

EXECUTIVE SUMMARY

FOR

Proposed Expansion of Plant in manufacturing of M.S. Billets and Rolling Mill products with capacity 29,000 TPA to 2, 20,000 TPA of billets/ingots and 54,000TPA to 2, 20,000 TPA of MS Bars/rolled products

At

**Plot No. D-1 to D-8, Pipalia Industrial Estate,
Bazpur, District Udham Singh Nagar Uttarakhand**

BY

M/s UTTARANCHAL ISPAT (P) LIMITED

Project schedule 3(a): Metallurgical Industries (ferrous & non-ferrous)

Category: A

Production Capacity: M.S. Billets and Rolling Mill products (2,20,000 Tons /Annum)

MS Bars/rolled products (2, 20,000)

Tor File No. IA-J-11011/286/2023-IA-II (IND-I)

EIS/2023/UIPL/EIA&EMP/R0

MAY 2024

ENVIRONMENTAL CONSULTANT

ENVIRO INFRA SOLUTIONS PVT. LTD.

(Accredited by NABET (Quality Council of India)

For EIA studies as 'A' Category Consultant

(S. No. 68th, List of Accredited Consultant Organizations May 2024)

Address: - 301,302 & 305, SRBC, Sec-9, Vasundhara, Ghaziabad, U.P.

Ph.: 0120- 4151183, [Email: eis@enviroinfrasolutions.com](mailto:eis@enviroinfrasolutions.com)

Website: www.enviroinfrasolutions.com

QCI NABET certificate No. – NABET/EIA/2225/RA 0300

NABL/MOEF&CC ACCREDITED LABORATORY

Noida Testing Laboratories (NABL Certificate No. TC-6814 valid till 02/12/2025)

(Study Period: 01st March 2023 to 31st May 2023)

Proposed Expansion of Plant in manufacturing of M.S. Billets and Rolling Mill products with capacity 29,000 TPA to 2,20,000 TPA of Ingots/billets and 54,000TPA to 2,20,000 TPA of MS Bars/rolled products at Plot No.D-1 to D-8, Pipalia Industrial Estate, Village Jagannathpur, Tehsil Bazpur, District Udham Singh Nagar Uttarakhand by M/s Uttaranchal Ispat Private Limited.

**Executive
summary**

Executive Summary

E.1 INTRODUCTION

(i) Name of the project along with applicable schedule and category as per EIA, 2006:

Name of the project is Proposed Expansion of Plant in manufacturing of M.S. Billets and Rolling Mill products with capacity 29,000 TPA to 2,20,000 TPA of Ingots/billets and 54,000TPA to 2,20,000 TPA of MS Bars/rolled products at Plot No.D-1 to D-8, Pipalia Industrial Estate, Village Jagannathpur, Tehsil Bazpur, District Udham Singh Nagar Uttarakhand by M/s Uttaranchal Ispat Private Limited. The project falls in the category A, under item 3(a) Secondary Metallurgical Process (ferrous and non-ferrous), as per the EIA Notification, 14th September 2006 and subsequent amendments.

(ii) Location and accessibility

The unit is located at Plot No.D-1 to D-8, Pipalia Industrial Estate, Village Jagannathpur, Tehsil Bazpur, District Udham Singh Nagar Uttarakhand. Project is at well-defined and developed industrial area in Tehsil of Bazpur. The unit is well connected to NH-309.

E.1.1 PURPOSE OF THE REPORT

The Environmental Impact Assessment (EIA) is a proven management tool that effectively integrates environmental considerations into the developmental process and enhances decision-making. This tool seeks to align developmental activities with environmental concerns, thereby promoting the greater good of society. Given the increased awareness in recent years about environmental protection and sustainable development, it has become crucial to implement sound environmental management practices that can help to mitigate the adverse impacts of developmental activities. Through the EIA study, a country can achieve sustainable development. Recognizing its significance, the Ministry of Environment, Forest, and Climate Change (MOEF&CC) in India has formulated policies and procedures to govern industrial and other developmental activities. These guidelines aim to prevent the indiscriminate exploitation of natural resources and to promote the integration of environmental concerns in project development.

E.2 PROJECT DESCRIPTION

E.2.1 Nature of the Project

The Existing Project falls under Category 'A'; Sl. No. 3(a) of Schedule "Primary and Secondary Ferrous Metallurgical Industries" as per EIA Notification September 2006 and amendment thereof vide Notification No. S.O.3067 (E) dated 1st December 2009. Uttaranchal Ispat Private Limited intends to increase manufacturing of M.S. Billets and Rolling Mill products with capacity 29,000 TPA to 2,20,000 TPA of Ingots/billets and 54,000TPA to 2,20,000 TPA of MS Bars/rolled products.

E.2.2 Size of the Project

The total industrial plot area is 17,920.22 sq. m. (covered area: 13,952.08 sq. m.; open area:

Proposed Expansion of Plant in manufacturing of M.S. Billets and Rolling Mill products with capacity 29,000 TPA to 2,20,000 TPA of Ingots/billets and 54,000TPA to 2,20,000 TPA of MS Bars/rolled products at Plot No.D-1 to D-8, Pipalia Industrial Estate, Village Jagannathpur, Tehsil Bazpur, District Udham Singh Nagar Uttarakhand by M/s Uttaranchal Ispat Private Limited.	Executive summary
---	--------------------------

2,818.14 and existing green/open area: 1,150 sq. m.) allotted from UPSIDC and the additional land (Owned by Director) of 10,641.75 sq. m. adjoining to the plant area is developed for proposed green belt (8,276 sq. m.) and open area (2,365.75 sq. m.). The land is Sufficient for the existing as well proposed expansion.

E.2.3 Project Cost

The cost of the proposed expansion will be Rs. 7.25 crore, and existing cost is Rs. 13.87 crore. Hence total cost of the project will be about Rs. 21.12 crore.

E.2.4 Salient Features of proposed Project

The salient features of Project are given in **Table E.1** below:

Table E.1: Location and Salient feature of Proposed Project

Proponent Name	M/s Uttaranchal Ispat Private Limited
Location	Plot Nos. D-1 to D-8, Pipalia Industrial Area, Village Jagannathpur, Pargana & Tehsil Bazpur, District Udham Singh Nagar, Uttarakhand
Latitude	29° 09' 21" N
Longitude	79° 04' 36" E
Land use	Industrial
Nearest Habitat/ Town	Jagannathpur – 0.6 km
Nearest Railways Station	Bazpur Railway Station - 6.1 km
Nearest Airport	Pantnagar airport, 41 km
Nearest Highway	NH 309 – 0.6 km
Nearest River	Kosi River- 2.5 Km
Water Demand and Supply Source	46.0 KLD, Source will be Bore well
Nearest Tourism Place	Nainital – 44.5 Km
Seismic Zone	IV
Altitude	255 m
Proposed Production process (Expansion)	2,20,000 MT/Annum of M.S. Billets and 2,20,000 MT/Annum of Rolling Mills products TMT Bar, M.S. Angle, M.S. Patti, and M.S. Pipes etc.. Induction furnace of 22 tons (3 nos.)
Working Days	330
Man Power	Existing- 105 Proposed- 125 Total after expansion- 230
Connected Power Load (KVA)	9,900 KVA
Required for expansion	9,900 KVA
Total Power load after expansion	19,800 KVA

Proposed Expansion of Plant in manufacturing of M.S. Billets and Rolling Mill products with capacity 29,000 TPA to 2,20,000 TPA of Ingots/billets and 54,000TPA to 2,20,000 TPA of MS Bars/rolled products at Plot No.D-1 to D-8, Pipalia Industrial Estate, Village Jagannathpur, Tehsil Bazpur, District Udham Singh Nagar Uttarakhand by M/s Uttaranchal Ispat Private Limited.	Executive summary
---	--------------------------

The details of the raw material requirement for the project along with its source and mode of transportation is given as below:

Sl. No.	Raw material	Existing	Proposed	Total
1.	Scrap/Sponge Iron, Ferro Alloys (MT/annum)	32,000	2,02,000	2,34,000
	Ingot/Billets (MT/annum)	57,000	1,71,000	2,28,000
2.	Fuel for Reheating furnace MTPA (Coal)	2376	7303	9679
	Source & Transport	Local & International Markets & transport through covered Trucks.		

(i) Resource Requirement:

- The total industrial plot area is 17,920.22 sq. m. (covered area: 13,952.08 sq. m.; open area: 2,818.14 and existing green/open area: 1,150 sq. m.) allotted from UPSIDC and the additional land (Owned by Director) of 10,641.75 sq. m. adjoining to the plant area is developed for proposed green belt (8,276 sq. m.) and open area (2,365.75 sq. m.).
- After expansion, total 46.0 KLD water is required which will be met out by bore well in the existing premises, out of which 30.0 KLD is required for make-up water of cooling purposes and recirculated hundred percent. While 12.0 KLD will be required for domestic purpose and 4 KLD for greenbelt development and dust suppression.
- Presently Power load sanction to the industry is 9900 KVA. Total Load will be 19800 KVA after expansion. Presently coal consumption of the industry for Reheating Furnace is 7.20 MT per day. Approx. 22.13 MT per day coal will be required for expansion purpose. The total consumption of coal will be 29.34 MT per day after expansion.
- The capital cost of the project will be Rs 21.12 Crores after expansion and the capital cost for environmental protection measures is proposed as Rs 0.59 Crores. The employment generation from the project after expansion will be 230.

(ii) Operational activity

Presently the company is operating through consent bases (CTE and CTO). Consent to establish was obtained from UEPPCB vide letter no. **61/04/32** dated 01.04.2016. Consent to operate (Air & Water) was obtained vide letter no. **1524** dated 19.09.2012. Again, in year 2006 consent to establish was renewed vide letter no. 652/06/673 dated 21.07.2006 and it was further renewed vide letter no. 652/2016/04 dated 20.02.2016.

The existing consent to establish has been obtained by the plant vide letter no. 652/2016/04 (UPPCBRO)/CTE/ on dated 20.02.2016 and existing consent to operate vide letter no. **1210** dated 14/10/2022 (Air & Water).

(iii) Key pollution concerns

One key pollution concern in the unit is the emission of greenhouse gases, particularly carbon dioxide (CO₂). The production of M.S. Billets and Rolling Mill products involves the use of various raw materials, such as iron ore, chromium, nickel, and others, which require significant energy inputs, including the burning of fossil fuels. These energy-intensive processes release large amounts of CO₂ into the atmosphere, contributing to climate change.

Another pollution concern in the unit is the release of other air pollutants during the production process. These pollutants include sulfur dioxide (SO₂), nitrogen oxides (NO_x), volatile organic compounds (VOCs) and particulate matter. These emissions can have adverse effects on air quality and human health, leading to respiratory problems, smog formation, and other environmental issues.

To address these pollution concerns, the unit has been implementing various measures. These include improving energy efficiency, adopting cleaner technologies, implementing recycling programs, and implementing wastewater treatment processes. Additionally, regulatory bodies and industry associations are working to establish and enforce environmental standards to reduce the industry's pollution footprint.

E.3 BASELINE ENVIRONMENTAL STUDIES

E.3.1 Ambient Air Quality

Meteorological data at the site was taken during March, 2023 - May, 2023 representing pre monsoon season.

Ambient Air Quality Monitoring has been carried out at 8 locations during pre-monsoon (March, 2023 - May, 2023) season as per ToR conditions. The results thus obtained indicate that the concentrations of PM₁₀, PM_{2.5}, in the Ambient Air are higher than National Ambient Air Quality (NAAQ) standards for Industrial, Residential, Rural and other areas as the Project site is located in notified industrial area. The results thus obtained indicate that the concentrations of SO₂ and NO₂, in the Ambient Air are well within the National Ambient Air Quality (NAAQS) standards for Industrial, Residential, Rural and other areas.

E.3.2 Ambient Noise quality

The values of noise observed in some of the areas are primarily owing to vehicular traffic and other anthropogenic activities. The status of noise quality within the 10 km zone of the study area is, therefore, within the MoEF&CC standards.

E.3.3 Traffic Study

The LOS value from the proposed expansion project has no impact for National Highway, which is showing Good condition. Traffic study for the project has been done and given in EIA Report.

E.3.4 Surface Water Quality

To assess the physical and chemical properties of water in the region, water samples from 2 locations were collected from Kosi River around the project area. The results indicate surface water is in conformity with IS-2296 standards.

E.3.5 Ground Water Quality

To assess the physical and chemical properties of water in the region, water samples from 08 locations were collected from various water sources around the project area. The results indicate groundwater is generally in conformity with the drinking water standards (IS: 10500:2012).

E.3.6 Soil Quality

Physical characteristics of soil were characterized through specific parameters viz bulk density, porosity, water holding capacity, pH, electrical conductivity and texture. Soil pH plays an important role in the availability of nutrients. Soil microbial activity as well as solubility of metal ions is also dependent on pH. In the study area, all the parameters are within permissible limit as per IS: 2720.

E.3.7 Biological Environment

There are no wildlife sanctuaries and National Parks within the study area of 10-km radius.

E.3.8 LAND USE PATTERN

Total land area available with the industrial unit, presently, is around 2.856 ha. There shall not be any change in the land area in the existing project planning.

E.3.9 Social Environment

Project is positively upgrading the socio-economic status while providing employment. Socio-economic study for 10 km radius study area has been done and incorporated in EIA Report.

E.4 ANTICIPATED ENVIRONMENTAL IMPACTS

E.4.1 Impact on Air Quality

PM₁₀ and PM_{2.5} are the main pollutants generated in industrial activities. The emissions of Sulphur dioxide (SO₂), Nitrogen Oxide (NO₂) contributed by diesel operated equipment, industrial process and vehicles movement were considered marginal as branded make and vehicles with PUC certificate is operating only. Fugitive dust and particulates are major pollutants occurred in the industrial activities.

Fugitive emissions will be settled by 70- 80% by use of multiple water sprinklers. Prediction of impacts on air environment will be made with production and net increase in PM₁₀, PM_{2.5}, SO₂ and NO_x emissions at the project site and at the 10 km radius of study area due to industrial activities.

E.4.2 Impact on Ambient noise quality

The values of noise observed in some of the areas are primarily owing to vehicular traffic and other anthropogenic activities. The status of noise quality within the 10 km zone of the study area is, therefore, within the MoEF&CC standards.

E.4.3 Impact on road and Traffic

From the traffic study it is observed that there is no impact on the existing roads and highways. But, the additional load on the carrying capacity of the concerned roads has no adverse effect on the LOS.

E.4.4 Impact on Surface Water Resources

The proposed expansion of the unit has not been planned on the basis of surface water extraction as water source. Thus, there is no impact on surface water resource.

E.4.5 Impact on Ground Water Resources

The unit has been designed on Zero Effluent Discharge, hence the possibility of any ground water contamination due to release of plant wastewater is ruled out.

E.4.6 Impact on Soil

No impact on soil is envisaged proposed expansion of the unit.

E.4.7 Impact on terrestrial and aquatic habitat

There is no forest area in the core zone area of the unit. As the industrial activity is restricted to core zone, no significant impact on the flora of the buffer zone due to the industrial activity is anticipated. Extensive plantation comprising of pollutant resistant trees will be undertaken, which will serve not only as pollution sink but also as a noise barrier.

The incremental dust generations due to the industrial activity, at the boundary of the unit are insignificant and it is also expected that with the adoption of mitigatory measures as suggested in EMP, the impact due to operation of the industrial activity will be minimal on the terrestrial and aquatic ecosystem. The impact on the fauna of the buffer zone due to the industrial activity will be marginal. The proposed progressive plantation over a period of time will reduce the impact, if any, on the fauna.

E.4.8 Impact on Socio – Economic Aspects

The project will not disturb/ relocate any village or need resettlement as the expansion will be done within the existing unit only. Thus, no adverse impact is anticipated. The impact of industrial activity in the area is positive on the socio-economic environment of the region. The proposed expansion of the unit will provide employment to local population, and preference has been given to the local people.

Proposed Expansion of Plant in manufacturing of M.S. Billets and Rolling Mill products with capacity 29,000 TPA to 2,20,000 TPA of Ingots/billets and 54,000TPA to 2,20,000 TPA of MS Bars/rolled products at Plot No.D-1 to D-8, Pipalia Industrial Estate, Village Jagannathpur, Tehsil Bazpur, District Udham Singh Nagar Uttarakhand by M/s Uttaranchal Ispat Private Limited.	Executive summary
---	--------------------------

E.5 ANALYSIS OF ALTERNATIVES

As per the standard ToR points issued by MoEF&CC, vide its letter No. TO23A1010UK5419258N dated 21st February 2024; the Analysis of Alternatives (Technology & Site) is not required.

Considering the project's location, the selection of an alternate location is not deemed necessary. The project site is situated on near NH-309, Plot No. D-1 to D-8, Pipalia Industrial Estate, Village Jagannathpur, Tehsil Bazpur, District Udham Singh Nagar, Uttarakhand.

E.6 ENVIRONMENTAL MONITORING PROGRAM

Project monitoring will be carried out as per conditions stipulated in environmental clearance letter issued by MoEF&CC, consent issued by SPCB as well as according to CPCB guidelines. The project site is considered as core zone and the area lying within 10 km radius from the project site is considered as buffer zone, where some impacts may be observed on physical and biological environment. In the buffer zone, slight impact may be observed and that too is occasional, table below showing the details of Post operational Project phase Monitoring programme.

Table E.2: Post Project Monitoring Programme

Attributes	Sampling		Measurement Method	Test Procedure
	Network	Frequency		
A. Air Environment				
Meteorological Wind direction Relative humidity Rainfall	Minimum 1 site in the project impact area	Regularly in one season by Weather Monitoring Station	Mechanical/automatic weather station	-
Pollutants PM10, PM2.5	10 locations in the project impact area (Minimum 3 locations in upwind side, 4 sites in downwind side / impact zone and 3 in core zone)	Once in a season.	Gravimetric method	-
			Gravimetric method	-

Proposed Expansion of Plant in manufacturing of M.S. Billets and Rolling Mill products with capacity 29,000 TPA to 2,20,000 TPA of Ingots/billets and 54,000TPA to 2,20,000 TPA of MS Bars/rolled products at Plot No.D-1 to D-8, Pipalia Industrial Estate, Village Jagannathpur, Tehsil Bazpur, District Udham Singh Nagar Uttarakhand by M/s Uttaranchal Ispat Private Limited.	Executive summary
---	--------------------------

SO ₂			EPA Modified West & Geake method	Absorption in Potassium Tetra Chloromercuribenz oic followed by Colorimetric estimation using P-Rosaniline hydrochloride and Formaldehyde (IS: 5182 Part - II).
NO ₂			Arsenite modified Jacob & Hochheiser	Absorption in dil. NaOH and then estimated colorimetrically with sulphanilamide and N(I Nephthyle) Ethylenediamine Dihydrochloride and Hydrogen Peroxide (CPCB Method).
B. Water Environment				
<p>pH, Turbidity, Colour, Odour, Taste, TDS, Total Hardness, Calcium hardness, Magnesium hardness, Chloride, Fluoride, Sulphate, Nitrates, Alkalinity, Iron, Copper, Manganese, Mercury, Cadmium, Selenium,</p>	<p>Set of grab Samples during pre and post-monsoon for ground and surface Water in the vicinity.</p>	<p>Diurnal and Season wise</p>	<p>As per IS 10500:2012</p>	<p>Samples for water quality should be collected and analyzed as per : IS : 2488 (Part1-5) methods for sampling and testing of Industrial effluents Standard methods for examination of water and wastewater analysis published by American Public Health Association</p>

Proposed Expansion of Plant in manufacturing of M.S. Billets and Rolling Mill products with capacity 29,000 TPA to 2,20,000 TPA of Ingots/billets and 54,000TPA to 2,20,000 TPA of MS Bars/rolled products at Plot No.D-1 to D-8, Pipalia Industrial Estate, Village Jagannathpur, Tehsil Bazpur, District Udham Singh Nagar Uttarakhand by M/s Uttaranchal Ispat Private Limited.	Executive summary
---	--------------------------

Arsenic, Cyanide, Lead, Zinc, Chromium, Aluminum, Boron, Phenolic Compounds				
C. Noise				
Noise levels at Day & night time - Leq dB (A)	High noise generating areas within the Buffer zone.	Quarterly / Half yearly	As per CPCB norms	As per CPCB norms
D. Soil				
pH, Bulk Density, Soil texture, Nitrogen, Available Phosphorus, Potassium, Calcium, Magnesium, Sodium, Electrical Conductivity, Organic Matter, Chloride	10 locations in the project impact area	Yearly/half yearly	As per USDA Method	As per USDA Method
E. Socioeconomic				
Demographic structure	Socioeconomic survey is based on proportionate, stratified and random	Minimum for two phases of the project	Primary data collection through Questionnaire	Secondary data from census records, statistical hard books, topo sheets, health
Infrastructure resource base	sampling method			Records and relevant official records available with Govt. agencies
Economic resource base	--	--	--	--
Morbidity pattern	--	--	--	--

Proposed Expansion of Plant in manufacturing of M.S. Billets and Rolling Mill products with capacity 29,000 TPA to 2,20,000 TPA of Ingots/billets and 54,000TPA to 2,20,000 TPA of MS Bars/rolled products at Plot No.D-1 to D-8, Pipalia Industrial Estate, Village Jagannathpur, Tehsil Bazpur, District Udham Singh Nagar Uttarakhand by M/s Uttaranchal Ispat Private Limited.	Executive summary
---	--------------------------

Cultural and Aesthetic	--	--	--	--
------------------------	----	----	----	----

E.7 ADDITIONAL STUDIES

E.7.1 Risk Assessment

The complete industrial operation will be carried out under the management control and direction of a qualified safety manager holding safety Manager's Certificate of Competency. Moreover, Environmental safety staff will be sent to refresher courses from time to time to keep them updated.

Disaster Management Plan

Emergency preparedness is an important aspect in the planning of Disaster Management. Personnel would be trained suitably and prepared mentally and physically in emergency response through carefully planned, simulated procedures. Similarly, the key personnel and essential personnel shall be trained in the operations.

E.7.2 Public consultation

In consonance with the EIA notification dated 14th September 2006, vide section 1 (a) related to Public Hearing, the draft EIA/EMP report shall be submitted to the Uttarakhand Environment Protection and Pollution Control Board (UEPPCB) for public hearing.

E.8 PROJECT BENEFITS

The impact on the civic amenities will be substantial due to operation activities. Medical facilities will be provided in the form of first-aid facility at the unit. These medical facilities will also be available to local people in the surrounding in case of emergencies.

- Generation of employment and improved standard of living;
- Increased revenue
- Superior communication and transport facilities etc. The employment of local people in primary and secondary sectors of project will upgrade the prosperity of the region.

E.9 ENVIRONMENTAL MANAGEMENT PLAN

E.9.1 Air quality management plan

The major source of air pollution in the plant is fugitive emissions from various material handling and transfer points. Height of the all the flue gas discharge facilities will be designed as per CPCB norms. Air Pollution Control System for the proposed expansion project is presented in **Table E.3.**

Proposed Expansion of Plant in manufacturing of M.S. Billets and Rolling Mill products with capacity 29,000 TPA to 2,20,000 TPA of Ingots/billets and 54,000TPA to 2,20,000 TPA of MS Bars/rolled products at Plot No.D-1 to D-8, Pipalia Industrial Estate, Village Jagannathpur, Tehsil Bazpur, District Udham Singh Nagar Uttarakhand by M/s Uttaranchal Ispat Private Limited.	Executive summary
---	--------------------------

Table E.3: Air Pollution Control System

S.No	Stack Attached to	Type of fuel	Air Pollution Control System	Stack Height (M)
1.	D.G set (200 KVA)	Diesel	Stack height	20
2.	D.G set (200 KVA)	Diesel	Stack height	20
3.	Reheating furnace	Coal	Fixed hood, Wet scrubber	30
4.	Induction furnace (22 TPH)	Electricity	Side draft hood, wet scrubber, ID fan,	30
5.	Induction furnace (22 TPH)	Electricity	Side draft hood, wet scrubber, ID fan	30
6.	Induction furnace (22 TPH)	Electricity	Side draft hood, wet scrubber, ID fan,	30

Transportation Management

- The raw material is being transported by Road.
- Raw material & Finished Products is being transported by road.
- All trucks carrying raw material are tarpaulin covered.
- Internal roads are being Tarred / Concreted with installation of water sprinklers to suppress dust due to transportation.

E.9.2 Noise quality management plan

Noises from fans, centrifugal pumps, electrical motors etc. is being kept in control so that the ambient noise level shall not exceed 75 dBA during daytime and 70 dBA during nighttime. Noise pollution control measures are provided in respective departments by way of providing silencers soundproofs cubicles / covers and proper selection of less noise prone machinery and by development of green belt.

E.9.3 Solid and Hazardous Waste management plan

Details of Solid and Hazardous Waste management with their Disposal is given in **Table E.4**

Proposed Expansion of Plant in manufacturing of M.S. Billets and Rolling Mill products with capacity 29,000 TPA to 2,20,000 TPA of Ingots/billets and 54,000TPA to 2,20,000 TPA of MS Bars/rolled products at Plot No.D-1 to D-8, Pipalia Industrial Estate, Village Jagannathpur, Tehsil Bazpur, District Udham Singh Nagar Uttarakhand by M/s Uttaranchal Ispat Private Limited.	Executive summary
---	--------------------------

Table E.4: Details of Solid and Hazardous Waste management with their Disposal

S. No.	Category of Hazardous Waste as per the Schedules I, II and III of these rules	Authorized mode of disposal or recycling or utilization or co-processing etc.	Existing Quantity (ton/annum)	Total Quantity after expansion (ton/annum)
1	Used Oil (schedule I Cat 5.1)	Authorized recycler/TSDF	0.50	0.65
2	Schedule I Cat 34.3	TSDF (Treatment storage and disposal Facility)	0.60	1.00
3	Schedule I Cat 5.2	Authorized recycler/TSDF	2.0	5.0

E.9.4 Effluent management plan

The process of manufacturing M.S. Billets, rolling mills products with induction furnace does not require water in process; hence it does not generate any type of effluents. The water is used for cooling purposes and is reused with recirculation system and remains as fresh water. Further the metal is melted with induction process and not by electrodes in furnace. Hence it does not generate any type of carbon in the process. Only domestic effluent will be discharged and treated by septic tank and finally disposed to soakage pit.

E.9.5 Storm water Management plan

By implementing storm water management practices, Uttaranchal Ispat Private Limited can minimize its environmental impact, protect nearby water resources, and demonstrate a commitment to sustainability and responsible manufacturing.

E.9.6 Occupational Health and Safety

Besides the above, the operating and maintenance personnel is being provided with all the necessary safety equipment such as hand gloves, gum boots, aprons, helmets, protective glasses, ear muffs etc. Workers training mainly focus on reduction of wastes, utilization of wastes and generally maintaining a clean and healthy environment.

E.9.7 Green belt development plan

The plantation and green belt development is being taken care in the plant and the space reserved for plantation is about 9426 sq. m. (existing green /open area: 1,150 sq. m. and proposed: greenbelt: 8,276 sq. m.) which is 33% of the total plot area. The proposed greenbelt i.e. 8,276 sq. m. will be developed in the additional land (owned by director) adjoining to the plant area. Total 2360 nos. of trees will be planted over an area of 9246 sq. m.

Number of Saplings to be Planted and Budgetary Estimate of the Green Cover

No. of tree plantation required (2500 tree per 10,000 m2 plot area for development) = $2500 * 9426 \text{ m}^2 \text{ plot area} / 10000 = 2357$	2357
No. of tree plantation proposed	2360

Proposed Expansion of Plant in manufacturing of M.S. Billets and Rolling Mill products with capacity 29,000 TPA to 2,20,000 TPA of Ingots/billets and 54,000TPA to 2,20,000 TPA of MS Bars/rolled products at Plot No.D-1 to D-8, Pipalia Industrial Estate, Village Jagannathpur, Tehsil Bazpur, District Udham Singh Nagar Uttarakhand by M/s Uttaranchal Ispat Private Limited.	Executive summary
---	--------------------------

The breakup of the proposed afforestation programme is given in **Table E. 5.**

Table E.5: Year-wise Afforestation Schedule

Sr. No.	Year of Plantation	Target of Plantation	Assumed Survival (%)	Replenishment of Casualties	Total
1	First year	472	80	—	472
2	Second year	472	80	94	472
3	Third year	472	80	94	472
4	Fourth year	472	80	94	472
5	Fifth year	472	80	94	472

Total 2360 sapling will be done in five years in 33% of project area.

E.9.8 Socioeconomic management plan

By implementing a well-rounded socioeconomic management plan, the stainless steel industry can enhance its positive contributions to local communities, promote sustainable development, and foster long-term partnerships based on trust and shared value. It is important to involve relevant experts, engage with stakeholders, and seek external guidance to ensure the plan aligns with best practices and local socioeconomic contexts.

E.10 COST ESTIMATES

The details of the cost to for the Environmental Management plan for 5 years, the budget for Corporate Environmental Responsibility (CER) (per year) and year wise allocation of funds for the various activities proposed to be taken up under CSR programme has been given in **Table E.6 to E.8** respectively.

Table E.6: Budget for Environmental Management Plan

Sl. No.	Activity	Budget Allocation in Lakhs (capital)	Budget Allocation in Lakhs (Recurring)
1.	Air Pollution Control Devices (Side draft hood, wet scrubber, ID fan, etc.)	4.50	2.00
2.	Water Pollution Control Measures	3.00	0.50
3.	Noise Pollution Control Measures	3.00	0.50
4.	Environment Monitoring and Management	8.00	4.00

Proposed Expansion of Plant in manufacturing of M.S. Billets and Rolling Mill products with capacity 29,000 TPA to 2,20,000 TPA of Ingots/billets and 54,000TPA to 2,20,000 TPA of MS Bars/rolled products at Plot No.D-1 to D-8, Pipalia Industrial Estate, Village Jagannathpur, Tehsil Bazpur, District Udham Singh Nagar Uttarakhand by M/s Uttaranchal Ispat Private Limited.	Executive summary
---	--------------------------

5.	Occupational Health	5.00	1.00
6.	Green Belt Development	5.00	1.50
7.	Rainwater Harvesting	10.00	0.50
8.	CER	21.00	-
	Total	59.50	10.00

Table E.7: Budget for Corporate Environmental Responsibility (CER) (per year)

S. No.	Activities	Amount (Rs. in Lac)
1.	Infrastructure creation for drinking water supply by providing hand pumps in Jagannathpur, Kanaura and Maheshpura villages	5.00
2.	Providing skills development training like computer education and distribution of books at Government Polytechnic College, Bazpur and Government Primary School Maheshpura Bazpur	5.00
3.	Farmers' fields Soil testing and advise proper fertilization in village Jagannathpur and Maheshpura.	4.00
4.	Plantation in community areas with native species in consultation with Forest Department in Jagannathpur and Maheshpura villages	2.00
5.	Provision of solar panel lights in Jagannathpur, Kanaura and Maheshpura villages	5.00
Total		21.00

Table E.8: Budget for Corporate Social Responsibility (CSR) (per year)

Activity	Budget (INR Lakh)
Promotion of Education and Skill Training	10.00
Promoting Gender Equality & Empowering	8.00
Women & Livelihood Promotion	10.00
Integrated Community Healthcare	8.00
Youth & Sports	5.00
Relief & Disaster Management	8.00
Rural Development Projects	4.00
Celebration/Misc.	3.00
Total	56.00

E.11 CONCLUSION

- The unit operations will meet the compliance requirements of MoEF&CC;
- Community impacts will be beneficial, as the project will generate significant economic benefits for the region;
- Adoption of Best Available Technology and Best Management Practices with more environmental friendly process; and

Proposed Expansion of Plant in manufacturing of M.S. Billets and Rolling Mill products with capacity 29,000 TPA to 2,20,000 TPA of Ingots/billets and 54,000TPA to 2,20,000 TPA of MS Bars/rolled products at Plot No.D-1 to D-8, Pipalia Industrial Estate, Village Jagannathpur, Tehsil Bazpur, District Udham Singh Nagar Uttarakhand by M/s Uttarakhand Ispat Private Limited.

**Executive
summary**

- With the effective implementation of the Environment Management Plan (EMP) during the industrial activities, the proposed project can proceed without any significant negative impact on environment.