EXECUTIVE SUMMARY

OF

EXPANSION OF IRON ORE BENEFICIATION PLANT UNIT FROM 8 MTPA TO 12 MTPA BY INCLUSION OF ADDITIONAL 4 MTPA BENEFICIATION CIRCUIT

AT

Palnar Road, Kirandul, Dantewada District, Chhattisgarh.

(Category-B)

By

M/s. ArcelorMittal Nippon Steel India Private Limited

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EXECUTIVE SUMMARY

1.0 INTRODUCTION

M/s. ArcelorMittal Nippon Steel India Private Limited (AMNSIPL), a joint venture between ArcelorMittal and Nippon Steel Corporation, is one of India's leading integrated steel manufacturers. AMNSIPL operates a range of facilities across India, with a strategic focus on producing high-quality steel through sustainable and environmentally responsible operations.

AMNSIPL has established an Iron Ore Beneficiation Plant with a total capacity of 8 Million Tonnes Per Annum (MTPA) at Palnar Road, Kirandul, Dantewada District, Chhattisgarh. The plant is currently operating with two beneficiation lines. The facility operates with valid statutory approvals, including the Consent to Operate issued by the Chhattisgarh Environment Conservation Board, Nava Raipur.

1.1 PRESENT PROPOSAL

AMNSIPL proposes to expand the existing Iron Ore Beneficiation Plant capacity from 8 MTPA to 12 MTPA by installing an additional 4 MTPA processing line and auxiliary facilities within the existing plant premises of 39.838 ha located at Palnar Road, Kirandul, Dantewada District, Chhattisgarh. The beneficiated ore is transported to the Pelletization facility in Visakhapatnam via 267km cross country slurry pipeline from pumping station located within existing beneficiation plant area.

MANUFACTURING CAPACITY – AFTER EXPANSION (MTPA)

Sl. No.	Product	Existing/ Permitted	Proposed	Total after Expansion
1	Beneficiation Plant- Line I	4	--	4
2	Beneficiation Plant- Line II	4	--	4
3	Beneficiation Plant- Line III	--	4	4
Total Capacity		**8**	**4**	**12**

PROJECT COST:

The capital expenditure for the proposed expansion is estimated at Rs. 743.58 crores, including construction and commissioning of an additional beneficiation line. The capital cost of the Environmental Management Plan (EMP) is estimated at Rs. 376.6 lakhs, with a recurring cost of Rs. 58.8 lakhs per annum.

1.2 REQUIREMENTS OF THE PROJECT

Raw materials: Raw materials of Iron ore requirement for the Existing and proposed expansion is given in the table below:

Input	Unit	Quantity			Source of Raw Material	Distance in km	Mode of Transport
		Existing	Proposed	Total after expansion			
Iron Ore Fines/Lumps	MT	83,97,734	4,198,867	12,596,601	NMDC, Bailadilla	3 km	Conveyor System

To ensure uninterrupted and reliable supply of iron ore for the proposed expansion, an MoU with National Mineral Development Corporation (NMDC) has been executed.

The ore is transported via a dedicated conveyor system to the designated iron ore bin. For the proposed expansion, the same conveyor network will be utilized to supply the new 4 MTPA beneficiation plant.

Land: The existing Beneficiation Plant and its facilities are located in an area of 39.838 ha (98.43 Acres), of which 6.355 ha is Government land and the remaining 33.483 Ha. is Leased land allotted through Commerce & Industries Department, Govt. of Chhattisgarh. The expansion is within existing site area. No Forest area is involved.

LAND DETAILS

Sl. No.	Classification of Land	Area in Hectares	Khasra No.s.
1	Leased Land	33.483	265,267,268,269, 270,271,272,273, 257/1,260/1,261/1, 263/1,260/2 & 261/2, 285/2, 285/1, 284/1, 286, 284/2,290 & 291
2	Govt. Land	6.355	274, 289 & 147
Total		**39.838**	

Water: The existing Iron Ore Beneficiation Plant consumes 12,000 KLD of water, which will increase to 18,000 KLD after expansion. The requirement will be met from the Sabari River and Madadi nallah, Water linkage for additional quantity will be obtained from Govt. of Chhattisgarh.

Power: The total power requirement for the expanded facility is estimated to be approximately 55 MW- sourced from Grid, emergency power backup is provisioned through existing Diesel Generator (DG) sets).

Employment: The existing plant employs about 440 Nos (902 direct and 350 indirect). The proposed expansion will generate an additional 154 jobs (27 direct and 127 indirect), increasing the total workforce to approximately 594 No's. Preference will be given to locals for employment based on the eligibility and qualification.

Colony – Accommodation: AMNSIPL has already provided essential worker facilities, including hostel, canteen, restrooms, transport, and indoor games, within an area of 0.2 Ha of the existing plant. To accommodate additional manpower existing hostel facilities will be upgraded.

1.3 PROCESS DESCRIPTION AND TECHNOLOGY

The proposed expansion will augment the plant's processing capacity by 4 MTPA, thereby increasing the total installed capacity to 12 MTPA. Overview of the process description is given below:

Raw Material Handling,Primary and Secondary Grinding, Multi-stage Screening and Classification,Gravity and Magnetic Separation – Thickening,Reprocessing of Tailings,Filtration of Tailings,Product Handling and Storage and Utilities and Infrastructure – Supporting systems including water supply, power, control systems, and ancillary facilities.

For the proposed expansion, raw material sourcing and handling is critical for smooth operations. AMNSIPL currently sources hematite ore fines exclusively from NMDC, a Government of India enterprise. For the new 4 MTPA Beneficiation Plant Line - III, fines of -10 mm size will be conveyed directly to the plant's designated iron ore bin.

The received iron ore fines (-10 mm) are screened to separate -1 mm material for hydro cyclone treatment at 150 microns. The underflow goes to rougher spirals, and the overflow to an intermediate thickener. Oversized material (+1 mm) is ground in a ball mill to -0.5 mm and recycled to the screen. Spiral tailings are classified at -25 microns. Intermediate thickener underflow is processed in a High-Gradient Magnetic Separator (HGMS), whose concentrate is ground to 45 microns and sent to the concentrate thickener. HGMS tailings undergo further magnetic separation for recovery. Combined concentrates are routed for slurry transport and pellet making. Final tailings are thickened and filtered; cakes (~18% moisture) are sent to Phulpahad and Kundeli. Each filter press has conveyors for cake handling. Clarified water is recycled for reuse, ensuring process efficiency.

AMNSIPL has adopted tailings reprocessing to recover residual iron values, enhancing mineral conservation. Tailings undergo three-stage magnetic separation—coarser, rougher, and scavenger units—to recover Fe content. Magnetic products are directed to the concentrate thickener and subsequently to slurry tanks for pelletization at AM/NS Visakhapatnam. Non-magnetic particles are collected in a slurry buffer tank and sent for pressure filtration. The system produces dry filter cakes suitable for transport while ensuring efficient water recovery and recycling.

The beneficiation process is centrally monitored with advanced instrumentation and supported by environmental safeguards, including dust suppression, water recycling, and tailings management system.

1.4 DESCRIPTION OF ENVIRONMENT

The predominant wind direction is from WSW-SW-SSW Sector accounting to 48.82% with calm wind for 4.48% and wind from other directions accounting to 46.70%.

Ambient Air Quality (AAQ) was monitored at Eight (8) locations, showed all values well within the limits of NAAQ standards specified for Industrial, Rural, Residential & Other areas.

Air Quality in the study area (All the values are in $\mu g/m^3$)

S. No	Pollutant	Range of values (Min – Max)	NAAQ Standards For Industrial, Residential, Rural and other areas
1	PM_{10}	41.9 – 69.8	100
2	$PM_{2.5}$	20.5 – 34.8	60
3	SO_2	7 – 18.8	80
4	NO_2	8.2 – 21.5	80

Note: CO values are observed less than 1 ppm during study period.

Noise levels were monitored at eight (8) locations at villages and were found to be well within the limits. Ambient noise levels in residential areas ranged from 49.9–54.5 dB(A) during daytime and 41.9–44.1 dB(A) at night, mainly due to routine village activities. All values are within the NAAQS limits. Ambient noise levels at the project site were 70.1 dB(A) during daytime and 62.3 dB(A) at night, within the prescribed limits for industrial zones.

The ground water samples were collected from eight (8) selected locations within and in the vicinity of the project site and were analyzed for physico-chemical parameters. The results were evaluated against the permissible and acceptable limits for drinking water quality (IS: 10500 – 2012). Groundwater quality across most sampling locations complied with IS 10500:2012 standards. The groundwater is therefore considered suitable for domestic use after conventional treatment and disinfection.

Surface water quality monitoring was carried out at ten (10) selected locations. Samples were analyzed for a comprehensive range of physico-chemical and biological parameters in line with Central Pollution Control Board (CPCB) guidelines. Parameters relevant to irrigation (EC, SAR, Boron) conform to Class E standards, ensuring no adverse effects on agriculture.

Soil samples were collected from eight (8) representative locations within the study area to evaluate baseline fertility and physico-chemical properties. Sampling and analysis followed standard procedures and methodologies. Soil texture ranged from sandy clay loam to sandy loam and loamy sand, Overall, the soils across the study area are physically stable, chemically balanced, and agriculturally suitable, with localized nutrient management

Primary survey was conducted with established and accepted ecological methods in different habitats of study area. The field data collection mainly included biodiversity status assessment of different life forms Habit) of floral elements such as Trees, Shrubs, Climbers, Herbs and Grass. The Schedule I species observed include Jungle Cat, Indian Leopard, Indian Common Mongoose, Giant Flying Squirrels, Golden Jackal, Indian Porcupine, Sloth Bear, Sambar Deer, Indian Fox, Indian Pangolin, Indian Peafowl, Barn Owl, Eurasian Eagle Owl, Brown Fish Owl, Cotton Pygmy Goose, Common Hill Myna, Russell's Viper, Indian Rat Snake, Spectacled Cobra, Indian Monitor Lizard, Indian Rock Python and Checkered Keelback. A Wildlife Conservation Plan for Rs.80 lakhs has been prepared and to be submitted to the Principal Chief Conservator of Forests (PCCF), Raipur, Chhattisgarh.

The socioeconomic status of the study area can be considered moderate, reflecting both developmental needs and community aspirations. Significant gaps persist in basic infrastructure, particularly in access to safe drinking water, sanitation, healthcare, and education. Most households depend on hand bore wells, often yielding hard water, while many villages lack adequate drainage and waste management facilities.

A traffic study was conducted to evaluate the adequacy of the road network, specifically the road connecting the plant to Palnar–Kirandul. The findings confirm that the proposed expansion of the Iron Ore Beneficiation Plant from 8 MTPA to 12 MTPA, through the addition of a 4 MTPA beneficiation circuit, will not adversely affect the existing road infrastructure. The Level of Service (LOS) remains at Category 'A' (Excellent).

1.5 ANTICIPATED ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

AIR ENVIRONMENT

The proposed expansion of the Kirandul Iron Ore Beneficiation Plant aims to increase capacity from 8.0 MTPA to 12.0 MTPA by adding a third beneficiation line of 4.0 MTPA within the existing premises. The facility employs wet beneficiation technology, which generates lower air pollution compared to dry systems.

In the expanded plant, potential emissions will mainly comprise fugitive dust from material handling, limited point source emissions from DG sets for emergency power, and minor process emissions from crushing and screening units. However, these are expected to remain within manageable levels due to the controlled process design.

Transport-related emissions are minimal. Run-of-mine (ROM) iron ore from NMDC's Kirandul mines is conveyed entirely through covered conveyors, while the final concentrate is dispatched via a closed underground slurry pipeline. The only notable external movement involves partially dewatered tailings, which are transported to approved Tailing Storage Facilities (TSFs) or designated land reclamation sites.

Incremental cumulative ground level concentrations from expansion of Plant, when superimposed on existing quality, lie within norms.

The Overall Scenario with predicted concentrations over the baseline is shown below.

PREDICTED GROUND LEVEL CONCENTRATIONS AND OVERALL SCENARIO, $\mu g/m^3$

24-Hourly Concentrations	Particulate Matter - 10 (PM_{10})	Particulate Matter – 2.5 ($PM_{2.5}$)	Sulphur Dioxide (SO_2)	Nitrogen dioxide (NO_2)
Baseline Concentration (Max)	69.8	34.8	18.8	21.5
Predicted Ground Level Concentration (Max)	0.175	0.00013	0.018	0.022
Overall Scenario	**69.97 {100}**	**34.80 (60)**	**18.81 {80}**	**21.52 {80}**

NOTE: Values in parenthesis are National Ambient Air Quality (NAAQ) standard limits specified for Industrial, Residential, Rural and other areas.

AIR POLLUTION CONTROL MEASURES

The Kirandul beneficiation plant operates on a wet iron ore beneficiation process, which minimises dust generation during ore processing. With concentrate transport undertaken entirely through a dedicated slurry pipeline and iron ore received from NMDC via closed conveyors, process-related particulate emissions are negligible.

However, fugitive dust can arise from limited dry material handling, vehicle movement, and ancillary activities.

Key measures include:

1. Operation of a wet beneficiation process, eliminating dust generation during ore processing.
2. Iron ore Concentrate transport through a fully enclosed slurry pipeline, avoiding transport-related emissions.
3. Iron ore supply via closed conveyor systems from NMDC, ensuring no dust escape.
4. Mandatory covered transportation within the plant; vehicles without tarpaulin covers prohibited from entry.
5. Periodic mechanical cleaning of approach roads to the tailings storage facility (TSF) using scrapers and vacuum trucks.
6. Regular water sprinkling on approach roads to suppress dust re-entrainment.
7. Structured plantation programmes along roads and parking areas, with green belt development covering at least 33% of plant area.
8. Regular vehicular emission checks by in-house or authorised agencies; all vehicles to maintain valid PUC certificates.
9. Speed regulation for vehicles within the premises to reduce dust and improve safety.
10. Adequate parking facilities inside and outside the plant to prevent traffic congestion.
11. Enhanced housekeeping practices supported by staff and driver training for dust control and cleanliness.
12. Scheduled preventive maintenance and monitoring of emissions of DG sets to ensure compliance with emission norms.

The significant off-site material movement involves transporting partially dewatered tailings to approved Tailing Storage Facilities (TSFs) or designated land reclamation sites. These tailings are first conveyed as slurry to ponds for thickening and partial dewatering. The settled material, containing moisture, is then transported in covered trucks from Kadampal Tailing Dam (4 km), mini tailing ponds near the plant, or the main TSF at Khasra Nos. 289–291.

TAILING MANAGEMENT PLAN AFTER COMMISSIONING OF DRY FILTRATION

S. No	Year	Tails generation in MT				Storage of Tails at		Tails consumption in land reclamation works/Sales (planned)
		In existing Beneficiation plant -8 MMTPA including Tail reprocessing/ year		In proposed Beneficiation plant- 4 MMTPA @ 4% rejection rate	Total Tails generation -12 MMTPA/ year	Kundeli lease hold land of AMNS ((16,00,000 MT) Per year storage	Upcoming Phulpad site of AMNS (50,00,000 MT) Per year storage	
		Beneficiation Plant @ 6% rejection rate	Tails Reprocessing					
1	2026-28	4,50,000	2,15,000		6,65,000 MT	1,50,000 MT	3,00,000 MT	2,15,000 MT
2	2029-30	4,50,000	2,15,000	1,60,000	8,25,000	2,00,000 MT	4,00,000 MT	2,25,000 MT
3	2031 onwards	4,50,000	-	1,60,000	6,10,000	2,00,000 MT	4,10,000 MT	-

Note

1. Total Tails storage capacity is 6.6Million tons which will cater for a period of 11.5 years based on the above rate of generation
2. Exploring alternative technologies to reduce the Tails generation.
3. R&D works under way for utilization of Tails in road construction & as a replacement of sand

The Conventional / Thickened (Paste) Tails currently being produced, in future will follow Dry Tails Filtration process in a phased manner. The dewatered filter cakes will typically contain around 18% moisture, which is considered optimal for safe handling and transportation. The moisture content provides sufficient cohesiveness to prevent dust generation, while still allowing easy discharge and stacking.

NOISE ENVIRONMENT:

Noise generation in the existing and expanded beneficiation plant will primarily arise from ore crushing, screening operations, conveyor systems, pumps, slurry handling equipment, and auxiliary machinery such as diesel generator (DG) contribute to ambient noise levels. Vehicle movement within the plant and along approach roads also adds to the noise environment, particularly during material transfer to and from the tailings storage facility (TSF). Baseline noise monitoring in and around the plant has indicated that existing levels are within prescribed CPCB standards for industrial and residential zones, and the proposed expansion is not expected to cause significant exceedance when proper noise control measures are maintained.

NOISE MITIGATION MEASURES:

a. Installation of acoustic enclosures for all DG sets, in compliance with CPCB guidelines.
b. Use of low-noise design equipment for crushers, screens, pumps, and conveyors wherever feasible.
c. Periodic maintenance and lubrication of all rotating and moving equipment to prevent excess noise from wear or misalignment.
d. Provision of vibration isolators and dampers for machinery foundations to reduce structural noise transmission.
e. Restricting operation of high-noise equipment to designated areas within the plant, away from boundary zones.
f. Regulation of vehicle speeds and enforcement of no-honking policies within the plant premises.
g. Paving of main internal roads to reduce tyre–road interaction noise.
h. Development and maintenance of a dense greenbelt along the plant boundary to attenuate noise propagation to surrounding areas.
i. Scheduling of high-noise activities during daytime hours to limit disturbance to nearby habitations.
j. Provision of personal protective equipment (PPE) such as earplugs and earmuffs to workers in high-noise areas.
k. Periodic occupational noise monitoring to ensure compliance with the Factories Act and CPCB workplace noise limits.

WATER ENVIRONMENT

The beneficiation plant operates on a wet process requiring continuous water input for ore grinding, slurry preparation and transport, classification, cooling, sealing, batching and flushing of slurry pipelines, firefighting, dust suppression, gardening, and housekeeping. The existing facility consumes 12,000 m^3/day of water, which will increase to 18,000 m^3/day after expansion to 12.0 MTPA. Freshwater will be sourced

from the Sabari River (Sukma water pumping station) and the Madadi water body, for which AMNSIPL holds requisite permissions.

Domestic water demand for the plant and hostel facilities will be 45 m^3/day, generating about 36 m^3/day of sewage. For this, 3X15 KLD STPs at the project workers area, hostel area and operation workers area will be installed. The treated effluent will be reused for greenbelt irrigation and dust suppression within the premises.

Additionally, AMNSIPL has established a dedicated rainwater harvesting and storage system covering 6,432.704 m^2 with an average depth of 5.0 m, providing a total capacity of approximately 32,163.52 m^3. This facility captures and stores monsoonal runoff for use in plant operations, further strengthening water sustainability measures.

SOLID WASTE MANAGEMENT – TAILINGS MANAGEMENT

The beneficiation plant generates approximately 6,65,000T/year of tailings, comprising 4,50,000T/year from beneficiation and 2,15,000T/year from reprocessing operations. Tailings are first transported in slurry form to ponds, where water is recovered through natural sedimentation and recycled for reuse. The partially dewatered tails are then transported to the Tailing Storage Facility (TSF) for secure storage.

The current tailings management system follows a multi-tiered approach:

- Kadampal Tailing Dam (leased from NMDC, capacity 9,40,000T), located at a distance of 4 km from the Beneficiation plant, serves as a temporary storage until the dry filtration facility becomes operational.
- Mini Tailing Ponds (two units of 50 KT each) are located adjacent to the plant and receive thickened tails (55–58% solids) when filtration is unavailable.
- Main TSF at Kirandul, Dantewada (capacity 1.5 million tonnes, approved by CECB), designed with engineered slopes, retaining walls, stormwater garland drains, and plantation, ensures long-term safe storage and environmental protection.

The supernant water from these ponds will be recycled back into system. To reduce wet tailings storage facilities and enhance water recovery, AMNSIPL proposes two Tailing storage areas at Kundeli and Phulpahad.

A study by IIT Indore assessed iron ore tailings (IOT) from the plant. Toxicity Characteristic Leaching Procedure (TCLP) results confirmed heavy metals were well within permissible limits, indicating stability and no risk of hazardous leaching. The IOT samples exhibited a high friction angle (32.25°–40.66°), reflecting excellent interlocking properties suitable for backfilling applications. While the study validates safe utilization of IOT without chemical treatment, large-scale trials are recommended to further evaluate performance and practical benefits.

The beneficiation of iron ore generates reject material known as tailings, which are stored in designated Tailings Storage Facilities (TSF). Effective solid waste management is essential to maintain environmental hygiene and uphold best practices.

Currently, technologies for recovering remnant iron values are not economically viable and do not support downstream processes. To address this, the Kirandul Beneficiation Plant has initiated efforts to reduce dump sizes and explore alternative, meaningful applications for tailings. Potential applications include their use in rural road construction, civil engineering works, brick making, and reclamation of barren or degraded lands.

AMNSIPL has also partnered with leading institutions such as IIT-Indore and NIT-Raipur to undertake R&D projects on using lean iron ore tailings as construction materials.

GREENBELT DEVELOPMENT

AMNSIPL has already developed a greenbelt over 11.70 ha within and around the beneficiation plant premises, covering about 29.37% of the total area. A total of 5,400 trees have been planted so far, with a survival rate of 85%. To achieve the required 33% greenbelt coverage, an additional 1.60 ha will be developed.

SOCIOECONOMIC ENVIRONMENT

The proposed expansion of the beneficiation plant from 8.0 MTPA to 12.0 MTPA at Kirandul, Dantewada District, Chhattisgarh, is expected to deliver significant socio-economic benefits. It will generate substantial direct and indirect employment for local communities across skilled, semi-skilled, and unskilled categories, helping to reduce rural unemployment and distress migration. Ancillary sectors such as transport, trade, construction, and services will also see increased activity, contributing to higher household incomes and local business growth.

The project is further expected to act as a catalyst for improved physical and social infrastructure. Development of roads, water supply, electricity, and communication networks will be complemented by initiatives in education, healthcare, vocational training, and community facilities through Corporate Social Responsibility (CSR) programs and collaboration with District Administration and local authorities. Increased economic activity will also strengthen the revenue base of local governing bodies, enabling greater investment in public welfare.

Given the predominantly tribal population and existing socio-economic challenges, the expansion presents an opportunity to foster inclusive development while respecting local culture and traditional livelihoods.

1.6 ENVIRONMENTAL MONITORING PROGRAMME

AMNSIPL has instituted a comprehensive Environmental Monitoring Programme to assess existing pollution levels and evaluate the effectiveness of the mitigation measures implemented which includes Ambient Air Quality, Groundwater Quality, Surface Water Quality, Noise Levels and Soil Quality

Post-project environmental monitoring will be continued in a systematic manner to track pollutant concentrations and verify adherence to prescribed standards of MoEF&CC, CECB, CPCB, and other statutory authorities.

AMNSIPL has earmarked a budget of ₹13.5 lakhs as recurring cost towards the implementation of the Environmental Monitoring Programme.

1.7 ENVIRONMENTAL MANAGEMENT PLAN

The total capital cost of Environmental Management Plan which will be incurred for the of the beneficiation plant is estimated to be about Rs. 376.6 Lakhs with annual recurring cost of Rs. 58.8 Lakhs.

PROPOSED BUDGET FOR IMPLEMENTATION OF ENVIRONMENTAL MANAGEMENT PLAN

Sl. No.	Activity	Mitigation Measures	Capital Cost (Rs. Lakhs)	Recurring Cost / annum (Rs. Lakhs)
1	Air Environment	Closed conveyors, water sprinkling, dry fog dust suppression at transfer points, regular mechanical road cleaning, mandatory tarpaulin cover for trucks, greenbelt along roads	100	10
2	Noise	Low-noise equipment, acoustic enclosures for crushers/pumps, vibration dampers, PPE (ear plugs/muffs), greenbelt at boundary, noise monitoring	10	01
3	Wastewater Management	100% closed loop water circuit, paste thickener, return water recycling, lined tailings ponds, STP for domestic wastewater, online flow meters	50	05
4	Solid Waste / Tailings	Tailings to TSF with engineered containment, progressive shift to Dry Filtration, use of tailings in road construction, bricks & land reclamation (with R&D support from IIT/NIT)	100	20
5	Occupational Health & Safety	Occupational health centre, regular health check-ups, training & awareness, provision of PPE, OHSMS implementation, emergency response preparedness	7.5	02
6	Greenbelt Development	Greenbelt on minimum 33% of total area; native species; maintenance & survival monitoring	29.1	7.3
7	Wildlife Conservation	Participating in regional Wildlife conservation activities in association with Forest Department.	80.0	0
8	Environmental Monitoring	Regular monitoring (AAQ, stack/fugitive emissions, noise, wastewater, tailings stability), NABL-accredited labs	0	13.5
Total			**376.6**	**58.8**

1.8 PROJECT BENEFITS

Currently, the existing plant operations engage approximately 440 No's. The proposed expansion is expected to create additional direct employment opportunities for around 154 No's, bringing the total workforce to approximately 594 No's. Preference will be given to locals for employment based on the eligibility and qualification.

Apart from the jobs, the company had provided medical camps, vegetable farming, community centers, solar powered lamps etc. at Kirandul and nearby villages of project area. The company has also constructed a full-fledged Hostel for the benefit of the employees.

CSR ACTIVITIES

AMNSIPL has implemented various initiatives to enhance the quality of life in surrounding areas. In the last three years alone, an expenditure of ₹10.81 crores has been spent towards CSR activities in key areas such as healthcare, education, sports promotion, arts and culture, potable water supply, livelihood enhancement, skill development and women empowerment, seed capital support, community infrastructure, and environmental protection.

AMNSIPL has undertaken a wide range of Community Development Measures aimed at improving the quality of life of people residing in and around the project area. The company's CSR initiatives primarily focus on the following thrust areas:

1. Healthcare
2. Education
3. Promotion of Sports, Arts and Cultural Events
4. Potable Water Supply (installation of hand pumps, repair and maintenance of water supply schemes)
5. Livelihood Enhancement, Skill Development and Women Empowerment
6. Seed Capital, Agricultural support and support to Community Infrastructure
7. Environmental Protection

The expansion is designed with modern, energy-efficient technologies and robust pollution control systems to minimize environmental impacts. Detailed assessments indicate that potential effects on air quality, water resources, noise, and biodiversity remain within permissible limits and can be effectively managed through proactive environmental practices. The project fully complies with all statutory requirements and no pending litigations.

The cooperation of public and all local bodies is solicited in this regard.

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