EPRMP SUMMARY FOR THE PUBLIC (ESP)

SAN MIGUEL FOODS, INC.'S PROPOSED SMFI STA. CRUZ POULTRY PROCESSING PLANT EXPANSION PROJECT

BRGY. DARONG, SANTA CRUZ
DAVAO DEL SUR

SAN MIGUEL FOODS, INC.

PREPARED FOR:

SAN MIGUEL FOODS, INC.
100 E. RODRIGUEZ JR. AVENUE (C-5 ROAD),
BRGY. UGONG, PASIG CITY

SEPTEMBER 2020

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11 September 2020

DR. SOPHIE T. MANUEL, CESO IV
Regional Director
Environmental Management Bureau XI
Department of Environment and Natural Resources
3rd Avenue corner V. Guzman St., Brgy. 27-C
Sta. Ana, Davao City

SUBJECT : EPRMP Summary for the Public (ESP) for San Miguel Foods, Inc.'s Proposed SMFI Sta. Cruz Poultry Processing Plant Expansion Project

Dear **RD Manuel**:

We are submitting herewith the **EPRMP Summary of the Public (ESP**) as a requirement for the conduct of Public Hearing Activity for the **Proposed SMFI Sta. Cruz Poultry Processing Plant Expansion Project** located at **Brgy. Darong, Santa Cruz, Davao del Sur**.

May we request for the schedule

Stay safe and healthy.

Sincerely yours,

For:

San Miguel Foods, Inc.

Richard Bryan C. Uy, BSME, MSEnE
Managing Director
Pacific Spectrum Environmental

1 PROJECT DESCRIPTION

1.1 PROJECT PROPONENT, TYPE, COMPONENTS AND SIZE

San Miguel Foods, Inc. (SMFI), the **PROPONENT**, a subsidiary of the San Miguel Pure Foods Company, Inc. (SMPFC), the largest food company in the Philippines, is one of the many divisions of San Miguel Corporation (SMC), a large publicly listed food, beverage and packaging company, focusing on the agro-industrial sector specifically in poultry, pork and beef, and commercial feeds.

The **Proposed SMFI Sta. Cruz Poultry Processing Plant Expansion Project** is categorized in Annex A of EMB MC 2014-005 or the guidelines for coverage screening and standardized requirements under the Philippine Environmental Impact Statement (EIS) System amending relevant portions of MC 2007-002, *as **"1.6.1. Animal products processing (fish/meat processing, canning, slaughterhouses, etc.) including other marine products, crabmeat etc.)"*** under Section 1.6 Agriculture, Food and related Industries.

The proposed project will be adding a second production line increasing the plant's current maximum rated capacity of 100,000 birds per day to **170,000 birds per day**. The project components are as follows:

- Production building
- Rendering cooker machines
- Refrigeration system
- Coal-fired boilers
- Diesel-fuel standby generator sets
- Power station and substation
- Wastewater treatment facility
- Boiler make-up water tanks
- Infiltration gallery
- Pump House
- Water treatment facility
- Water storage tank
- Cistern tank/ Rainwater harvesting system
- Material recovery facility/ Hazardous waste storage area
- Ash storage facilities
- Mezzanine (office, conference room and storage room)
- Locker room
- Canteen and kitchen
- Laboratory
- Dry storage
- Engineering shop
- Training room
- Prayer room
- Shed for live birds
- Truck waiting shed
- Truck scale and truck scale house
- Driver's lounge
- Guardhouses
- Parking Area
- All-weather access road
- Open Space

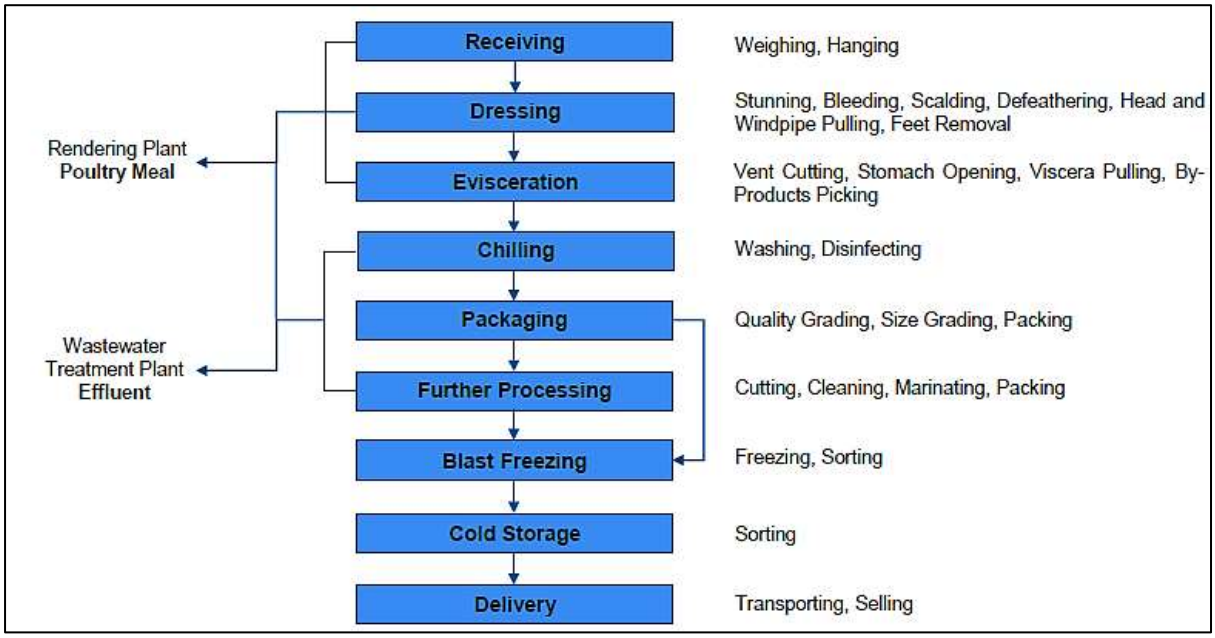
1.2 PROCESS/ TECHNOLOGY

1.2.1 POULTRY PROCESS

Process flow starts with receiving which includes weighing and hanging of the poultry. The hanged poultry will then proceed to dressing which involves stunning, slitting, bleeding, scalding, defeathering, head and windpipe pulling, and feet removal. Afterwards, evisceration will take place which includes vent cutting, stomach opening, viscera pulling, and by-products picking. The by-products will then proceed to the rendering plant wherein raw materials for poultry meals are produced.

Once the poultry has been eviscerated, it will then be chilled and be readied for packaging. Chilling and packaging involves washing and disinfecting, quality grading, size grading, and packing respectively. The wastewater from the chilling process will be treated in the wastewater treatment facility prior to discharging.

Packed poultry products will either be brought to buffer stock room for further processing (i.e. cutting, cleaning, marinating, and parking), blast freezing (freezing and sorting), and cold storage (sorting), or holding room preceding the delivery. Transporting and selling are included in the process of delivery.



Poultry Process Flow Diagram

1.2.2 RENDERING

Rendering will process the extracted feathers into protein meal as ingredient for animal feed. Two (2) units of rendering cooker machine each with 5 tons processing capacity will be provided. Each unit can have a processing time of 4-5 hours but may require lesser time depending on the quantity of feathers to be cooked.

Organic odor may be produced from rendering of poultry by-products. As such, the rendering plant will be equipped with odor control facility such as biofilter.

1.2.3 COAL-FIRED BOILERS

Four (4) units of coal-fired boilers will be installed to provide steam to the rendering plant through combustion of coal. The operation of coal-fired boilers may generate air pollutants. A such, air pollution devices such as multi-cylones and wet scrubber will be installed.

1.2.4 WASTEWATER TREATMENT FACILITY

The wastewater treatment facility (WWTF) is a Sequencing Batch Reactor (SBR) Process with nutrient removal system. Its capacity shall be expanded from 1,900 to 7,000 m^3/day. The WWTF shall treat the domestic and industrial wastewater of the facility prior to discharge to Sibulan River.

1.2.5 INFILTRATION GALLERY

A river intake structure is placed in slowly permeable materials with a minimum depth of water above the riverbed of Sibulan River. Three (3) pumps will be collecting freshwater from the river then channeled to the water treatment facility for treatment before utilization for domestic and industrial purposes.

1.3 RESOURCE UTILIZATION

During the operational phase of the project, the power supply requirements will be provided by its own substation line. The projected power consumption is estimated at 150,000 kW/month. Water supply will be sourced from Sibulan River through infiltration gallery. The projected water requirement is estimated at 4,998 m^3/day.

2 PROJECT LOCATION

The project site is located at Brgy. Darong, Santa Cruz, Davao del Sur as shown in figure below. It shall have a project area of 106,500 m^2 of the total lot area of 241,531 m^2. It is bounded by Don Alfonso Oboza Avenue to the north; grassland, cluster of trees, Sibulan River and residential houses to the south; grassland to the west; and a public road connecting Don Alfonso Oboza Avenue to the east.

The decision in choosing the site was primarily based on the availability of the land and its accessibility when transporting raw materials and distributing finished products. The zoning classification of parcels of land also adheres to the proposed plan of the LGU of Sta. Cruz to zone all lots along Davao-Cotabato National Highway as industrial. The geologic features of the project site and potential geohazards that may affect it were also considered.

Project Site Location

3 PROJECT TIMELINE

The construction of the poultry processing plant under existing ECC is ongoing. The project timeline for both existing and proposed expansion is shown below.

POULTRY PROCESSING PLANT DAVAO SCHEDULE

Target Completion for (12,000 BPH)

ID	Task Name	Duration (Months)	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
			Q3 2018					Q4, 2018			Q1, 2019			Q2, 2019			Q3, 2019			Q4, 2019			Q1, 2020			Q2, 2020			Q3, 2020			Q4, 2020			Q1, 2021		
1	Site Grading / Land Development	13																																		
2	Foundation /Concreted Slabs/Reinforced Concrete Works	15																																		
3	Structural Steel Works: Fabrication / Installation	14																																		
4	Production Equipment: Installation / Testing	5																																		
5	Refrigeration System	10																																		
6	High Side Chiller	5																																		
7	Compressed Air System	5																																		
8	Insulated Panels / Mechanize Curtain	8																																		
9	Ventillation System Lairage	4																																		
10	Ventillation System Production Building	6																																		
11	Racking System	4																																		
12	Flooring Protection	3																																		
13	Vacuum Tumbler	6																																		
14	Hygienic Equipment	4																																		
15	Forklift (4 units)	7																																		
16	CCTV and Structural Cabling	8																																		
17	Steam Generation System	8																																		
18	Rendering System	12																																		
19	Water Supply and Distribution System	13																																		
20	Truckscale System	4																																		
21	WWTP	10																																		
22	Unified Grounding System	10																																		
23	Low Voltage Power Distribution	6																																		
24	Substation - High/Med Voltage	8																																		
25	TESTING & COMMISSIONING	3																																		

Construction and Installation

Commissioning

4 INTEGRATED SUMMARY OF MAJOR IMPACTS AND RESIDUAL EFFECTS AFTER MITIGATION

Solid Waste Generation

Most of the solid wastes generated by the facility will be coming from domestic activities. Color-coded garbage receptacles will be placed strategically at the administration building and common areas. During each shift, housekeeping personnel collects and segregates the solid wastes. A DENR-accredited hauler will be collecting and disposing the solid wastes. For recyclable solid wastes, these are sold to waste traders.

Water Quality Degradation

Domestic wastewater generated from domestic, kitchen, amenities, utilities, cleaning/maintenance & gardening, and industrial wastewater from the poultry processing shall be channeled to the Wastewater Treatment Facility (WWTF). This will ensure that the wastewater will be treated before being discharged to Sibulan River; thus, avoiding the possible degradation of its water quality.

Water Resource Depletion

Study conducted on Sibulan River's discharge shows that at sustainable flow of 80%, the flow rate of Sibulan River is 5,080 liters per second which is much larger than the project's water withdrawal of 59 liters per second. Hence, the water withdrawal from infiltration gallery for the project's operation is not expected to deplete the water of Sibulan River. The facility shall also reuse treated wastewater for gardening and cleaning of non-critical areas to conserve water.

Degradation of Ambient Air Quality

The main air pollutant during construction would be coming from earthmoving activities (i.e. land clearing and excavation). An increase in total suspended particulates (TSP) can be mitigated through water sprinkling, reducing vehicle speed and avoidance of earthmoving activities during unfavorable wind conditions.

Emissions from the facility's equipment such as coal-fired boilers and standby power generator set may contribute to increase concentrations of air pollutants. As such, Source Specific Emission Testing (SSET) will be regularly conducted. Coal-fired boilers shall be equipped with air pollution control devices such as wets scrubber and multi-cyclones. Similarly, company vehicles and delivery trucks will be properly maintained and subjected to vehicle emission testing.

Generation of Coal Dust and By-Products

Delivery trucks for coals must be covered to avoid dispersion of coal dust during transport when influenced by wind. Plastic curtains and sprinklers will be made available to suppress dust during unloading. The ash generated during coal combustion will be subjected to Toxicity Characteristic Leaching Procedure (TCLP). The boilers shall be equipped with multi-cyclones and wet scrubbers.

The ash generated will be collected and placed in durable tonner bags. The tonner bags shall then be stored in the ash storage facility inside the plant and stacked in pallets prior to its disposal. The ash disposal options being considered are as follows:

- Dispose to the ash pond of the SMC Malita Coal-Fired Power Plant either via barge or land transport
- Use in brick making as part of the Corporate Social Responsibility (CSR) for livelihood of constituents of the host barangay and/or municipality
- Dispose to an ash storage facility to be developed within Santa Cruz which will serve not only SMFI but also the SMC plants located in the area.

Generation of Organic Odor

Organic odor may be generated during rendering of feathers and other inedible viscera. As such, the rendering plant shall be equipped with odor control facility (i.e. biofilter) and adequate ventilation. The dressing and evisceration areas shall also be regularly maintained and cleaned. Live poultry will undergo fasting before being transported from farm to facility to avoid organic odor generation from feces along the route. Feces generated in the facility shall be removed daily.

Increase of Noise Level

Construction noise is a combination of noise coming from machines and activities within and around the construction site. The expected sources of noise include excavators, bulldozer, graders, pay loaders, compressors, heavy trucks, etc. Mitigation measures may include conduct of general maintenance runs during weekends to avoid noise during regular business operations and use of muffler system for equipment to reduce noise level. Construction during nighttime shall also be avoided.

Traffic Congestion

Traffic may increase during delivery of construction materials and live poultry during operation. If possible, delivery will be scheduled during non-peak hours. Parking spaces will also be available inside the project site to avoid parallel parking along Don Alfonso Oboza Avenue.

Risk to COVID-19 Hazard

All workers and personnel during construction and operation shall observe compliance to DOH guidelines for COVID-19 safety. Ensuring safety in the workplace will also ensure safety of the nearby communities.

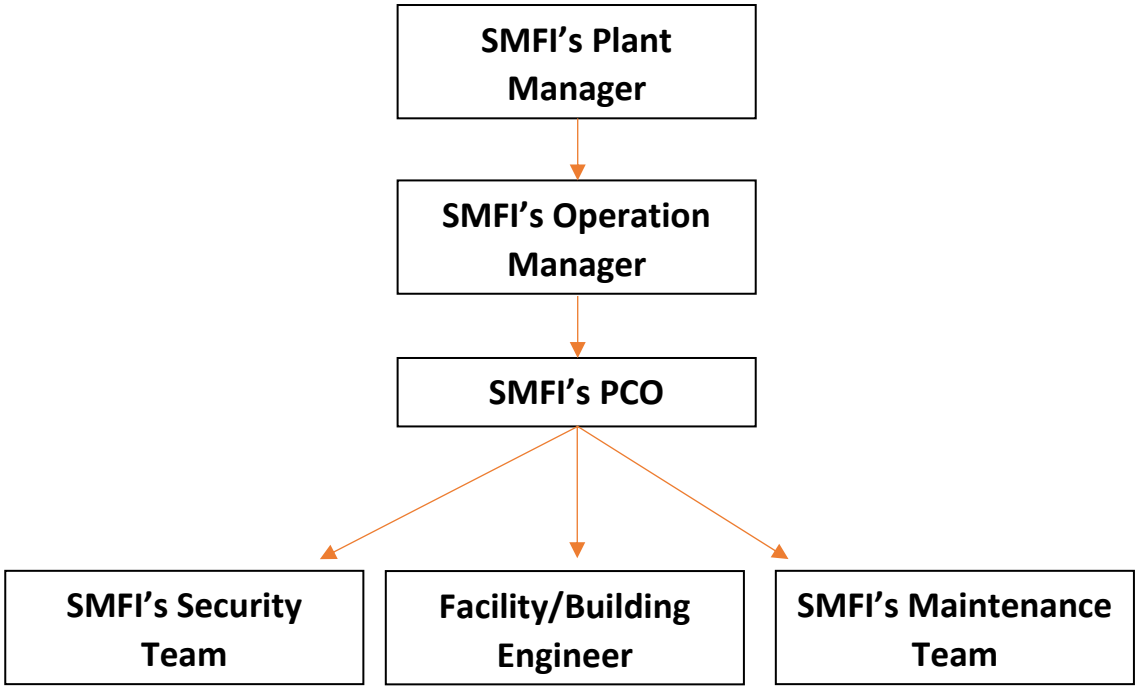
5 IDENTIFIED STAKEHOLDERS

The stakeholders were identified based on the delineation of the Direct Impact Area (DIA) and Indirect Impact Area (IIA) for impacts on land, water, air and people. The stakeholders identified are the following:

Type	Stakeholder
Local Government Unit	Office of the Municipal Mayor
	Office of the Barangay Chairman
School	Marcos P. Saez Elementary School
	Inawayan National High School - Annex
Non-Governmental Organization	Benepisyaryo ng Repormang Agraryo ng Darong Multipurpose Cooperative (BREAD-MPC)

6 PROJECT PROPONENT'S STATEMENT OF COMMITMENT AND CAPABILITY IN IMPLEMENTING MEASURES

The Environmental Unit (EU) of San Miguel Foods, Inc. (SMFI) will be supervised by the Pollution Control Officer (PCO) and it can be composed of the facility engineer, the security team, and the maintenance team. See figure below.



Organizational Chart for EMP Implementation

The **security team** shall enforce adequate restrictions on the clients and employees regarding too much air pollution emission from vehicles. It is also their task to assist people going in and out of the existing facility and proposed a project to lessen heavy traffic within the project's vicinity and to remind all to regularly check the engine of their vehicles.

The **housekeeping team** shall oversee proper segregation of garbage and collection time of solid wastes generated during the actual operation of the proposed project. The security team shall coordinate with the housekeeping team in maintaining the orderliness of the facility. Both team's leader must report to the Facility Engineer and the PCO. The PCO, in turn, reports to the Operations Manager.

The Plant Manager shall assign a **PCO** for the proposed project. The PCO shall be tasked to ensure the proponent's conformity to all environmental regulations and standards and to prepare the Self-Monitoring Reports (SMRs) and Compliance Monitoring Reports (CMRs) to be submitted to the DENR-EMB-R11. The PCO likewise shall coordinate and work with the Operations Manager and Plant Manager in addressing issues which may directly affect the plant's environmental compliance.

The proponent shall comply with environmental protection, social responsibility, and government regulations with regards to the operation of the project in the municipality of Santa Cruz. The commitments and agreements between the proponent and various institutions include the following activities:

- Regular monitoring of environmental performance and submission of quarterly and annual reports to DENR-EMB Region 11;
- Application and renewal of applicable government permits, licenses and accreditation;
- Payment of business permits, property and sales taxes, and other local applicable fees of the local government unit; and
- Implementation of the PROJECT's EMP

7 INFORMATION ON COPY OF EPRMP

Copy of the EPRMP can be accessed to EMB-R11. You may visit their website at http://r11.emb.gov.ph/ for more information.