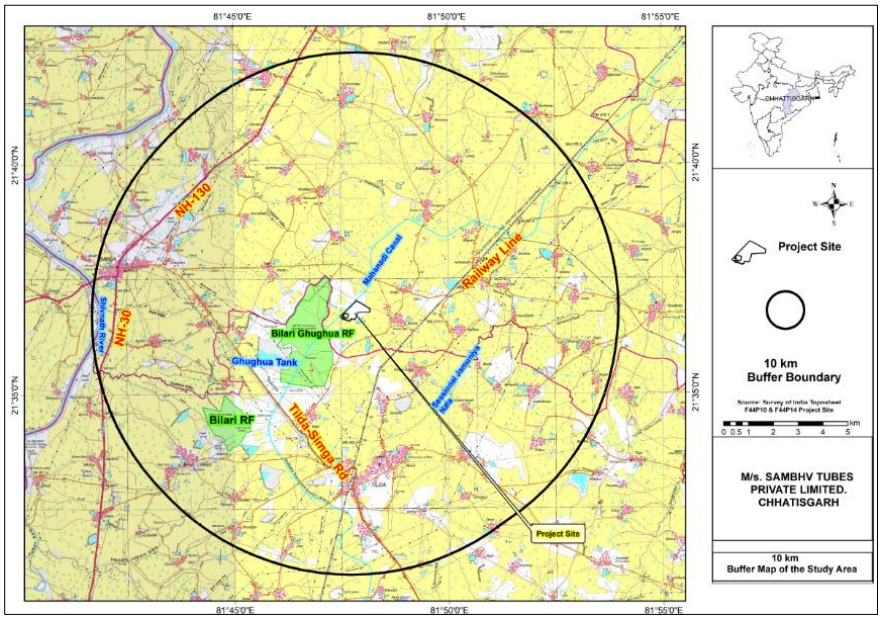
SUMMARY OF ENVIRONMENTAL IMPACT ASSESSMENT REPORT FOR PUBLIC HEARING

Greenfield steel project for establishment of DRI based Sponge Iron (7,00,000 TPA), Iron Ore Pellets (12,00,000 TPA), MS Billets with Induction Furnaces and EAF (10,45,000 TPA), Rerolled Steel Products of 10,00,000 TPA (Through Hot Charging is 5,50,000 TPA and through Reheating Furnace based on Coal Gasifier is 4,50,000 TPA with Producer Gas Plant 25,000 nm^3/hr, Cold Rolled Products (6,00,000 TPA), Steel Tube/Pipes and other profiles (10,00,000 TPA), Strip/Coil Pickling and Annealing (10,00,000 TPA), Galvanized Steel (3,00,000 TPA), Ferro Alloy plant with SAF 2x9 MVA to produce Si-Mn#38,000 TPA or Fe-Mn#48,000 TPA or Fe-Si#21,000 TPA and/or Pig Iron#76,000 TPA, Coal Washery (8,00,000 TPA throughput), Oxygen Plant (45,000 Nm^3/hr), Captive Power Plant of 85 MW (60 MW through WHRB and 25 MW through FBC) and Fly Ash Bricks Plant 1,00,000 Brick/day

Located at

Village -Kesda Tehsil-Simga, District – Balodabazar Bhatapara, C.G-493113



Submitted By

M/s Sambhv Tubes Private Limited

Regd. Office: 5th Floor, Office No. 501, Harshit Corporated, Amanaka, Raipur, (C.G),492001

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1.0 PROJECT DESCRIPTION

M/s Sambhv Tubes Private Limited., has proposed Greenfield project for implementation of new manufacturing facilities for production of Sponge Iron, Iron Ore Pellets, MS Billets, Steel Rerolled products, Cold Rolled Products, ERW Pipes, , HRAP Steel, Galvanized Steel, Ferro Alloys/ Pig Iron,; Coal Washery Oxygen Plant and Fly Ash brick plant along with captive power generation plant comprising of Waste Heat Recovery Boilers (WHRB) and Fluidized Bed Combustion (FBC) Boiler along with Steam Turbine & Generator and a Producer Gas Plan at Village-Kesda, Tehsil- Sigma, District- Baldobazar Bhatapara, CG.

The project site is located at Village -Kesda, Tehsil-Simga, District-Balodabazar Bhatapara (C.G) 493113. The project is proposed in 41.25 ha. Out of which 34.65 Ha. land is under the possession of company, 4.51 ha. land is under agreement to purchase with private landowners and 2.09 ha. govt land is involved within project site and same will be obtained through SIPB from CG Government. Project site is abutting to Tild sigma through approach road which is 1.15 km in NE direction. Further which is connecting to SH-10 in North direction. Nearest Railway Station is Hathbandh Railway Station, which is located about 4.8 km distance from the project site towards ENE direction. However, nearest railway siding is Ringni siding which is 2 km away from the project site in ENE direction. Tilda Newra City is located at about 6.3 km distance from the Project site towards South direction and Kesda Village is at 0.5 km towards East direction. Nearest airport is Bilasa Devi Kevat Airport Bilaspur which is almost 52.2 km away from the site towards NE. Mahanadi Canalis at a distance of 0.023 km from the Project site towards W direction and Shivnath River is at 9.5 km towards W direction. Siltara CPA is 30 km away from the project site in SSW direction. There is no River/Canal in the plant area. There is no village or human settlement in the project area. The climate in the area is dry with extreme temperature variation. No National Park/sanctuary falls within 10 km of the plant area

ToR's application was submitted to online portal of MoEF&CC vide proposal No-IA/CG/IND1/497896/2024, dated 26.11.2024. Project was considered in 70th EAC meeting

dated 5th -6th december, 2024 and ToR's was granted vide file No- IA-J-11011/403/2024-IA-II(IND-I), dated 5th January, 2025.

The project falls under Category 'A' of Schedule 3 (a), as per the EIA Notification, 2006 & its amendment till date and will be appraised by EAC (Industry-I), MoEF&CC, New Delhi"

Total land available is 41.25 ha for the proposed project. Total 33.94% area will be developed as Greenbelt area. Density of trees will be 2500 trees/ha as per the MoEFC&CC norms. Total trees to be planted @2500 trees/ha = 2500*14 = 35,000 Nos.Total trees to be planted 39,000 nos. within project site, considering 90% survival rate.

Project Promoters:-

M/s Sambhav Tubes Private Limited will be managed by Directors Mr. Suresh Kumar Goyal, Mr. Vikas Kumar Goyal. They will be associated with their experienced and knowledgeable employees for the respective areas of operation. The directors have vast experience in running the Steel plant.

Table 1: Proponent Information

Sr. No.	Name	DIN
1	Mr. Suresh Kumar Goyal,	00318141
2	Mr. Vikas Kumar Goyal	00318182

Land	41.25 ha
Power	Total power requirement will be 150 MW out of which 85 MW will be met through captive power plant and 65 MW will be sourced through State Grid (CSPDCL) In addition to this total 4000 kVA DG sets are proposed for emergency backup.
Water	No Process water is required in the sponge iron and steel manufacturing process. Water will be used only for cooling purpose. Daily fresh Water requirement will be 4708 KLD. Source of the water will be Tulsi Posari Anicut at Shivnath River for industrial purpose, application form for sanction of allotment of water-by-water resources department.

2.0 DESCRIPTION OF BASELINE ENVIRONMENT

Baseline environmental study has been carried for the period 1st March 2024 to 31st May 2024 (Pre-Monsoon). Baseline data has been collected out, by M/s. GRC India Training & Analytical Laboratory, Noida. Accredited by NABL also Recognized by MoEF&CC, New Delhi

Summary of Ambient Air Quality

- Results were compared with the standard for ambient air quality monitoring as per the Ministry of Environment, Forest and Climate Change (MoEF&CC).
- During the study PM_{10} was observed in the range of 48.7 to 77.5 µg/m^3. Maximum concentration of PM_{10} was found near Binika Village.
- $PM_{2.5}$ was observed in the range of 27.1 to 42.81 µg/m^3. Maximum concentration of $PM_{2.5}$ was found at near Sinodha Village.
- SO_2 concentration was observed in the range of 5.0 to 10.5 µg/m^3, which is well within the standard limit.
- NO_2 concentration in was observed in the range of 10.6 to 21.7 µg/m^3, which is well within the standard limit.
- Monitoring and analysis were also carried out for CO. Result for the CO was found well within the norms and was observed in the range of 220 to 570 µg/m^3, which is well within the standard limit.

Summary of Ground Water Quality

- pH was observed in the range of 7.16 to 7.85 which meets with desirable norms.
- Total dissolved solid was recorded in the range of 380 to 530 mg/l with minimum at Borewell water near village Tilda Town and maximum at Borewell water near Jhiriya Village.
- Total hardness was in the range of 240-298 mg/l with minimum at Borewell water near village Tilda Town & maximum at Borewell water near village Ringni Village..
- Total Alkalinity was found in the range of 176-265 mg/l with minimum at Borewell water near village Tilda Town & maximum at Borewell water near village Jhiriya.
- Iron was found in the range of 0.02-0.08 mg/l with minimum at Borewell water near project site and village-Otgan and maximum at Borewell water near village Kesda.
- As microbiological parameters MPN analysis was also carried out and it was found Nil.

Summary of Surface Water Quality

The following description is based on the analysis of the samples:

- During the analysis pH of the samples was found in the range of 7.43 to 7.89.
- TDS analysis was also carried out for surface water sample, and it was found in the range of 210 to 430 mg/l.
- DO measured during analysis was found in the range of 5.3 to 6.6 mg/l.
- COD measured during analysis was found in the range of 9.8 to 28 mg/l.
- BOD measured during analysis was found in the range of 2.9 to 3.8 mg/l.
- COD & BOD analysis was also carried out during the study period, and it was found more than desirable value for drinking water.
- MPN test was also carried out for this surface water sample, and it was found positive. It indicates towards the fecal contamination in surface water body.

Summary of Soil Quality

Soil is the media for supplying the nutrients for plant growth. Nutrients are available to plants at certain pH and pH of soils can reflect by addition of pollutants in it either by air, or by water or by solid waste or by all of these. In order to establish the baseline status of soil characteristics, soil samples were collected from 05 sampling locations. The analysis results show that soil is basic in nature as pH value ranges from 6.67 to 7.43, Iron ranges from 45.8 to 63.7 mg/kg, Bulk Density is 1.33 to 1.38 gm/cc, Water Holding Capacity is 27.1 to 33.6, Total Nitrogen (as N) is 31 to 45 mg/kg, Total Phosphorus (as P) is 3.4 to 5.8 mg/kg and Available Potassium (as K) is 57 to 66 mg/kg. The soil texture is Clay loam at project site.

Summary of Noise Quality

The values of noise observed in some of the rural areas are primarily owing to vehicular traffic and other anthropogenic activities. The baseline noise levels have been monitored at different locations as indicated in the table below and graphical representation is given in figure below. In rural areas wind blowing and chirping of birds would contribute to noise levels especially during the nights. Assessment of day noise levels around the study area are ranging between 46.5 to 63.5 dB (A) during study period. Whereas the night equivalents were in the range of 36.8 to 52.6 dB (A). From the results it can be seen that the

Day equivalents and the Night equivalents were within the Ambient Noise standards of residential areas standards.

Socio-Economics Conditions of the Study Area

The study area was defined as an area within 10 km radius around the proposed project site. The study area comprises of 50 census villages of district Baldobazar with a total population of 815533.

Sl.	Details	No./%
1	Total population	815533
2	No. of House hold	163881
3	Average family size	4.98
4	Average no. of house hold per village	3278
5	Average population per village	16311
6	Sex ratio –females per thousand males	1001
7	Percent of male population to total population	49.98
8	Percent of female population to total population	50.02
9	Percent of SC population to the total population	20.97
10	Percent of ST population to the total population	11.82
11	Percent of literate population to the total population	59.39
12	Percent of Male literate population to the total population	34.65
13	Percent of Female literate population to the total population	24.74
14	Percent of total main worker to the total population	30.44
15	Percent of total marginal worker to the total population	16.57
16	Percent of non-worker to the total population	53

There are no National Park, Forest, Wildlife Sanctuary, Eco-sensitive areas within 10 km of the Project site. Conservation plan has been submitted to PCCF, Wildlife for approval.

3.0 ANTICIPATED ENVIRONMENTAL IMPACT & MITIGATION MEASURES

- Raw material Dust is the main pollutant generated during ore handling.
- Water sprinklers used to reduce dust generation during coal handling.
- Wet dust suppression system installed to reduce the dust generation.
- All belt conveyors covered. Internal roads concreted.
- Industrial vacuum cleaners used in workshops and other work areas.
- Mechanical road sweeping machines will be deployed for daily cleaning of all internal roads.
- There will be no industrial wastewater discharge as the plant will be designed on zero effluent discharge principle.
- Domestic waste water will be treated in STP and treated water will be used for irrigation purpose.
- Zero effluent discharge will be practiced.
- 100% of waste water will be recycled and Zero discharge condition will be maintained.
- Low noise emitting plant and machinery will be selected. 35.37% land area will be developed as greenbelt. The noise level at plant boundary will be maintained below 70 dBA.
- The existing truck movement pattern will not undergo any significant change. Appropriate traffic management plan will be implemented in consultation with the transport authorities.

4.0 ENVIRONMENTAL MONITORING PROGRAM

Environmental Management Cell (EMC) will be set up to undertake routine environmental monitoring. Monitoring will be done to ensure compliance with the prescribed laws and

standards. The Head of EMC will report to the Plant Head. Qualified staff will be recruited in EMC. Environmental monitoring of ambient air, stack emission, fugitive dust emission, noise levels, groundwater quality, surface water quality and soils will be carried out as per norms. EMC will be responsible for the following functions:-

Regular monitoring of:-

- Measuring fugitive emissions, measuring $PM_{2.5}$ and PM_{10} in work environment and report any abnormalities for initiating corrective and preventive actions.
- Measuring the ambient air quality at upwind and downwind direction of crusher, at plant boundary.
- Checking the wastewater quality (inlet and outlet).
- Checking the ground water quality near the project area, and surrounding villages.
- Water quality of water body present in study area at upstream and downstream of site.
- Noise monitoring at plant boundary, nearest habitation, near highway, and work areas.
- Development and maintenance of greenbelt and greenery within the plant boundary.

5.0 ADDITIONAL STUDIES

Adequate fire mitigation measures will be ensured for handling fire in project area in care of emergency. Disaster Management Plan has been prepared to take care of public health and safety during any accident. CER will be done as per CER norms. Generally, the CER amount use to spent for making classrooms in local schools, providing teaching aids, making community centres, develop drinking water facility in nearby villages, making rainwater harvesting structures like anicuts and check dams in the area, developing infrastructure facilities and equipment in primary health centres.

6.0 PROJECT BENEFITS

The proposed project is expected to yield a positive impact on the socio-economic environment within the study area. It helps to sustain the development of this area including further development of physical infrastructural facilities.

A well-structured manpower is essential for uninterrupted operation and proper maintenance of plant facilities. About 400-500 people on daily wages basis will get employment during the construction stage. Approx. 2600 persons are expected to be employed during operational phase, for the skilled, semi-skilled and unskilled category. Top priority will be given to locals for Semi-Skilled and Unskilled jobs. With the development of this Plant there will be lot of scope for more ancillary development, which in turn will benefit the nation.

7.0 ENVIRONMENTAL MANAGEMENT PLAN

Environmental Management Plan for effective management of environmental impacts and ensuring overall protection of the environment through appropriate management procedures has been developed. In order to implement the recommended mitigation measures and institutionalize the EMP, budgetary provision of Rs. 62.25 Cr capital expenditure has been made and Recurring annual expenditure will be Rs 14.72 Cr.

Environment Management Cell (EMC) will ensure that all air pollution control device, effluent treatment plants and water re-circulating systems function effectively. EMC will also supervise disposal of spent oil and lubricants and used batteries to the authorized vendors. Plantation will be started during the construction phase by following the guidelines issued by the Central Pollution Control Board. Schemes for resource conservation (raw materials, water, etc), rainwater harvesting, and social forestry development will be taken up by EMC. Regular environmental awareness programs for the employees will be conducted.

Workers will be periodically subjected to health check-up. EMC will ensure cleanliness and industrial hygiene in the plant. EMC in association with the safety department will undertake full review of the potential hazard scenarios during plant commissioning. The review will ensure enforcement of the proposed safeguards for pollution abatement, resource conservation, accident prevention and waste minimization. The implementation

of EMP would ensure that all elements of project comply with relevant environmental legislation throughout its life cycle.

PREPARED BY:

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