

EXECUTIVE SUMMARY

I. PROJECT FACT SHEET

BASIC PROJECT INFORMATION

Name of Project	600,000 MT Steel Mill Plant Project
Location	Barangay Baluarte, Tagoloan, Misamis Oriental
Project Capacity	600,000MT which products are round bars with sizes 10mm, 12mm, 16mm and 20mm. <i>Note: The ECC issued with 28,000 MTPY capacity was not implemented</i>
Area	The Steel Mill Plant is located within the 22.5575 hectare leased property from PHIVIDEC Industrial Estate. The plant has its own Wharf for easy load and unload of cargos situated within the 5.8514-hectare foreshore area.
Project Components	<p>Major Components</p> <ul style="list-style-type: none"> • 1 Electromagnetic Overhead Crane • Raw Material Storage Facility / Scrap Storage Warehouse (3 x 15,000.00 metric tons of metal scrap) • 6 sets of 40 ton melting furnaces using coreless electric induction furnace • 3 units of Ladle and Tundish • 1 set Billet Molder • 1 set Rolling and Shearing Mill Finished Product Storage Facility • 30 MVA Sub-Station 1 • 1 35 MVA Transformer • 2 Cabinet type Control Room • 1 standby genset

	<p>Support Facilities and Utilities</p> <ul style="list-style-type: none"> • 1 Office Admin Building • 6.0 cu.m /day Water Supply Facility • 20 cu.m Overhead Water Tank • Drainage System • Weighing Scale • Parking and Open Yard Pollution Control Facilities • 3 units Dust Collector System • 1 Filter Bag Dust Collector (Impulse Dust Cleaner Baghouse) • 1 Cooling Water Pond (5 cu.m/hr) • 2 to 3 Cooling Water Tank (Tank A: 2,400 cm Tank B: 3,400 cm) • 1 Solid Waste Management Facility • 1 Toxic and Hazardous Waste Facility • 1 Three Chambered Septic Tank
Project Proponent	PHILIPPINE SANJIA-STEEL CORPORATION
Principal Office Address	Zone 1, Nabalod, Baluarte, Tagoloan, Misamis Oriental 9000
Contact Person and Details of Proponent's Authorized Representative	Mr. Zheng Feng Quan <i>General Manager</i>
Pollution Control Officer	Ms. Flora Mae Padera Leuterio.florame95@gmail.com 090676885066
Project Type	Heavy and Other Processing/Manufacturing Industry 1.4 Smelting Plants > 15,000 MT annual rate production

Permits	Agency	Date Issued
SEC & Articles of Incorporation	Securities and Exchange Commission	Oct. 17, 2018
Amended Articles of Incorporation	Securities and Exchange Commission	May 4, 2019
Secretary's Certificate of PHIVIDEC	PHIVIDEC Industrial Authority	Oct. 24, 2018
Zoning Certificate/Locational Clearance	PHIVIDEC Industrial Authority	July 4, 2019
Environmental Compliance Certificate (ECC-R10-1901-0003)	EMB REGION 10	Jan. 8, 2019
Project Status	Operational	
Manpower	Around 300 direct and indirect vocational and technical personnel will be hired to run and maintain the facilities	
Total Project Cost	Estimated at Php 500,000,000.00	

II. PROCESS DOCUMENTATION

A. EIA TEAM

This study is composed of the various technical, environmental, institutional/legal, and social inputs and findings of the following specialists/experts:

Table ES-1. EIA Team

NAME OF PREPARER	FIELD OF EXPERTISE	EMB REGISTRATION No.
Jay Richard R. Siasoco	EIA Process, Project Management	-

Jose Paulo E. Devanadera	EIA Process, Project Management	IPCO-52
Ernesto M. Flores	EIA Process, Project Management	IPCO-129
Romel D. Sia	EIA Process	-
Proserfino Comendador	EIA Process	-
Alan De Gala	EIA Process	-
Russel Babatido	EIA Process	-

B. EIA STUDY SCHEDULE AND AREA

The study area focused on the Direct Impact Area (DIA) of the project are identified as the people from Barangay Baluarte, Macajalar Bay, Tagoloan River and Kitrol Depot.

Table ES-2. EIA Schedule

Activity	Date
Information, Communication and Communication	July 23, 2019
Technical Scoping	August 31, 2020
Public Scoping	November 03, 2020
Conduct of Baseline Studies and EIA Report Preparation	February 2020 to May 2021
First EIARC Meeting	
Public Hearing	
Final EIARC Meeting	

The assessment of the impacts, however, was projected to some areas farther to 1000-meter wide belt ringing the primary impact areas, which is identified in this study as the indirect impact areas or secondary impact areas. The subject area is accessible from National Highway through the barangay road which is passable by all types of vehicles. The environmental parameters included in this study include air, water, land and people.

The project site is near the community, Macajalar Bay, Tagoloan River and industrial plants such as Filinvest Development Corporation and Kitrol Depot.

Table ES-3. Surrounding Description and Distance of the Impact Area at the Project Site

DESCRIPTION	APPROXIMATE DISTANCE FROM THE SITE (km)	DELINEATION
Barangay Baluarte Community- Host Barangay	0.5	Direct Impact Area
FILINVEST DEVELOPMENT CORP.	0.8	Direct Impact Area
Baluarte Elementary School	0.9	Direct Impact Area
Tagoloan Community College	1.1	Indirect Impact Area
Municipal Hall	1.5	Indirect Impact Area
KITROL Depot	0.4	Direct Impact Area
Tagoloan River	0.2	Direct Impact Area
Macajalar Bay	0.4	Direct Impact Area

EIA Methodology

The EIA was prepared in accordance with the prescribed standards and procedures under the Philippine Environmental Impact Statement System and its Implementing Rules and Regulation or the DAO 2003-30.

In the preparation of the Environmental Impact Statement (EIS), Primary and secondary data were utilized for the assessment of the project impacts. Primary data were obtained from the conducted on-site investigation and field sampling/surveys while secondary data were acquired from the proponent and government agencies/institutions. Relevant and previously conducted studies were also considered. The following are the sampling/assessment methodologies employed by the EIS team for the study:

Table ES-4. EIA Methodology

EIA Study Module		Methodology
Land	Land Use	Gathering and review of Secondary data
	Natural Hazards	Gathering and review of Secondary data
	Pedology	Grab sampling and laboratory analysis
	Terrestrial	Transect walk, quadrat sampling and trapping
Water	Hydrology and Hydrogeology	Gathering and review of secondary data
	Water Quality	In-situ measurements; grab sampling and laboratory analysis
	Freshwater Ecology	Collection of samples using nets
Air and Noise	Meteorology	Gathering and review of secondary data
	Air and Noise Quality	High volume samplers, Personal Sampler and sound level meter for noise and review of monitoring data
People	Socio-economic Profile	Gathering and review of secondary data Key informant interviews Perception survey Focus group discussions

C. PUBLIC PARTICIPATION ACTIVITIES

Information, Education Campaign (IEC)

In compliance to DAO 2017-15, Public Participation for the Information Education Campaign (IEC) in form of General Assembly and Consultation was conducted on July 23, 2019.

Perception Survey

The perception survey thru house-to-house was conducted to identify the present socio-economic profile of the pre-determined social impact areas and to know the level of awareness of the people and their acceptance to the proposed expansion project. The perception survey was conducted on July 23, 2019.

Public Scoping

On 03 November 2020, the public scoping was conducted in Barangay Baluarte Covered Court, Barangay Baluarte, Tagoloan, Misamis Oriental. The activity aims to discuss the project, including its impacts and benefits, and provide them the opportunity to present their issues and concerns as well as provide their clarifications on pertinent matters concerning the same project and was attended by the stakeholders and Officials from Brgy. Baluarte and Tagaloan. Below is the summary of the key issues and concerns raised during the Public Scoping

- Type of furnace to be used
- Benefits of the Barangay especially for employment
- Measures to minimize the noise and dust from the plant
- Taxes due to local government
- Air pollution that may reach from the Barangay
- Formation of Multi-partite Monitoring Team

Public Hearing

Public Hearing will be conducted next to present the results of the EIA Report to the stakeholders after the procedural screening of the EIA Case Handler and review and evaluation of EIA Review Committee.

Issuance of Notice of Violation

Philippine Sanjia Steel Corporation secured an Environmental Compliance Certificate (ECC-R10-1901-003) on 08 January 2019 in EMB Region X for the Steel Mill project with annual capacity of 28,000 MT of reinforcing bars within 22.5575 hectares leased property in Phividec Industrial Authority located in Buluarte, Misamis Oriental. It also covers a wharf with 1.2 hectares.

A field investigation was conducted by EMB Central Office last 27 May 2021 and found that PSSC violated the following: a) Pursuant to Section 4 of PD 1586 states that “No person, partnership or corporation shall undertake or operate any such declared environmental critical project are are withon first securing an Environmental Compliance Certificate issued by the President or his duly authorized representative” for constructing the facility more than the allowable capacity of the plant; b) Pursuant to Section 1, Rule XIX of DENR Administrative Order No. 2004-26, amending DAO

NO. 2000-81, Implementing Rules and Regulations of RA 8749 or the Philippine Clear Air Act of 1999, which provides that “All sources of air pollution must have a valid Permit to Operate issued by the EMB Regional Director;” c) Non-implementation of immediate replanting as indicated in the Environmental Management Plan. The PSSC settle the fine amounting to One Hundred Fifty Thousand Pesos (Php 150,000.00) for violating the above violation on 22 June 2021.

III. EIA SUMMARY

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

Siting: Environmental characteristics of the project site were also considered in the site selection. The location is within the PHIVIDEC Industrial Estate. The location is considerably clear and flat area consequently, erosion and mass wasting are expected to be nil. 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 regards to seismic vulnerability and liquefaction potential, the potential ground-shaking and liquefaction susceptibility of the project site is also low.

Technology Option and Design: The project adopts the latest technology of Induction Furnace Smelting Technology that requires lower power consumption, in effect lowers the electricity cost and minimizes the emission of air pollution compared to the old technology of electric arc furnace which causes heavy pollution and requires high energy cost. The Air Pollution Control Device such as Umbrella-Type Dust Collection System to be installed for each furnace and Impulse Dust Cleaner (Baghouse) is equipped with thousands of filter boxes that can capture particulate matter up to 90% of the total expected smoke and dust.

Integrated Summary of Impacts and Target Efficiencies

The summary of Impacts and Proposed Mitigation and Target Efficiencies is shown in the table below.

Table ES-5. Integrated Summary of Impacts and Target Efficiencies

PROJECT ACTIVITIES	ENVIRONMENTAL COMPONENT LIKELY TO BE AFFECTED	POTENTIAL IMPACT	PROPOSED MITIGATING MEASURES	TARGET EFFICIENCY
I. PRE-CONSTRUCTION PHASE				
Permitting	Land Use	Non compatibility with the existing land use	Secure necessary permits, zoning clearance, foreshore lease agreement and other appropriate licenses	100% compliance to zoning certificate and foreshore lease agreement. No resettlement since the Project Site is uninhabited.
Stakeholder Consultations	The People	Social non-acceptability of the Project	Conduct Information Education Campaign (IEC) campaigns and information disclosure	100% adherence to stakeholder consultations as required by DAO 2017-15 guidelines on the public consultation
II. CONSTRUCTION PHASE				
Land clearing and demolition of some existing structures	The Land	Scraps Construction debris / Soil erosion	Good housekeeping Provision of Material Recovery Facility Sell scraps Water spraying for dust management Proper construction methods and	100% to comply with the applicable guidelines under the National Structural Code of the Philippines 100% Adherence to the Ecological Solid Waste Management Act (RA 9003)

PROJECT ACTIVITIES	ENVIRONMENTAL COMPONENT LIKELY TO BE AFFECTED	POTENTIAL IMPACT	PROPOSED MITIGATING MEASURES	TARGET EFFICIENCY
			procedures and implementation of Slope protection with vegetation when necessary	
	The Air	Dust	Road water sprinkling Provision of nursery Tree planting	100% adherence to the Philippine Clean Air Act of 1999 (NAAQGV and NAAQS). 100% maintenance of pollution control devices.
		Noise	Proper maintenance of construction equipment and vehicles Use of PPE, i.e. earmuffs when needed	100% adherence to the 1978 NPCC Noise Standards
Transport and delivery of construction materials General construction activities	The People	Safety	Strict implementation of DOLE DO 13-98 <ul style="list-style-type: none"> • Health and safety policies including IATF protocols for covid-19 pandemic • Employee safety inspections and toolbox meetings • Regular APE and use of PPEs • First aid training • Provision of ambulance and Clinic Provision of Fire Fighting System	100% compliance to DOLE 13-98.

PROJECT ACTIVITIES	ENVIRONMENTAL COMPONENT LIKELY TO BE AFFECTED	POTENTIAL IMPACT	PROPOSED MITIGATING MEASURES	TARGET EFFICIENCY
		Employment	Employment generation Local Hiring Support in Alternative Livelihood trainings	100% compliance to local hiring and provision of livelihood trainings.
		Traffic	Traffic management plan	100% compliance to the TMP in coordination with the LGU.
Wastewater operations and storage	The Water	Domestic waste discharges	Use of Portable toilets	100% to comply with DAO 2016-08 Water Quality Guidelines (WQG) 100% Adherence to the Ecological Solid Waste Management Act (RA 9003).
		Used oil	Provision of a Hazardous Waste Area with proper labeling, segregation and storage of wastes Transport, treatment and disposal by DENR accredited third party contractors	
Solid waste accumulation	The Land	Solid waste pollution due to garbage	Good housekeeping Provision of a Material Recovery Facility Recycle Sell recyclables Reuse	100% implementation of the proposed mitigations. 100% to comply with DAO 2016-08 Water Quality Guidelines (WQG) 100% Adherence to the Ecological Solid Waste Management Act (RA 9003).

PROJECT ACTIVITIES	ENVIRONMENTAL COMPONENT LIKELY TO BE AFFECTED	POTENTIAL IMPACT	PROPOSED MITIGATING MEASURES	TARGET EFFICIENCY
			Septic Vaults Disposal thru DENR accredited 3rd party Proper hauling/ conveyor from vessel to wharf	
		Generation of sludge from septage	Septic tank management by desludging	
		Contamination and improper management of hazardous waste materials	Provision of Hazardous Waste area with proper labeling, segregation and storage of wastes Management of transformer oil to prevent spills. Storage rooms should have concrete containment. The transformer room/ area should also be designed to prevent accidental spills to contaminate soil in the area. The storage room also for used transformer oils should have containment - this is our Hazmat Storage Facility.	

PROJECT ACTIVITIES	ENVIRONMENTAL COMPONENT LIKELY TO BE AFFECTED	POTENTIAL IMPACT	PROPOSED MITIGATING MEASURES	TARGET EFFICIENCY
			Transport, treatment and disposal of DENR accredited third party contractors	
Operation of rolling mill facility, furnace, and general operations	The Water	Water pollution from run-off and domestic wastes	Construction of rainwater cisterns and collection ponds Regular ambient and effluent water quality monitoring using DENR standards Domestic wastewater management by connecting it to the water treatment facility Zero discharge/effluent	100% to comply with DAO 2016-08 Water Quality Guidelines (WQG)
		Use of river water for make up water	Address resource use competition; secure water permit	100% compliance to water permit.
	The Air	Air pollution from fugitive dusts,	65 meters stack height Training on power equipment and vehicle use and speed	100% adherence to the Philippine Clean Air Act of 1999 (NAAQGV and NAAQS). 100% maintenance of pollution control devices.

PROJECT ACTIVITIES	ENVIRONMENTAL COMPONENT LIKELY TO BE AFFECTED	POTENTIAL IMPACT	PROPOSED MITIGATING MEASURES	TARGET EFFICIENCY
		equipment and vehicles	Proper maintenance, designation of no idling zone Routine plant maintenance and good house keeping Use of low sulfur fuel (LSFO or mixing with Diesel) Use of enclosures, barriers and buffer zones Implementation of reforestation and Carbonsink Program Insulate structures Installation of dust collector for each furnace and properly connect and install impulse Dust Collector (Baghouse)	
		Greenhouse gas emission	Implementation of a reforestation and carbon-sink / greenhouse gas reduction program	

PROJECT ACTIVITIES	ENVIRONMENTAL COMPONENT LIKELY TO BE AFFECTED	POTENTIAL IMPACT	PROPOSED MITIGATING MEASURES	TARGET EFFICIENCY
	The People/ Noise	Noise from equipment and vehicles	Buffer zone and tree planting Enclosed facility Provision of AC motors Scheduling certain high noise emitting works to more acceptable times of day Use of the most environmentally acceptable equipment which is properly maintained and silenced Enclosures for sources of noise Provide high fence within the plant's perimeter Provide a buffer zone on the adjoining boundaries Planting of trees on the buffer zone and plant's perimeter that will serve as noise barrier/Acoustic screening. Use of the least intrusive method of work	100% adherence to the 1978 NPCC Noise Standards

PROJECT ACTIVITIES	ENVIRONMENTAL COMPONENT LIKELY TO BE AFFECTED	POTENTIAL IMPACT	PROPOSED MITIGATING MEASURES	TARGET EFFICIENCY
			<p>Proper instruction and supervision of staff</p> <p>The following noise control measures will also be applied for the protection of employees working on site as well as the nearest sensitive receptors:</p> <ul style="list-style-type: none"> • It is advisable that electrically powered equipment should be preferred, where practicable, to mechanically powered alternatives. If mechanical powered plant will be used, it should be fitted with suitable silencers and mufflers • Defective equipment/parts with abnormal noise and/or vibration will be either repaired replaced • Schedule use of equipment/machines emitting high noise like pile driver during daytime operation while, 	

PROJECT ACTIVITIES	ENVIRONMENTAL COMPONENT LIKELY TO BE AFFECTED	POTENTIAL IMPACT	PROPOSED MITIGATING MEASURES	TARGET EFFICIENCY
			minimize use during nighttime operation; • All employees working on site will be provided with proper ear protectors The Contractor shall at all times comply with all current statutory environmental legislation	
	The People	Health and safety hazards	Health and safety policies Employee safety inspections and toolbox meetings Regular APE and use of PPEs First aid training Provision of ambulance and Clinic Provision of Fire Fighting System	100% compliance to DOLE 13-98 and workplace environment guidelines.
		Employment and positive benefits	Employment generation Local Hiring	100% compliance to local hiring

PROJECT ACTIVITIES	ENVIRONMENTAL COMPONENT LIKELY TO BE AFFECTED	POTENTIAL IMPACT	PROPOSED MITIGATING MEASURES	TARGET EFFICIENCY
			Support in Alternative Livelihood trainings	
Demolition of structures	The Land	Solid waste pollution/ contamination brought about by scraps and debris from demolished structures	Good housekeeping Planting of endemic species or reforestation	100% compliance to RA 9003 or the Ecological Solid Waste Management Act.
		Change in land use	Adaptation to the industrial land use of the new project	100% compliance to future land use.
		Oil spill	Conduct of Environmental Site Assessment (ESA) prior to abandonment	100% compliance to abandonment plan following the requirement of the revised procedural manual of DAO 2003-30
	The Water	Water pollution/ contamination	Conduct of Environmental Site Assessment (ESA) prior to abandonment	100% to comply with DAO 2016-08 Water Quality Guidelines (WQG) except for those that exceed the limit.

PROJECT ACTIVITIES	ENVIRONMENTAL COMPONENT LIKELY TO BE AFFECTED	POTENTIAL IMPACT	PROPOSED MITIGATING MEASURES	TARGET EFFICIENCY
	The Air	Air pollution because of dusts from demolished structures	Sprinkling of water	100% adherence to the Philippine Clean Air Act of 1999 (NAAQGV and NAAQS).
		Noise pollution from structures being demolished	Scheduling to daytime activities Wear PPE	100% compliance to the proposed mitigations. 100% adherence to the 1978 NPCC Noise Standards.
Plant closure or operation stoppage	The People	Loss of Jobs	Payment of legal social benefits Retrenchment package Labor support programs	100% compliance to the provisions of DOLE.