

N. HUSSAIN & SON
ENTERPRISE
PROJECT SUMMARY

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Name of Developer: Nazim Hussain

Developer's Address: 1 Endeavour Canal No 2 West Bank Demerara

Project Address: Ess 31/25 Right Bank kaburi River Bartica Potaro Road

Contact details: 6947501

Project Type: Logging, Timber Depot and Log Market

Sector of Operation: Forestry

Projected Capital Investment: Approximately GYD \$20 million

Annual Turnover: Projected GYD \$10M

Project Duration: Three (3) years based on the renewal of the SFA Agreement.

Project Description

This project provides a detailed summary of activities carried out within a designated logging concession area, focusing on the sustainable harvesting and management of forest resources. Logging concessions play a vital role in balancing economic development with environmental conservation, requiring careful planning, monitoring, and adherence to regulatory frameworks.

The primary aim of this project is to document the operational processes, resource utilization, and management practices implemented during the concession period. Emphasis is placed on sustainable forestry techniques, compliance with legal and environmental standards, and the minimization of ecological impact.

Project Location

This project is located within the No: *Ess 31/25 Right Bank kaburi River Bartica Potaro Road.*, There are similar small scale logging concessions surrounding this concession and largescale concession. According to the SFA Agreement issued by GFC, the total land area is approximately **8094 ha (2000 ac)**.

The project activity is to undertake logging within SFA No: *Ess 31/25*. Logs are harvested based on the stipulated measures set out in the Guidelines for Forest Operations, 2018 by GFC. Approximately six (6) persons are employed to carry out various operational tasks they relate to the logging activities. The logs are selected by a tree spotter, which is the chainsaw operators) Logs are harvested based on the tags issued by the Guyana Forestry Commission (GFC).

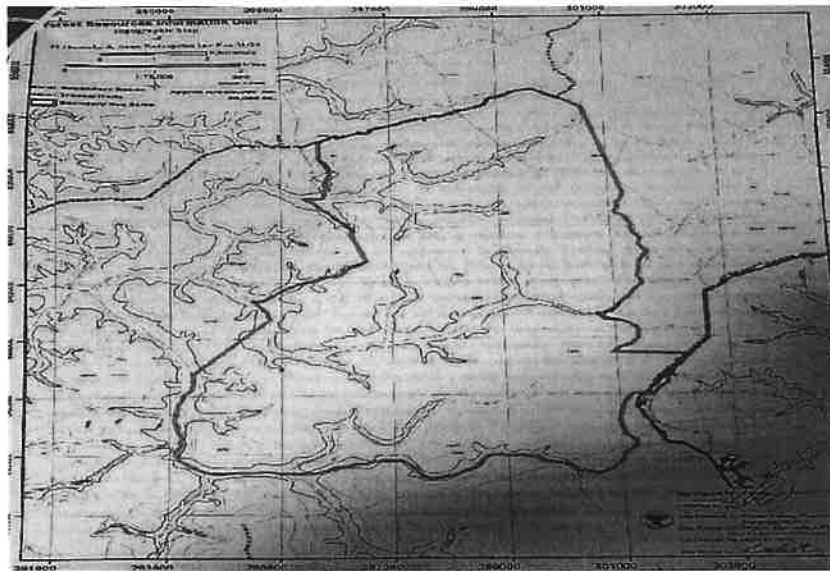


Figure above showing the map of SFA Ess 31/25concession

Operation Phase

A camp of 20ft L by 25 ft W in dimensions is established within the concession to house the six (6) workers and solar lights are used at night. The toilet facility entailed one (1) pit latrine.

Working hours will be from 7:00 hrs. to 3:30 hrs. from Monday to Saturday. Work is carried out on some weekends in fulfillment of orders.

Water for drinking and domestic purposes is sourced from a nearby creek within the concession, and rainwater is collected for drinking too.

Personal Protective Equipment (PPE) is provided to all employees, including long boots, helmets, gloves, and visibility vests. Additionally, a first aid and snake bite kit are present on site at all times.

List of equipment that is onsite:

One (1) Skidder

One (1) Bulldozer

Environmental Impacts and Mitigation Measures

The following environmental impacts may be generated from the operations within the concession, and these impacts are likely to be insignificant:

Environmental Impacts

Habitat Loss and Fragmentation

Logging activities can result in the destruction and fragmentation of habitats for many species including mammals, birds, insects, and fungi. This can lead to declines in biodiversity and ecosystem health.

Soil erosion and degradation

Logging can disrupt the natural structure of forest soils, leading to erosion and decreased soil fertility. This can have negative impacts on water quality and make it more difficult for new trees to grow.

Carbon dioxide emissions and Climate Change

Trees absorb carbon dioxide from the atmosphere, so logging can result in increased carbon dioxide emissions, which contribute to climate change. Additionally, forests are important in regulating local and regional climate through their role in water cycling and temperature regulation.

Water quality impacts

The removal of trees and disturbance of forest soils can lead to increased sedimentation in rivers and streams, which can have negative impacts on aquatic ecosystems and water quality.

Hazardous materials/waste

If these materials/wastes are not stored effectively, can result in accidental spill/release leading to soil contamination.

Noise Emissions

The source of noise is from the operation of the chainsaws and tractor when they are operational.

Particulate Matter (dust)

Sawdust is emitted during the harvesting of the logs, and during the dry weather, dust is generated when vehicles traverse the trail.

Fire

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

Solid Waste:

1. Domestic waste, inclusive of plastic bottles, food scraps, etc. is generated by the workers.
2. Sawdust, strips, wood ends, etc. during the felling process and conversion of logs into boards/planks using the chainsaws.

Cumulative Impacts

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

Mitigation Measures

Habitat Loss and Fragmentation

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

Soil erosion and degradation

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

Carbon dioxide emissions and Climate Change

Logs are not cleared-fell but are selectively harvested based on a breast height of 1.3 m and a diameter above 35cm. 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 FC 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 CO₂ into the atmosphere and also allowing saplings to continue absorbing CO₂ 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.

Water quality impacts

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

Hazardous materials/ waste

Fuel is stored on site, including 4-45-gallon drums of diesel and 2-45-gallon drums of gasoline, and kept in a designated area located at the campsite. The drums with the respective fuel are 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.

Noise Emissions

The noise levels generated are expected to be insignificant since the machinery is equipped with an exhaust stack and will be serviced and maintained according to the manufacturer's specifications. Chainsaw blades will be checked and replaced with sharp ones. Workers will be provided with appropriate PPE, including hearing protection.

Particulate Matter (dust)

During dry weather, the speed limit of 30 km/hr. is adhered to. The chainsaw operators are given the appropriate PPE to protect them from dust.

Fire

Workers are 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 are placed at the camp site and can be easily accessed should there be a fire emergency.

Solid Waste:

1. The garbage is collected in a garbage receptacle and emptied in a solid waste pit located approximately 150 meters away from the creek that flows within the concession.
2. Some of the wood waste such as sawdust, strips, wood ends, etc. will be stored in a designated area to decompose while some will be used for landfilling. Some of the wood ends will be reused as meat boards, stools, etc.

Cumulative Impacts

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.