



NORTHSTAR WORLD STEEL CORPORATION

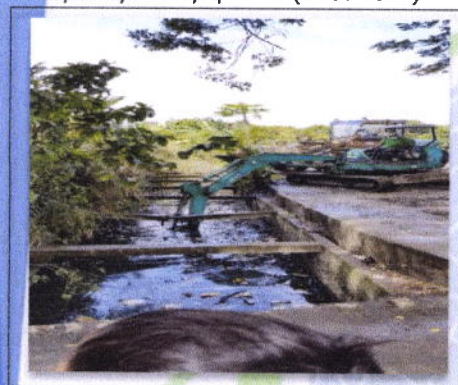
#1900 National Road, Dampol 1st, Pulilan, Bulacan
044-2156920 / 044-2156808 / 0917-8356641 / 0925-6611133

PROOF OF CONDUCT OF IEC

- **Regular cleaning of irrigational canal** - As part of Northstar World Steel Corporation committed support to the local Barangay to uphold clean and unobstructed flow of water along the NIA irrigation waterway. This irrigation waterway serves as an overflow of water during the rainy season and serves also as water supply to neighboring farmland downstream the area.
- Regular cleaning of the irrigation canal/drainage system will also help address eradication of breeding sources of insects and rodents subsequently the area will be free of related diseases like malaria or dengue, leptospirosis, etc.

Location: National Irrigation Administration canal (front of Northstar World Steel Corporation, along purok 7, Dampol 1st, Pulilan Bulacan).

Frequency: Every quarter (since 2017)



- **Initiated rehabilitation of irrigational canal** – It was noted from the past that this water passage crossing the property of NWSC is very important especially during the rainy season. This serves as a runway of excess water from neighboring rice fields. In order to maintain clear passage of water, the management initiated the rehabilitation of this bypass water canal.

Location: 1900 Dampol 1st, Pulilan Bulacan

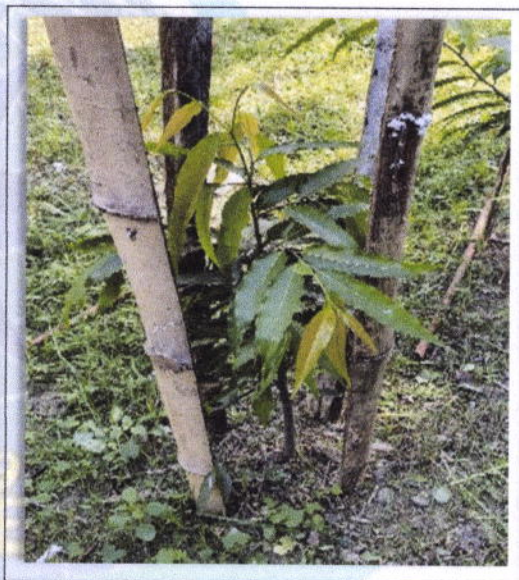
Date completed: December 2019



- **Tree planting around the plant compound—** In support of DENR executive order 193 "expanding the coverage of greening program" in cooperation with Pulilan local Government, Northstar World Steel Corporation continuously planting trees inside the perimeter of the plant. Our target is to fill all potential areas that need to be planted with trees combining with fruit bearing Mango tree, Narra tree and Mahogany tree.
- Plants and other fruit bearing trees will be in a little way can absorb carbon dioxides that is precursor to climate change aside from the benefits to the community of the produce i.e. mango, etc.

Location: Inside perimeter area of Northstar world Steel Corporation

Timeline: Continuous every year (June to October – rainy season)



DONATION FOR THE CONSTRUCTION OF SCHOOL BUILDING IN DAMPOL 1ST PULILAN BULACAN

- Donation for the construction of school building in Barangay Dampol 1st, Pulilan Bulacan
The school building was constructed to provide a conducive place for the education and career foundation of the many children of Pulilan Bulacan. The school building stands as a living representation of the company's common goal and an edifice of friendship to the community. (Dec 1, 2014)
- The goal of providing school building to the host barangay is to help address shortage of classrooms and to encourage parents and local officials that education is the basic services that should be provided to the community. The company is supportive in this endeavor to increase the literacy rate of the community and provide the youth of a better future.



IMPROVEMENT OF PATHWALK



Improvement of Path walk at Brookside Dampol 1st Pulilan Bulacan

Northstar World Steel Corporation makes an important rehabilitation to the rough and muddy road going to a residential community that passes through the company's property along Brookside, Dampol 1st Pulilan Bulacan. This gives a very comfort transport by foot and 2 wheeled vehicles for the community. (November 2019)



DONATION OF SACKS OF RICE

Donation of Prime commodities to the population of Dampol 1st, Pulilan Bulacan

Northstar World Steel Corporation continuously provide assistance to the community of Dampol 1st by giving ample sacks of rice, to help support daily needs of the people especially hard hit calamities like flood and typhoon. (2019, 2020)



DONATION OF FACE MASKS

Donation of face masks / face shields during Covid-19 pandemic to the barangay of Dampol 1st and to the municipality of Pulilan

As a sincere gesture of Northstar World Steel Corporation support to avoid massive transfer of the deadly disease, the company gear up campaign inside the company premises and support local government by donating numerous facemasks and face shields. (2020)

The company is very much concern on the impacts of the pandemic to public health especially in the barangay. The company is also supporting local officials in the campaign and implementation of local health protocols to prevent the transmission of diseases. Likewise, the company is also advocating the proper handling of the used face masks to the community.



INTERVIEW QUESTIONNAIRE

Pangalan ng Nag-interview: Evangeline G. Espinosa Petsa: 2/7/2020
 Oras ng Interview: Simula _____ Tapos: _____
 Lugar ng Interview: _____

Pangalan ng Iniinterbyu: Leilie P. Ventura Edad: 23
 Kasarian: Babae: ☒ Lalaki: _____
 Katayuan sa Lipunan: _____
 _____ May-Asawa _____ Single
 _____ Hiwalay _____ Balo
☒ _____ Live-In _____ Others, specify _____

Tirahan: _____

I. FAMILY BACKGROUND

1. Ano ang pinakakakitaan (Hanapbuhay) : NONE

2. Mayroon po bang ibang pinagkakakitaan: Online

3. Magkano ang kinikita ng pamilya sa isang buwan: (lagyan po ng Tsek)

_____ wala pang 1,000	<input checked="" type="checkbox"/> 10,000-15,000
_____ 1,000-5,000	_____ 15,000-20,000
<input checked="" type="checkbox"/> 5,000-10,000	_____ Mahigit sa 20,000

4. Sinu-sino ang naghahanap buhay sa inyong pamilya?

Pangalan	Edad	Hanapbuhay	Sweldo sa Isang Buwan
<u>Gerry Gabardo</u>	<u>29</u>	<u>Welder/Helper mech</u>	<u>10K to 12K</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

5. Saan kayo pinanganak? PULLAN

6. Ilang taon na kayong naninirahan dito sa Barangay nyo? Since birth
 Naninirahan nab a kayo sa ibang lugar? _____ OO ☒ HINDI
 Kung OO, Saan? _____

Bakit kayo lumipat sa lugar na ito? _____

May Plano Ba kayong lumipat ulit? _____

7. Ilan kayong katao na nainirahan sa inyong bahay? 6
 May-iba pa bang pamilya na nakikitira ditto sa inyong bahay? NO Mayroon _____ Wala _____

II. INFORMATION ON HOUSING

8. Klase at Halaga ng Bahay (Please Check)?

Klase	Halaga ng Bahay	Sarili	Klase ng Pag-aari	
			Umuupa	Upa sa isang Buwan
<input type="checkbox"/> Nipa/Bamboo	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Nipa/Wood	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> GI Roof/Wood	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> GI Roof/Concrete	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Scrap/Mixed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9. Pag-aari at Laki ng lupang tinatayuan ng bahay?

Laki: 30 sq.m.

Halaga: PhP 125,000

Sarili bang pag-aari ang lupang kinatatayuan ng inyong bahay?

Government Sarili Inuupahan
Atbp Ipaliwanang

10. Saan nagngagaling ang inyong tubig?

Sariling linya ng Tubig	Iniinom	Panglaba	Ibang Gamit
Nakikiigib sa Kapitbahay	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bumubili	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kung bumibili, magkano?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Deep Well	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Poso Artesiano	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Others,	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

11. Sa palagay nyo baa no ang kalidad ng inong tubig na ginagamit? Malinis

Malinis: Bakit nasabi na Malinis? Pinag kukuhanan ng Inumin

Marumi: Bakit nasabi na Marumi?

12. May sarili ba kayong linya ng koryente? Mayroon ☒ Wala

13. Gamit sa Pagluluto?

<input type="checkbox"/> Uling	<input type="checkbox"/> Kahoy
<input type="checkbox"/> Gaas	<input checked="" type="checkbox"/> LPG
<input type="checkbox"/> Gas/Electric Stove	<input type="checkbox"/> Others

14. Klase ng Toilet?

<input type="checkbox"/> Flush	<input type="checkbox"/> Water Sealed
<input type="checkbox"/> Antipolo Type	<u>Dibuhos</u> Others

15. Saan ninyo itinatapon ang inyong basura ? Ito ba ay inyong?

<input checked="" type="checkbox"/>	Sinusunog
<input type="checkbox"/>	Kinukuha ng Garbage Truck
<input type="checkbox"/>	Others (specify)

16. Anu-anong mga gamit ang mayroon ka sa bahay?

<u> / </u>	TV	<u> / </u>	Radio
<u> </u>	Electric Fan	<u> </u>	Electric Stove/Gas Stove
<u> </u>	Refrigerator	<u> </u>	
<u> </u>	Stereo	<u> </u>	

III. HEALTH

17. May nagkasakit naba sa inyong pamilya nitong nakaraang limang (5) taon?

 DD Mayroon Wala

Kung Mayroon, pakisulat ang mga nagkakasakit?

Klase ng Sakit

lagnat
Ubo
papatingin dibdib
Trangkaso

18. Ano po ba ang kadalasang nagiging sakit ng tao sa inyong lugar?

Ubo, Sipon, lagnat

19. Saan po kadalasang nagpapatingin ang mga maysakit at sino ang gumagamot?

center

20. Mayroon po bang Health Center sa inyong barangay?

meron

21. Mayroon po bang miyembro ng inyong pamilya na namatay nitong nakaraang limang (5) taon?

 Maroon / Wala

Kung mayroon, ano po ang dahilan ng ikinamatay?

22. Kayo po ba o inyong asawa ay miyembro ng organisasyon sa inyong lugar?

 Oo / Hindi

Kun oo, anong organisasyon?

IV. PEACE AND ORDER SITUATION

23. Kamusta naman po and Peace and Order sa inyong lugar?

OK naman

Kung magulo, ano po ang pinagmumulan ng gulo?

24. Ano po ang mahalagang tradisyon na isinasagawa dito sa inyong lugar?

Carabao Festival

25. Ano ang mahalagang lugar dito na may kasaysayan (Historical)?

Carabao Festival

V. ENVIRONMENT

26. May-alam ba kayong problema sa kalikasan dito sa inyong lugar? Anu-ano?

WALA

27. Mayroon na po bang ginagawa ang mga kinaukulan para maresolba ang mga problemang inyong nabanggit?

WALA

28. May napapansin po ba kayong pagbabago sa inyong kapaligiran nitong nakalipas na limang (5) taon?

WALA

29. Sa nakalipas na sampu (10) taon, anu-anong proyekto ang naitayo dito sa inyong lugar o karatig pook?

Narami

30. Sa nakalipas na sampu (10) taon, anu-anong pabrika at pagawaan ang naitayo dito sa inyong lugar o karatig pook?

Mix Cement, Bigben, Shell, Petron
North Star

31. Sa nakalipas na limang (5) taon, nakaranaas na ho ba kayo ng pagbaha sa inyong lugar?

OO ☒

Hindi ☐

Kung OO, ano ang dahilan?

Pagbaha ng kasura sa gero

Ano ho bang kaukulan solusyon para maayos ang ganitong pagbaha?

Magtapon ng basura sa imortal

VI. PERCEPTION AWARENESS

1. Alam ba ninyo na may "Steel Rolling Mills Project" (Pagawaan ng Bakal) dito sa inyong Barangay o lugar?

✓

Oo

Hindi

Kung Oo, pano ninyo nalaman? katapat namin

Ano ho ba ang inyong personal na palagay tungkol sa proyekto (Steel Rolling Mills Project) na ito?

patakatubong sa mga taong walang trabaho

2. Sa inyong palagay, anu-ano ang mga mabubuti at masasamang epekto

3. Mayroon po ba kayong nais maiparating o gustong sabihin tungkol sa nasabing proyekto?

Tangkilikin ang mga taga dampol ist
bagay ang mga taga ibang lugar

Pirma ng Ininterbyu: [Signature]

Pirma ng Nag-interbyu: [Signature]

Petsa: 2/7/2020

PERCEPTION SURVEY REPORT

February 10-14, 2020

Introduction:

Based on the new guidelines in the conduct of the environmental impact assessment of developmental projects either existing or new, there should be community awareness to be done. There should be a community consultation prior to proceed to the next steps of the EIS application.

Since the project is aiming to expand its operation and is already in existence for the past years, the management decided to just conduct a perception survey to gauge the level of awareness of the community in regard to the plant operation. The survey likewise intends to determine the community's perception on the plants' contribution to the economic progress of the locality and to the livelihood of the constituents.

The perception survey will also be the basis in determining on what kind of programs are necessary to be done for the good both of the community and the environment.

Methodology:

The following have been by the Company in the conduct of the Perception Survey.

- Developed questionnaire's/form to be used in the survey
- Conduct random survey via face to face interview and filling up the form. Respondents were identified randomly
- Tabulation and analysis of the results

Results and Discussion:

The survey was conducted on February 10-14, 2020 by commissioning/employing a number of persons as enumerators. There are 32 respondents that participated in this perception survey, mostly are female and about 15 are from the municipality of Pulilan while others are migrants that came from different provinces and regions. Two-third of the respondents resides in the area for more than twenty years.

Of the respondents, 21 are working and the rest are plain housewife and those who are working earned a monthly average income ranges from 5,000.00 – 10,000.00 pesos. Majority of the interviewed are living in a comfortable house which they already owned and are made up of concrete/wood with GI roofing.

With regard to their water supply, only four households are being served by the local waterworks system while about 11 HHs are using onsite water supply facility like artesian and deep wells. Some households are fetching their water from their neighbors. According to them, the water is clean and suited for domestic uses. The households are also connected to the power supply system of the municipality/province and only 9 HHs don't have electricity.

Questions were also asked about the type of cooking fuels are being used and about 16 respondents are using LPG while some are using electric stove, wood and charcoal, or a combination of LPG and charcoal, wood, stove and kerosene gas.

On the other hand, majority of the HHs have access to sanitary toilet facilities (27HH) while 5HH are using other types of sanitation facilities. The community is being catered by the local solid waste management collection system but there are still households (2 HHs) are practicing open burning of wastes.

The perception survey likewise done for determining the health status and the common diseases being experience by the community. Based on the results, the most common diseases are fever, cough and cold, flu and other diseases like high blood pressure, pneumonia, stroke, diabetic and kidney. There is one respondent that says that they encountered dengue problem.

The community availed the health services of the rural health units/centers. Their families always brought them there for check-up and treatment. For the five years, there are 9 respondents said that one of their family members died due to accidents and sickness.

The respondents were also asked if they really know the quality of the environment in their area. About 11 answered none, others said that the cause of pollution is through open burning and improper solid waste management. They believed that the local government units (barangay and municipal) are doing their best to address the environmental problems.

Likewise, the community observed and felt the improvement in their locality in terms of local development for the past five years like for example the presence of plants and factories, road improvement, street lighting and CCTV installations, and sports facilities. There are batching plants, warehouses, gas stations. Feeds manufacturing plant, fast food establishments, dressing plants and steel mills.

They also (community) experienced flooding in there are a in the past five years but didn't provide information about the cause. They are also aware about the presence of Rolling Steel Mill Plant project as the plant is just very near to their houses but some knew it from their neighbors and workers. The respondent were asked how they perceived the existence of the plant, if its operation is generating income and livelihood or badly affects their health and environment. And majority of the respondent are favorably saying that the plant helps their livelihood, but of course some are worried that it might affect their health due to foul odor and noise. They are pleading to the steel mills plant management to prioritize the locals in job hiring and must ensure that its operation is compliant to environment regulations and standards and protect public health. They are also requesting for a water supply project. However, there is one respondent that does not agree with the project.

Tabulation of Results:

A). Q₂ = meron bang pinagkakakitan; Q₃ = Magkano ang kinikitannng pamilya sa isang ipinanganak?; Q₅ = Saan kayo ipinanganak?; Q₆ = Ilang taon na kayong naninirahan dito sa Baarangay nyo?

Number of Respondent	Q ₂	Q ₃	Q ₅	Q ₆
Number of Respondent = 32	W/o work = 11	1-5K = 2	15 of the respondents are from Pulilan,	< 30 years = 19
	W/ work = 19	5-10K = 21		< 20years = 7
		10-15k = 5		> 10 years = 3

	15-20k =	Bulacan. Others comes from different places	> 5 years = 3
	> 20K =		< 5 years = 1

B). Q₈ = Klase at Halaga ng Bahay; Q₉ = Sarili bang Pag-aari ang Lupang Kinakatayuan ng inyong Bahay; Q₁₀ = Saan Nanggagaling ang inyong tubig?; Q₁₂ = May sarili ba kayong linya ng kuryente?

Q ₈	Q ₉	Q _{10a}	Q _{10b}	Q _{10c}	Q ₁₂
GI Roof – concrete/wood Nipa/Wood	Owned = 19	Artesian well	9	Water is clean	with = 23
	Govt = 9	From Neighbor	5		w/o = 9
	Rent = 3	Deep well	2		
		Bumibili	2		
		Water system	4		

C). Q₁₃ = Gamit sa pagluluto? Q₁₄ = Klase ng Toilet? Q₁₅ = Saan nyo itinaon ang inyong basura? Q₁₇ = May nagkakasakit na ba sa inyong pamilya nitong nakaraang limang taon? Q₁₈ = Ano po ba ang kadalasang nagiging sakit ng tao sa inyong lugar?

Q ₁₃	Q ₁₄	Q ₁₅	Q ₁₇	Q ₁₈
LPG = 16	WS = 20	Truck/burning = 2	Flu = 10	Flu = 11)
Stove = 2	PF = 7		Dengue = 1	Fever = 4
Wood = 1	N/A = 3	Truck = 28	Lungs/Ulcer/HBP = 4	Stroke = 1
Charcoal = 3	Other = 2		UTI = 1	Cough/cold = 6
LPG/charcoal = 2			Pneumonia = 1	Cough = 3
LPG/wood = 3			Diabetic = 1	Cold = 2
LPG/Stove = 1			Kidney = 1	N/A = 2
LPG/Gaas = 1			N/A = 10	

D). Q₁₉ = Saan po kadalasang nagpapatingin ang mga may sakit at sino ang gumagamot? Q₂₀ = Mayroon po bang Health Center sa inyong Barangay? Q₂₁ = Mayroon po bang miyembro ng inyong pamilya na namatay nitong nakaraang limang taon? Kung mayroon, ano po ang dahilan ng ikinamatay? Q₂₆ = May alam ba kayong problema sa kalikasan dito sa inyong lugar? Anu-ano?

Q ₁₉	Q ₂₀	Q _{21a}	Q _{21b}	Q ₂₆
HC = 28	w/ HC = 30	Died = 9	Sickness = 4	Polusyon = 1
Hosp = 5		W/o = 22	Selinity = 1	Siga = 3
			Accident = 4	Basura = 11
				Bukbok = 2
				Wala = 11
				Foul odor = 2
				Sprouting Buildings/ Farm - 1

E). Q₂₇ = Mayroon na po bang ginagawa ang mga kinauukulan para maresolba ang mga problemang inyong nabanggit? Q₂₈ = May napapansin po ba kayong pagbabago sa inyong kapaligiran nitong nakalipas na limang (5) taon? Q₂₉ = Sa nakalipas na sampung (10) taon, anu-anong proyekto ang naitayo dito sa inyong lugar o karatig pook? Q₃₀ = Sa nakalipas na sampung (10) taon, anu-anong pabrika at pagawaan ang naitayo dito sa inyong lugar o karatig pook?

Q ₂₇	Q ₂₈	Q ₂₉	Q ₃₀
Mayroon = 19	Umunlad/maayos= 6	CCTV ng barangay = 5	Batching plants, steel mills, warehouses, gas stations, feeds, fast food, dressing plants
Wala = 2	Mayroon = 11	Marami = 1	
	Wala =	Est/factory = 13	
	FTMR = 3	Plant = 7	
	Est/Factory = 2	Road improvement = 2	
		St. lighting = 2	
		Basketball court = 1	

F). Q₃₁ = Sa nakalipas na limang (5) taon, nakaranas na po ba kayo ng pagbaha sa inyong lugar? Q₃₂ = Alam ba ninyo na may "Steel Rolling Mills Project" (Pagawaan ng Bakal) dito sa inyong Barangay o lugar?; Q₃₃ = Sa inyong palagay, anu-ano ang mga mabubuti at masamang epekto? Q₃₄ = Mayroon po ba kayong nais maiparating o gusting sabihin tugngol sa nasabing proyekto?

Q ₃₁			Q ₃₂	Q ₃₃	Q ₃₄
Yes = 20	Aware = 29	From neighbors = 10	Nakakatulong pangkabuhayan = 8	Nagbibigay trabaho = 13	Prioritize residents to avail jobs = 10
No = 9	Not aware = 1	Near to their house = 17	Pagawaan ng bakal = 10	Nakakasama sa kalusugan/kapaligiran/ma baho/mabaho = 9	Ensure to protect health of the communitiy = 2
NA = 2	N/A = 1	From workers = 1	Maingay = 1	Nagbibigay trabaho ngunit may masamang epekto = 5	Provide water supply project = 1
		N/A = 3	baka makakasama sa kalusugan = 3		Ayaw sa proyekto = 1
			N/A = 8		Address noise and odor = 6

Prepared for the Company by:
GERARDO S. MOGOL, CE, SE, MSc.
 Environmental Consultant

1.0 Basic Project Information

1.1. Project Fact Sheet

Name of Project	:	Steel Rolling Mill Project
Location	:	Barangay Dampol 1 st , Pulilan, Bulacan
Project Proponent	:	Northstar World Steel Corporation
Business Address	:	No. 1900 Barangay Dampol 1 st , Pulilan, Bulacan
Type of Project	:	Expansion of Existing Steel Rolling Mill
Project Component	:	Rolling Mill and Accessories
Estimated Gross Floor Area	:	8,100.00m ²
Property Lot Area	:	42,737.00 m ²
Project Cost	:	PhP41,562,000.00
Contact Person/s	:	Ramon Mangibunong / Gilbert Ferrer
Contact Numbers	:	0917-1699898/ 0905-8389349
Name of Consultant	:	Gerardo S. Mogol, CE, SE, MSc. Enviroscience Consultancy Lot 3 Blk 187 Ph5 Sto. Nino Subdivision Meycauayan City, Bulacan 0928-5203433

2.0 PROJECT DESCRIPTION

2.1 Project Location and area

a. Project Area

The existing steel rolling plant of the Northstar World Steel Corporation is constructed in a 42,737.00m², the boundary of which is defined under TCT Nos. 039-2015007394, 039-2015002916, 039-4008893 and 039-20148894.

b. Project Location

The rolling steel plant project is located at Barangay Dampol 1st, Pulilan, Bulacan with a geographical coordinates of North Latitude: 15°00'28.3" and East Longitude: 120°43'21.9" The plant is located in a zoning classification of industrial land use as per Municipality of Pulilan Comprehensive Land Use Plan and Zoning Ordinance 20-96, August 15, 1996 and Sangguniang Panlalawigan Kapasiyahan 97-219 dated April 21, 1997). The location of the steel plant is shown in *Annex 1 (Location Map of the Plant)* while the aerial photo is shown in *Annex 2*.

2.2 Project Rationale

The proponent decided to upgrade the existing machinery to increase its production volume. A replacement of the reheating furnace is to be implemented to address process bottlenecks that stood in the way of attaining the mills' real potential. The plant has existing annual production capacity of 28,000 MT and planned to increase to 240,000MT per year of deformed steel bar.

The proposed increase in plant capacity will then help support the increasing demand of the construction sector due to booming economy of the country and the Build, Build, Build Program of the Government.

2.3 Project Alternatives

The project is already operational and the management is just planning to increase its annual production through increasing the capacity of the equipment and therefore there is no alternative sites being considered for this purpose. The nature of the project requires a site where it is accessible and it meets the siting requirements of the project.

The location of the plant was chosen due to its proximity to the mega cities within and nearby regions like Metro Manila where most of the construction activities is high. The project will utilize the national expressways in the delivery of steel products to its customers and suppliers.

2.4 Project components

The project components are the following, as shown in the Table below.

Table 1: List of Equipment

Existing Rolling Mill		Improvement of Rolling Mill	
Description	Quantity	Description	Quantity
Billet Charging	1	Billet Charging	1
Furnace	1	Furnace	1
Side Pusher	1	Side Pusher	1
Charging Conveyor	1	Charging Conveyor	1
Roughing Mill reversible, 6 passes	2	Pinch roller	1
RM Flying crop shear	1	Roughing Mill	7
Emergency shear	1	RM Flying crop shear	1
Intermediate Mill	4	Emergency shear	1
Finishing Mill	3	Intermediate Mill	4
Side Looper	2	IM Flying crop shear	2
Quenching Equipment	1	Guide through	1
Pinch Roller	1	Finishing Mill	8
Flying dividing shear	1	Vertical looper	2
Cooling bed 50ML x 60MW	1	Quenching Equipment	1
Cold shear	1	Pinch Roller	2
No. 1 Packing Bed	1	Flying dividing shear	2
No. 2 Packing Bed	1	Guide through with selector	1
		Pinch Roller	4
		Cooling bed 50ML x 60MW	1
		Cold shear	1
		No. 1 Packing Bed	1
		No. 2 Packing Bed	1

Source: Northstar World Steel Corporation

2.5 Other Support Facilities

2.5.1 Water Supply

Operation of the steel plant will only need water of approximately 100.0m³ for their cooling system and will replace it annually. The water requirements of the project will be provided by the water service concessionaires operating in the area through water lorries.

The total requirement during installation of additional equipment shall be based on the number of workers and occupants, respectively. Water requirement for fire control will also be considered in the design of the water reservoir. The water supply requirement for workers will be sourced from the existing deep well located within the compound.

2.5.2 Power Supply

The power requirement for the operation of the rolling steel mills is being supplied by SEM-CALACA RES Corporation. In case of power failure or interruption, diesel-fueled power generator is provided and utilized as stand-by power source.

2.5.3 Drainage System

The building will be provided with drainage system to collect and convey rainwater/run-off to the receiving waterways. Drainage lines will be made of concrete (RCP) that shall be placed underground, on top of sand bedding and shall be covered. The drainage system shall be provided with manhole for easy access during cleaning and maintenance.

2.5.4 Sewer System

Sewerage system shall be constructed to collect sewage and wastewater discharges separately from rainwater. Construction of these facilities shall conform to the Plumbing Code of the Philippines.

2.6 Description of the Proposed Project Phases and Activities

2.6.1 Construction/Pre-Operational Requirements

The steel plant already exists and operational thus, no construction activities will be conducted or take place. The activities to be done is the installation of the additional equipment as shown in *Annex 3* (Lay-out Plan of Equipment).

2.6.2 Operation Phase

2.6.2.1 Project Operation Duration and Schedule

The plant operates 12 hours per day with two shifts, six days a week schedule while their office hours is 8:00am – 5:00pm (8 hours) from Monday to Saturday. The company is guided and strictly implementing the rules and regulations of the Labor Code of the Philippines.

2.6.2.2 Manufacturing Process

The steel bar manufacturing process is shown in *Annex 4* and it is enumerated below:

- Upon delivery of billets, random sampling is performed based on the “heat number list” prepared by Quality Assurance Department. The billets samples are tested and checked for conformity to the contracted chemical composition. Physical inspection and measurement are also conducted by Raw Material Preparation group to ensure conformance to contract terms
- The billets are then prepared for charging into the reheating furnace based on Production Schedules. The quantity and quality of billets to be used are determined based on “Billet Allocation Report”.
- The billets intended for the production are subsequently charged into the Reheating Furnace for heating to the rolling temperature of 1100°C-1200°C.
- Immediately upon discharge from the furnace, the heated billet is fed into the roughing mill to undergo a series of reductions in its cross-sectional area at each mill stand to secure the required size and shape of the finished bar. By means of this process, the length of the bar is proportionately increased since the rolling and transformation process is constant volume process.
- In case of delays in the process, the billet that has been discharged but not yet fed into the mill, is set aside by means of a Billet Ejector to remove low temperature billets
- As a billet passes through the mill, both feeding and tail ends are cut by Crop Shears at specified intervals to avoid formation of “fish tails” in the rolling process. Cropping of ends is especially important when producing small sized bars.
- As it exits the finishing stands, the bar is cut at the dividing shears and runs into the cooling bed. For ‘as-rolled’ bars, no in-line quenching of bars is performed. However, the bar is diverted into a water quenching box located immediately after the last finishing stand for thermo-mechanical processing of the bar, if quenching and tempering is to be done. This latter process, known as the ‘thermo-mechanically controlled process’, produces bars that are quenched and self-tempered that possess enhanced ductile mechanical properties
- Finished bars, whether quenched or not, are manufactured to comply with specific grade and type bars in accordance with the DTI standard PNS 49
- The finished bar is pulled and moved along by pinch rollers and cut by computer controlled shears to optimize the length of cuts
- The cut bars are then deposited into the Cooling Bed by means of a series of chutes, roller ways or troughs. These bars cool down here prior to final cutting into commercial lengths
- While in the coming bed, samples of the finished bars are taken for periodic QA inspection and testing based upon a pre-determined schedule. Segregation and batching of the finished bars according to batch numbers is performed to provide traceability

- Complete physical, mechanical and chemical tests are subsequently performed on the bars at the QA laboratory material testing section in compliance with standards. Based on test results and quick feedback, non-conforming products are sorted and segregated for proper disposal
- After discharge from the cooling bed, the finished bars are cut to commercial length at the cold shear
- Finally, the finished bars are then counted, bundled, tagged and color marked at the packing station for grade identification and finally goes into storage or delivery. Undelivered bars are temporary stored in the Finished Goods Warehouse both as stock items and also as stocks awaiting delivery.

2.6.3 Abandonment Phase

The operation of the steel plant will depend on the demand in the market of the finished steel product. If and when the management finds it is no longer feasible to operate the plant, they may opt to dismantle all equipment and may resell or transfer them into the same purpose. In this phase, the company will also include disposal of the product and wastes. An abandonment plan will be developed that will guide the company, such as:

- All remaining steel products are sold and /or transferred
- All raw materials are properly inventoried, packed and sold
- Hazardous wastes i.e. used oil will be transported and treated by an accredited hauler and treater
- All solid wastes are collected and disposed of properly.

2.6.4 Project Duration and Schedule

Initially, the plant started the activities through clearing/preparation of the project area (for the new manufacturing process line) sometime in August last year (2019). This was followed by excavation and foundation preparation in setting the machine/equipment. The preparation activities stopped due to pandemic but decided to continue last July 2020 by installation of the machine/equipment and the target date of commissioning/full operation based on the target increased capacity on May 2021.

At present, the plant management is securing permits and clearances from different national and local government agencies prior to its full operation. The general work schedule is shown in *Annex 5*.

2.7 Environment Impacts and Management Plan

Environmental Impacts

The implementation of the proposed expansion (increased production capacity) is expected to bring impacts to physical environment such as air and water, occupational health and safety if not properly managed/address. To address the predicted negative impacts, the project proponent identified appropriate mitigating/control measures for implementation. Outlined in this document are some of those control/management measures to be properly and religiously implemented by the project proponent.

Table 1 presents the summary of the predicted environmental impacts of the project while Tables 2a & 2b show key environmental impacts and mitigating measures of the identified impacts.

Impacts during installation of additional line capacity

Ambient Air Quality– The impacts could be due to airborne dust and emissions from hauling vehicles and equipment. Development activities will only involve welding/installation of additional lines as well as the delivery of construction materials/equipment.

Ambient Water Quality – Construction workers/personnel will generate sewage and solid waste. When improperly managed might affect the receiving bodies of water adjacent to the project site.

Occupational health and safety – the impacts could be job-related like accidents, etc. Exposed groups are construction workers and contractors' employee.

Impacts during operation stage

Ambient Air Quality – A power generator set will be provided as stand-by facility to be used during power interruption. Emissions from this equipment will contribute to the pollution of the air environment.

Ambient Water Quality – Domestic sewage/ wastewater are expected to be generated during this stage of the project that requires proper treatment.

Generation of general solid waste and hazardous waste– improper handling of these wastes might affect human and the environment.

Noise pollution – operation of the steel manufacturing equipment will generate noise higher than the normal level. Long term or continuous exposure to high level of noise will impair hearing capability of workers.

Occupational health and safety – Risks that are expected to occur in the workplace are mostly job-related accidents and to some extent exposure to heat and noise hazards. Personnel directly involved in the steel manufacturing shall be trained on the Occupational Health and Safety and will likewise be provided with appropriate personnel protective equipment

Environmental Management Plan

The EMP will focus on addressing problems on air, water and noise pollution and proper handling and management of domestic and hazardous wastes i.e. used oils.

- Equipment emitting contaminants will be properly maintained and keep in good running condition.

- Noise level will be attenuated through enclosure of sources and ear plugs will be provided to workers inside the plant.
- Domestic sewage/wastewater will be conveyed and treated in a conventional waste water treatment facility.
- Proper solid waste management program/plan will be developed and implemented by the proponent. The collection and disposal services of the local government unity will also be tapped.

Table 1 : Summary of Predicted Impact Environmental Impacts

Environmental Aspect		Environmental Concerns		Significance of Impacts				Proposed Mitigating Measures
		+/-	D/In	L/S	R/I			
Construction/Installation Phase								
Water Quality	Domestic sewage /wastewater generated by construction workers and personnel	-	D	S	R	Installation/proper use of sanitation facilities. Requiring all workers to observe proper hygiene and sanitation		
Air Quality	Emissions from construction equipment and vehicles, power generator	-	D	S	R	Proper maintenance of equipment/ vehicles. Provision of mufflers		
Occupational Health and Safety	Incidence of related work accidents	-	In	S	I	Strict implementation of Occupational Health and Safety rules and regulations		
	Accidents caused by people near the project site	-	In	S	I	Prohibition of illegal entry by un-authorized person within the project site. Provide perimeter fence and lighting		
Generation of solid and construction wastes/overburden	Increased volume of solid waste	-	D	S	R	Implementation of proper solid waste management plan including the management of construction wastes/ spoils		
Noise and Vibration	Elevated noise level due to operation of construction equipment and vehicles	-	D	S	R	Limit the operation of construction equipment/vehicles as well as noisy activities to daytime only.		
People	Generation of jobs/employment Increase in income	+	D	S	I	Use of mufflers/sound silencers Hiring of qualified local residents		
Traffic	Road congestion due to service vehicles	-	D	S	R	Proper parking of service vehicles Prohibits illegal parking		

Environmental Aspect	Environmental Concerns	Significance of Impacts				Proposed Mitigating Measures
		+/-	D/In	L/S	R/I	
Operation Phase						
Water Pollution	Discharges of untreated wastewater	-	D	L	R	Regular maintenance/operation of STP
Air Pollution and Noise	Emission from oil-fired reheating furnace and power generator set operation and vehicles	-	D	S	R	Regular maintenance and operation of the oil-fired reheating furnace, power generator set, and equipment/vehicles
	Noise generation from the operation of machines	-	D	S	R	Enclosure of the machines/plant to minimize noise level pollution. Application of noise attenuating materials, silencer
Solid waste/Hazardous	Generation of domestic solid wastes, hazardous wastes i.e. used oils	-	D	S	R	Proper implementation of Solid and Hazardous Waste Management
Fire Safety	Fire accidents	-	In	S	I	Fire and safety program implementation
People	Employment/job opportunities	+	D	L	I	Priority in hiring of qualified residents
Economic	Improvement of delivery of basic services	+	D	L	I	
	Improvement of economic sector	+	D	L	I	

Legend: Significance of Impact

+/- = Positive or negative
D/In = Direct or Indirect
S/L = Short or Long term
R/I = Reversible or Irreversible

Table 2a: Key Environmental Impacts and Mitigating Measures of the On-going/Existing Project

Impacts	Mitigation
Generation of domestic solid waste	Proper solid waste management in conformity with RA 9003
Generation of domestic sewage	Provision of sanitary toilet facilities (portable toilet) for workers
(Potential degradation of inland water)	No direct discharge of solid waste and sewage into the river system
Air and Noise pollution	Regular maintenance and operation of the oil-fired reheating furnace, power generator set, and equipment/vehicles Enclosure of the machines/plant to minimize noise level pollution. Application of noise attenuating materials, silencer
Occupational Health and Safety	Proper implementation of Health and Safety Standard and provision of PPE

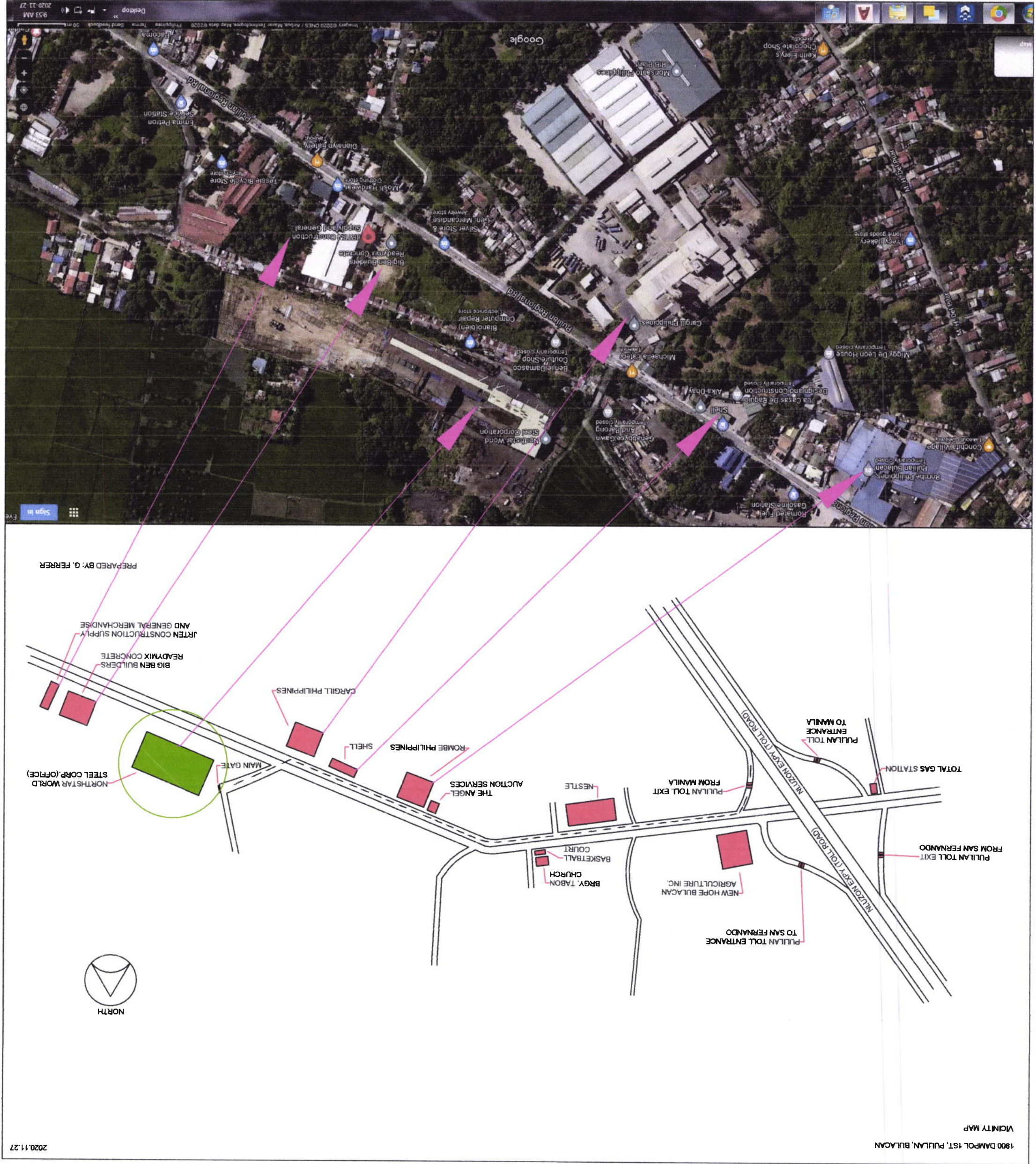
Table 2b: Key Environmental Impacts and Mitigating Measures of the Proposed Expansion Project

Impacts	Mitigation
Generation of domestic solid waste	Proper solid waste management in conformity with RA 9003 i.e. waste segregation, proper collection and disposal
Generation of domestic sewage	Sanitation facilities and STP
(Potential degradation of inland water)	No direct discharge of solid waste and sewage into the river system
Noise and dust generation	Regular maintenance and operation of the oil-fired reheating furnace, power generator set, and equipment/vehicles Enclosure of the machines/plant to minimize noise level pollution. Application of noise attenuating materials, silencer
Occupational Health and Safety	Proper implementation of Health and Safety Standard and provision of PPE

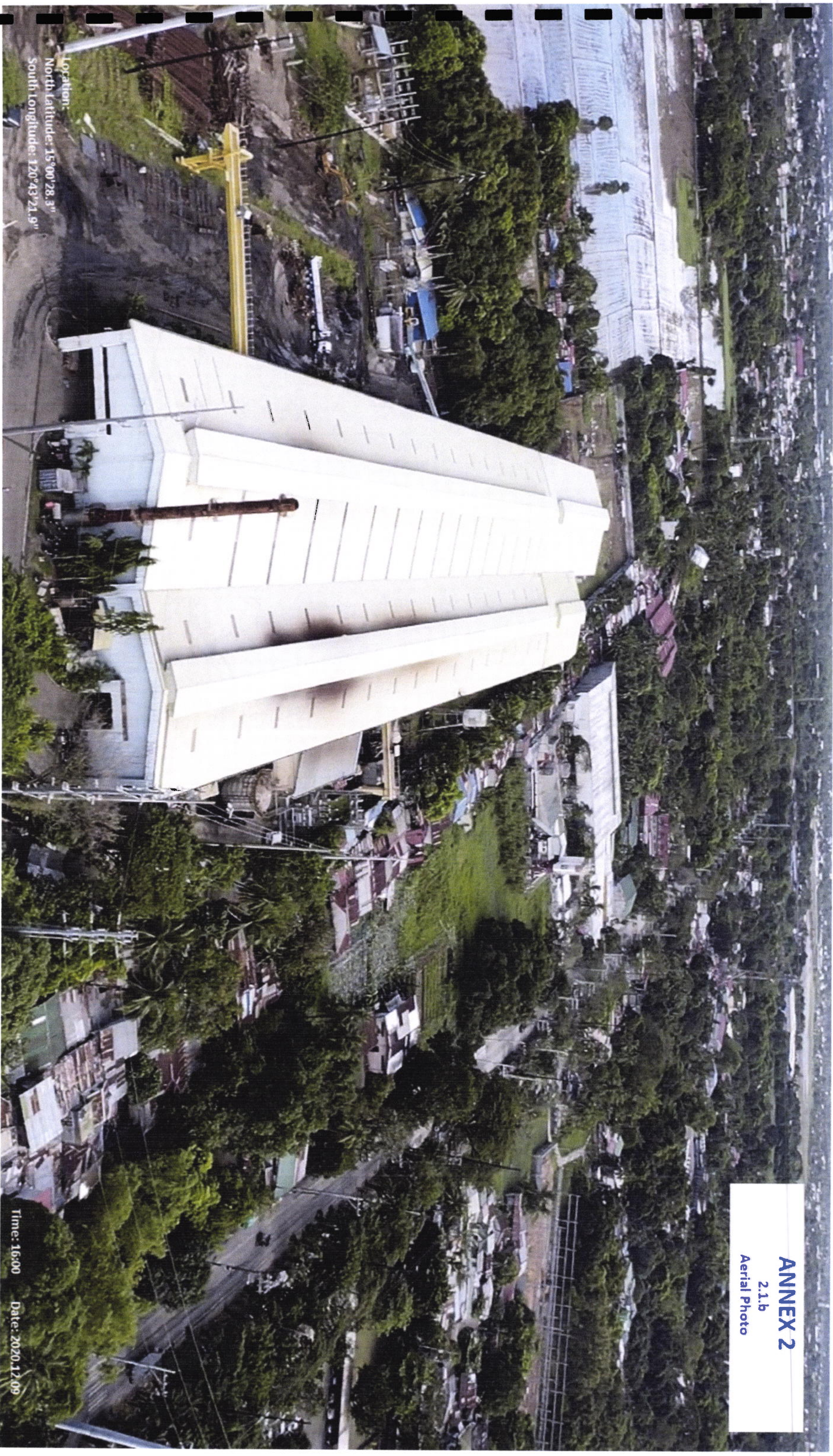
Environmental Monitoring

Environmental monitoring activities will be focused on the quality of effluent and the receiving river/creek water system. Air emission will also be monitored as well as the collection and disposal of domestic and hazardous solid wastes.

ANNEX 1 2.1.b (Location Map of the Plant)



VICINITY MAP
1800 DAMPOL 1ST, PULILAN, BULACAN



ANNEX 2

2.1.b


Aerial Photo

Location:
North Latitude: 15°00'28.3"
South Longitude: 120°43'21.9"

Time: 16:00 Date: 2020.12.09



Existing Rolling Mill			Improvement of Rolling Mill		
Description	Quantity	No.	Description	Quantity	
Billet Charging	1	1	Billet Charging	1	
Furnace	1	2	Furnace	1	
Side Pusher	1	3	Side Pusher	1	
Approach Table	1	4	Billet Transfer Conveyor	1	
Roughing Mill reversing 6 passes	2	5	Pinch roller	1	
RM Flying crop shear	1	6	Roughing Mill	7	
Emergency shear	1	7	RM Flying crop shear	1	
Intermediate Mill	4	8	Emergency shear	1	
Finishing Mill	3	9	Intermediate Mill	4	
Side Loop-er	2	10	RM Flying crop shear	2	
Quenching Equipment	1	11	Guide through	1	
Pinch Roller	1	12	Finishing Mill	8	
Flying dividing shear	1	13	V-entrical looper	2	
Cooling bed 50M x 60MW	1	14	Quenching Equipment	1	
Cold shear	1	15	Pinch Roller	2	
No. 1 Packing Bed	1	16	Flying dividing shear	2	
No. 2 Packing Bed	1	17	Guide through with selector	1	
		18	Pinch Roller	4	
		19	Cooling bed 50M x 60MW	1	
		20	Cold shear	1	
		21	No. 1 Packing Bed	1	
		22	No. 2 Packing Bed	1	



OWNER :

NORTHSTAR WORLD
STEEL CORPORATION

DESCRIPTION :

PLANT MODIFICATION
LAYOUT

DRAWING NO :

1900 NATIONAL ROAD DAMPOL 1st PULILAN BULACAN

DRAWN BY :

GILBERT FERNER

CHECK BY :

RANDY MANGIBUNDO

APPROVE BY :

ENRIQUE VINDY

APPROVE BY :

VICTOR DIAZ

DATE :

2020.12.02

MATERIALS :

0

QUANTITY :

0

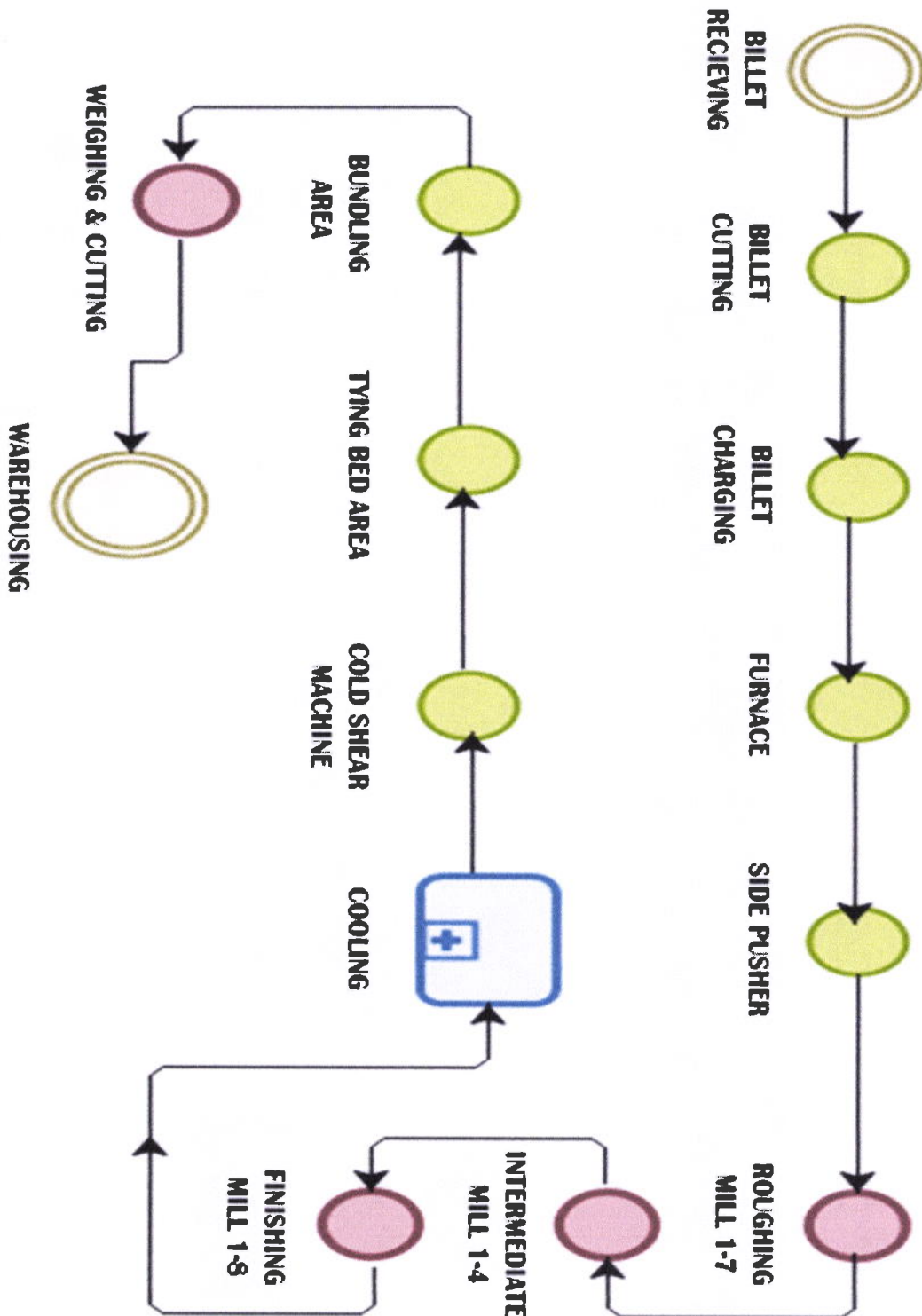
REVISION NO :

ANNEX 4

2.6.2.2

Manufacturing Process

Production of Steel Bar Process Flow



Annex 5:

2.6.4

General Work Schedule

General Work Schedule		Month																					
Item Description/Activities		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1.	Site/Area Preparation																						
	Clearing and excavation																						
	Steel works																						
	Piping systems																						
	Concrete works																						
2.	Installation of machine/equipment																						
3.	Test/Dry run of machines																						
4.	Commissioning/Operation																						
5.	Securing of Permits/Clearances																						

Source: Northstar World Steel Corp.



NORTHSTAR WORLD STEEL CORPORATION

#1900 National Road, Dampol 1st, Pulilan, Bulacan
044-2156920 / 044-2156808 / 0917-8356641 / 0925-6611133

List of invitees to the proposed public scoping:

- | | | |
|---|---|--------------------|
| 1. Engr. Rosemarie Esguerra | - | Municipal Engineer |
| 2. Gil Garcia | - | MPDC |
| 3. Roberto C. Cruz | - | MENRO Designate |
| 4. Carolina Nuguid | | |
| 5. Donna De Guzman | | |
| 6. Jannet De La Cruz | | |
| 7. Valentina Dela Torre | | |
| 8. Arjay Espiritu | | |
| 9. Cristina Lopez | | |
| 10. Catherine Mendoza | | |
| 11. Salud Pascual | | |
| 12. Gennly Puno | | |
| 13. Ma. Jennie Federico | | |
| 14. Jellibeel Cabardo | | |
| 15. Roselia Arevalo | | |
| 16. Valentina Dela Torre | | |
| 17. Hilda Santiago | | |
| 18. Big Ben Builder's Dev't and Realty Corp. | | |
| 19. JRTEN Construction Supply and General Merchandise | | |
| 20. ROMBE Philippines, Pulilan, Bulacan | | |
| 21. Shell Pulilan, Bulacan | | |



NORTHSTAR WORLD STEEL CORPORATION

#1900 National Road, Dampol 1st, Pulilan, Bulacan
044-2156920 / 044-2156808 / 0917-8356641 / 0925-6611133

List of Person's in the Perception Survey

1. Eulalia Añonueva
2. Roselia Arevalo
3. Inaly Cabardo
4. Gregorio Cabardo
5. Jellibeel Cabardo
6. Donna de Guzman
7. Rochelle de Silva
8. Jannet de la Cruz
9. Leticia del Cruz
10. Valentina dela Torre
11. Francisco Atop
12. Gerry dela Torre Jr.
13. Arjay Espiritu
14. Ernesto DC. Espiritu
15. Evangeline Espiritu
16. Ma. Jennie Federico
17. Cristina Lopez
18. Catherine Mendoza
19. Franco Mogas
20. Mary Gene Mogas
21. Jean Natividad
22. Carolina Nuguid
23. Salud Pascual
24. Gennly Puno
25. Ma. Theresa Reyes
26. Melody Reyes
27. Hilda Santiago
28. Endolisia Tabinas
29. Analeli Torres
30. Mary Grace Torres
31. Ronel Torres
32. Leslie Ventura

List of Establishment

1. Big Ben Builder's Dev't and Realty Corp.
2. JRTEN Construction Supply and General Merchandise
3. ROMBE Philippines, Pulilan, Bulacan

Barangay Dampol 1st,
National Road
Pulilan, Bulacan

Dear _____;

Greetings!

This is in reference to the proposed modernization/expansion project of the Steel Rolling Mills of Northstar World Steel Corporation by increasing its current production capacity from 28,000 to 240,000 MT of deformed steel bar.

As a requirement of the Environmental Impact Assessment system (PD 1586), may we invite to attend the public scoping to be held at the Barangay Hall of Dampol 1st on November 18, 2020. During the scoping, we will be presenting the description of the existing and proposed expansion project including its potential impact and the mitigating measures to protect air and water environment as well as the public health.

Thank you and we are looking forward on your participation to the said public scoping activity for the proposed project.

Very truly yours,

ENGR WILLIAM P. CUÑADO
OIC- Director
Environmental Management Bureau
DENR

the environment
Environmental Management Bureau

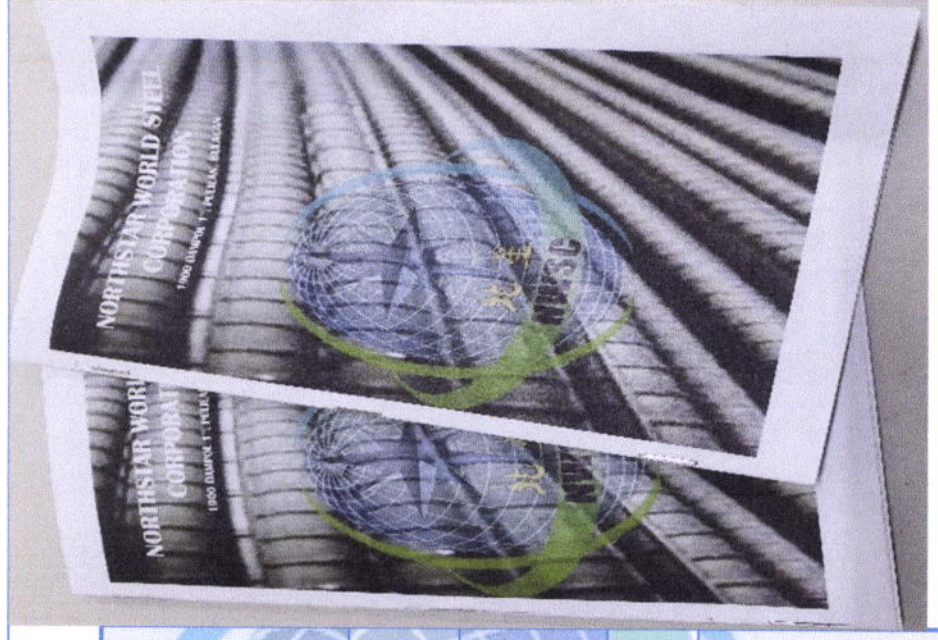
NORTHSTAR WORLD STEEL CORPORATION

1900 National Road Dampol 1st , Pulilan , Bulacan

北星

NWSC

Name of Project	Steel Rolling Mill Project
Name of Project Proponent & Address	Steel Rolling Mill Project No. 1900 Barangay Dampol 1st, Pulilan, Bulacan
Type of Project	Modification / Expansion of Rolling Mill Line
Property Lot Area	42,737.00 m²
Project Cost	PhP41,562,000.00
Contact Person	Ramon Mangibunong Plant Manager 0917-1699898 / 0905-8389349



PROJECT DESCRIPTION

Project Location:

- Barangay Dampol 1st, Pulilan, Bulacan with a geographical coordinates of North Latitude: 15°00'28.3" and East Longitude: 120°43'21.9"
- The plant is located in a zoning classification of industrial land use as per Municipality of Pulilan Comprehensive Land Use Plan and Zoning Ordinance 20-96, August 15, 1996 and Sangguniang Panlalawigan Kapasiyahan 97-219 dated April 21, 1997).



Project Area

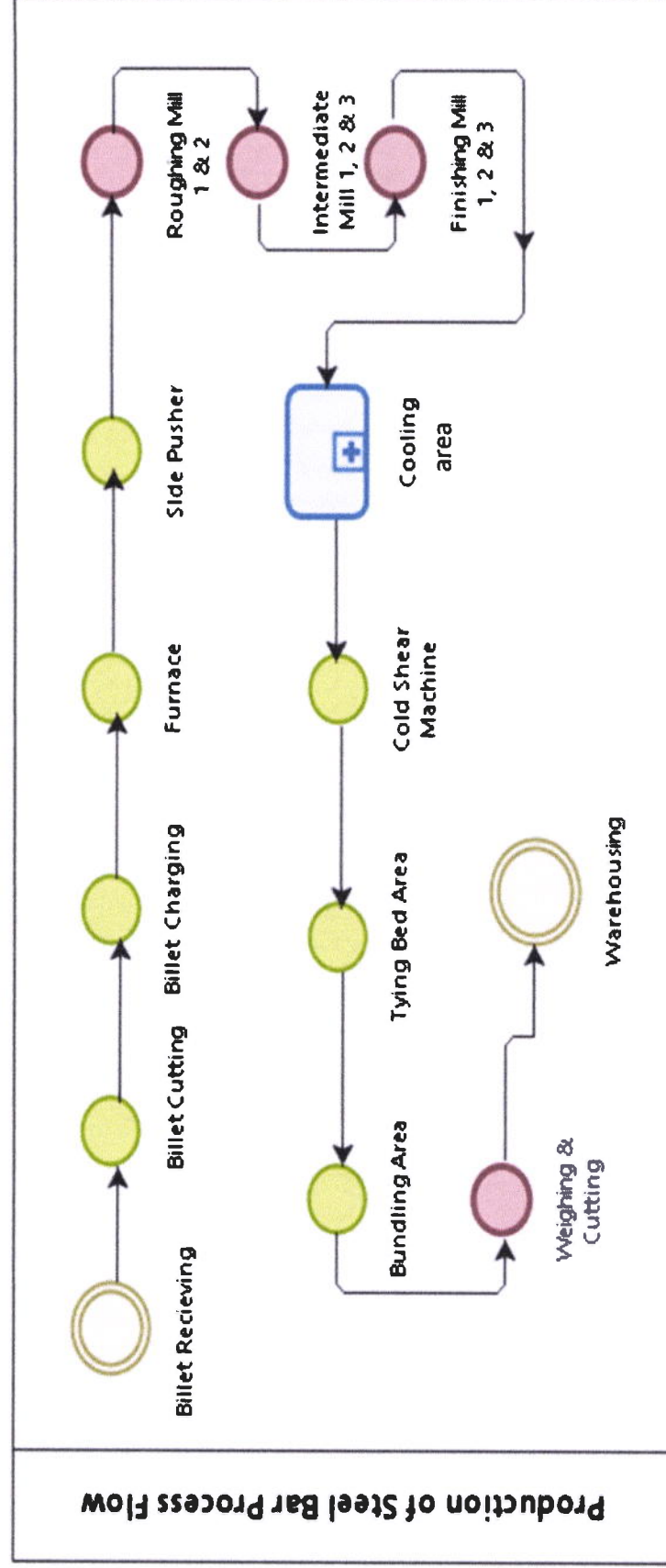
- The steel plant is constructed in a 42,737.00m², the boundary of which is defined under TCT Nos. 039-2015007394, 039-2015002916, 039-4008893 and 039-20148894.



Steel Manufacturing Production Information

Sources of Raw Materials:	<ul style="list-style-type: none">• Steel Billet 120mm² ~ 150mm² cross section• Local Domestic & imported supplier
Steel Production Per Year	<ul style="list-style-type: none">• Existing Production - 28,000mt/yr• Request for amendment - 240,000mt/yr
Target Clients	<ul style="list-style-type: none">• Local contractors• Steel bar supplier• Fabricators & Erectors

Steel Manufacturing Process



Environmental Impacts of the Project

- Impacts during installation of additional line capacity
- Ambient Air Quality– The impacts could be due to airborne dust and emissions from hauling vehicles and equipment. Development activities will only involve welding/installation of additional lines as well as the delivery of construction materials/equipment.
- Ambient Water Quality – Construction workers/personnel will generate sewage and solid waste. When improperly managed might affect the receiving bodies of water adjacent to the project site.
- Occupational health and safety – the impacts could be job-related like accidents, etc. Exposed groups are construction workers and contractors' employee.

Environmental Impacts of the Project

Impacts during operation stage

- Ambient Air Quality – A power generator set will be provided as stand-by facility to be used during power interruption. Emissions from this equipment will contribute to the pollution of the air environment.
- Ambient Water Quality – Domestic sewage/ wastewater are expected to be generated during this stage of the project that requires proper treatment.
- Generation of general solid waste and hazardous waste— improper handling of these wastes might affect human and the environment.
- Noise pollution – operation of the steel manufacturing equipment will generate noise higher than the normal level. Long term or continuous exposure to high level of noise will impair hearing capability of workers.
- Occupational health and safety – Risks that are expected to occur in the workplace are mostly job-related accidents and to some extent exposure to heat and noise hazards. Personnel directly involved in the steel manufacturing shall be trained on the Occupational Health and Safety and will likewise be provided with appropriate personnel protective equipment

Environmental Management Plan

The EMP will focus on addressing problems on air, water and noise pollution and proper handling and management of domestic and hazardous wastes i.e. used oils.

- Equipment emitting contaminants will be properly maintained and keep in good running condition.
- Noise level will be attenuated through enclosure of sources and earplugs will be provided to workers inside the plant.
- Domestic sewage/wastewater will be conveyed and treated in a conventional wastewater treatment facility.
- Proper solid waste management program/plan will be developed and implemented by the proponent. The collection and disposal services of the local government unity will also be tapped.

IEC Campaign and Social Assistance Done by the Steel Plant

- Concreting of Drainage Canal
- Regular Clean Up activity of the waterways to prevent community exposure to sanitation (insect and rodent) related diseases
- Provision of food supplies during calamities/disaster
- Construction of School Building as support to Elementary School



Subject : Focus Group Discussion Proceedings/Report

Name of Project: Steel Rolling Mill Expansion Project
Northstar World Steel Corporation
Barangay Dampol 1st, Pulilan, Bulacan

Date Conducted: January 19, 2021

Place Conducted: Barangay Hall Compound, Dampol 1st

In compliance with section 6.1 of DENR Administrative Order 2017-15, Northstar World Steel Corporation conducted the small/focus group discussion (FGD) yesterday, January 19, 2021 at the compound near the Barangay Hall of Dampol 1st. The place was selected in compliance with the health protocol being imposed by the LGU Barangay.

The activity was presided by Mr. Ramon Mangibunong, Rolling Mill Manager in coordination with Mr. Gerry Arellano, Barangay Chairman of Dampol 1st. The activity started with an opening prayer lead by the Barangay Chairman and thereafter welcomes the participants. In his welcome remarks, the Barangay Chairman introduced the participants (see attached list of participants) and explained or discussed the purpose of the meeting/assembly. He further said that he granted the request of the Plant Management regarding the conduct of the IEC through FGD and explained to his constituents (stakeholders) that the activity is the same as in other projects operating in the barangay. Thus, he is very supportive with the undertakings as the plant already exist and contributes with the economic development of the barangay and the community.

After the short opening remarks of the Barangay Chairman, the Rolling Mill Manager presented the company profile of Northstar World Steel Corporation. A brief description of the company's history was also presented including its products and the social assistance being provided to the host barangay. And after the presentation, he introduced Engr. Gerardo Mogol, Environmental Consultant commissioned by the Company. The Consultant presented the description of the proposed expansion project, its component, the predicted impacts and mitigating measures during the installations of equipment and operation stages of the expansion project including the vulnerable groups or individuals.

Some the impacts that were highlighted during the presentation were the increase generation of sewage and solid waste, emissions from the hauling vehicles and noise level arises from the plant operation, human activities and hauling vehicles. See attached presentation materials (Company Profile and Brief Project Description) used in the FGD.

After the presentation there was an open forum wherein the participants were allowed to raise issues or concerns about the existence and operation of the steel plant project.

The following were questions raised during the focus group discussion:

1. Ms. Ms. Anna Liza R. Pascual, BHW and residing near the plant informed the Rolling Mill Manager about the complaint raised by her neighbors regarding the black smoke emitted during the operation of plant, especially when there is rain as the smoke cannot dispersed into the air thus exposing the health of the community. One of the exposed person experienced skin diseases which they attributed to air pollution.

The Plant Manager responded that he never experienced (during his tenure) such event, but assured the community that this will not happen under his watch. He further said that the Low Sulfur fuel oil they are using was approved by the regulatory agency of the government.

The Environmental Consultant likewise discussed/explained that skin diseases are attributed by poor personal hygiene like regular hand washing, bathing and proper sanitation.

2. Ms. Ma. Lorena C. Dela Cruz also a BHW, raised the increase noise level generated with the operation of the steel plant.

The Environmental Consultant answered the issues raised by saying that the steel plant is located in an industrial land use and therefore the allowed noise level in this area is much higher than in the residential area. The perceived noise level is different in each receptor. What is annoying to somebody is not to others.

The Plant Manager likewise said that they are planting trees to attenuate sound/noise generated from the plant.

These two pressing issues were also identified in the perception survey conducted by the company. As there are no more questions arises, the FGD was adjourned at 12:30pm. See attached program of activities and photos during the FGD.

Prepared by:

GERARDO S. MOGOL, CE, SE, MSc
Environmental Consultant

Noted and Approved by:


RAMON MANGIBUNONG
Rolling Mill Manager
Northstar World Steel Corporation



NORTHSTAR WORLD STEEL CORPORATION

#1900 National Road, Dampol 1st, Pulilan, Bulacan
044-2156920 / 044-2156808 / 0917-8356641 / 0925-6611133

Program of Activities:

Focus Group Discussion – Proposed Rolling Mills Expansion Project – Northstar World Steel Corp.

10:00 am – 10:30 am

Registration of Participants- Northstar World Steel Corporation
Opening Prayer- Barangay Representative

Welcome Address and Opening Remarks- **Mr. Gerry Arellano**
Barangay Chairman – Dampol 1st

10:30am – 10:45am

Presentation of the FGD objectives and the Company Profile (Northstar World Steel Corporation)-
Ramon Mangibunong
Rolling Mill Manager

10:45am – 11:15am

Presentation of the Proposed Rolling Steel Mills Expansion Project
Impacts and Mitigation Measures, IEC and Social Assistance of the
Company-

Engr. Gerardo Mogol
Environmental Consultant

11:45 am – 12:30pm

Open Forum - **Ramon Mangibunong /**
Engr. Gerardo Mogol

12: 35pm

Closing Remarks - **Ramon Mangibunong**
Rolling Mill Manager



NORTHSTAR WORLD STEEL CORPORATION

#1900 National Road, Dampol 1st, Pulilan, Bulacan
044-2156920 / 044-2156808 / 0917-8356641 / 0925-6611133





Republic of the Philippines
Province of Bulacan
Municipality of Pulilan
BARANGAY DAMPOL 1ST
PULILAN
Power



OFFICE OF THE BARANGAY CAPTAIN

DATE: JAN. 19, 2021 * ATTENDANCE *		
NAME	DESIGNATION	SIGNATURE
1. SOLUD L. PASCUAL	B.H.W	<i>[Signature]</i>
2. VICTY S. REYES	ML	<i>[Signature]</i>
3. MARIA NERISA V. REYES	ML	<i>[Signature]</i>
4. AMMERIZIA A. MANALAN	BHW	<i>[Signature]</i>
5. MARICEL U. VILAFANIA	BHW	<i>[Signature]</i>
6. RAOU M. KRUSTIN	PROTON LOMOK	<i>[Signature]</i>
7. Remedios H. BUNAG	ML	<i>[Signature]</i>
8. MA. LUISA V. GARCIA	B.H.W	<i>[Signature]</i>
9. aldin S. agustin	B.H.W	<i>[Signature]</i>
10. Florantina A. Santo	B.H.W	<i>[Signature]</i>
11. Desiree V. Mayugo	B.H.W	<i>[Signature]</i>
12. Remya Reyes	B.H.W	<i>[Signature]</i>
13. Theresa O. Victoria	BHW	<i>[Signature]</i>
14. Anna Liza R. Pascual	BHW	<i>[Signature]</i>
15. Glicerio Samsa	ML	<i>[Signature]</i>
16. Manifer Valarde	TANOD	<i>[Signature]</i>
17. REXA DE GUZMAN	PROTON LOMOK	<i>[Signature]</i>
18. Ma. Loura C. Dela Cruz	CDT	<i>[Signature]</i>
19. Reynaldo Santos	Tanod	<i>[Signature]</i>
20. Rogelio De. Brator	KABUNAY	<i>[Signature]</i>
21. JONELYN DE GUZMAN	BROT. TREAS	<i>[Signature]</i>
22. JOCELYN P. DEVOS SANTOS	" SEC	<i>[Signature]</i>
23. GERARDO T. AMELIANO	P/IS	<i>[Signature]</i>



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Republic of the Philippines
Province of Bulacan
Municipality of Pulilan
BARANGAY DAMPOL 1ST
PULILAN
Bulacan

OFFICE OF THE BARANGAY CAPTAIN

DATE: JAN. 19, 2021 * ATTENDANCE *		
NAME	DESIGNATION	SIGNATURE
23. GILBERT B. FERRER	PROJECT INVR.	FERRER
24. RAMON MANGIBLONOS	Rolling Mill Manager	88h
25. GERARDO MOGOL	Consultant	MOGOL
26. BOY VARGAS		
27.		
28.		
29.		
30.		

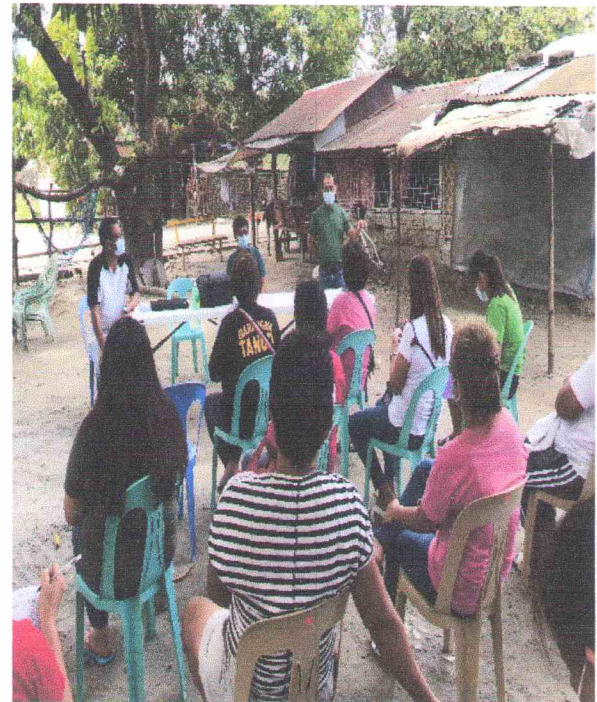
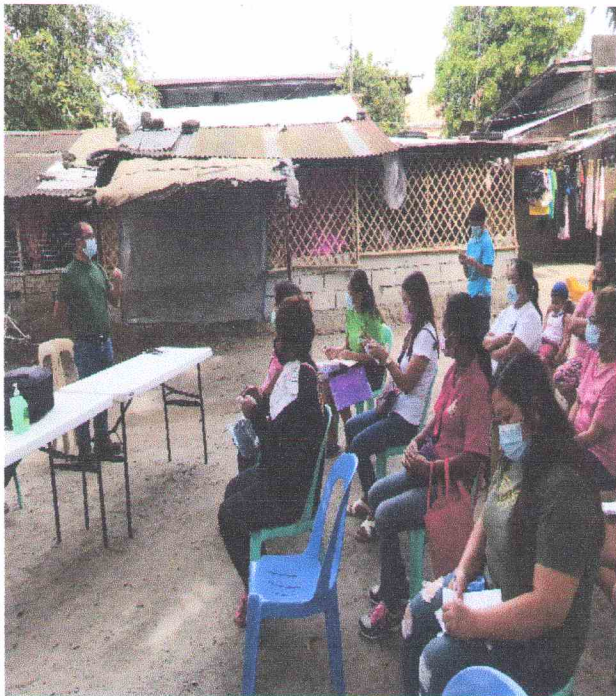


NORTHSTAR WORLD STEEL CORPORATION

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Barangay Chairman – Mr. Gerry Areelano; Opening Prayer and Welcome Message/Opening Remarks



Ramon Mangibunong – Presenting the objectives of the meeting and the Company Profile



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Engr. Gerardo Mogol presented the FGD process in compliance to Section 6.1 of DENR Administrative Order 2017-15 and the proposed rolling steel mill modernization/expansion project



The participants actively listening to the presentation about the expansion project, the predicted impacts on health and environment, the mitigating measures and social assistance of the Company



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Engr. Mogol and Ramon Mangibunong responded to the issues raised by the participants.