration of above-mentioned new application in the 191<sup>st</sup> meeting of SEAC scheduled on 24.07.2020 has been submitted. The project proponent has also requested to consider the same processing fee, which was deposited for the old application. SEAC accepted the request of the project proponent.

SEAC was further apprised that Environmental Engineer, PPCB, RO, Fatehgarh Sahib was requested vide email dated 07.07.2020 to send the construction status of the project site. Accordingly, he replied vide email dated 10.07.2020 that the industry was visited by its AEE on 10.07.2020 and it was observed as under:-

S.No.	Point	Reply
1.	Construction status of the industry in the project area. Also attached the photographs of the project sites.	Construction status of the industry in the project area (30.620067, 76.32352) is following:  The proposed site of the industry is a vacant agriculture land (paddy grown field) and there is no construction work observed during the visit. Also photographs taken during the visit submitted.
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.	It is submitted that, there are no specific siting guidelines framed by Punjab Pollution Control Board for such type of industry i.e Induction furnace unit. However, this office has received change of land use certificate from agricultural to Industrial vide Senior Town Planner, SAS Nagar letter no. 188-193-STP(S)/SS-11(F1) dated 05.02.2020 for Khasra No. 19//19, 19//18, 19//17, 19//16/2/1/2, 19//16/2/2, 19//21, 19//22, 19//23, 19//24, 18//25/1/2, 18//25/2/1/1, 19//25/1/2, 18//16min., 19//20 i.e total land area of 8.62 acres.

Environmental Consultant of the promoter company submitted the presentation for new proposal incorporating the EDS reply submitted with the old proposal, which was taken on record. As per the presentation, the details of the salient features of the project are as under:

Sr. No.	Description	Details
1.	Online Proposal No.	SIA/PB/IND/51066/2020 (Old) SIA/PB/IND/55021/2020 (new)
2.	Name and Location of the project	M/s Pawanputra Steels Pvt. Ltd. at Village-Wajirabad, Sirhind Side, Tehsil & District Fatehgarh Sahib (Punjab)

3.	Nature of project (Fresh EC/EC for Expansion/New)	Fresh EC
4.	a) Category b) Activity (As per schedule appended to EIA Notification, 2006 as amended time to time.)	(a) B1 (b) 3(a) Metallurgical Industries (ferrous & non ferrous)
5.	Whether project falls within 5km from the boundary of critically polluted area (Yes/No)	No
6.	Co-ordinates of the project site (Latitude & Longitude) :	Latitude : 30°37'11.05"N 30°37'10.92"N 30°37'07.32"N 30°37'08.14"N Longitude: 76°19'20.62"E 76°19'32.45"E 76°19'20.17"E 76°19'32.44"E
7.	Classification/Land use pattern as per Master Plan	The site falls in Medium & heavy Industry zone as per master plan (2010-31) of Mandi Gobindgarh.
8.	Details of CLU certificate	Industrial as per CLU granted vide memo no 185 STP(S)/SS-11 (F-1) dated 05.02.2020 for land area measuring 8.62 acres having Khasra no. 19//19, 19//18, 19//17, 19//16/2/1/2, 19//16/2/2, 19//21, 19//22, 19//23, 19//24, 18//25/1/2, 18//25/2/1/1, 19//25/1/2, 18//16 min, 19//20.
9.	Copy of memorandum of Article & Association/ partnership deed/undertaking of sole proprietorship/ list of Directors and names of other persons responsible for managing day to day affairs of the project.	Submitted

10	a) Is the project covered under PLPA, 1900, if No but located near to PLPA area then the project proponent is required to submit NOC from the concerned DFO to the effect that project area does not fall under the provision of PLPA Act, 1900. b) b. Is the project covered under PLPA,1900, if yes then Status of the NOC w.r.t PLPA,1900.	Project proponent submitted an undertaking to the effect that the project does not cover under PLPA, 1900
11	The project proponent is required to submit either documentary proof of the distance of Bir Bhadson Wildlife Sanctuary from project site.	Project proponent submitted black & white copy of toposheet with marked location Bir Bhadson wildlife sanctuary as 13 km away from project.
12	No. of Working Days/Annum	330 days in a year
13	No. of working Hrs/Day	21 hrs/day
14	Manpower	150
15	Details of block as per CGWA guideline (Notified/ Non Notified area) in which project site is located	The project site falls in Sirhind Block which is Non-notified area as per CGWA guidelines.
16	Project Area Details:	
	S. No.	Land
	1.	8.62
	2.	1.50
17	Total project cost	Rs. 30 Crores
18	Raw Material requirement	
	S.No.	Quantity (TPA)
	1.	1,56,816
	2.	39,204
19	Production Capacity	
	S.No.	Total Production (TPA)
	1.	1,78,200
	2.	1,70,000
	*No. Of working days : 330days/ Annum	
20	Details of major productive machinery/plant	
	S.No.	Machinery/plant
	1.	3X15TPH
	2.	01 No.
	3.	01 No.

21	Water Requirements & its source :				
	S. No.	Description	Total water demand (KLD)		
	1.	Domestic water demand	7		
	2.	Make up water demand for cooling purpose	38		
	Total		45		
	Sources of water:				
	Sr. 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 from STP		
22	Power Requirement with source		16 MW ; Source - PSCPCL		
23	Details of Effluent				
	Sr. No.	Details	Effluent generation (KLD)	Details of existing & proposed Effluent Control Device	
	i)	Industrial Effluent	Nil	There will be no generation of trade effluent from process	
	ii)	Domestic Effluent	38	Waste water generated from domestic & cooling tower will be treated in STP of 40 KLD capacity.	
24	Details of Emissions				
	Sr. No.	Source	Capacity (TPH)	Chimney Height (m)	Details of proposed Air Pollution Control Device
	i)	Induction Furnace	3X15 TPH	30	Side Suction Hood Spark Arrestor, Bag House, ID Fan (Offline cleaning pulsejet bag filter)
	ii)	D.G. set	500 kVA	2.5m above roof level	Equipped with canopy

25	Details of Hazardous waste and its disposal				
	Sr. No.	Hazardous Waste	Category	Quantity (TPA)	Disposal arrangement
	1.	Gas Cleaning Residue (APCD dust)- Bag filter	35.1	264	Will be sent to authorized recycler for Final Disposal
2.	Used Oil (KLI/annum)	5.1	0.015 kl/hour	Will be sold to the authorized recycler.	
26	Solid waste generation and its disposal(After expansion)				
	Sr. No.	Solid Waste	Quantity (TPD)		
	(i)	Slag	29.7		

During the meeting, the following observations were made to which project proponent replied as under:

Sr. No	Observations	Reply
1	As to whether 33% green area proposed in consonance with the requirement of MoEF	<p>PP submitted that the competent authority has granted CLU for land measuring 8.62 Acre with one of the condition that a strip of 29' wide is to be kept out of plot measuring 34997.67 m<sup>2</sup> for any future widening of adjoining public road.</p> <p>Accordingly, an area measuring 2749.74 m<sup>2</sup> has been left out, thereby considering only the remaining area of 32247.93 m<sup>2</sup> for layout, of which 33% i.e. 10650.55m<sup>2</sup> may be considered for green belt.</p> <p>SEAC was not satisfied with the reply of the project proponent and asked to submit the revised layout proposing 33% of the green area w.r.t 8.62 Acres land for which EC has been applied.</p>

		Accordingly, the project proponent submitted the revised layout plan which was taken on record.
2)	<p>Environmental Consultant informed that they had conducted baseline monitoring from March 2018 to May 2018 for M/s Salasar casting which is closely located with proposed project site. He requested to kindly accept the study as per the OM dated 29.08.2017 issued by the MoEF&amp;CC, New Delhi.</p> <p>To this, SEAC queried to the project proponent that how far site is located from the M/s Salasar casting</p>	He stated that the site is located within 2 Km from the M/s Salasar casting. SEAC accepted the request of the environmental consultant. However, it was decided that 01 months additional study shall be carried out with effect from 16.09.2020.

### 3.0 Recommendations

After detailed deliberations, it was decided to recommend to SEIAA as under:

- i) The request of project proponent regarding withdrawal of old application having proposal no SIA/PB/IND/51066/2020 dated 23.07.2020, be accepted.
- ii) The project is categorized under Activity 3(a); B-1 with public consultation. Terms of Reference for preparing Environmental Impact Assessment (EIA) report in reference to the new application having proposal no SIA/PB/IND/55021 /2020 be issued to the project proponent as under: -

#### A. STANDARD TERMS OF REFERENCE

##### 1) Executive Summary

Report in about 8-10 pages incorporating the following:

- (i) Project name and location (Village, Distt., State, Industrial Estate (if applicable))
- (ii) Products and capacities. If expansion proposal, then existing products with capacities and reference to earlier EC.
- (iii) Requirement of land, raw material, water, power, fuel, with source of supply (Quantitative)
- (iv) Process description in brief, specifically indicating the gaseous emission, liquid effluent and solid and hazardous wastes.

- (v) Measures for mitigating the impact on the environment and mode of discharge or disposal.
- (vi) Capital cost of the project, estimated time of completion
- (vii) Site selected for the project - Nature of land - Agricultural (single/double crop), barren, Govt./private land, status of its acquisition, nearby (in 2-3 km.) water body, population, within 10 km other industries, forest, eco-sensitive zones, accessibility, (note - in case of industrial estate this information may not be necessary)
- (viii) Baseline environmental data - air quality, surface and groundwater quality, soil characteristic, flora and fauna, socio-economic condition of the nearby population Identification of hazards in handling, processing and storage of hazardous material and safety system provided to mitigate the risk.
- (ix) Identification of hazards in handling, processing and storage of hazardous material and safety system provided to mitigate the risk
- (x) Likely impact of the project on air, water, land, flora-fauna and nearby population
- (xi) Emergency preparedness plan in case of natural or in plant emergencies
- (xii) Issues raised during public hearing (if applicable) and response given
- (xiii) CSR/CER plan with proposed expenditure.
- (xiv) Occupational Health Measures
- (xv) Post Project monitoring plan
- (xvi) Synopsis of the project (as available on web site i.e. [www.pbdecc.gov.in](http://www.pbdecc.gov.in))

## 2) Introduction

- (i) Details of the EIA Consultant including NABET accreditation
- (ii) Information about the project proponent
- (iii) Importance and benefits of the project

## 3) Project Description

- (i) Cost of project and time of completion.
- (ii) Products with capacities for the proposed project.
- (iii) If expansion project, details of existing products with capacities and whether adequate land is available for expansion, reference of earlier EC if any.
- (iv) List of raw materials required and their source along with mode of transportation.
- (v) Other chemicals and materials required with quantities and storage capacities.



- (vi) Details of Emission, effluents, hazardous waste generation and their management.
- (vii) Requirement of water (breakup for induction and rolling mill), power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract).
- (viii) Process description along with major equipment and machineries, process flow sheet (quantitative) from raw material to products to be provided
- (ix) Hazard identification and details of proposed safety systems.
- (x) In case of Expansion/modernization proposals:
  - a) Status of compliance of Consent to Operate for the ongoing /existing operation of the project from SPCB shall be attached with the EIA-EMP report.
  - b) In case the existing project has not obtained environmental 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 SPCB shall be submitted.

#### 4) Site Details

- (i) Location of the project site covering village, Taluka / Tehsil, District and State, Justification for selecting the site, whether other sites were considered. Copy of Master Plan indicating a land use pattern of the site is in conformity of proposals of Master Plan shall be attached with EIA report.
- (ii) A top sheet of the study area of radius of 10 km and site location on 1:50,000/1:25,000 scale on an A3/A2 sheet. (Including all eco-sensitive areas and environmentally sensitive places)
- (iii) Details w.r.t. option analysis for selection of site.
- (iv) Co-ordinates (lat-long) of all four corners of the site.
- (v) Google map-Earth downloaded of the project site
- (vi) Layout maps indicating existing unit as well as proposed unit indicating storage area of raw material, finished products, greenbelt area with marking of tree, Location of STP/ETP, Solid waste storage area, Parking space, Firefighting equipment layout, First aid room, Location of Tube wells, DG Sets & Transformers and any other utilities
- (vii) If located within an Industrial area/Estate/Complex, layout of Industrial Area indicating location of unit within the Industrial area/Estate.

- (viii) Photographs of the proposed and existing (if applicable) plant site. If existing, show photographs of plantation/greenbelt, in particular.
- (ix) Land use break-up of total land of the project site (identified and acquired), government/private - agricultural, forest, wasteland, water bodies, settlements, etc. shall be included. (not required for industrial area)
- (x) A list of major industries with name and type within study area (10 km radius) shall be incorporated. Land use details of the study area.
- (xi) Geological features and Geo-hydrological status of the study area shall be included.
- (xii) Details of Drainage of the project up to 5km radius of study area. If the site is within 1 km radius of any major river, peak and lean season river discharge as well as flood occurrence frequency based on peak rainfall data of the past 30 years. Details of Flood Level of the project site and maximum Flood Level of the river shall also be provided. (mega green field projects)
- (xiii) Status of acquisition of land. If acquisition is not complete, stage of the acquisition process and expected time of complete possession of the land.
- (xiv) R&R details in respect of land in line with state Government policy

5) Forest and wildlife related issues (if applicable):

- (i) Permission and approval for the use of forest land (forestry clearance), if any, and recommendations of the State Forest Department. (if applicable).
- (ii) Land use map based on High resolution satellite imagery (OPS) of the proposed site delineating the forestland (in case of projects involving forest land more than 40 ha).
- (iii) Status of Application submitted for obtaining the stage I forestry clearance along with latest status shall be submitted.
- (iv) The projects to be located within 10 km of the National Parks, Sanctuaries, Biosphere Reserves, Migratory Corridors of Wild Animals, the project proponent shall submit the map duly authenticated by Chief Wildlife Warden showing these features vis-a-vis the project location and the recommendations or comments of the Chief Wildlife Warden-thereon.
- (v) Wildlife Conservation Plan duly authenticated by the Chief Wildlife Warden of the State Government for conservation of Schedule I fauna, if any exists in the study area.
- (vi) Copy of application submitted for clearance under the Wildlife (Protection) Act, 1972, to the Standing Committee of the National Board for Wildlife.

6) Environmental Status

- (i) Determination of atmospheric inversion level at the project site and site specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall.
  - (ii) AAQ data (except monsoon) at 8 locations for PM 10, PM2.5, SO<sub>2</sub>, NO<sub>x</sub>, CO and other parameters relevant to the project shall be collected. The monitoring stations shall be based CPCB guidelines and take into account the pre dominant wind direction, population zone and sensitive receptors including reserved forests.
  - (iii) Raw data of all AAQ measurement for 12 weeks of all stations as per frequency given in the NAQPM Notification of Nov. 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.
  - (iv) Surface water quality of nearby River (100m upstream and downstream) and other surface drains at eight locations as per CPCB/MoEF& CC guidelines.
  - (v) Whether the site falls near to polluted stretch of river identified by the CPCB/MoEF& CC.
  - (vi) Groundwater monitoring at minimum at 8 locations shall be included.
  - (vii) Noise levels monitoring at 8 locations within the study area.
  - (viii) Soil Characteristic as per CPCB guidelines.
  - (ix) Traffic feasibility / serviceability study for at least 3 days based on Indian Standard Codes. Further it shall also include the details of cross section of the road on which industry is located, vehicles movement w.r.t. the industry, traffic load of other vehicles on the road incorporating the haulage time for the vehicles for loading/unloading within the premises and parking requirement to avoid the traffic congestions on the link and adjoining roads. Traffic study shall be conducted considering the traffic of the industries located in the vicinity.
  - (x) 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. If Schedule-I fauna are found within the study area, a Wildlife Conservation Plan shall be prepared and furnished.
  - (xi) Socio-economic status of the study area.
- 7) Impact Assessment and Environment Management Plan
- (i) Assessment of ground level concentration of pollutants from the stack emission based on site-specific meteorological features. In case the project is located on a hilly terrain, the AQIP Modeling shall be done using inputs of the specific terrain characteristics for determining the potential impacts of the project on the AAQ. Cumulative impact of all sources of emissions (including transportation) on the AAQ of the area shall be well assessed. Details of the model used and the input data used for modeling shall also be provided. The

- air quality contours shall be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any.
- (ii) Water Quality modelling.
  - (iii) Impact of the transport of the raw materials and end products on the surrounding environment shall be assessed and provided. In this regard, options for transport of raw materials and finished products and wastes (large quantities) by rail or rail-cum road transport or conveyer-cum-rail transport shall be examined.
  - (iv) A note on treatment, recycling and reuse of wastewater from different plant operations, extent for different purposes shall be included. Complete scheme of effluent treatment. Characteristics of untreated and treated effluent to meet the prescribed standards of discharge under EPA Rules.
  - (v) Details of stack emission and action plan for control of emissions to meet standards.
  - (vi) Measures for fugitive emission control
  - (vii) Details of hazardous waste generation and their storage, utilization and disposal. Copies of MOU regarding utilization of solid and hazardous waste shall also be included. EMP shall include the concept of waste-minimization, recycle/reuse/recover techniques, Energy conservation, and natural resource conservation.
  - (viii) Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 2009. A detailed plan of action shall be provided.
  - (ix) Action plan for the green belt development in 33 % area with not less than 1,500 trees per hectares giving details of species, width of plantation, planting schedule, post plantation maintenance plan for 3 years shall be included. The green belt shall be around the boundary and a scheme for greening of the roads used for the project shall also be incorporated
  - (x) Action plan for rainwater harvesting measures at alternative sites shall be submitted to harvest rainwater from the roof tops and storm water drains to recharge the groundwater and also to use for the various activities to conserve freshwater and reduce the water requirement from other sources.
  - (xi) Total capital cost and recurring cost/annum for environmental pollution control measures shall be included.
  - (xii) Action plan for post-project environmental monitoring shall be submitted.
  - (xiii) Onsite and Offsite Disaster (natural and Man-made) Preparedness and Emergency Management Plan including Risk Assessment and damage control. Disaster management plan should be linked with the District Disaster Management Plan.
- 8) Occupational health

- (i) Details of existing Occupational & Safety Hazards. What are the exposure levels of above-mentioned hazards and whether they are within the Permissible Exposure Level (PEL)? If these are not within PEL, what measures the company has adopted to keep them within PEL so that the health of the workers can be preserved,
  - (ii) Details of exposure specific health status evaluation of worker. If the workers' health is being evaluated by pre-designed format, chest x rays, Audiometry, Spirometry, Vision testing (Far & Near vision, colour vision and any other ocular defect) ECG, during pre-placement and periodical examinations give the details of the same. Details regarding last month analyzed data of above-mentioned parameters as per age, sex, duration of exposure and department wise.
  - (iii) Annual report of the health status of workers with special reference to Occupational Health and Safety.
  - (iv) Plan and fund allocation to ensure the occupational health & safety of all contract and casual workers.
- 9) Corporate Environment Policy
- (i) 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.
  - (ii) Does the Environment Policy prescribe for standard operating processes/procedures to bring into focus any infringement/deviation/violation of the environmental or forest norms/conditions? If so, it may be detailed in the EIA.
  - (iii) What is the hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions? Details of this system may be given.
  - (iv) Does the company have a system of reporting of non-compliances / violations of environmental 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
- 10) Details regarding infrastructure facilities such as sanitation, fuel, restroom, etc. to be provided to the labour force during construction as well as to the casual workers including truck drivers during the operation phase.
- 11) Enterprise Social Commitment (ESC)
- (i) To address the Public Hearing issues, 2.5% of the total project cost of (Rs. \_\_\_crores), amounting to Rs. \_\_\_crores, shall be earmarked by the project proponent, towards Enterprise Social Commitment (ESC). Distinct ESC projects shall be carved out based on the local public hearing issues. Project estimate shall be prepared based on PWD schedule of rates for each distinct Item and schedule for time-bound action plan shall be prepared. These ESC projects as indicated by the project proponent shall be implemented along with the main project. Implementation of such program shall be ensured by constituting a

Committee comprising of the project proponent, representatives of village Panchayat & District Administration. Action taken report in this regard shall be submitted to the Ministry's Regional Office. No free distribution/donations and or free camps shall be included in the above ESC budget

- 12) 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.
- 13) A tabular chart with index for points wise compliance of above TORs.

**B. STANDARDISED SPECIFIC TERMS OF REFERENCE FOR EIA STUDIES FOR INDUCTION/ ARC FURNACES/CUPOLA FURNACES 5TPH OR MORE**

- (i) Details of proposed layout clearly demarcating existing & proposed features of the project within the plant.
- (ii) Total no. of furnaces & details including capacity of each furnace.
- (iii) Detail of the mechanical shredder to reduce the size of the raw material.
- (iv) Complete process flow diagram describing each unit, its processes, and operations, along with material and energy inputs and outputs (material and energy balance).
- (v) Details on the design and manufacturing process for all the units.
- (vi) Details on environmentally sound technologies for recycling of hazardous materials, as per CPCB Guidelines, may be mentioned in case of handling scrap and other recycled materials.
- (vii) Details on the requirement of raw materials, its source, and storage at the plant.
- (viii) Details on the requirement of energy and water along with its source and authorization from the concerned department. Location of water intake and outfall points (with coordinates).
- (ix) Details on toxic metal content in the waste material and its composition and end-use (particularly of slag).
- (x) Details on toxic content (TCLP), composition and end-use of chrome slag. Details on the recovery of the Ferro chrome from the slag and its proper disposal.

**C. ADDITIONAL SPECIFIC TORS DECIDED DURING MEETING OF SEAC**

- (i) Public consultation is required for the projects as not located in notified industrial parks/estates.

- (ii) Environmental Consultant of the promoter company shall carry out the baseline study for one additional month from 16.09.2020 (except monsoon season), which includes at least three days of traffic study.
- (iii) Submit 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)
- (iv) Submit dully filled prescribed field data sheets and analysis reports along with exact location of sampling / monitoring point marked on the layout map. Also submit the status of approvals of Laboratories.
- (v) Submit cost of the project duly certified by Chartered Engineer/ Approved valuer / Chartered Accountant. In the absence of above, the project proponent may submit self-certified detail of cost of the project mentioning the cost of Land, building, infrastructure and plant & machinery
- (vi) Certificate from the concerned authority w.r.t the location of protected areas as notified under the Wildlife Protection Act, 1972 within 5 km radius from the boundary of the project site.
- (i) Certificate from the Department of Town & Country Planning or concerned authorities to support the claim made by project proponent that the project site is located in the industrial zone as per the provisions of Master Plan of Town/City in the jurisdiction of which the project site is located.
- (vii) Compliance of the siting criteria, standard operating practices, code of practice, and guidelines if any prescribed by the SPCB/CPCB/MoEF&CC for such type of units.
- (viii) Necessary permissions from the Central Groundwater Authority (CGWA)/ State Groundwater Authority (SGWA)/concerned authority for the abstraction of groundwater for the existing requirements as well as for the expanded unit. In case of not allowing such permission by the concerned authority for the abstraction of additional groundwater for the expanded project, the project proponent shall propose alternative arrangements to meet out the additional water requirements. It shall be ensured that: -
  - a) In the projects where groundwater is proposed as a water source, the project proponent shall apply to the Central Groundwater Authority (CGWA)/ State Groundwater Authority (SGWA), as the case may be, for obtaining No Objection Certificate (NOC) if applicable.
  - b) Approval /permission of the CGWA/SGWA shall be obtained before drawing groundwater for the project activities.
  - c) In the absence of approval, submit a copy of acknowledgment along with a set of application filed to CGWA /Competent Authority for obtaining permission for the abstraction of groundwater

- (ix) Minimize the water consumption in the steel plant complex by segregation of used water, practicing cascade use and by recycling treated water.
- (x) STP for treatment of wastewater & re-utilization 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) 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) In case of any acid pickling activity, the spent acid/effluents generated from such activities shall be utilized through authorized re-processors for converting the same into useful by-products like FeSO<sub>4</sub> etc. An agreement to this effect shall be made with the authorized agencies.
- (xiii) Adequate area to be reserved and marked on the layout plan for the green belt as per the conditions laid down by the MoEF&CC as per the Standard EC Conditions prescribed for Induction/ Electric Arc Furnace & Rolling Mills circulated vide OM dated 09/08/2018.
- (xiv) Detailed study report along with calculation for reserving 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 incorporating 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.
- (xv) Action plan for the compliance of standard operating procedures and up-gradation of suction and treatment arrangement for the secondary emissions as prescribed by the State Pollution Control Board or by CPCB/MoEF&CC.
- (xvi) Compliance of standard operating procedures and up-gradation of suction/treatment systems for the control of secondary emissions within the time frame prescribed by the State Pollution Control Board. Similar action is to be implemented in the proposed expansion project.
- (xvii) Whole of the vehicle movement area as well as the 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.
- (xviii) The vehicles to be used for loading/unloading purposes shall not be parked along the roadside so as to avoid the traffic congestion and dedicated parking place to be provided for the same.
- (xix) 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.

- (xx) Use of natural gas (if available) as substitute fuel wherever possible in the existing industry/ for the expansion project.
- (xxi) Delineate the concrete proposal regarding activities to be undertaken under Corporate Environmental Responsibility indicating the followings: -
  - i) various activities to be undertaken as per the provision of OM dated 01.05.2018
  - ii) proportionate provisions of funds,
  - iii) the period in which CER activities is to be implemented
  - iv) the person(s) responsible for the implementation.
- (xxii) Submit compliance w.r.t. condition no.II [(i) & (iii)] subtitled as "Air Quality Monitoring & Preservation" regarding continuous emission monitoring system and continuous ambient air quality monitoring as prescribed in the Standard EC Conditions for Induction/ Electric Arc Furnace & Rolling Mills issued by the MoEF&CC, New Delhi vide OM dated 09/08/2018.
- (xxiii) Examine and submit the proposal for: -
  - a) Recovery of iron from slag before disposing of it.
  - b) Identify the areas for utilization of slag in a scientific manner and explore its usage in cement/construction industry/manufacturing of pavers & tiles/road laying etc.
  - c) Recovery of precious metals like Zinc, lead and iron etc. from the APCD dust (Hazardous waste) through authorized re-processor.
- (xxiv) Air Pollution Control Arrangement details shall be provided as below:

Plant /Unit	Pollutants	Qty generated	Method used to Control /specifications (attach Separate Sheet to furnish Details)	Number of units planned & Capacity	Budget	Estimated Post Control Qty Pollutant	
						Per Unit	Per day

- (xxv) Submit compliance regarding the installation of Pulse jet bag filter with offline cleaning technology as APCD with the proposed induction furnace.
- (xxvi) List the species with heavy foliage, broad leaves and wide canopy cover. The landscape planning should include plantation of native species. Water intensive and/or invasive species should not be used for landscaping.

- (xxvii) Examine the quantity of hazardous waste for category 5.1 & 35.1 generated from the unit and shall submit its disposal arrangements.
- (xxviii) Examine the source of water to meet the requirement of green area in the summer season.

The following general points shall be noted:

- (i) The EIA document shall be printed on both sides, as far as possible.
- (ii) All documents shall be properly indexed, page numbered.
- (iii) Period/date of data collection shall be clearly indicated.
- (iv) The letter/application for environmental clearance shall quote the MOEF / SEIAA file No. and also attach a copy of the letter.
- (v) The copy of the letter received from the Ministry / SEIAA shall be also attached as an annexure to the final EIA-EMP Report.
- (vi) The index of the final EIA-EMP report must indicate the specific chapter and page no. of the EIA-EMP Report.
- (vii) While preparing the EIA report, the instructions for the proponents and instructions for the consultants issued by MOEF vide notification dated 03.03.2016 which is available on the website of this Ministry shall also be followed.
- (viii) The consultants involved in the preparation of EIA-EMP report after accreditation with Quality Council of India (QCI) /National Accreditation Board of Education and Training (NABET) would need to include a certificate in this regard in the EIA-EMP reports prepared by them and data provided by other organization/Laboratories including their status of approvals etc. Name of the Consultant and the Accreditation details shall be posted on the EIA-EMP Report as well as on the cover of the Hard Copy of the Presentation material for EC presentation.

The Terms of Reference (ToR) prescribed by the State Expert Appraisal Committee (SEAC), Punjab should be considered for the preparation of EIA / EMP report for the project in addition to all the relevant information as per the Generic Structure of EIA given in Appendix III and IIIA in the EIA Notification, 2006.

Where the documents provided are in a language other than English, an English translation shall be provided. The draft EIA-EMP report shall be submitted to the State Pollution Control Board of the concerned State for the conduct of Public Hearing. The SPCB shall conduct the Public Hearing/public consultation, district-wise, as per the provisions of EIA notification, 2006. The Public Hearing shall be chaired by an Officer, not below the rank of Additional District Magistrate. The issues raised in the Public Hearing and during the consultation process and the commitments made by the project proponent on the same shall be included separately in EIA-EMP Report in a separate chapter and

summarized in a tabular chart with financial budget (capital and revenue) along with time-schedule of implementation for complying with the commitments made.

If any part of the data/information submitted by the project proponent is found to be false or misleading at any stage, then SEIAA & SEAC will not be responsible for the expenditure incurred on the project due to issuance of this ToR or subsequent work carried out by the project proponent for conducting EIA study or for any other activity related to the project.

The 'Terms of Reference' (TORs) prescribed will be valid for a period of three years from its issuance. The final EIA report shall be submitted to the SEIAA, Punjab for obtaining environmental clearance.

**Item No. 191.11 Application for issuance of TORs for manufacturing of 1,05,000 TPA of Alloys/Non Alloys Steel Billets/Ingots and 1,00,000 TPA of Structural Steel (Round, Coil, Flats, Wire Rod, TMT Bars) by upgrading existing furnace to 10TPH, addition of one no. IF of capacity 15TPH, a Concast and a Rolling Mill having capacity 15TPH respectively at Village-Bhagwanpura, Dehlon Road, Tehsil- Ludhiana East, District-Ludhiana, Punjab by M/s J.N. Tayal Steels Pvt. Ltd. (Proposal No. SIA/PB/IND/46655/2019)**

SEAC observed that

### **1.0 Background**

The project proponent has applied for issuance of TORs for installing two Induction Furnaces of capacity 1×15 TPH & 1 x 10 TPH by replacing induction furnaces of 1x 8 TPH, and a concast machine for manufacturing of Steel Ingots/Billets with capacity 1,05,000 TPA & installing a Rolling Mill for manufacturing Round, Coil, Flats, Wire rod, TMT Bars with capacity of 1,00,000 TPA to M/s J.N. Tayal Steels Pvt. Ltd. located at Village- Bhagwanpura, Dehlon Road, Tehsil- Ludhiana East, District- Ludhiana, Punjab. The Project is covered under Activity 3(a) & Category 'B1'.

The project proponent submitted the Form I, Pre-feasibility report and other additional documents on online portal. He has also deposited the processing fee amounting to Rs. 32,275/- (25% of the total fee) through NEFT No. SBIN20071284811 dated 11.03.20. w.r. t Rs. 12.91 crores.

The application was scrutinized & Essential Details were sought to which project proponent replied vide Email dated 12.03.20, 03.06.20 and 21.07.20 respectively.

### **2.0 Deliberations during the 191st meeting of SEAC held on 04.03.2020**

The meeting was attended by Sh. Jitin Tayal, Director of the company through Video Conference and Sh .Sh. Sital Singh, EIA Coordinator, M/s CPTL, Mohali.

Environmental Engineer, PPCB, RO 4, Ludhiana was requested vide email dated 31.12.2019 and 03.02.20 to send the construction status of the project site. Accordingly, they replied vide letter dated 17.03.20 that the industry was visited on 16.03.20 and it was observed as under:-

Sr. No.	Description of points	Reply
1	Construction /installation status of the expansion proposal of the proposed project of the industry	No construction activity regarding expansion of the industry is in progress at site.
2	As to whether existing production is less than 30000 TPA. Please send the detailed report.	The computerized record of production of the industry w.e.f April, 2019 to Feb, 2020 has been collected during visit and as per the record of the industry, the total production of the industry since April, 2019 is 27464 Ton.
3.	Distance of unit from the boundary of MC limit and Critically Polluted Area	As per the DTP, Ludhiana letter no. 3684 DTP(L)/M2A dated 26.11.2019, the site of the industry is located at a distance 6.2 KM from the MC limit and the site of the industry falls in Medium & Heavy industry zone as per notified Master Plan, Ludhiana (2007-2021)
4.	Status of physical structures within 500 m radius of the site including the status of industries, if any.	There are 18 no. industries are located within the 500 m radius of the site of the industry
5.	Status of consents issued to existing unit under the Air Act, 1981 and the Water Act, 1974.	The industry was granted consent to operate under the Water Act, 1972 vide no. CTOW/Fres/LDH4/2019/9761041 dated 28.06.2019 which is valid upto 30.06.2023 and under the Air Act, 1981 vide no. CTOA/Fresh/LDH4/2019/9760969 dated 28.06.2019 which expired on 27.12.2019. The industry has also applied for renewal of consent to operate under Air Act, 1981 which is under process.
6	As the whether, the existing unit complying with condition of consent to	Yes

	operate under Air Act, 1981 and Water Act, 1973 granted to it.	
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Environmental Consultant of the promoter company submitted the presentation for new proposal, which was taken on record. As per the presentation, the details of the salient features of the project are as under:

Sr. No.	Description	Details
1.	Online Proposal No.	SIA/PB/IND/46655/2019
2.	Name and Location of the project	M/s J.N. Tayal Steels Pvt. Ltd. at Village-Bhagwanpura, Dehlon road, Tehsil- Ludhiana east, District- Ludhiana
3.	In case of expansion projects, whether granted EC earlier, if Yes, then provide its details	It is an expansion project. But due to existing capacity of 29,610 TPA, earlier EC was not required.
4.	Nature of project (Fresh EC/EC for Expansion/New)	Fresh EC
5.	a) Category b) Activity (As per schedule appended to EIA Notification, 2006 as amended time to time.)	(a) B1 (b) 3(a) Metallurgical Industries (ferrous & non ferrous)
6.	Whether project falls within 5km from the boundary of critically polluted area (Yes/No)	The project site is located at distance of 6.20 km from MC Limit Ludhiana. Distance certificate vide letter no.- 3684DTP(L)/M2A dated 26/11/2019 obtained from District Town Planner, Ludhiana has been submitted
7.	Details of Consent to operate under (Air/Water Act) of existing project	Consent to operate under (Air/Water Act) has been submitted
8.	Existing production Capacity (TPA)	Alloys/Non alloys Steel Ingots- 29,610 TPA
9.	Details TOR processing fee submitted (25% of the total project cost)	25% of the total project cost i.e. a sum of Rs. 32,275/- has been submitted through RTGS vide UTR No. SBIN120071284811 dated 11.03.20.
10.	Co-ordinates of the project site (Latitude & Longitude) :	<b>Latitude :</b> 30°47'43.57"N 30°47'43.47"N 30°47'41.80"N 30°47'41.80" N <b>Longitude:</b> 75°56'38.92"E 75°56'30.28"E 75°56'30.78"E 75°56'38.87"E

11.	Classification/Land use pattern as per Master Plan	The site falls in Industrial zone as per master plan (2007-21)		
12.	Details of CLU certificate	CLU has been obtained vide memo no.- 890 STP(L)/TW-12A dated 10/03/2010 for land Area 1.86 Acres having Khasra no. 18/18,4//21/2,22/2,5//4/2,7,14,17,18,23,24,25 / ,6//3/1,4/1,5,6/1,7/1,7//1,2,9/1,10/1 As per CLU record, the site falls in Medium & heavy Industry zone as per master plan (2007-21).		
13.	Copy of memorandum of Article & Association/ partnership deed/undertaking of sole proprietorship/ list of Directors and names of other persons responsible for managing day to day affairs of the project.	Submitted copy of memorandum		
14.	No. of Working Days/Annum	350 days in a year		
15.	No. of working Hrs/Day	21 hrs/day		
16.	Manpower (Existing & After expansion)	Existing - 45 Proposed – 55 After Expansion - 100		
17.	Details of block as per CGWA guideline (Notified/ Non Notified area) in which project site is located	The project site falls in Samrala Block which is Non-notified area as per CGWA guidelines.		
18.	Project Area Details as per Pre-Feasibility report :			
	S.no.	Details	Existing Land	Proposed Additional Land
	1.	Plot Area (in sqm as per registry)	11533	---
				Total land after Expansion
				11533 (2.85 Acre)
19.	Total Project cost	Rs. 12.91 Crore		
20.	Raw Material requirement as per following format:			
	S.No.	Product name	Existing (TPA)	Proposed (TPA)
	1.	MS Scrap	32,500	82,900
	2.	Ferro Alloys	1050	3,150
				After Expansion (TPA)
				1,15,400
				4,200

21.	Production Capacity as per following format :				
	S.No.	Product name	Existing (TPA)	Proposed (TPA)	After Expansion (TPA)
	1.	Alloy/ Non alloy Steel Billets/Ingots	29,610	75,390	1,05,000
2.	Structural Steel (Round, Coil, Flats, Wire rod, TMT bars)	Nil	1,00,000	1,00,00	
22.	Details of major productive machinery/plant				
	S.No.	Particulars	Existing	Proposed	After Expansion
	1.	Induction Furnace	1X8 TPH	Existing 8TPH will be upgraded to 10TPH, 1X15 TPH	1X10 TPH 1X15 TPH
	2.	Rolling Mill	Nil	1 No. (15TPH)	1 No. (15TPH)
3.	CCM	Nil	01 No.	01 No.	
23.	Water Requirements & its source :				
	S. No.	Description	Existing water demand (KLD)	Proposed water demand (KLD)	Total water demand (KLD)
	1.	Domestic water demand	4.5	3.0	7.5
	2.	Make up water demand for cooling purpose	8.0	15.0	23.5
	Total		12.5	18.0	30.5
	Sources of water:				
	Sr. 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		
24.	Details of Effluent : The waste water generated from domestic and cooling purposes will be treated through STP of 10 KLD capacity and will be used for plantation as mentioned PFR.				



25.	Details of Hazardous waste and its disposal (After expansion)				
	Sr. No	Hazardous Waste	Category	Quantity (TPD) (After expansion)	Disposal arrangement
	1.	Gas Cleaning Residue (APCD dust)- Bag filter	35.1	0.86	Will be sent to TSDf site or M/s Madhav alloys for final disposal
	2.	Gas Cleaning Residue (APCD dust)- Alkali scrubber	35.1	--	--
3.	Used Oil (kl/annum)	5.1	--	Will be reused as lubricant in the industry y.	
26.	Solid waste generation and its disposal (After expansion)				
	Sr. No.	Solid Waste	Quantity (TPD) (After Expansion)	Disposal arrangement	
(i)	Slag	28.11	Will be sent to approved manufactures of concrete blocks, pavers and tiles.		
27.	Energy Requirements (After expansion)		16000KW Source - PSPCL		

During the meeting, the following observations were made to which project proponent replied as under:

Sr. No	Observations	Reply
1)	Production of the exiting plant is reported 29610 TPA. How many heats per day is taking by the units and accordingly provide the calculations.	Project proponent submitted the computerized record of production of the industry w.e.f April, 2019 to March 2020. As per the said record of the industry, the total production of the industry for a year was 29417.925 MT. He further informed that he was taking total 11 heats in a day and the maximum production, which can be achieved in year considering 330 working days on average basis is $8 \times 11 \times 335 = 29480$ MT.
1	Please provide the details of project area of land to be	The project area to be considered is 2.85 acres as per the registry of land submitted.

	considered and existing and proposed amenities to be marked on the layout plan.	Out of 2.85 acres land, the CLU is granted to 1.85 acre. The CLU of balance 1 acre will be obtained.  The existing and proposed amenities has been marked on the layout plan and same has already been submitted, which was taken on record.
2.	As to whether 33% green area proposed in consonance with the requirement of MoEF	PP submitted that 33% green area will be provided w.r.t 2.85 acres of land.

### 3.0 Recommendations

After detailed deliberations, it was decided to categorize the project under Activity 3(a); B-1 with public consultation as required for the project. The baseline study shall be carried out by Environmental Consultant for full season except monsoon season, which includes at least three days of traffic study. The Committee approved the following Terms of Reference for preparing Environmental Impact Assessment (EIA) report for the proposed project and recommended to SEIAA to issue the following TORs:

#### A. STANDARD TERMS OF REFERENCE

##### 1) Executive Summary

Report in about 8-10 pages incorporating the following:

- (i) Project name and location (Village, Distt., State, Industrial Estate (if applicable))
- (ii) Products and capacities. If expansion proposal, then existing products with capacities and reference to earlier EC.
- (iii) Requirement of land, raw material, water, power, fuel, with source of supply (Quantitative)
- (iv) Process description in brief, specifically indicating the gaseous emission, liquid effluent and solid and hazardous wastes.
- (v) Measures for mitigating the impact on the environment and mode of discharge or disposal.
- (vi) Capital cost of the project, estimated time of completion
- (vii) Site selected for the project - Nature of land - Agricultural (single/double crop), barren, Govt./private land, status of is acquisition, nearby (in 2-3 km.) water body, population, within 10 km other industries, forest, eco-sensitive zones, accessibility, (note - in case of industrial estate this information may not be necessary)

- (viii) Baseline environmental data - air quality, surface and groundwater quality, soil characteristic, flora and fauna, socio-economic condition of the nearby population Identification of hazards in handling, processing and storage of hazardous material and safety system provided to mitigate the risk.
- (ix) Identification of hazards in handling, processing and storage of hazardous material and safety system provided to mitigate the risk
- (x) Likely impact of the project on air, water, land, flora-fauna and nearby population
- (xi) Emergency preparedness plan in case of natural or in plant emergencies
- (xii) Issues raised during public hearing (if applicable) and response given
- (xiii) CSR/CER plan with proposed expenditure.
- (xiv) Occupational Health Measures
- (xv) Post Project monitoring plan
- (xvi) Synopsis of the project (as available on web site i.e. [www.pbdecc.gov.in](http://www.pbdecc.gov.in))

## 2) Introduction

- (i) Details of the EIA Consultant including NABET accreditation
- (ii) Information about the project proponent
- (iii) Importance and benefits of the project

## 3) Project Description

- (i) Cost of project and time of completion.
- (ii) Products with capacities for the proposed project.
- (iii) If expansion project, details of existing products with capacities and whether adequate land is available for expansion, reference of earlier EC if any.
- (iv) List of raw materials required and their source along with mode of transportation.
- (v) Other chemicals and materials required with quantities and storage capacities.
- (vi) Details of Emission, effluents, hazardous waste generation and their management.
- (vii) Requirement of water (breakup for induction and rolling mill), power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract).
- (viii) Process description along with major equipment and machineries, process flow sheet (quantitative) from raw material to products to be provided
- (ix) Hazard identification and details of proposed safety systems.
- (x) In case of Expansion/modernization proposals:

- c) Status of compliance of Consent to Operate for the ongoing /existing operation of the project from SPCB shall be attached with the EIA-EMP report.
- d) In case the existing project has not obtained environmental 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 SPCB shall be submitted.

#### 4) Site Details

- (i) Location of the project site covering village, Taluka / Tehsil, District and State, Justification for selecting the site, whether other sites were considered. Copy of Master Plan indicating a land use pattern of the site is in conformity of proposals of Master Plan shall be attached with EIA report.
- (ii) A top sheet of the study area of radius of 10 km and site location on 1:50,000/1:25,000 scale on an A3/A2 sheet. (Including all eco-sensitive areas and environmentally sensitive places)
- (iii) Details w.r.t. option analysis for selection of site.
- (iv) Co-ordinates (lat-long) of all four corners of the site.
- (v) Google map-Earth downloaded of the project site
- (vi) Layout maps indicating existing unit as well as proposed unit indicating storage area of raw material, finished products, greenbelt area with marking of tree, Location of STP/ETP, Solid waste storage area, Parking space, Firefighting equipment layout, First aid room, Location of Tube wells, DG Sets & Transformers and any other utilities
- (vii) If located within an Industrial area/Estate/Complex, layout of Industrial Area indicating location of unit within the Industrial area/Estate.
- (viii) Photographs of the proposed and existing (if applicable) plant site. If existing, show photographs of plantation/greenbelt, in particular.
- (ix) Land use break-up of total land of the project site (identified and acquired), government/private - agricultural, forest, wasteland, water bodies, settlements, etc. shall be included. (not required for industrial area)
- (x) A list of major industries with name and type within study area (10 km radius) shall be incorporated. Land use details of the study area.
- (xi) Geological features and Geo-hydrological status of the study area shall be included.

- (xii) Details of Drainage of the project up to 5km radius of study area. If the site is within 1 km radius of any major river, peak and lean season river discharge as well as flood occurrence frequency based on peak rainfall data of the past 30 years. Details of Flood Level of the project site and maximum Flood Level of the river shall also be provided. (mega green field projects)
  - (xiii) Status of acquisition of land. If acquisition is not complete, stage of the acquisition process and expected time of complete possession of the land.
  - (xiv) R&R details in respect of land in line with state Government policy
- 5) Forest and wildlife related issues (if applicable):
- (i) Permission and approval for the use of forest land (forestry clearance), if any, and recommendations of the State Forest Department. (if applicable).
  - (ii) Land use map based on High resolution satellite imagery (OPS) of the proposed site delineating the forestland (in case of projects involving forest land more than 40 ha).
  - (iii) Status of Application submitted for obtaining the stage I forestry clearance along with latest status shall be submitted.
  - (iv) The projects to be located within 10 km of the National Parks, Sanctuaries, Biosphere Reserves, Migratory Corridors of Wild Animals, the project proponent shall submit the map duly authenticated by Chief Wildlife Warden showing these features vis-a-vis the project location and the recommendations or comments of the Chief Wildlife Warden-thereon.
  - (v) Wildlife Conservation Plan duly authenticated by the Chief Wildlife Warden of the State Government for conservation of Schedule I fauna, if any exists in the study area.
  - (vi) Copy of application submitted for clearance under the Wildlife (Protection) Act, 1972, to the Standing Committee of the National Board for Wildlife.
- 6) Environmental Status
- (i) Determination of atmospheric inversion level at the project site and site specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall.
  - (ii) AAQ data (except monsoon) at 8 locations for PM 10, PM2.5, SO<sub>2</sub>, NO<sub>x</sub>, CO and other parameters relevant to the project shall be collected. The monitoring stations shall be based CPCB guidelines and take into account the pre dominant wind direction, population zone and sensitive receptors including reserved forests.
  - (iii) Raw data of all AAQ measurement for 12 weeks of all stations as per frequency given in the NAQQM Notification of Nov. 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.

- (iv) Surface water quality of nearby River (100m upstream and downstream) and other surface drains at eight locations as per CPCB/MoEF& CC guidelines.
- (v) Whether the site falls near to polluted stretch of river identified by the CPCB/MoEF& CC.
- (vi) Groundwater monitoring at minimum at 8 locations shall be included.
- (vii) Noise levels monitoring at 8 locations within the study area.
- (viii) Soil Characteristic as per CPCB guidelines.
- (ix) Traffic feasibility / serviceability study for at least 3 days based on Indian Standard Codes. Further, it shall also include the details of cross-section of the road on which industry is located, vehicles movement w.r.t. the industry, traffic load of other vehicles on the road incorporating the haulage time for the vehicles for loading/unloading within the premises and parking requirement to avoid the traffic congestions on the link and adjoining roads. Traffic study shall be conducted considering the traffic of the industries located in the vicinity.
- (x) 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. If Schedule-I fauna are found within the study area, a Wildlife Conservation Plan shall be prepared and furnished.
- (xi) Socio-economic status of the study area.

7) Impact Assessment and Environment Management Plan

- (i) Assessment of ground level concentration of pollutants from the stack emission based on site-specific meteorological features. In case the project is located on a hilly terrain, the AQIP Modeling shall be done using inputs of the specific terrain characteristics for determining the potential impacts of the project on the AAQ. Cumulative impact of all sources of emissions (including transportation) on the AAQ of the area shall be well assessed. Details of the model used and the input data used for modeling shall also be provided. The air quality contours shall be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any.
- (ii) Water Quality modelling.
- (iii) Impact of the transport of the raw materials and end products on the surrounding environment shall be assessed and provided. In this regard, options for transport of raw materials and finished products and wastes (large quantities) by rail or rail-cum road transport or conveyor-cum-rail transport shall be examined.
- (iv) A note on treatment, recycling and reuse of wastewater from different plant operations, extent for different purposes shall be included. Complete scheme of effluent treatment. Characteristics of untreated and treated effluent to meet the prescribed standards of discharge under EPA Rules.

- (v) Details of stack emission and action plan for control of emissions to meet standards.
  - (vi) Measures for fugitive emission control
  - (vii) Details of hazardous waste generation and their storage, utilization and disposal. Copies of MOU regarding utilization of solid and hazardous waste shall also be included. EMP shall include the concept of waste-minimization, recycle/reuse/recover techniques, Energy conservation, and natural resource conservation.
  - (viii) Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 2009. A detailed plan of action shall be provided.
  - (ix) Action plan for the green belt development in 33 % area with not less than 1,500 trees per hectares giving details of species, width of plantation, planting schedule, post plantation maintenance plan for 3 years shall be included. The green belt shall be around the boundary and a scheme for greening of the roads used for the project shall also be incorporated
  - (x) Action plan for rainwater harvesting measures at alternative sites shall be submitted to harvest rainwater from the roof tops and storm water drains to recharge the groundwater and also to use for the various activities to conserve freshwater and reduce the water requirement from other sources.
  - (xi) Total capital cost and recurring cost/annum for environmental pollution control measures shall be included.
  - (xii) Action plan for post-project environmental monitoring shall be submitted.
  - (xiii) Onsite and Offsite Disaster (natural and Man-made) Preparedness and Emergency Management Plan including Risk Assessment and damage control. Disaster management plan should be linked with the District Disaster Management Plan.
- 8) Occupational health
- (i) Details of existing Occupational & Safety Hazards. What are the exposure levels of above-mentioned hazards and whether they are within the Permissible Exposure Level (PEL)? If these are not within PEL, what measures the company has adopted to keep them within PEL so that the health of the workers can be preserved,
  - (ii) Details of exposure specific health status evaluation of worker. If the workers' health is being evaluated by pre-designed format, chest x rays, Audiometry, Spirometry, Vision testing (Far & Near vision, colour vision and any other ocular defect) ECG, during pre-placement and periodical examinations give the details of the same. Details regarding last month analyzed data of above-mentioned parameters as per age, sex, duration of exposure and department wise.
  - (iii) Annual report of the health status of workers with special reference to Occupational Health and Safety.

- (iv) Plan and fund allocation to ensure the occupational health & safety of all contract and casual workers.
- 9) Corporate Environment Policy
- (i) 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.
  - (ii) Does the Environment Policy prescribe for standard operating processes/procedures to bring into focus any infringement/deviation/violation of the environmental or forest norms/conditions? If so, it may be detailed in the EIA.
  - (iii) What is the hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions? Details of this system may be given.
  - (iv) Does the company have a system of reporting of non-compliances / violations of environmental 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
- 10) Details regarding infrastructure facilities such as sanitation, fuel, restroom, etc. to be provided to the labour force during construction as well as to the casual workers including truck drivers during the operation phase.
- 11) Enterprise Social Commitment (ESC)
- (i) To address the Public Hearing issues, 2.5% of the total project cost of (Rs.\_\_\_\_crores), amounting to Rs.\_\_\_\_crores, shall be earmarked by the project proponent, towards Enterprise Social Commitment (ESC). Distinct ESC projects shall be carved out based on the local public hearing issues. Project estimate shall be prepared based on PWD schedule of rates for each distinct Item and schedule for time-bound action plan shall be prepared. These ESC projects as indicated by the project proponent shall be implemented along with the main project. Implementation of such program shall be ensured by constituting a Committee comprising of the project proponent, representatives of village Panchayat & District Administration. Action taken report in this regard shall be submitted to the Ministry's Regional Office. No free distribution/donations and or free camps shall be included in the above ESC budget
- 12) 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.
- 13) A tabular chart with index for points wise compliance of above TORs.

**B. STANDARDISED SPECIFIC TERMS OF REFERENCE FOR EIA STUDIES FOR INDUCTION/ ARC FURNACES/CUPOLA FURNACES 5TPH OR MORE**



- (i) Details of proposed layout clearly demarcating existing & proposed features of the project within the plant.
- (ii) Total no. of furnaces & details including capacity of each furnace.
- (iii) Detail of the mechanical shredder to reduce the size of the raw material.
- (iv) Complete process flow diagram describing each unit, its processes, and operations, along with material and energy inputs and outputs (material and energy balance).
- (v) Details on the design and manufacturing process for all the units.
- (vi) Details on environmentally sound technologies for recycling of hazardous materials, as per CPCB Guidelines, may be mentioned in case of handling scrap and other recycled materials.
- (vii) Details on the requirement of raw materials, its source, and storage at the plant.
- (viii) Details on the requirement of energy and water along with its source and authorization from the concerned department. Location of water intake and outfall points (with coordinates).
- (ix) Details on toxic metal content in the waste material and its composition and end-use (particularly of slag).
- (x) Details on toxic content (TCLP), composition and end-use of chrome slag. Details on the recovery of the Ferro chrome from the slag and its proper disposal.

**C. ADDITIONAL SPECIFIC TORS DECIDED DURING MEETING OF SEAC**

- (ii) Public consultation is required for the projects as not located in notified industrial parks/estates.
- (iii) Submit 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)
- (iv) Submit dully filled prescribed field data sheets and analysis reports along with exact location of sampling / monitoring point marked on the layout map. Also submit the status of approvals of Laboratories.
- (v) Submit cost of the project duly certified by Chartered Engineer/ Approved valuer / Chartered Accountant. In the absence of above, the project proponent may submit self-certified detail of cost of the project mentioning the cost of Land, building, infrastructure and plant & machinery
- (vi) Certificate from the concerned authority w.r.t the location of protected areas as notified under the Wildlife Protection Act, 1972 within 5 km radius from the boundary of the project site.

- (xxix) Certificate from the Department of Town & Country Planning or concerned authorities to support the claim made by project proponent that the project site (2.85 acres land) is located in the industrial zone as per the provisions of Master Plan of Town/City in the jurisdiction of which the project site is located otherwise project proponent shall submit the Change of land use of the project site for total land area 2.85 acres.
- (vii) Compliance of the siting criteria, standard operating practices, code of practice, and guidelines if any prescribed by the SPCB/CPCB/MoEF&CC for such type of units.
- (viii) Necessary permissions from the Central Groundwater Authority (CGWA)/ State Groundwater Authority (SGWA)/concerned authority for the abstraction of groundwater for the existing requirements as well as for the expanded unit. In case of not allowing such permission by the concerned authority for the abstraction of additional groundwater for the expanded project, the project proponent shall propose alternative arrangements to meet out the additional water requirements. It shall be ensured that: -
  - a) In the projects where groundwater is proposed as a water source, the project proponent shall apply to the Central Groundwater Authority (CGWA)/ State Groundwater Authority (SGWA), as the case may be, for obtaining No Objection Certificate (NOC) if applicable.
  - b) Approval /permission of the CGWA/SGWA shall be obtained before drawing groundwater for the project activities.
  - c) In the absence of approval, submit a copy of acknowledgment along with a set of application filed to CGWA /Competent Authority for obtaining permission for the abstraction of groundwater
- (ix) Minimize the water consumption in the steel plant complex by segregation of used water, practicing cascade use and by recycling treated water.
- (x) STP for treatment of wastewater & re-utilization 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) 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) In case of any acid pickling activity, the spent acid/effluents generated from such activities shall be utilized through authorized re-processors for converting the same into useful by-products like FeSO<sub>4</sub> etc. An agreement to this effect shall be made with the authorized agencies.
- (xiii) Adequate area to be reserved and marked on the layout plan for the green belt as per the conditions laid down by the MoEF&CC as per the Standard EC

Conditions prescribed for Induction/ Electric Arc Furnace & Rolling Mills circulated vide OM dated 09/08/2018.

- (xiv) Detailed study report along with calculation for reserving 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 incorporating 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.
- (xv) Action plan for the compliance of standard operating procedures and up-gradation of suction and treatment arrangement for the secondary emissions as prescribed by the State Pollution Control Board or by CPCB/MoEF&CC.
- (xvi) Compliance of standard operating procedures and up-gradation of suction/treatment systems for the control of secondary emissions within the time frame prescribed by the State Pollution Control Board. Similar action is to be implemented in the proposed expansion project.
- (xvii) Whole of the vehicle movement area as well as the 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.
- (xviii) The vehicles to be used for loading/unloading purposes shall not be parked along the roadside so as to avoid the traffic congestion and dedicated parking place to be provided for the same.
- (xix) 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.
- (xx) Use of natural gas (if available) as substitute fuel wherever possible in the existing industry/ for the expansion project.
- (xxi) Delineate the concrete proposal regarding activities to be undertaken under Corporate Environmental Responsibility indicating the followings: -
  - i) various activities to be undertaken as per the provision of OM dated 01.05.2018
  - ii) proportionate provisions of funds,
  - iii) the period in which CER activities is to be implemented
  - iv) the person(s) responsible for the implementation.
- (xxii) Submit compliance w.r.t. condition no.II [(i) & (iii)] subtitled as "Air Quality Monitoring & Preservation" regarding continuous emission monitoring system and continuous ambient air quality monitoring as prescribed in the Standard EC Conditions for Induction/ Electric Arc Furnace & Rolling Mills issued by the MoEF&CC, New Delhi vide OM dated 09/08/2018.

- (xxiii) Examine and submit the proposal for: -
  - d) Recovery of iron from slag before disposing of it.
  - e) Identify the areas for utilization of slag in a scientific manner and explore its usage in cement/construction industry/manufacturing of pavers & tiles/road laying etc.
  - f) Recovery of precious metals like Zinc, lead and iron etc. from the APCD dust (Hazardous waste) through authorized re-processor.

(xxiv) Air Pollution Control Arrangement details shall be provided as below:

Plant /Unit	Pollutants	Qty generated	Method used to Control /specifications (attach Separate Sheet to furnish Details)	Number of units planned & Capacity	Budget	Estimated Post Control Pollutant Qty	
						Per Unit	Per day

- (xxv) Submit compliance regarding the installation of Pulse jet bag filter with offline cleaning technology as APCD with the proposed induction furnace.
- (xxvi) List the species with heavy foliage, broad leaves and wide canopy cover. The landscape planning should include plantation of native species. Water intensive and/or invasive species should not be used for landscaping.
- (xxvii) Examine the quantity of hazardous waste for category 5.1 & 35.1 generated from the unit and shall submit its disposal arrangements.
- (xxviii) Examine the source of water to meet the requirement of green area in the summer season.

The following general points shall be noted:

- (i) The EIA document shall be printed on both sides, as far as possible.
- (ii) All documents shall be properly indexed, page numbered.
- (iii) Period/date of data collection shall be clearly indicated.
- (iv) The letter/application for environmental clearance shall quote the MOEF / SEIAA file No. and also attach a copy of the letter.
- (v) The copy of the letter received from the Ministry / SEIAA shall be also attached as an annexure to the final EIA-EMP Report.
- (vi) The index of the final EIA-EMP report must indicate the specific chapter and page no. of the EIA-EMP Report.

- (vii) While preparing the EIA report, the instructions for the proponents and instructions for the consultants issued by MOEF vide notification dated 03.03.2016 which is available on the website of this Ministry shall also be followed.
- (viii) The consultants involved in the preparation of EIA-EMP report after accreditation with Quality Council of India (QCI) /National Accreditation Board of Education and Training (NABET) would need to include a certificate in this regard in the EIA-EMP reports prepared by them and data provided by other organization/Laboratories including their status of approvals etc. Name of the Consultant and the Accreditation details shall be posted on the EIA-EMP Report as well as on the cover of the Hard Copy of the Presentation material for EC presentation.

The Terms of Reference (ToR) prescribed by the State Expert Appraisal Committee (SEAC), Punjab should be considered for the preparation of EIA / EMP report for the project in addition to all the relevant information as per the Generic Structure of EIA given in Appendix III and IIIA in the EIA Notification, 2006.

Where the documents provided are in a language other than English, an English translation shall be provided. The draft EIA-EMP report shall be submitted to the State Pollution Control Board of the concerned State for the conduct of Public Hearing. The SPCB shall conduct the Public Hearing/public consultation, district-wise, as per the provisions of EIA notification, 2006. The Public Hearing shall be chaired by an Officer, not below the rank of Additional District Magistrate. The issues raised in the Public Hearing and during the consultation process and the commitments made by the project proponent on the same shall be included separately in EIA-EMP Report in a separate chapter and summarized in a tabular chart with financial budget (capital and revenue) along with time-schedule of implementation for complying with the commitments made.

If any part of the data/information submitted by the project proponent is found to be false or misleading at any stage, then SEIAA & SEAC will not be responsible for the expenditure incurred on the project due to issuance of this ToR or subsequent work carried out by the project proponent for conducting EIA study or for any other activity related to the project.

The 'Terms of Reference' (TORs) prescribed will be valid for a period of three years from its issuance. The final EIA report shall be submitted to the SEIAA, Punjab for obtaining environmental clearance.