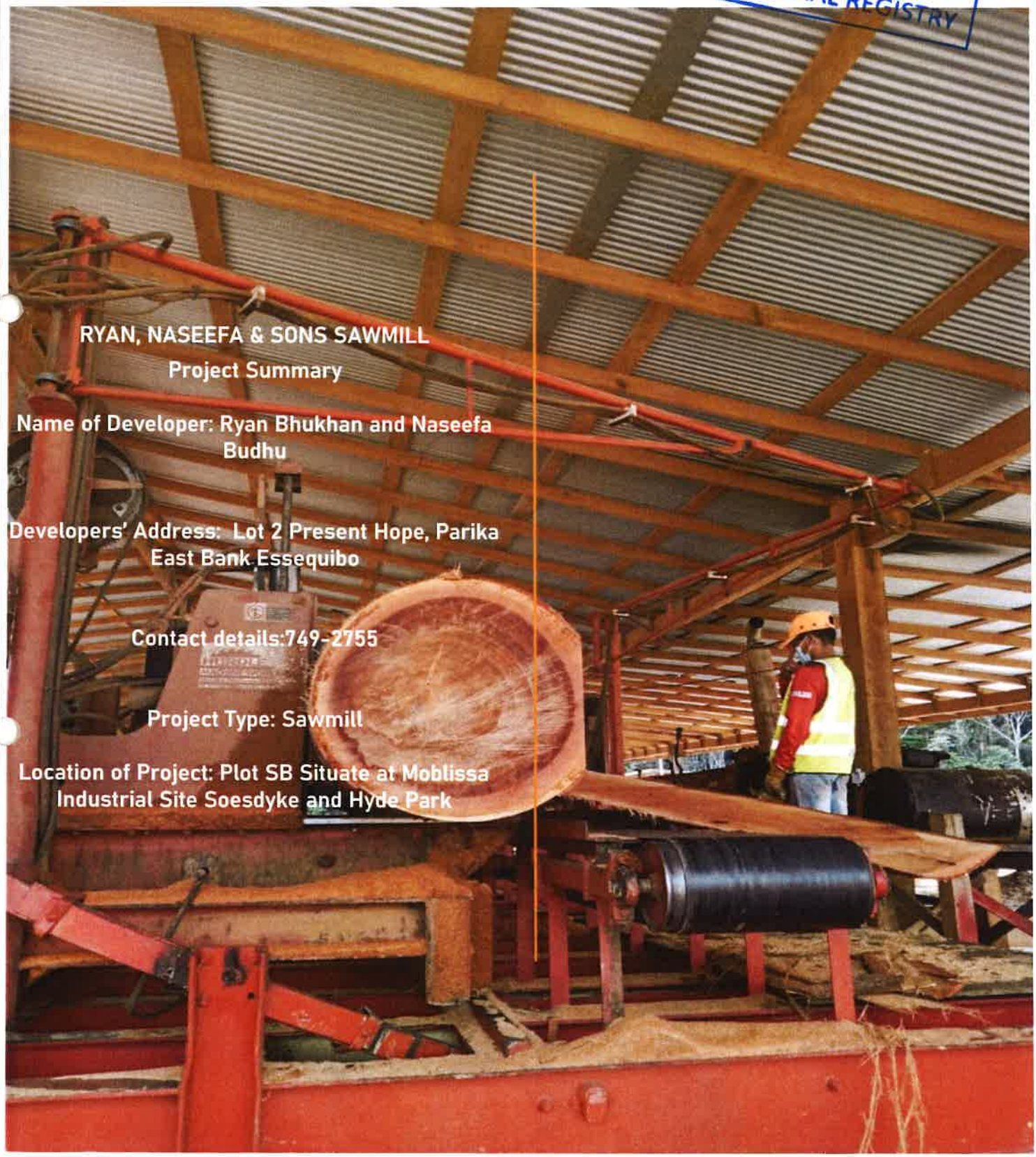

RYAN, NASEEFA & SONS SAWMILL

Project Summary

Name of Developer: Ryan Bhukhan and Naseefa Budhu

Developers' Address: Lot 2 Present Hope, Parika East Bank Essequibo

Contact details:749-2755

Project Type: Sawmill

Location of Project: Plot SB Situate at Moblissa Industrial Site Soesdyke and Hyde Park

Project Description

This existing sawmill operation is designed for the processing of timber into sawn lumber and other wood products. The facility is always focus on the efficient, sustainable processing of logs sourced from various concessions such as in Ituni and Kwakwani. It includes log sorting and storage areas, primary and secondary sawing equipment, drying kilns (if applicable), a planer mill, and finished goods storage.
The sawmill utilizes modern, energy-efficient equipment and follows best practices for environmental management, including waste reduction, wood residue utilization (e.g., mulch) and compliance with local air and water quality regulations (nearest creek is located 5km from the site). The operation creates local employment opportunities and supports the local timber industry through value-added wood processing.

Key Components of the Operation:

- Log pond and storage
- Debarking and primary sawmill (Under the mill shed 50x50)
- Secondary processing and finishing lines
- Wood chip and sawdust handling systems (In the process of installing a dust containment bin)
- Maintenance and administrative buildings
- Truck loading and unloading areas

Project Location

Address/Coordinates: Plot SB Situate at Moblissa Industrial Site Soesdyke and Hyde Park

Municipality/Region: Moblissa Region 10, Guyana.

The project site is situated on approximately 2acres of land which is rented from Mr. Sylvon A Baynes parcel of industrial-zoned land located approximately from the nearest town or highway. The location was selected for its proximity to sustainable timber resources, existing transportation infrastructure (such as Linden highway which is located alongside the project site) and access to utilities including electricity, water, and waste management services.

Surrounding Land Use:

- North: [vegetation]
- South: [vegetation]
- East: [vegetation land]
- West: [Linden Highway]

The location ensures minimal impact on surrounding communities while maximizing logistical efficiency and economic viability.

Done by: *Naseefa Budhu*

Operational phase for the sawmill

This existing sawmill operation is able to process at least 20,000 to 30,000 bm of logs per month. The sawmill is equipped with two (2) cook saw mills, one (1) table edger, one (1) planer, one (1) log loader and one (1) generator (50 kva).

Dressed and Rough lumbers are processed and these are stored on dunnage because it will be removed from the sawmill site and transported via trucks to various lumber yard and sawmills in the Georgetown. Some of the timber species that are processed at my sawmill are as follows, Tatabu, Torinario, Karatie, Silverballi, Dukalie, Purpleheart, Greenheart etc. The logs are sourced from logging concessionaires from Ituni, Kwakwani, Mabura, etc. and is transported to the site by hired log trucks. The logs are offloaded from the log truck by the log loader and discharged in the log pond. The logs are temporarily stored in the log pond, which have the capacity to hold approximately 300-430 m^3 of logs. From the log pond, the log loader would usually transport the logs to the mill for processing to remove the bark and saw it into the boards. From the mill, the boards are further processed by the edger. Both dressed and rough lumber are produced.

Utilities such as water and electricity are provided by Guyana Water Incorporated (GWI) and the Generator respectively while the telephone service is provided by One Communication Network. Solar lights are also utilized to provide lights for the dwelling house, office and mill shed. No generator will be used.

Eight (8) persons are employed to work daily at the sawmill. Working hours are from 8:00 hr to 17:00 hr, Monday to Saturday. All loading and offloading of logs and lumber will occur during the working hours. Personal Protective Equipment (PPE) provided to the workers is gloves, visibility vests, helmets, goggles and steel tip boots. A First Aid Kit will be placed in the office to treat any minor cut(s) or bruise(s) and a vehicle will be standby to transport any injured person to the Linden Hospital Complex.

Three (3) fire extinguishers and three (3) sand buckets are placed at strategic points of throughout my operation and "No Smoking" sign are placed contiguous area.

Done by: *Naseefa Budhu*

Environmental Effects

The following environmental effects may be generated from the operation of the Sawmill

Noise Nuisance
Sawmills are noisy places due to the machinery used for cutting, and processing wood. This noise can disturb nearby communities and wildlife, particularly species that are sensitive to noise pollution.

Fire
The source of the fire may be as results of defective electrical equipment such as loose wiring, overload sockets, etc. or arson or the carelessness of workers who may smoke onsite.

Vibration
Vibrations generated from the use of the equipment and heavy-duty machinery.

Particulate Matter (dust)
Sawmills produce a significant amount of sawdust, which can become airborne and cause air quality issues if not properly managed.

Emissions from Machinery:
The diesel and gasoline engines used to power the equipment in sawmills contribute to the release of greenhouse gases (GHGs), including carbon dioxide (CO2), as well as other air pollutants like nitrogen oxides (NOx) and volatile organic compounds (VOCs).

Soil erosion:
Establishing a sawmill can contribute to soil erosion through several direct and indirect mechanisms such as.

Clearing of Vegetation

- Building a sawmill often requires clearing trees, shrubs, and ground cover.
- Vegetation protects the soil by absorbing rainfall and anchoring the soil with roots. Its removal exposes soil to rain and wind erosion.

Grading and Excavation

- Earthmoving activities to level land or create access roads disturb the soil structure and compact it, increasing runoff.

Done by: *Naseefa Budhu*

Mitigation Measures

Mitigating the environmental impacts of sawmills is crucial for ensuring that timber production is both sustainable and responsible. Here are some key mitigation measures that can be implemented at sawmills to reduce their environmental footprint:

Noise Nuisance

Most of our sound making devices at the facility such as generators and planers are enclosed with materials of good noise insulation properties such as hollow concrete blocks, insulation boards, solid clay bricks, however there is no residents living nearby of the facility but our operation is willing to comply with any standards set out by the regulatory agencies. In addition, we will ensure that all equipment is equipped with silencers and mufflers to reduce the noise level to also add to that our equipment purchased is the new models so the noise levels generated will not be significant as compared to the old models. The equipment and machinery will be worked during working hours. These will be serviced and maintained according to manufacturer's specifications. Blades will be checked and replaced with sharp ones. Workers will be provided with appropriate Personal Protective Equipment (PPE).

Fire

Fire extinguishers and sand buckets are placed at strategic points within the sawmill so in case there is a fire emergency then the firefighting equipment can be used. Staffs are trained in the use of the fire extinguishers. The electrical circuits and points are checked regularly.

Vibration

All equipment is placed on concrete foundation to dampen the vibrations and the loader usually work only when the need arises that is to 'feed' the mill with logs. The equipment and machinery are worked during working hours and serviced according to manufacturer's specifications.

Particulate Matter (dust) and mitigation

Wood shaving/ Sawdust that will be generated by mills is removed from the mill floor daily a worker and we would try to not let it exceeds 15cm in height and sawdust from the planer will be trap in a dust containment bin, when this bin is full farmers/interested persons along the linden highway would usually collect for various personal reasons and the remainder will be used to land fill various sections of the sawmill.

The employees are given appropriate PPE to protect themselves from dust. The mill floor will be wet from time to time to keep down the dust particles.

Soil Erosion

Minimize Land Disturbance

- Clear only the area necessary for the mill.
- Leave buffer zones of natural vegetation around the site.

Phase Construction

- Carry out construction in stages to limit exposed soil at any given time.

Contour Grading

- Grade slopes following natural contours to slow water runoff and reduce erosion.

Done by: *Naseefa Budhu*

Waste Generation

Solid Waste Management

Domestic waste such as food boxes, beverage containers, etc. is collected in a covered garbage receptacle and will be emptied once weekly by Cevons Waste Disposal Services.

Wood waste such as sawdust is collected/bagged from the mill floor in a timely manner we will continue to try our best to not allow our sawdust to accumulate to more than 15cm, shavings, wood ends, slabs/barks and wood chips etc. will be used as landfill and other revetment works around the site. Extractor systems will be installed on planers and connected to the dust containment bin. The bins dimensions will be based on quantity of shaving and sawdust generated from the planers.

Effluent

Grey and sewage water produced by workers and customers; such as, the effluent will be discharged into the septic tank to be treated anaerobically. The septic tank will be accessible for cleaning and will be emptied when fill by Cevon Waste Disposal Service.

Hazardous Waste

Waste oil of approximately 5-10 gallons will be generated from the servicing of the loader and generator. The waste oil will be stored in tightly covered 5-gallon plastic pails to avoid spillage and kept in a designated area for storage also some wastes oil is reused in the chainsaws on site.

Fuel is stored in a fuel bond approximately 45 gallons of diesel.

Done by: *Naseefa Budhu*