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Environmental Permit

Issued under the Environmental Protection Act, Cap. 20:05, Laws of Guyana, the Environmental Protection (Amendment) Act, 2005, and the Environmental Protection (Authorisations) Regulations, 2000.

Reference No.:	20200626 - DRCML
Fees:	Extra Large (C2) US\$15,500 for Five (5) years) i.e., US\$3,100 per year
Fees Paid:	US\$15,500 (October, 2022 to September, 2027)

Addressee(s):

Mr. Deonarine Ramsaroop

Director/Secretary

Lumber Master Guyana Inc. Lot 40, Block 3, Craig Milne

Cove & John

East Coast Demerara.

Activity:

To undertake Logging Activities within SFEP 01/2018

Mr. Deonarine Ramsaroop, trading and operating under the name Lumber Master Guyana Inc., herein referred to as the "Permit Holder", is hereby authorised in accordance with the Environmental Protection Act, Cap. 20:05, Laws of Guyana, the Environmental Protection (Amendment) Act, 2005, and the Environmental Protection (Authorisations) Regulations, 2000, to undertake logging activities within SFEP 01/2018, at Mazaruni-Potaro District, along the Kartabu-Puruni Road and right/left side of the Puruni/Mazaruni, hereinafter referred to as the "Project", in a manner indicated in the Application submitted on June 26, 2020, and the approved revised EAMP dated August 24, 2022, subject to the terms and conditions set forth herein and any existing or forthcoming regulations made under the said Environmental Protection Act and/or any other applicable laws, best practices, guidelines and standards relevant to this project.

The Permit Holder, His Servants, Agents and/or Sub-Contractors shall comply with the following Terms and Conditions:

1.0 GENERAL

- 1.1 Make an application to the Agency to vary this Environmental Permit in instances where it becomes necessary to:
 - i. Change the construction, operation, structure, or layout of the facility and all associated buildings;

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- ii. Change equipment, machine, apparatus, mechanism, system or technology serving the facility;
- iii. Change the position and design of any outlet at the point or points of discharge of effluents; or
- iv. Affect any other change outlined in 20(3) of the Environmental Protection (Authorisations) Regulations.
- Be obligated to restore or rehabilitate the biophysical Environment due to impacts that may result from any breach of the conditions of this Permit.
- 1.3 Construct camps, roads, log markets, plumbed toilets/pit latrines and trail(s) in the manner specified in the Guyana Forestry Commission (GFC) Guidelines for Forest Operations, 2018.
- 1.4 Ensure that logs do not free fall from log haulers to the ground to aid in the attenuation of vibrations and reduce the incidence of accidents.
- 1.5 Institute a transparent and accessible grievance mechanism for employees and surrounding communities to relate and address any environmental and work related concerns or problems which may arise and affect their well-being as a result of the Company's operation.

2.0 EMPLOYEES

- 2.1 Comply with the requirements of the Occupational Safety and Health Act, Cap. 99:01, Laws of Guyana.
 - 2.1.1 Provide employees with the necessary protective equipment to fit their job specification.
 - 2.1.2 Provide first aid kit/s equipped according to the Guyana Red Cross standards which shall include a snake bite kit.
 - 2.1.3 Provide communication and transportation systems to respond to emergencies.
- 2.2 Make all employees/third party contractors aware of the Conditions of this Environmental Permit and provide training on good environmental management practices. Prepare and maintain a training file for employees which should be available upon Officers' request during Compliance Inspections.

3.0 WASTE MANAGEMENT

3.1 Comply with the provisions of the Environmental Protection (Litter Enforcement) Regulations, 2013.

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- 3.2 Maintain good housekeeping, sanitary, hygienic practices, and the aesthetic quality of all operational facilities and surroundings.
- 3.3 Promote proper solid waste management practices at Project site.
 - 3.3.1 Place covered garbage receptacles at strategic locations both in and outside of camps;
 - 3.3.2 All solid waste collected shall be appropriately stored until such time for disposal in solid waste pits; and
 - 3.3.3 Reuse, recycle and compost waste material as much as practicable.
 - 3.3.4 Waste shall not be disposed of in or near the waterways.
- 3.4 Solid Waste Pits shall be located at least 100 metres away from waterways, above the water table and lined with at least 1.5 metres of clay/loam material to avoid leachate entering the ground water.
 - 3.4.1 Storm water shall be diverted from the solid waste pits. Pits shall be maintained and covered on a regular basis to minimise insect and rodent infestations, as well as mal-odour from leachate.
 - 3.4.2 When the maximum capacity is reached, solid waste pits shall be capped with at least 0.3 metres of clay/loam and a suitable site determined for another.

4.0 AIR QUALITY AND NOISE MANAGEMENT

- 4.1 Comply with the Environmental Protection (Air Quality) Regulations, 2000, and the Environmental Protection (Noise Management) Regulations, 2000.
- 4.2 Adhere to Guyana National Bureau of Standards (GNBS) noise Limits.
 - Industrial Limits 100dB (Day-time (06:00 h 18:00 h)
- 4.3 Ensure that all sound-making devices, e.g., generators, etc. are suitably enclosed in structures constructed with materials of good noise insulation properties (e.g., sound proof fiber-glass, insulation boards, anti-vibration soundproof floor mats) and are equipped with silencers or mufflers to reduce the noise level.
- 4.4 Maintain and service all mechanical equipment regularly in accordance with the manufacturer's recommendations to minimise sound levels and atmospheric emissions to the environment.
- 4.5 Erect signage indicating the speed limit (50km/h along the roads) and ensure that all drivers are aware of the speed limit and it is enforced.



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- 4.6 Manage all activities at the operation to prevent forest fires. Respond immediately to any reports of forest fires. Maintain a record of all fire occurrences, note date, time, location (GPS) and duration of the incident. Submit a summary of the fire occurrences in the Annual Report.
- 4.7 Use low sulphur diesel where possible and aim to reduce dependency on fossil fuel usage for residential dwellings on site.
- 4.8 Maintain records of the type and quantities of each fuel consumed annually and submit as part of the Annual Report.
- 4.9 Adhere to these limits below:

Air Pollutant	Averaging Time	Maximum Permissible Level
Carbon Monoxide	1 h	35ppm
Nitrogen Dioxide	1 h	200μg/m ³
Sulphur Dioxide	24 h	20 μg/m ³
PM _{2.5}	24h	25 μg/m ³

5.0 WATER QUALITY

- 5.1 Comply with the provisions of the Environmental Protection (Water Quality) Regulations, 2000.
- 5.2 Implement measures to prevent erosion, sedimentation, and pollution of the nearby rivers, streams, and natural waterways.
- 5.3 Implement suitable precautions to protect fragile land on steep slopes.
- 5.4 Install a filter treatment system at domestic wastewater discharge points for further treatment before discharge. Discharging domestic wastewater directly into watercourses is strictly prohibited.
- 5.5 All effluent discharged from the project site during all operational phases shall not compromise the integrity of the waterways and shall be in accordance with the Guyana National Bureau of Standards Interim Guidelines for Industrial Effluent Discharge into the Environment and the Guyana Geology And Mines Commission (GGMC) Code of Practice. For receiving water bodies, the following allowable limits shall not be exceeded:
 - pH 5.0-9.0;
 - Temperature <40 °C;
 - Biochemical Oxygen Demand (BOD) < 50 mg/L;
 - Chemical Oxygen Demand (COD) < 250 mg/L;
 - Total Suspended Solids (TSS) <50 mg/L;
 - Turbidity <30NTU; and

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- Oil and Grease <10 mg/L.
- 5.6 A water quality monitoring plan for sampling point below to include Quality Control/Assurance and frequency of sampling shall be submitted to the EPA **one month** after the issuance of this permit.

Site			GPS Coordinates	
	Water quality sites	Location	X	Y
1	Smaller creeks	Puruni Compartment 4	154650	731957
2	Mazaruni River	Puruni Compartment 2	154987	695543
3	Pashanamu	Puruni Compartment 2	179000	677985
4	Kamiguin River	Puruni Compartment 3	197000	684000
5	Puruni River	Puruni Compartment 1	221000	695453

5.7 Analysis of the parameters above shall be conducted at a GNBS-certified laboratory or by trained personnel using calibrated equipment. The analysis shall be submitted to the Agency as part of the Annual Report.

6.0 HAZARDOUS MATERIALS

- 6.1 Comply with the provisions of the Environmental Protection (Hazardous Wastes Management) Regulations, 2000.
- 6.2 There shall be no release of any pollutants (i.e., fuel, waste oil, wood preservatives) to ground water or soil from permitted installation.
- 6.3 An incident spill report shall document **EVERY** occurrence of spills during the collection and/or transportation of hazardous waste. A copy of the spill report shall be submitted to the Agency **within twenty-four (24) hours** of the incident.
- 6.4 Store all fuel away from ignition sources and have 'No Smoking' signs posted where fuel is handled or stored.
- 6.5 Waste oils, used batteries, oily rags, and oil containers shall be **appropriately labeled** and stored in tightly covered drums or barrels to avoid spillage. Waste oils and used batteries shall be reused, for example, for lubrication of equipment, or sold to an authorised dealer.
- 6.6 Construct a fuel containment bund for the fuel storage tank. The containment bund must have the capacity to store 110 percent (%) of the volume of fuel stored in the tank.

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- 6.7 Store all used/waste oil used as preservatives at least 100 metres away from all water courses. It is an offense to drain fuel/lubricants including waste oils of any quantity from the equipment onto the ground, or in waterways.
- 6.8 Use leak-proof and tightly closed containers during the transport of fuels to the logging concession and take precautions during the handling and use of all hazardous waste.
- 6.9 Where applicable, prepare and submit to the Agency no later than **forty-five (45)** days after the end of the operating year, a report relating to the activities for the previous year. The report shall include the following:
 - a) The identification information of the facility;
 - b) Type and quantities of hazardous waste generated;
 - c) Data concerning off-site shipments of waste;
 - d) Any applied treatment standards;
 - e) A summary of any accidents that may have occurred and any action taken;
 - f) Any waste minimisation efforts undertaken by the generator; and
 - g) Any other matter the Agency may require.

7.0 BIODIVERSITY MANAGEMENT

- 7.1 Prohibit the hunting, trapping and trading of endangered and locally protected wildlife species, in keeping with the Wildlife Conservation and Management Act, 2016. Further, prohibit the capture, trading and removal of wildlife by employees and/or all third-party contractors.
- 7.2 The Permit Holder shall ensure that rare and endangered species are monitored and sustainably managed as outlined in **section 6.3 of the EAMP.**
- 7.3 Inform the National Trust and Walter Roth Museum if any artefacts of archaeological and anthropological significance are unearthed during Lumber Master Guyana Inc. operations.
- 7.4 The Permit Holder shall ensure all persons/researchers entering the area to undertake inventories and other studies/research, with the exception of timber inventories, obtain a valid Biodiversity Research Permit from the Agency prior to commencing research.
- 7.5 Maintain the integrity of the area identified as biodiversity reserve, monitor and report all activities inclusive of mining within same.

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- 7.6 Report to the EPA & Guyana Wildlife Conservation and Management Commission all occurrences of illegal wildlife trapping & trading. The Permit Holder shall discourage hunting of wildlife by staff.
- 7.7 Conduct aquatic and terrestrial surveys at least once every two (2) years to assess any change in species type and abundance. As far as possible, use the same methodology identified in the in the approved revised EAMP dated August 24, 2022 and any subsequent approved revisions/amendments of the afore-mentioned documents, for the Project.
- 7.8 Maintain a Register of aquatic and terrestrial biodiversity observed within the concession area as specified in the approved revised ESIA dated August 24, 2022. The Register must contain the following information but not limited to number of species of fishes, mammals, birds, etc. sighted, date, time, scientific and common names. Register shall be submitted to Officers upon request during Compliance Inspections and in the **Environmental Annual Report**.

8.0 COMPLIANCE MONITORING& REPORTING

- 8.1 Comply with any lawful directions given by the EPA from time-to-time in furtherance of the implementation of any international or other obligation for the environmental protection of Guyana.
- 8.2 Monitor the implementation of the Conditions of this Environmental Permit, insofar as they involve adherence by your employees and all third parties under your direction.
- 8.3 Submit to the EPA, the **Environmental Annual Reports** on the status of the project, progress of the implementation of the monitoring activities and compliance with the conditions contained herein by **March 31** every year.
- 8.4 Conform to all terms and conditions under which this Environmental Permit is granted and the Permit Holder shall be liable for any loss or damage which arises from the project as a result of the Permit Holder's activities or breach of any term or condition of this Permit.
- 8.5 Inform the Agency prior to or within **thirty (30) days** of any change of name or ownership of the operation.
- 8.6 Notify the Agency **within twenty-one (21) days** in event of death, bankruptcy, liquidation or receivership of the Permit Holder or if the Company becomes a party to an amalgamation.
- 8.7 Notify the EPA within one (1) hour of the occurrence of any environmental emergencies such as a sudden onset disaster, accident, natural, technological or

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human induced factors that cause or threaten to cause severe environmental damage as well as harm to human health or livelihood.

- 8.8 Report to the Agency any non-compliance with the Environmental Permit as follows:
 - 8.8.1 Within **twenty-four (24) hours** of the time the Permit Holder becomes aware of the non-compliance, the anticipated manner in which it may endanger human health or the environment.

8.8.2 Within **seventy-two (72) hours**, submit to the Agency a written report containing a description of the non-compliance, its cause and the period of

non-compliance including exact dates and time.

8.8.3 Submit a report to the Agency indicating the reasons and the anticipated time it is expected to continue if the non-compliance has not been corrected.

9.0 INSTITUTIONAL AUTHORITY AND LIABILITIES

- 9.1 The Permit Holder shall be liable for any material environmental harm caused by polluting the environment, pursuant to s. 39 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.
- 9.2 The Permit Holder shall be liable for any activity that causes or is likely to cause pollution of the environment unless all reasonable and practicable measures are taken to prevent or minimise any resulting adverse effect, pursuant to s. 19 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.
- 9.3 The Permit Holder shall be liable for discharging, causing or permitting the entry into the environment, of any contaminant in any amount, concentration or level excess of that prescribed by the regulations or stipulated by this Environmental Permit, pursuant to s. 19 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.
- 9.4 The Permit Holder shall be liable to compensate any person who suffers any loss or damage as a result of contravening conditions 9.2 and 9.3 of this Environmental Permit, pursuant to s. 19 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.
- 9.5 The Permit Holder shall be liable of any gross negligence or willful misconduct caused by the Permit Holder, his Servants and/or Agents, to the environment, biodiversity, protected species and natural habitat with respect to any release, discharge, or spill, of contaminant fluids, oil or lubricants.
- 9.6 Should the Permit Holder contravene or be likely to contravene any condition of this Permit, the Agency (EPA) may serve on him an Enforcement Notice in accordance with Section 26 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.
- 9.7 Where it appears to the Agency that the Permit Holder is engaged in any activity that may pose a serious threat to natural resources or the environment, or a risk of serious

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pollution of the environment or any damage to public health, the EPA may issue to the Permit Holder a Prohibition Notice, which may order him to immediately cease the offending activity, in accordance with Section 27 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.

- 9.8 The EPA reserves the right to enter at any time the permitted facility and conduct regular inspections of the Permit Holder's activities as part of its monitoring and enforcement requirements under the Environmental Protection Act, Cap 20:05, the Environmental Protection (Amendment) Act, 2005, and Environmental Protection (Authorisations) Regulations, 2000.
- 9.9 The EPA has the right to modify, cancel or suspend this Permit for breach of any of the terms and conditions contained herein.
- 9.10 This Environmental Permit is not the final consent; all relevant Permissions should be obtained from other regulatory bodies for continued operation.
- 9.11 This Environmental Permit is effective for the period stipulated herein; October, 2022 to September, 2027.
- 9.12 This Environmental Permit shall remain valid until **September 30**, **2027**, unless otherwise suspended, cancelled, modified or varied, in accordance with the provisions of this Permit or the Environmental Protection Act, Cap. 20:05, Laws of Guyana, Environmental Protection (Amendment) Act, 2005, and the Environmental Protection (Authorisations) Regulations, 2000.
- 9.13 This Permit must be renewed by submitting a completed Application Form for Renewal of Environmental Authorisation to the Agency at least six months before this Permit expires, that is, no later than **April 30**, **2027**.
- 9.14 Any late submission of renewal application after the specified date as stated above, the Agency may require the Permit Holder to pay, in addition to renewal fee, a late penalty fee (accruing at the time such obligation was first owed for renewal) at a rate of **two thousand dollars (GY\$2000.00) per day for every business day late**, until such renewal application is submitted to the Agency, without prejudice to any other rights of the Permit Holder in connection therewith.
- 9.15 Failure to comply with the requirements of this Permit or with applicable laws and regulations, whether existing or forthcoming, shall render the Permit Holder liable to prosecution and to penalties, inclusive of civil penalties, injunctive relief and imprisonment, as prescribed under the Environmental Protection Act, Cap. 20:05, Laws of Guyana, the Environmental Protection Regulations and other applicable Laws of Guyana.

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Signed by

on behalf of the Environmental Protection Agency.

Kemraj Parsram

Executive Director

Date 4.10.22

I hereby accept the above Terms and Conditions upon which this Environmental Permit is granted and agree to abide by the Environmental Protection Act, Cap.20:05, Laws of Guyana, the Environmental Protection (Amendment) Act, 2005, the Environmental Protection Regulations, 2000, and any forthcoming regulations and standards made under this Act.

NAME:	DEONARINE KANSAROOP
DESIGNATION:	DEREVIOR / RECRETARY
SIGNATURE:	Manning
DATE:	1020/10/087