

8/16/2024

R. Thakur & Daughter Sawmill Project Summary for Sawmilling Operation

Name of Developer: Ramesh Thakur

Developers' Address: Lot 247, Patentia Housing Scheme, West Bank Demerara

Contact details: 680-9820

Business Name: R. Thakur & Daughter Sawmill

Sector: Forestry

Project Type: Sawmill

Projected Capital Investment: Guy\$25-30 M

Annual Turnover: Projected Guy\$15 M

Project Duration: 5 years and may continue once the rental agreement is renewed

Project Location: Lot 460 Long Creek Commercial Area, Soesdyke Linden Highway

1. Description of the Site

The sawmill will be located at Lot 460 Long Creek Commercial Area, Soesdyke Linden Highway. The total land area is 1 acre. The general topography of the area is slightly undulating and the soil type is predominantly coarse white sandy soil which is freely drained. The site is surrounded by vegetation (Dakama trees).

The sawmill site is accessible by the Soesdyke-Linden Highway, a paved road capable of accommodating two-way traffic and withstanding inclement weather. From the Highway, a turnoff can be made north onto an existing sandy trail and the location is immediately off the highway.

2. Project Design

The sawmill facility occupies approximately less than an acre and includes machinery for efficient wood processing. The design includes a family house and workers house, both measuring approximately 15 ft x 10 ft, existing on the site is a generator room (10 ft by 15 ft), log pond, sawmill/lumber yard shed measuring 58 ft *128 ft. There are no waterways found in the vicinity of the site.

3. Operational phase

The sawmill is projected to process roughly 60-100 cubic meters of logs each month. The sawmill is equipped with one mill, one moulder/planer, one surface planer, one edger, one-two chainsaws, one-127 kVA diesel generator and one tractor. Onsite processing will take place for timber species such as Tatabu, Torinario, Shibadan, Farm Board or Baroamalli, Antwood, Karatie, Silverballi, Dukalie, Purpleheart, Greenheart, and others. Rough lumber will be further

The logs will be sourced from logging concessionaires in the Ituni/Kwakwani and Mabura districts, brought to the site on log trucks, and unloaded by a tractor in the log pond. The logs are temporarily held in the log pond, which has a capacity of 200-300 m³ of logs. The tractor will transport the logs from the log pond to the mills for processing to remove the bark and saw them into boards. Both rough and dressed lumber will be available for sale. However, some of the rough lumber is further processed into dressed lumber and stored on dunnage/sticker to be delivered to customers.

Utilities such as water will be sourced from the nearby Hauraruni Creek with a use of a hired canter and two (2) large 450-gallon black tanks and carried to the project site and electricity will be provided by the

127 kVA generator and there is no telephone landline services available but mobile (cellphone) services are available and provided by either GTT and/or Digicel. Fuel of approximately 2-45 drums of diesel and 1-5 gallon pail of gasoline is stored in a designated area at the site. All fuel containers would be tightly secure. Solar lights will also be added to reduce the need for the generator for the purpose of lighting at nights.

All logs and lumber loading and unloading will take place during working hours. Gloves, visibility vests, helmets, goggles, and steel tip boots are among the personal protective equipment (PPE) provided to employees. A First Aid Kit will be placed in the office, bottom flat of the family house, to treat any minor cuts or bruises, and a van will be on standby to transfer any injured individual to Long Health Centre.

Fire extinguishers and sand buckets will be placed at strategic points of the operation and a "No Smoking" sign will be placed in a contiguous area.

4. Project Size

The capital investment for this operation was 25M Guyana dollars. The sawmill provided employment for fifteen (15) persons that reside in the area or from closeby community. The working days are Monday through Friday, 8:00 hr to 17:00 hr, and Saturday, 8:00 hr to 12:00 hr. The estimated annual turnover is 15M Guyana dollars.

5. Non-Technical Explanation of the Project

The sawmilling operation is designed to transform raw logs into valuable lumber products. The project will harness the country's rich timber resources, creating jobs and contributing to economic growth while adhering to environmental protection standards. By processing logs locally, the project will add value to Guyana's natural resources, enhancing the country's position in the global wood products market.

6. Potential Effects on the Environment

The sawmilling operation may have potential impacts on the local environment, waste generation, vibrations, and air pollution from sawdust and emissions. However, the project will implement best environmental management practices, ensuring minimal ecological disturbance. The following environmental effects may be generated from the operation of the sawmill:

Environmental Effects	Mitigation Measures
<p>Noise Nuisance</p> <p>Workers may find it annoying when machinery, generators, and other equipment are running. The machinery and equipment shall be repaired and maintained in accordance with the manufacturer's specifications during business hours, and the generators will be kept in a generator room with exhaust stacks.</p>	<p>Because the machinery is modern, the noise levels it produces won't be as annoying as they would be with older models. The generators will be maintained in a generator room and feature exhaust stacks. During regular business hours, the machinery and equipment will be utilized. According to the manufacturer's guidelines, these will be maintained and kept updated. The blades will be inspected by our experts, and then sharp blades will be installed. The required PPE, which includes hearing protection, will be provided to the workforce.</p>
<p>Fire</p> <p>It's possible that defective electrical equipment, such as weak wiring or overload sockets, arson, or carelessness on the part of workers who could be smoking on the working site were the causes of the fire.</p>	<p>Fire extinguishers and sand buckets will be placed at strategic points within the sawmill so they may be used in the case of an emergency fire. The staff members will receive training on how to use fire extinguishers. The electrical points and circuits will undergo routine checks.</p>
<p>Vibration</p> <p>Heavy equipment and mechanical use can cause vibrations. for example, unloading timber from trucks.</p>	<p>The equipment will only be used when it is required to "feed" wood into the mills, and it will be mounted on a concrete platform to lessen vibrations. During regular business hours, the machinery and equipment will be utilized and maintained in accordance with the manufacturer's instructions.</p>

<p>Particulate Matter (dust)</p> <p>Dust emission from equipment like mills and planers is expected.</p>	<p>A dust containment container will be used to collect dust from the planers' extractor devices. The mill floor will be cleaned of the sawdust produced by the mills and planer, and personnel will be given the appropriate PPE to protect themselves from dust. The mill floor will occasionally be wet to help reduce dust.</p>
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Waste Generation

Solid Waste Management

Domestic waste, such as food packaging and drink cans, will be gathered in a covered rubbish container and placed in 45-gallon barrels before being buried in a designated pit. Persons making charcoal will collect wood ends, strips, and slabs while farmers and others who might want shavings and sawdust will collect such. On the planers it will be installed with an extractor device that is connected to a dust collection container. The volume of shaving and sawdust produced by the planers will decide the bin's size.

Effluent

Grey and sewage water produced by employees and customers will be dumped into the septic tank for anaerobical treatment. The septic tank is accessible for maintenance, and Puran Waste Disposal Service will empty it once it is full.

Hazardous Waste

The servicing of the tractor, chainsaw (s), and generators will generate roughly 10-15 gallons of waste oil. To avoid spillage, the waste oil will be stored in carefully covered 5-gallon plastic pails in the mechanic workshop. The used oil will be put back into the chainsaw.

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