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# Project Summary

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SAWMILL & LOGGING

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ANGELA PAULINE STEPHEN LOGGING OF ARAWARRI ESSEQUIBO RIVER 3.



**Name of Project:** Angela Pauline Stephen Logging of Arawarri

**Name of Developer's:** Angela Stephen

**Project address:** Ess 01/16 Left Bank Essequibo River Right Bank Arawani River, Left Bank Weri-Werai-Kuru River Right Bank kurudani River.

**Type of project:** Sawmill and logging

**Capital Investment:** Ten (10) million Gyd

**Annual turnover:** Five (5) million gyd

**Contact details:** 592- 6913124

**Date prepared:** 10/05/2025

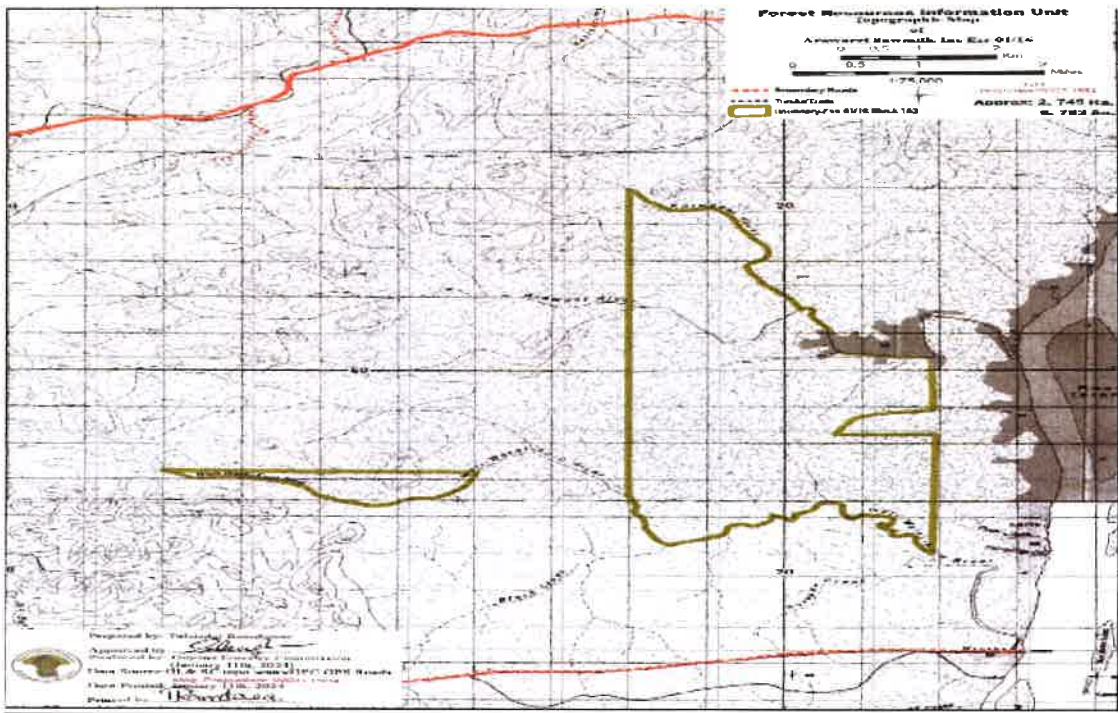


**Project Description**

In this logging and sawmill business we specialize in sustainable, efficient, and professional logging services tailored to meet the needs of timber buyers, and forestry partners. With years of industry experience and a deep respect for the environment, we provide expert timber harvesting, land clearing, and forest management solutions that maximize value while preserving long-term forest health.

Our team is committed to safety, environmental stewardship, and customer satisfaction.

Ms. Stephen is currently a holder of a Forest Concession, State Forest Authorisation SFA-Ess 01/16 which is situated on Left Bank Essequibo River, Right Bank, Arawani River, Left Bank Weri-Werai-Kuru River, Right Bank kurudani River.



The figure above shows the map of the concession



## Operational Phase

The sawmill is fed with logs that is harvested from the same concession Ess 01/16. The sawn products are transported to customers in different parts Guyana. e.g. Lumber Yards or construction.

A total of four (4) persons are employed to carry out various operational task as it relates to the logging and sawmill operation. There is an existing mill shed on site with the dimension of 30x60. Toilet facility entails one (1) Pit Latrine. Working hours are from 8:00 to 4:30 from Monday to Friday.

Equipment on site entails:

1. One (1) Cook mill
2. Two (2) chainsaws
3. One (1) tractor and One (1) skidder
4. One (1) 100kva generator set

Personal Protective Equipment (PPE) are given to all employees such as long boots, helmets, air muff, dust mask and visibility vest. Additionally, one first aid kit and one snake bit kit is present on site at all time.

Water for drinking are purchase and taken to the operation as needed. Water for domestic purposes is source from creeks and other water ways located within the SFA.





## **Environmental Impacts**

### **Noise Emissions**

The noise emissions emanated from the chainsaws and tractor.

### **Particulate Matter (dust)**

Sawdust is emitted during log harvesting, as well as dust generated when vehicles travel along the trail during dry weather.

### **Hazardous materials/waste**

If these materials or wastes are not properly stored, it can result in an accidental spill or discharge may occur, resulting in soil pollution.

### **Fire**

Flammable substances such as gas and diesel are stored onsite and if not managed properly, can be ignited if a worker who smokes discards a burning cigarette butt.

### **Water quality impacts**

The removal of trees and disturbance of forest soils can cause increased sedimentation in rivers and streams, which can have detrimental to water quality and the aquatic ecosystems.

### **Habitat Loss and Fragmentation**

Logging can destroy and fragment habitats for a wide range of species, including animals, birds, insects, and fungi. This can lead to a decrease in biodiversity and ecosystem health.

### **Soil erosion and degradation**

Logging can disturb the natural structure of forest soils, causing erosion and reduced soil fertility and making it more difficult for new trees to grow. Also, this can have an adverse effect on water quality during rainy weather conditions.

### **Carbon dioxide emissions and Climate Change**

Trees absorb carbon dioxide from the atmosphere, so logging can increase carbon dioxide emissions, contributing to climate change. In addition, trees play a vital role in managing local and regional climates by cycling water and moderating temperatures.

### **Cumulative Impacts**

There are several other active small-scale logging concessions surrounding this concession, which can impact air, water, and land cumulatively.



## **Mitigation Measures**

### **Noise Emission**

The noise levels generated are expected to be insignificant since the tractor and chainsaws are equipped with an exhaust stack. They are serviced and maintained every month so as to reduce emissions into the environment and downtime. Chainsaw blades checked and replaced with sharp ones. Workers will be provided with appropriate PPE, including hearing protection.

### **Particulate Matter (dust)**

During dry weather conditions, the speed limit of 30 km/hr. is adhered to. The chainsaw operators will be provided with the appropriate PPE dust masks to protect them from dust, long boots, visibility vests, hard hats (helmets) and gloves. The technique utilized is selective logging thus leaving the majority of the forest intact and adequate forest cover hence minimizing the dust emissions within the concession.

### **Hazardous materials/waste**

Fuel will not be stored on site, however fuel will be purchase as required from nearby Gas stations and transported in 5-gallon pails the fuel containers with the respective fuel will be tightly covered to avoid any accidental spillage or release.

Waste oil is generated from the servicing of the tractor and chainsaws once per month. The quantity of waste oil generated is 5-6 gallons and is reused on the chainsaws. The waste oil is stored in the 5-gallon tightly closed plastic pail in a designated area at the campsite.

### **Fire**

Workers will be briefed verbally on the importance of fire safety almost every week, and a 'No Smoking' sign is placed at the fuel storage area. A sand bucket and a fire extinguisher will be placed on site and can be easily accessed should there be a fire emergency.

Water quality impacts

Buffer zones along water bodies such as rivers, streams, etc. will be maintained to prevent soil erosion and protect water quality and aquatic habitats.

### **Habitat loss and fragmentation**

Logs will be harvested based on Reduced Impact Logging (RIL) techniques, which result in the conservation of ecosystems and biodiversity.

### **Soil erosion and degradation**

Logs will be harvested in accordance with Condition 5.1(a)(b) of the State Forest Authorizations (SFA) Agreement as well as GFC's Guidelines for Forest Operations, 2018. Also, vegetative cover will be maintained on the edges of the trail to reduce the displacement of soil particles. Buffer zones will be maintained, and the harvesting of logs will not be done within the buffer zones.



### *Carbon dioxide emissions and Climate Change*

Logs will not be cleared-fell but will be selectively harvested based on a breast height of 1.3 m and a diameter above 35 m. However, if there are more than one (1) tree within an 8-metre radius, only trees over 40cm at breast height will be harvested based on the GFC guidelines. This practice leaves the majority of the forest intact and helps preserve the carbon stored in the trees and soil, thus reducing the release of CO<sub>2</sub> into the atmosphere and also allowing saplings to continue absorbing CO<sub>2</sub> through photosynthesis. Also, it minimizes soil disturbances during logging activities, thus maintaining the integrity of the forest floor and preventing the release of stored carbon from the soil.

### *Cumulative Impacts*

The proposed project has the potential to impact air quality such as particulate matter result in dust nuisance and noise nuisance generated from the operation of the tractors, chainsaws and portable sawmill. To abate these impacts, the portable sawmill is placed on wooden foundation to reduce vibration and noise levels. Wood waste such as sawdust, wood skins, wood ends and wood strips will be used as land filled materials throughout the SFA. Hence, no one will be affected from dust and noise nuisance generated from the operation. Cumulatively, the impacts on air, land and water will not be significant since the concessionaires have to adhere to the Code of Practices and regulations established by GFC to ensure that logging is done in a sustainable manner and the Environmental Protection Act and its associated regulations for environmental protection.



## **Waste management**

**Domestic waste** inclusive of plastics bottles, vegetable skins, food scraps, etc. are placed in a waste pit located approximately three hundred (300) meters away from creeks and other water ways within the SFA and when full will be covered with soil and another waste pit is dug.

**Wood waste** such as sawdust, wood skins, wood ends and wood strips are used as land filled materials throughout the SFA.

## **Hazardous waste**

**Waste oil** generated from the servicing of the tractor, skidder and generator once per month is amounted to approximately fifteen (15) gallons and that is stored in tightly covered five gallons plastic containers and will be reused in the chainsaws which is stored in a designated area within the SFA.

**Fuel** is stored on site; fuel such as diesel is stored in 45-gallon drum and also gasoline will be stored in 45-gallon drum as well. Fuel will be stored with the waste oil generated from the servicing of the tractor is set at a designated area within the SFA located approximately 300 meters away from creeks and other water ways.

Prepared by *Angela Stephen*

