

EXECUTIVE SUMMARY

Project Fact Sheet / PD Summary

Project Information

Name of Project	Proposed Scrap Recycling Steel Mill for Structural Shapes and Sections Project
Location	Brgys. Mataasna Bayan and Balanga, Lemery, Batangas
Project Proponent	SteelAsia Manufacturing Corporation
Principal Office Address	B2 Bldg., Bonifacio High Street, BGC, Taguig, Metro Manila
Contact Person and Details of Proponent's Authorized Representative	Mr. Roberto Cola Vice President Contact Details: +639178675921 Email address: RMCola@steelasia.com
Background and Nature of Project	<p>The proposed Scrap Recycling Steel Mill Project is a new Project of Steel Asia Manufacturing Corporation (SAMC). SAMC has been manufacturing steel for more than 51 years. The Philippines' largest steel company, SAMC is comprised of steel bar manufacturing companies and 1 melt shop. From 1966 to present, it has built and operated rolling mills across the archipelago. Currently, six SteelAsia Group rolling mills cover the major island groups of Luzon, Visayas and Mindanao with a combined manufacturing capacity of 2.3 million tons per year.</p> <p>SAMC set the standard for modernization in the steel industry by being technologically at par with the best in the world. The SteelAsia Group's operation systems have been internationally certified to:</p> <ul style="list-style-type: none"> • ISO 9001 Quality Management • ISO 14001 Environmental Management • OHSAS 18001 Occupation Health and Safety • ISO 17025 Testing Laboratory • UK Certification Authority for Reinforcing Steel (UK CARES) British Standard <p>The Environmental Impact Statement (EIS) was required as per Procedural Manual of DENR Administrative Order No. 30 Series of 2003.</p>
Project Description and Location	<p>The Project is a rebar and wire-rod mill with a new generation scrap recycling mill that SteelAsia will construct. The Scrap recycling or smelting will produce billets, light and heavy sections which is an input to countless uses, such as building and construction of houses, infrastructure and different concreted works. SAMC will use "state of the art" technologies for this project because in the longrun it will provide the lowest operating cost.</p> <p>It will be the first steel mill in the Philippines to manufacture light and medium sections, and merchant bars (currently 100% imported). It will be a joint venture with Yamato Kogyo, SYS, and Mitsui while the technology will come from one of the top steel equipment companies, SMS Group of Germany, with a record of accomplishment of 140 years, and Fives Stein of France with a track record of 205 years in equipment design and engineering and manufacturing.</p>
Size and Scale	1,200,000 MTPY for rolling mill (light to heavy sections) and 800k MTPY new generation scrap recycling in an area of more than 80 hectares

Project Information

Rationale

The steel industry in the Philippines is one of the most significant growth industries. Steel constitutes a basic industry prerequisite in a country's pursuit of development and industrialization. The central role of the industry stems from its linkages with numerous sectors, where its products serve as an essential input to countless uses, such as building and construction, automotive, shipbuilding and repair, electronics, packaging, etc. and it is equally important contributions to employment generation, growth, and promotion of industrial activity, etc. Therefore, ensuring a strong domestic steel and steel-based industry is vital in developing the competitive edge of a country in meeting the challenges of globalization.

With the boost in infrastructure industry in the country together with the rehabilitation activities in some parts of the country, there will be a bigger demand for reinforcing steel bars. Some of these infrastructure growth areas are in:

- South Luzon as seen in the coming years
- New infrastructure will spur additional growth in housing, retail, tourism and industrial construction
- New construction will require more steel products, best supplied by a local/ community steel mill.
- Supply of products for industrial use.

This project will also provide support to:

- SLEX Toll Road 4 Expressway
- Laguna Lake Highway
- PNR South Commuter and South Long Haul Project
- Quezon-Bicol Expressway (QuBex)
- Cavite-Laguna Expressway (CALAX)
- Cavite Industrial Area Flood Risk Management
- Project (CIA-FRMP)
- Camarines Sur Expressway

Also, since this Project is will be implemented almost in parallel with other SteelAsia Plants all over the country, this particular Plant is envisioned to produce not only billets and rebars but also light and heavy sections like H-Beams and I-Beams which are not yet available here in the Philippines. This Plant will be producing products for import-substitution to save on dollars, promote local industry, generate more employment and revenue for the country.

Project Components

Scrap Recycling:

- Electric Arc Furnace
- Ladle Furnace
- Continuous Casting Machine

Shapes and Sections:

- Reheating furnace
- Rolling train
- Block mill
- Quenching
- Cooling bed
- Bundling
- Straightener

Ancillary equipment and Pollution Control System:

- Water treatment plant
- Rainwater collection reservoir
- Compressed air
- Power substation

Project Information

- QA laboratory
- Roll shop
- Oxygen Plant

Manpower

During Construction, an estimated manpower of 1,000 workers for the project will be required where 3 are directly hired by SAMC while 997 will be employed by the Contractor.

During Scrap Recycling operations, another 1500 workers will be required which will be directly hired by SAMC in coordination with the Public Employment Service Office (PESO) of Lemery.

During decommissioning, work will be outsourced to contractors supervised by the PCO and Plant Manager of SAMC.

The Company complies with the equal opportunity principle in hiring persons with disability (PWD) as well as women. This means that the Company gives employment opportunities to PWDs and women provided the person is qualified to the position. A qualified employee, whether a woman or with disability is subject to the same terms and conditions of employment and the same compensation, privileges, benefits, incentives and allowances as any qualified employee of the Company.

For plantilla-based/regular employees, monthly salaries or wages for services rendered by an employee are timely paid twice a month via bank transfer. For transparency, the said payments are duly acknowledged by the employees through electronic and/or manual payslips. Thirteenth month pay is likewise paid to all qualified employees in compliance with the relevant laws, rules and regulations. Qualified employees also enjoy various benefits such as vacation leaves, sick leaves, overtime pay, health insurance, health plan, separation pay, retirement plan and allowances, as well as safety provisions like Personal Protective Equipment (PPE) and personal emergency kits, contributions and remittances for SSS, Philhealth and PAG-IBIG fund and other welfare benefits. Employees who have queries on the salaries or benefits they receive or are entitled to may bring their concerns with the Human Resources Department.

For contractors or manpower agencies who engage contractuels, the Company undertakes an accreditation process wherein contractors are required to submit documents to establish that they are duly registered with the Securities and Exchange Commission or Department of Trade and Industry and with the Bureau of Internal Revenue and that they have substantial capital and/or investments to ensure that they can perform the work to be done and are compliant with relevant laws and regulations, specifically on the prohibition against labor-only contracting. Without this accreditation, the Company will not engage the services of the contractor and ensure compliance by the contractors with all the rights and benefits under labor laws, rules and regulations. The Company strictly enforces such contractual provisions in order to ensure that the contractor's employees are paid all statutory benefits and that the contractor complies with all the requirements as provided by law.

For all of these manpower requirements, applicants from the host community are given priority subject to the qualifications of the applicant to the position. Job vacancies/openings are posted in the barangay and municipal bulletin boards for qualified locals to have an opportunity to work for SAMC. Local officials sometimes provide recommendations for qualified workers.

Project Information	
Duration of Project	The project is expected to operate for a period of at least 40 years.
Project Schedule	Project operation will commence 19 months after securing all necessary permits, licenses and approvals.
Total Project Cost	Estimated at PhP 25,000,000,000.00.

Process Documentation of the Conduct of EIA

The EIA Team

SteelAsia Manufacturing Corporation engaged the services of Mediatrix Business Consultancy to conduct the EIA for the project and to prepare the EIS Report. The EIA team, composed of professional experts on their respective fields and with the coordination and the technical people from the proponent, were organized based on the project's EIA needs.

Table ES2: EIA Team

NAME	DESIGNATION	EIA Registration No.	EXPERTISE	PARTICIPATION
Matilde Fernando	Project Manager / EIA Team Leader	IPCO-035	Legal Framework, Socio-Economics, Public Participation and Community engagement	Preparation of Study/ Report and consolidation of documents for the whole project study; conduct and facilitation of public participation and community engagement
RiaCaramoan	Assistant Team Leader	IPCO-106	Air and water	Preparation of Project Description and water module
Reynaldo Tejada	Air Quality Expert	IPCO-036	Air and water module	Preparation of Air and water modules including air dispersion and noise attenuation modeling
Alexis Fernando	Researcher	IPCO-034	Research and community engagement	Gathering of secondary information
Juvinal Esteban	Social Worker	IPCO-091	Socio-economics, community engagement and IEC	Preparation of socio module
Benjamin Francisco		IPCO-038	Identification of plankton community structure, presence of fish biota, macro-invertebrates, macro-benthos and fisheries resources	Preparation of Freshwater Ecology Module
Michael Chester Francisco		IPCO-040		
Victor Pantaleon		NA		
Rowena Quimpo		NA		
Jose Rene Villegas		NA		
HernaniBayani	Geologist	IPCO-58	Geology and Geohazard	Preparation of Geology Module
Allyana Marie Bermudez	Research Assistant	NA	Community engagement	Conduct of perception survey
Patrick Kenneth Fernando	Admin. Assistant	NA	Field Assignments	Gathering of secondary information

Table ES2A: Proponent Representatives assisting the EIA Team

Technical Person from Proponent	Areas of Expertise
Benjamin Magalong	Senior Vice President for Operations
Roberto Cola	Vice President for Industry Affairs
Ronald Magsalin	Project Manager

Eustaquio Alipio, Jr.	Chief Engineer
Reginald Nolido	Legal Counsel
Allan Christopher Agati	Legal
Anna Isabel Galvez	Legal
Janine Marie Soliman	Executive Assistant of the SVP for Operations

EIA Study Period/Schedule

Mediatrix Business Consultancy was engaged by SteelAsia Manufacturing Corporation in September 2017. The project proponent and the EIA Preparers proceeded in coordinating with the stakeholders on the proposed project especially with LGUs concerned on October 30 and November 04, 2017 as IEC. Stakeholder profiling proceeded immediately to prepare for the initial EIA processes. **Public Scoping** was conducted on December 14, 2017 while the **Technical Scoping** was conducted last January 22, 2018. EIA baseline studies and impact assessment were conducted in May and the EIA Report was completed within three months.

Table ES2: EIA Milestone and Schedules

EIA Activity/Stage	Date
EIA Planning, Project and Stakeholder Profiling	October 2017
Preliminary IEC and consultation with the officials of Lemery	October 30 and November 04, 2017
Public Scoping	December 14, 2017
Technical Scoping	January 22, 2018
Baseline studies	September 2017 to June 2018
EIA study, impact assessment and mitigation plan	
EIS Report Preparation	
Report Submission to EMB	August 2018

EIA Study Area

Figure 0.1 presents the project site area. An enlarged map is provided separately.

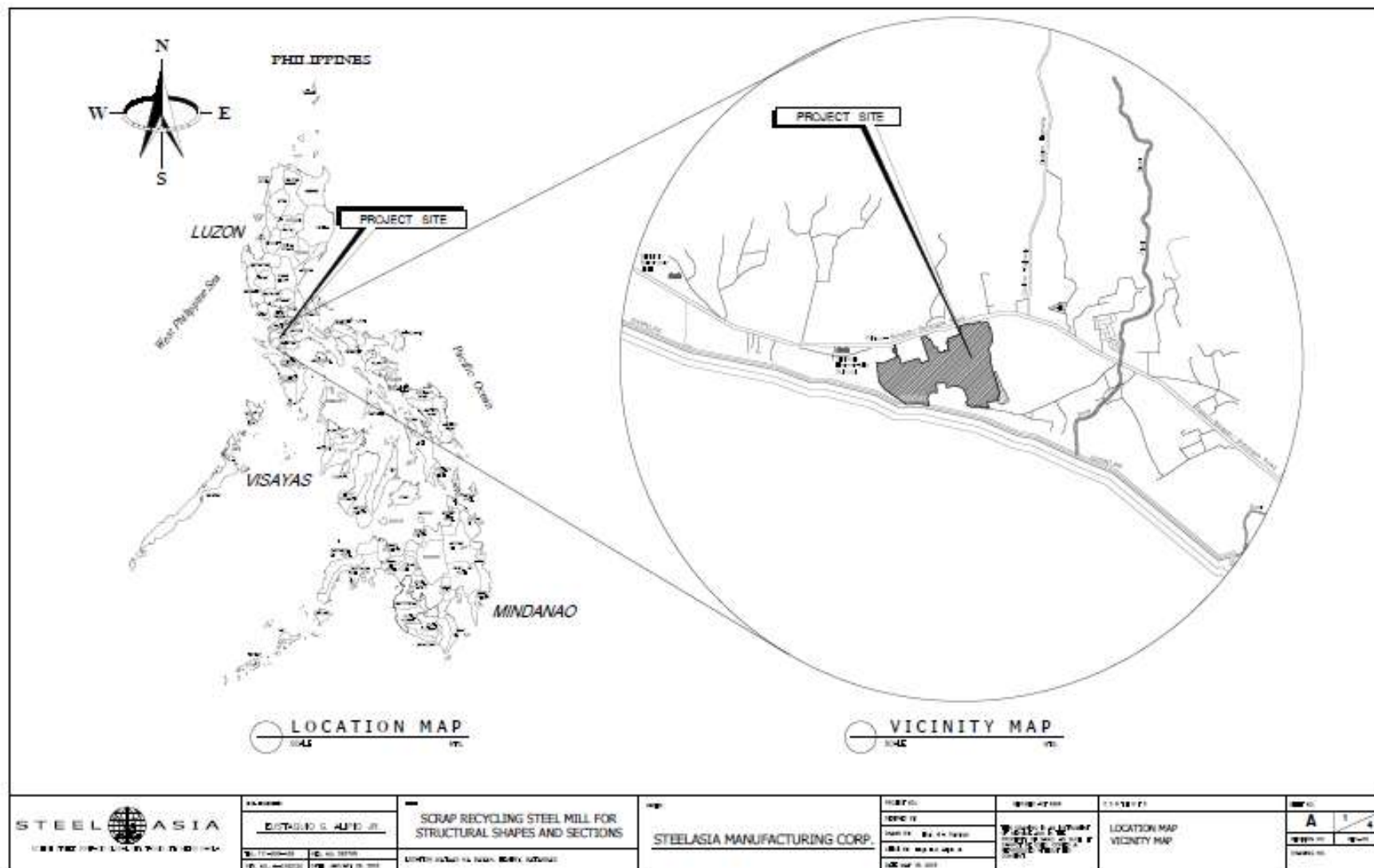


Figure 0.1: Study Area

EIA Methodology

The EIA was prepared in accordance with the prescribed standards and procedures under the Philippine Environmental Impact Statement System. Table below presents the detailed EIA methodology per environment sector/component.

Table ES3: EIA Methodology

EIA Module	Study	Parameters/Scope	Baseline Methodology	Sampling and
Land				
Geology/Geomorphology, Pedology, Land Use & Classification		Reconnaissance, land use, land classification assessment, slope, soil types and classification, erosion	Secondary data, soil sampling and testing, review of geological reports and maps, soil site assessment	
Terrestrial Biology – Wildlife and Vegetation		Flora and fauna species inventory, species endemicity and conservation status, species abundance, frequency and distribution	Use of secondary dataand inventory	
Water				
Hydrology/Hydrogeology		Regional hydrogeology, catchment and drainage system	Spring & well inventory, flow measurements, use of secondary data, water balance analysis, flow duration and water flow analysis and groundwater recharge and productionanalysis, interviews	
Water Quality		Physico-chemical and bacteriological characteristics of rivers, wells, springs, and coastal water	Primary data were secured through water sampling and laboratory analysis	
Freshwater Ecology		Full accounting of all existing benthic habitats, species, composition, density, and diversity of sea grass resources and associated macro benthic algae in front of the project site , commercially-important macro invertebrates in the inter-tidal areas, plankton community	Use of primary and secondary data and interviews	
Air				
Air Quality		Ambient air quality and noise levels	Primary data through sampling and laboratory analysis	
Meteorology/Climatology		Monthly average rainfall, climatological normal and extremes, wind rose diagrams, and frequency of tropical cyclones	Use and review of secondary data	
Air Dispersion Modeling		Worst case scenario identification, use of meteorological data	Use of AERMOD Model	
Noise			Sampling station noise in receptor	

EIA Module	Study	Parameters/Scope	Baseline Methodology	Sampling and
			areas	
Climate Change				
Temperature change		Seasonal Temperature increase (in °C) in 2020 and 2050 under medium range emission scenario in Batangas Monthly Average Temperature without Climate Change Monthly Average Temperature with Climate Change (2006-2035)	Effects of Temperature Increase	
Rainfall change		Seasonal rainfall change (in %) in 2020 and 2050 under medium range emission scenario in Batangas Monthly Average Rainfall without Climate Change (1980-2010) Monthly Average Rainfall with Climate Change (2006-2035) Monthly Average Rainfall with Climate Change (2006-2065)	Effects of change in rainfall pattern	
Greenhouse as Assessment		GHG Emissions based on IPCC 2006 Guidelines and USEPA Procedure	Bunker oil consumption vs GHG emissions	
People: Socio-Economic, Health				
Public health and Demography		Morbidity and mortality trends, Demographic data of impact area: - Number of households and household size - Land area, - Population, - Population density /growth - gender and age profile, - literacy rate, profile of educational attainment	Interviews with key elected officials of the barangays (from barangay captains to councilors and the social welfare barangay officers/ barangay health workers); analysis of secondary health data; Use of secondary data from RHU and NSO; Interviews with the locals; household-level survey	
Socio-economics		Socioeconomic data: Main sources of Income, Employment rate/ profile, sources of livelihood, Poverty incidence, commercial establishments and activities, banking and financial institutions	Perception surveys, Interviews with municipal and barangay officials; analysis of secondary data; analysis of survey results Provision of traffic management flow in a traffic management plan Provision of housing options for workers within the vicinity	

EIA Module	Study	Parameters/Scope	Baseline Methodology	Sampling	and
<i>Environmental Risk Assessment</i>					
Risk Assessment		Safety risks and physical risks	Consequence and Frequency analyses to be undertaken using the methodology described in the Revised Procedural Manual for DAO 2003-30		

Public participation, scoping and consultation in the conduct of the EIA Study

As provided in DAO 2003-30, MC 14 Series of 2010 and DAO 2017-15, public participation is mandatory for this project. SteelAsia Manufacturing Corporation conducted a series of pre-scoping IEC through public consultation, formal and informal discussions with the Lemery Officials from July 2017 and continuing regarding the project proposal.

Mediatrix Business Consultancy was engaged by SteelAsia Manufacturing Corporation in September 2017. The project proponent and the EIA Preparers proceeded in coordinating with the stakeholders on the proposed project especially with LGUs concerned on October 30 and November 04, 2017 as IEC. Stakeholder profiling proceeded immediately to prepare for the initial EIA processes. **Public Scoping** was conducted on December 14, 2017 while the **Technical Scoping** was conducted last January 22, 2018. EIA baseline studies and impact assessment were conducted in May and the EIA Report was completed within three months.

Description of Key EIA Methodologies

Summary of Baseline Characterization

Information below summarizes the salient findings of the baseline information/data for the land, water, air and people components.

Table ES4: Summary of Findings

Environmental component	Key Findings
Physical Environment—Land	The land classification of the project area is Alienable and Disposable according to NAMRIA. As per Lemery's land use plan, it is still agricultural. However, the LGU of Lemery issued a Certification that this Project is compatible with the proposed rezoning and amendment of Zoning Ordinance 2012-2021.
Physical Environment—Air	The climate of the proposed site belongs to Type III as referred to the climate map of the Philippines based on the Modified Coronas system of classification. The Type III climate is not very pronounced maximum rain period with a short dry season from November to April and wet during the rest of the year.
Physical Environment—Water	Based on the assessment of the project site, Balayan Bay is located Just beside the Project Site.
Biological Environment	Balayan Bay is just beside the project area. The vegetation in the project area is commonly described as ' <i>parang vegetation</i> ' with is completely devoid of forests patches. There are no ridges, creeks or other natural waterways that pass through the site. The <i>parang vegetation</i> is best characterized as marginal areas with widespread grassland and some sparsely scattered trees. In the case of the project site, the dominant grasses are Cogon (<i>Imperata cylindrica</i>) and Talahib (<i>Saccharum spontaneum</i>)

Environmental component	Key Findings
	and the only tree species that was observed to thrive with these grasses is the Ipil-ipil. It is also evident that the area has been previously cleared of vegetation to pave the way for the building of concrete structures that have been ultimately decommissioned during abandonment. The remaining trees are located mostly in the eastern periphery of the project site.
Socioeconomic and Cultural Environment	Perception surveys were done in 2017. A total of 595 households were randomly interviewed and surveyed, which corresponds to 20% of the estimated household population of Brgy. Mataasna Bayan and Balanga. Details of the perception survey are provided under People Module of this EIS.

Impact, Mitigation and Monitoring Summary

Provided below is the Impact, Mitigation and Monitoring Summary.

Table ES5: Impact, Mitigation and Monitoring Summary

Major Activities Description/Details key environmental aspects or activities	Potential Impact, nature and estimate of major emissions	Impact mitigation, built-in management measures and facilities planned
Preconstruction Phase		
Land	Restriction on the land use classification of Project site	The land use is classified as industrial. Provided in Annex G is the LGU Certification of compatibility with proposed rezoning and amendment of Zoning Ordinance 2012-2021.
	Project's general impacts to the environment	Environmental impact assessment and acquisition of Environmental Commitment/Compliance Certificate
Construction Phase		
Generation of domestic wastewater	Contamination of water quality	Provision of septic tanks and implementation of seepage management
Solid waste generation	Accumulation of solid wastes	Provision of Material Recovery Facility (MRF)
Chemicals and hazardous wastes generation	Contamination of land and water	<ul style="list-style-type: none"> • Securing of Hazardous Waste Generation ID • Provision of hazardous waste storage area • Treatment and disposal with Certificate of Treatment by DENR-accredited third party treaters
Use of domestic water	Water resource use of competition	<ul style="list-style-type: none"> • Provision of water from water utility • No extraction of groundwater
Construction of the steel mill complex	Air emission (TSP, PM10, PM2.5, SOX, NOX) and noise pollution from equipment and	<ul style="list-style-type: none"> • Training on power equipment and vehicle use and speed • Proper maintenance, designation of no idling zone • Good house keeping • Water sprays, use of enclosures, barriers and buffer

	vehicles.	zones <ul style="list-style-type: none"> Implementation of Reforestation and Carbon-sink Program: tree planting within the perimeter
	Potential health and safety hazards for construction workers	<ul style="list-style-type: none"> Health and safety policies Employee safety inspections and toolbox meetings Regular APE and use of PPEs First aid training
Operations Phase		
Rebar operation	Effect on public health due to dust and emissions brought about by the project	Coordinate with Rural Health office for the implementation of programs related to community health.
	Water pollution	<ul style="list-style-type: none"> Zero effluent Provision of Rain catchment reservoir Provision of Water Treatment Facility for process water
	Air emission and noise pollution	<ul style="list-style-type: none"> Training on power equipment and vehicle use and speed Water sprays, use of enclosures, barriers, and buffer zones. Proper maintenance, designation of no idling zone 65 meters stack height Routine plant maintenance and good house keeping Use of low sulfur fuel (LSFO or mixing with Diesel) Training on proper equipment use and speed
	Employment generation	Preference will be given to qualified residents of Brgy. Mataasna Bayan and Balanga and in the municipality of Lemery as a whole.
	Increase in economic opportunities through associated incomes and taxes	These are predominantly positive effects, no mitigation measures necessary.
Solid waste generation	Accumulation of solid wastes	Provision of Material Recovery Facility (MRF)
Chemicals and hazardous wastes generation	Contamination of land and water	<ul style="list-style-type: none"> Securing of Hazardous Waste Generation ID Provision of Hazmat Storage Facility Treatment and disposal with Certificate of Treatment by DENR-accredited third party treaters
Storage, handling and transport of rebars	Health and safety hazards (e.g. heat and hot liquids)	<ul style="list-style-type: none"> Health and safety policies Installation of proper ventilation Implementation of safety buffer zones to separate areas where hot materials are handles and stored. Employee safety inspections and toolbox meetings.

		<ul style="list-style-type: none"> Regular APE for employees Use of PPEs First aid training Provision of 24-Hour Clinic Provision of Ambulance Spills containment of fuel
	Traffic and road accidents	<ul style="list-style-type: none"> Implementation of Traffic Management Plan Provision of proper road signages. Designation of marshalling/holding area offsite Observe traffic rules and load limit requirement
	CO ₂ emissions	<ul style="list-style-type: none"> Utilize thermally-efficient heating process equipment Explore the viability of using inline Electric Induction heating process after the reheating furnace Engage in carbon sequestration projects such as tree planting and use of electricity from renewable energy sources such as geothermal, etc.
	Noise	<ul style="list-style-type: none"> AC motors Enclosed facility Tree buffer zone Insulate structures
	Water collection and operational treatment	<ul style="list-style-type: none"> Zero water discharge Water is recycled and re-circulated within the Water Treatment Facility, which consists of grease/oil skimming, scale inhibitors plus filtering and bio/algaecide
Abandonment Phase		
<ul style="list-style-type: none"> Removal of wastes and oil spills if any Removal of all equipment, Actual Rehabilitation 	<ul style="list-style-type: none"> Change in land use Loss of jobs and community programs 	<ul style="list-style-type: none"> Turn over of the facilities which can still be used by the new project especially drainage system and rain collection Adaptation to the industrial land use of the new project Grading and drainage stabilization works including leveling of sediment trap and settling ponds Soil conditioning Planting or reforestation of endemic species Retrenchment package Labor support programs

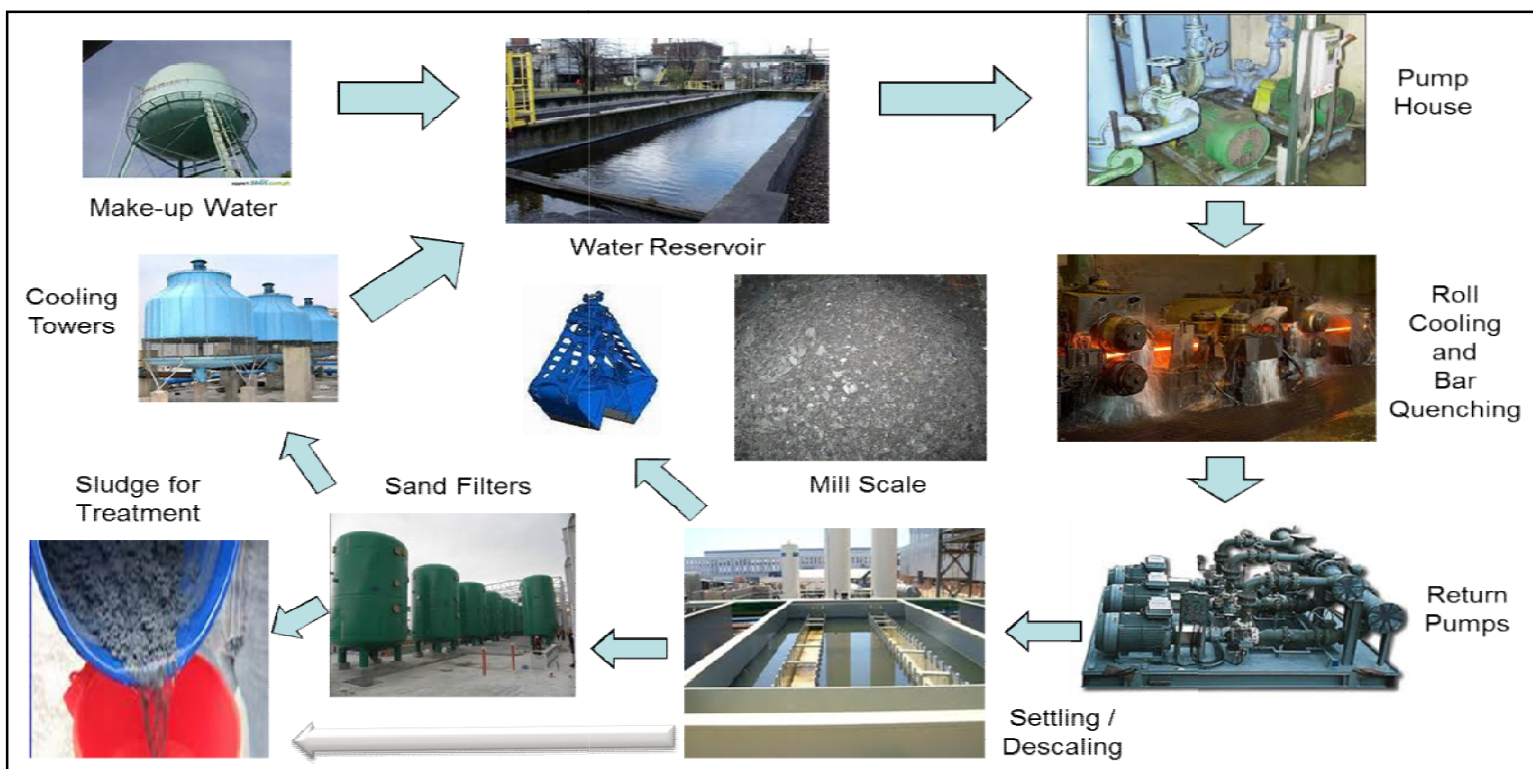


Figure 0.2: Water Collection and Operational Treatment

Key Monitoring Plans

Provided below is the matrix of Environmental Monitoring Plan.

Table ES6: Environmental Monitoring Plan

Monitoring Objectives	Potential Impact	Parameters	DAO 2016-08 Limit Level for Compliance	Sampling	
				Station Location	Frequency
Monitor the water quality and the impact of rolling mill and protect the ambient water quality	Surface water quality degradation or pollution	TSS Oil and grease Cr ⁺⁶ Pb Hg T. coliform Fecal coliform DO pH BOD	80 mg/L 2 0.01 0.05 0.002 5000 200 5 6.5-9.0 7	<ul style="list-style-type: none"> Surface Water Downstream of Balayan Bay Surface Water Upstream of Cotcot River 	Quarterly during construction and operation
	Groundwater quality degradation	TDS Cr ⁺⁶ Oil and grease Pb Hg T. coliform Fecal coliform pH	500 0.01 1 0.01 0.001 0.01 <1.1 6.5-8.5	<ul style="list-style-type: none"> Along Mataasna Bayan and Balanga Barangay Road Along Mataasna Bayan and Balanga Barangay Road Along Mataasna Bayan and Balanga Barangay Road 	Quarterly during construction and operation

Monitoring Objectives	Potential Impact	Parameters	DAO 2016-08 Limit Level for Compliance	Sampling	
				Station Location	Frequency
				<ul style="list-style-type: none"> Along Mataasna Bayan and Balanga Barangay Road 	
Monitor the air quality as well as the noise and the impact of the rolling mill and protect the ambient air quality	Possible degradation of the air quality in the areas	TSP / PM ₁₀ SO ₂ NO ₂ Sound levels	230 ug/ncm (TSP) /150 ug/ncm (PM10) 180 ug/ncm 150 ug/ncm Daytime: 70 dB (Class C) Morning/ Evening: 65 dB (Class C) Nighttime: 60 dB (Class C)	<ul style="list-style-type: none"> At the basketball court In front of Chappel, 	Quarterly
Ensure the safety and health of the workers	Effects on human health and safety	Injury, Accidents, or safety reports statistics and medical records or reports Safety performance	0 fatality	Work areas	Quarterly
Monitor the socio-economic, cultural and Health impact of the project	Increase in economic activities and development, increase in number of employed locals, Increase skills and capacity among locals, Increase in the average monthly or salary of the households	Household income, Literacy and employment statistics, Number of economic activities, Taxes generated and basic services, Health statistics	Increase by 0.5% or more of the baseline value of some economic indicators in the municipality	Community, Barangay Mataasna Bayan and Balanga	Annually

Environmental Monitoring Fund (EMF) and Environmental Guarantee Fund (EGF) Commitments

The establishment of the appropriate EMF and EGF schemes will be in accordance with the prescribed guidelines and procedures of the DENR Administrative Order No. 2003-30 and its procedural manual. The amount of the EGF will be based on the risk and hazards that will associate with the project's implementation and will be negotiated between SteelAsia Manufacturing Corporation and the DENR-EMB Central office. The proposed EGF amount will be Php500,000.00 Trust Fund and Php500,000.00 Cash Fund which is the current EGF baseline amount for similar SAMC projects.

The EMF to be established immediately after the Memorandum of Agreement (MOA) on EGF and EMF is based on the activities and programs of the Multi-partite Monitoring Team (MMT), is around Php300,000.00. The EMF can be replenished once the amount of Php300,000.00 is less than 50%.

EIA Summary

Summary of Alternatives Considered in terms of Siting, Technology Selection/Operation Processes and Design

Following were the criteria used:

Technology/Operation Process

This Project will be the first steel mill in the Philippines to manufacture light and medium sections, and merchant bars (currently 100% imported) - Joint venture with Yamato Kogyo, SYS, and Mitsui. The Technology from one of the top steel equipment companies, SMS Group of Germany, with a track record of 140 years, and Fives Stein of France with a track record of 205 years in equipment design and engineering and manufacturing. It will use the new generation scrap recycling mini-mill technology.

Resources

In terms of water source, rainwater collection is the primary water source. For make-up water, an alternative source is river water. Deep well is not an option since it may affect the supply of those nearby residential communities whose water supply is coming from their own deepwell. In terms of power supply, the Electric Cooperative will supply the required power. Standby generator sets with a capacity equivalent to the mill's cranes and critical water pump power requirement will be installed.

Logistics

Steel manufacturing is essentially a transportation business as it requires a lot of moving & handling for its raw materials and finished goods. The plant should be sited near the port, major highways and customers to optimize the logistics cost. The port to be used is Batangas Port.

Manpower Availability

Scrap Recycling and Rebar manufacturing needs around 1,000 direct and 5,000 indirect vocational and technical personnel to run and maintain the facilities 24/7.

Land

The land area must accommodate all the facilities needed in a contiguous manner. In addition it should not require a long time for land conversion and expensive site development. It should have sufficient elevation for flooding.

Carbon footprint

The proponent's policy is to adopt practices to minimize fuel use. These include optimized trip planning/routing to increase fuel efficiency, reducing the number of kilometers each truck travels daily and minimizing travel time.

The following locations below were evaluated using these criteria.

- Salong, Calaca, Batangas
- Camastilisan, Calaca, Batangas

Environmental Impacts of Each Alternative

In terms of location, the potential impacts in all locations are the same. However, other areas were not considered because of existing mangrove plantation, lack of sustainable water and power sources and the land classification is not yet industrial.

Environmental characteristics of the project site were also considered in the site selection. The proposed location is considerably clear and flat area. Being in a topographically flat area, hazards associated with slope instability, erosion and mass wasting are expected to be nil.

The project's potential impact to people, biodiversity, water (ground water, surface and marine) were also considered in the site selection. In terms of biodiversity, the project site is just in front of Balayan Bay and beside a mangrove area. Balayan Detailed study on Balayan Bay's resources is provided in this EIS under Chapter 2 on Marine Ecology.

The proposed location of the project facilities was also evaluated in terms of geohazard susceptibility based on information from government agencies such as the Mines and Geosciences Bureau (MGB) and the Philippine Institute of Volcanology and Seismology (PHIVOLCS). Generally, the project area's susceptibility to earthquake-triggered slope failure and rainfall-triggered slope failure are low. With regard to seismic vulnerability and liquefaction potential, the potential ground-shaking and liquefaction susceptibility of the project site is also low. The impacts are discussed and summarized in the next two chapters.

No Project Option

If the proposed rolling mill project will not materialize, employment opportunities and social development such as livelihood projects, skills training, scholarship programs and medical assistance for the residents of Brgy. Mataasna Bayan and Balanga in particular will not be realized. Also, the prospective LGU increase in revenue, multiplier effect of the project such as business opportunities, support to basic services like infrastructure and medical assistance and other opportunities for the community and LGU will likely lose when the project is not pursued.

Concise integrated summary of the main impacts and residual effects after applying mitigation

The Project's major impact given in a worst case scenario of drought is water resource use competition. However, when that time comes, the Project will be forced to stop its operation because it will not be feasible to operate in such worst case scenario.

Risks and Uncertainties relating to the findings and implications for decision-making

Based on the EIA conducted, there are insignificant risks and uncertainties for the Project because mitigation and management plans have been laid down and the Proponent's mother company, the SteelAsia Group of Companies has been in the business for 50 years now.