Adon Jacobus

Aranaputa valley North Rupununi Region 9

Project Summary

Name of Developer: Adon Jacobus

Developers' Address: Aranaputa valley North Rupununi Region 9.

Project Address: Southern Boundary Iwokrama Ess 24/25

Contact details: CONTACT DETAILS: 621-6677/6620799

Project Type: logging and portable mill

Projected Capital Investment: Guy$25M

Annual Turnover: Projected Guy$5M

Project Duration: Approx. 9-15 years dependent on customers' demands.

Project Location: Southern Boundary Iwokrama

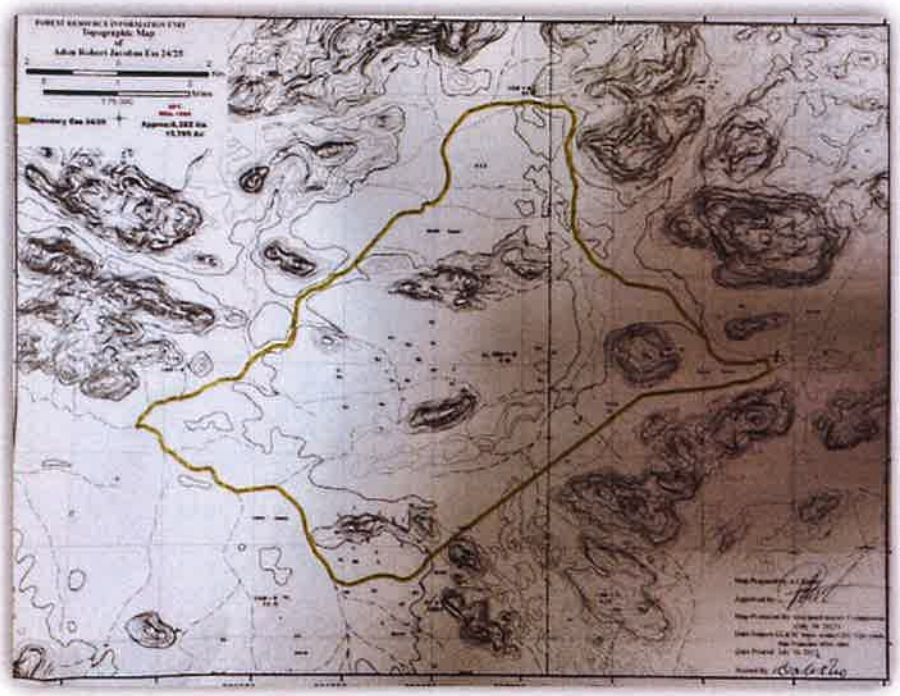
Project location and Description

This logging and sawmill activity involves the full cycle of timber production from forest harvesting to the processing of logs into usable wood products. The process begins with logging operations, which include the identification and selection of mature trees suitable for harvest in accordance with forest management plans and sustainability guidelines. Logging activities typically involve tree felling, limbing, bucking, and skidding or forwarding logs to a centralized landing or storage area.

Once harvested, the logs are transported to the sawmill facility for processing. At the mill, logs undergo debarking and are then sawn into various sizes and shapes depending on market demand.

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

Mr. Jacobus is currently a holder of a Forest Concession, State Forest Authorisation SFA-Ess 24/25 which is situated at, Southern boundary Iwokrama. Commencing at a point near the source of an unnamed tributary on the left Bank of larger unamed tributary of the Kuiparu river having approximately UTM geographic coordinates of 02 96 411 E, 04 60 594 N



Map Showing project location and surrounding land uses

Construction Phase

Land clearing was done with chain saws and cutlasses for the establishment of one camp with the dimensions of 60 x 18. The total land area cleared for the establishment of the one camp is an approximate area of one acre. The vegetation cleared for the establishment of the camp was used as landfilled material for the maintenance of the secondary roads within the SFA

Project Operation

Approximately fifteen (15) persons is employed to carry out various operational tasks as it relates to the logging activities and these include chainsaw operators, choker-men, tractor driver etc. Our company plans to produce approximately 10,000 bm of lumbers per month within Ess 24/25 concession to supply various sawmill around Georgetown. All logs will be harvested based on the stipulated measures set out in the Guidelines for Forest Operations, 2018 by GFC. The logs are harvested based on the tags issued by the Guyana Forestry Commission (GFC) and some of the species that are harvested are Baromalli, Softwallaba and Tauroniro etc.

There is one (1) camp site with the dimension of 60 x 18 to accommodate employees on the concession.

List of equipment

- Four (4) tractors
- Fifteen (15) chainsaws
- One (1) locust mill
- The toilet facility entailed one (1) pit latrine.

Working hours are from 8:00 hrs. to 4:00 hrs. from Monday to Saturday. Work is carried out on some weekends in fulfillment of orders.

Electricity is provided by solar power.

Water for drinking purpose will be purchase by company and water for domestic purposes will be sourced from a nearby creeks within the concession, and rainwater will be collected for drinking domestic purposes also.

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

Environmental Impacts

Noise Emissions

Noise emission will be produced from the chainsaws, mills and tractors.

Particulate Matter (dust)

Sawdust is emitted during log harvesting, converting logs to lumber and also dust will be 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 will be 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 stored on site; fuel such as diesel will be stored in 45-gallon drum and gasoline will be stored in 5-gallon plastic pails.

Fuel will be stored with the waste oil generated from the servicing of the tractors and will be placed at a designated area within the SFA located away from creeks and other water ways.

Waste oil will be generated from the servicing of the tractors and chainsaws once per month. The quantity of waste oil generated will be approximately 5-6 gallons and will be reused in the chainsaws. The waste oil will be 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 are 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, into the atmosphere and also allowing saplings to continue absorbing CO, 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 one hundred and twenty (120) meters away from creeks and other water ways within the SFA and when fill will be covered with soil and another waste pit is dig.

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