



**Environmental
Protection
Agency**

Ganges Street, Sophia,
Georgetown, GUYANA.
Tel.: (592)-225-5467 / 5468 /
5469
Fax: (592) 225-5481
Email: epa@epaguyana.org
Website: www.epaguyana.org

Operation Permit

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

Reference No.:	20191206 – HRRMB
Fees:	Small (C1) - US\$100 per year
Fees Paid:	US\$500 - (5 years - May 2020 to April 2025)

Addressee(s): Mr. Hemraj Ramdeo
Proprietor
Hemraj Rice Milling
430, Bush Lot Village
Corentyne, Berbice.

Activity: Operation of a Rice Mill

Hemraj Ramdeo, trading and operating under the name, Hemraj Rice Milling, hereinafter 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 operate a Rice Mill, located at 430, Bush Lot Village, Corentyne, Berbice, hereinafter referred to as the "Project", in a manner indicated in the Application submitted on December 06, 2019, and subject to the terms and conditions set forth herein and any forthcoming regulations under the said Environmental Protection Act and/or any other applicable laws, best practices and standards relevant to this project.

Terms and Conditions for Operation to be adhered to by the Permit Holder:

1.0 GENERAL

- 1.1 Notify the Agency in writing and obtain its approval for **ANY** proposed changes to the operation **at least fourteen (14) days** prior to making the change. The notification shall contain a **description of the proposed change in**

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operation. It is not necessary to make such a notification if **an application to vary** this Permit has been made and the application contains a description of the proposed change. In this condition '**change in operation**' means a change in the nature or functioning, or an extension, or any additional installation, which may have consequences for the environment. Changes to operation may include but not limited to the following:

- a) Changes in construction, structure, or layout of the facility, plant or building;
 - b) Installation of new and/or changes to equipment, machine, apparatus, mechanism, system or technology serving the facility or operation; or
 - c) Any technology used or installed at the facility from which effluent maintains good house-keeping, sanitary and hygienic practices and the aesthetic quality of the surroundings are maintained at all times.
- 1.2 Maintain good house-keeping, sanitary and hygienic practices. The aesthetic quality of your surroundings **must** be maintained at all times.
 - 1.3 Ensure that all mechanical equipment, for example, the furnace, milling apparatus and separator are operated in accordance with manufacturer's specifications. Additionally, **all** mechanical equipment and vehicles should be regularly maintained and operated at their optimal levels.
 - 1.4 Make all employees aware of the conditions of this Operation Permit and provide them with training on good environmental management practices, inclusive of emergency response.
 - 1.5 All employees must be equipped with and trained in the use of Personal Protective Equipment (PPE) in accordance with job specification. For example, protective headwear, respirators (N95 filters or N95 mask), ear protection, safety vests, and safety boots.
 - 1.6 Ensure that all pest control applications are conducted by a pest control operative who has been **certified** by the Pesticides and Toxic Chemicals Control Board (PTCCB). Use **only** pesticides approved for use in Guyana by the Pesticides and Toxic Chemicals Control Board.
 - 1.7 The pest control operative must be equipped with PPEs according to the Safety Data Sheet (SDS) during the application of pesticides and/or decontamination spraying equipment.
 - 1.8 Use **only** fumigants approved for use by Guyana Rice Development Board (GRDB) and PTCCB and ensure all relevant staff have been trained by GRDB on

their use, for example, application of the correct/effective concentrations at the relevant time.

- 1.9 Decontaminate **all** empty agro-chemical containers by either, triple rinsing (rinsing three times) or follow the decontamination procedures in accordance with Safety Data Sheet (SDS). All rinsate/effluent generated during the decontamination process must be disposed by placing into a spray can and sprayed on vegetation or weeds in an area at least 10 meters away from any waterway.

2.0 WATER QUALITY MANAGEMENT

- 2.1 Comply with the provisions of the **Environmental Protection (Water Quality) Regulations, 2000**.
- 2.2 Provide water quality results of the parameters listed in section 2.4 below, at all points where the Mill's drainage system discharges into the canal, **within sixty (60) days** of issuance of this Permit of all immediate water ways.
- 2.3 **At no time** should paddy husk, paddy ash or any other solid waste be disposed of in surrounding drains and/or waterways.
- 2.4 Maintain the drainage network to ensure the free flow of water from the compound which should be kept free of debris and vegetation, especially on the western side of the Mill.
- 2.5 Maintain the integrity of all waterways (especially the canals) that are leading outside of the compound and immediately surrounding the compound. Discharges should be in accordance with the Guyana National Bureau of Standards (GNBS) *Interim Guidelines for Industrial Effluent Discharge into the Environment not exceeding the parameter limits below*:
 - Temperature (<40°C);
 - pH (5.0-9.0);
 - Total Suspended Solids (TSS <50 mg/L);
 - Oil and Grease (<10 mg/L);
 - Biological Oxygen Demand (BOD <50 mg/L); and
 - Turbidity (<30 NTU).Further, monitor these parameters on a **bi-annual basis** (once during the rainy and once dry season) and submit the results to the Agency as part of your Annual Report.
- 2.6 Promote conservation of water resources by minimizing water consumption in the production process and reuse water where practicable.

3.0 AIR QUALITY MANAGEMENT

- 3.1 Comply with the provisions of the **Environmental Protection (Air Quality) Regulations, 2000.**
- 3.2 Ensure that the operation is appropriately enclosed to minimize the impact of dust and ash on the receiving environment. An adequate and efficient dust/ash collection system with extractor and containment bin(s) must be installed. The installed storage bins must have the capacity to store at least seventy-five (75) % of all paddy waste generated during a typical milling season. All paddy waste must be stored in bins until such time for disposal.
- 3.3 Employ wet suppression methods such as watering to control dust emissions from roadways, during the transport of paddy waste or any other activities that have the potential to generate dust particles.
- 3.4 Conduct regular maintenance to ensure that all vents and openings are sealed around the milling and drying area in an effort to minimize/ prevent escape of fugitive dust into the environment.
- 3.5 Monitor particulate matter on a **bi-annual basis** (in the rainy and dry seasons) and submit the results to the Agency as part of your Annual **Report**. Comply with the World Health Organisation (WHO) *Air Quality Guidelines for Particulate Matter in the Environment*, not exceeding the limits below:

PM_{2.5}: 10 µg/m³ annual mean
25 µg/m³ 24-annual mean

PM₁₀: 20 µg/m³ annual mean
50 µg/m³ 24-annual mean

- 3.6 Plant and maintain a row of trees or other suitable vegetation at the boundaries of the facility to act as a buffer against dust and other air emissions from the operation.

4.0 WASTE MANAGEMENT

- 4.1 Dispose of unused paddy husk/impurities and any other solid waste at a suitable location away from residents or reuse these materials in a timely manner and not allow them to accumulate on site.
 - 4.1.1 In event that paddy husk/chaff accumulates on site, ensure that the heap/s is/are kept at a height not exceeding two (2) metres.
Options for reuse of paddy husk and its impurities include but are not limited to use as:

- Poultry bedding;
- Landfill material (where practical); and
- Fuel for furnaces to generate energy at the rice mill.

4.2 Maintain a septic system on site at all times. The septic tank should be located one hundred (100) metres away from waterways, at least 1.5 m away from a building or property boundary and be accessible for cleaning and de-sludging. Any modification to the septic tank (s) must be in accordance with the Guyana National Bureau of Standards (GNBS) *Code of Practice for the Design and Construction of Septic Tanks and Associated Secondary Treatment and Disposal Systems*.

5.0 NOISE MANAGEMENT

- 5.1 Comply with the provisions of the **Environmental Protection (Noise Management) Regulations, 2000**.
- 5.2 Ensure all significant noise-producing equipment, e.g. generators, milling equipment, etc., are equipped with appropriate silencers or mufflers and/or are enclosed in suitable acoustic enclosures where necessary, to reduce noise levels impacting the surrounding environment to achieve compliance with the Guyana National Bureau of Standards (GNBS) requirement.
- 5.3 Comply with the Guyana National Bureau of Standards (GNBS) *Guidelines for Noise Emissions into the Environment*, not exceeding the limits below at a distance of 15 metres (50 feet) from the source or at the property boundary, whichever is closer.

Commercial Limits: 80 dB (Day-time (06:00 h -18:00 h))
65 dB (Night-time (18:00 h - 06:00 h))

- 5.4 Ensure all equipment and machinery is placed on foundations properly designed to ensure effective damping of vibrations.

6.0 HAZARDOUS MATERIALS MANAGEMENT

- 6.1 Comply with the provisions of the **Environmental Protection (Hazardous Waste Management) Regulations, 2000**, as follows:
- 6.2 Keep on site books, documents, records or things showing, as the case may be:
- a) The amount of hazardous wastes generated stored, treated, transported or disposed of.
 - b) The dates pertinent to the activities referred to above.
 - c) Signed copies of manifests.

- d) Records of test results, waste analyses, permit and standard conditions required by any authorisation.
 - e) And any information as the Agency may require.
- 6.3 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:
- 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 minimization efforts undertaken by the generator.
 - g) A pollution prevention plan for the facility.
 - h) Any other matter the Agency may require.

The Agency considers all materials listed in Schedules I and II of the Environmental Protection (Hazardous Waste Management) Regulations, 2000, to be hazardous. Please see attached list of Hazardous Wastes to be controlled.

- 6.4 Submit the report of activities as outlined in condition 6.2 above for the previous year in an electronic format acceptable to the Agency along with a hard copy which should be signed by the Permit holder.
- 6.5 Prepare and submit to the Agency an **Emergency Preparedness Plan** for approval by the Agency. The plan shall include:
- a) The accident prevention procedures.
 - b) First person response.
 - c) Notification procedures.
 - d) Location of clean-up equipment.
 - e) And analysis of potential accidents and responses.
 - f) Safety Data Sheets for all materials which could be spilled.
- 6.6 Designate an area for the storage of fertilizers and chemicals. The area selected must be secured and have a base constructed of an impervious material and be well ventilated.
- 6.7 Construct a fuel containment bund for all fuel storage tanks. The containment bund must have the capacity to store 110% of the volume of fuel stored in the tanks. All waste oils must be stored in leak-proof containers in a secured designated area, with an impervious base.

- 6.8 Refrain from draining fuel/lubricants including used oils of any quantity from equipment onto the ground or into waterways. An oil-water separator should be installed at a strategic locations, preferably at the interceptor drain, through which all effluent must pass before final discharge into the public drainage system.
- 6.9 Ensure that oil/fuel containment adsorbent materials are appropriately stored and disposed of in a manner approved by the EPA.
- 6.10 Promote the reuse of used oil, for example for lubrication of equipment.
- 6.11 Label, store and dispose of used oils and batteries in an environmentally acceptable manner, approved by the EPA.

7.0 EMERGENCY MANAGEMENT

- 7.1 Maintain approval from the Guyana Fire Service. Provide and locate adequate fire protection and safety measures such as fire extinguishers and sand buckets in accordance with this approval.
- 7.2 Ensure all firefighting equipment are maintained and serviced regularly.
- 7.3 Develop and maintain a regularly updated Emergency Response Protocol which includes an **Evacuation Plan** for the Rice Mill. The **Evacuation Plan** should be posted at strategic locations, which is visible and accessible to all employees.
- 7.4 Ensure that all employees are aware of the emergency response protocol and their duties and responsibilities according to the **Evacuation Plan**.
- 7.5 Ensure that the fire escape route is clearly defined and has emergency lighting in accordance with the requirements of the Guyana Fire Service.
- 7.6 Ensure that all employees are trained in the use of the fire extinguisher and any other firefighting equipment.
- 7.7 Treat and contain oil and chemical spills of even a minor nature with absorbent materials.
- 7.8 Maintain a supply of oil-absorbent materials such as absorbent pads, sand, etc., at the site for the clean-up of spills.
- 7.9 Ensure that appropriate clean-up equipment such as spill trays, oil spill clean-up recovery pump, oil spill dispersant spray system or sorbent pads are readily accessible during refueling exercises.

8.0 COMPLIANCE MONITORING & REPORTING

- 8.1 Obtain and submit to the Agency **within thirty (30) working days** of commencement of the Rice Mill:
 - a. Milling License from Guyana Rice Development Board (GRDB).
 - b. Guyana Fire Service Fire Safety Certificate
- 8.2 Notify the EPA in writing of any change of name or ownership of the Permit Holder's facility **within thirty (30) days** after the change occurs.
- 8.3 Maintain and submit to the Agency records of the type, composition and quantity of contaminant released i.e. fuel, used oil, etc.
- 8.4 Assign an individual responsible for coordinating environmental management, monitoring for compliance, reporting to the EPA, implementing the conditions of this Permit and the preparation and implementation of the **Monitoring Protocol**.
- 8.5 Notify the EPA within **twenty-four (24) hours** of the occurrence of any spills or accidental release of an environmental contaminant.
- 8.6 Monitor the conditions of this Permit, in-so-far as they involve adherence by your employees and all third parties associated with the implementation (operation) of the Project.
- 8.7 Submit **Annual Reports** to the EPA on the progress of the operation and compliance with the conditions under which this Permit was granted on or before **March 31** each year (Please see attached the *Guidelines for the preparation of Annual Report*).
- 8.8 Report to the Agency of non-compliance with the Operation Permit:
 - i. Within **twenty-four (24) hours** of the time the Holder of the Operation Permit becomes aware of the non-compliance, the anticipated manner in which it may endanger human health or the environment.
 - ii. Within **seventy-two (72) hours**, submit to the EPA a written report containing a description of the non-compliance, its cause and the period of non-compliance including exact dates and time.
 - iii. Submit a report to the EPA indicating the reasons and the anticipated time it is expected to continue if the non-compliance has not been corrected **within seventy-two (72) hours**.

- 8.9 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.
- 8.10 Comply with any lawful directions given by the EPA from time-to-time in furtherance of the implementation of any international or other obligations for the environmental protection of Guyana.

9.0 INSTITUTIONAL AUTHORITY AND LIABILITIES

- 9.1 The Permit Holder shall be strictly liable for any loss or damage to the environment through any act caused intentionally or recklessly, through the adverse effect of any discharge or release, or cause or permit the entry of pollution, contaminant in any amount, concentration or level in excess of that prescribed by the regulations or stipulated by any environmental authorization which are attributed to any Project (and more specifically petroleum activities). S. 19(1) EP Act, Cap. 20:05, Laws of Guyana.
- 9.2 The EPA reserves the right to review and/or amend the conditions and fees attached to this Permit, which also includes the review and/or amendment of Permit Fees in consideration of any changes in fee structure as determined by the Agency for projects of this nature.
- 9.3 The Permit Holder shall comply strictly with section 39 (1), (2), (3) and (4) of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.
- 9.4 Compensate any affected Party for any loss or damage to the environment that arises from the implementation of this Project.
- 9.5 The Permit Holder shall strictly observe section 19 (3) of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.
- 9.6 The Permit Holder may be liable for environmental damage due to pollution from its activities within Guyana.
- 9.7 The Permit Holder shall, at all times, allow entry to the Permitted facility to any Officer designated by the EPA for the purposes of conducting inspections or any other legitimate business of the Agency. Pursuant to s.38 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana, it is an offence to assault, obstruct or hinder an authorized person in the execution of his/her duty under the said Act or its Regulations and the Permit Holder shall be liable to penalties prescribed under paragraph (c) of the Fifth Schedule for doing so.
- 9.8 Where it appears to the Agency that the Permit Holder is engaged in any activity that may pose serious threat to natural resources or serious pollution of the

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Environment or any damage to public health, issue to the Permit Holder a Prohibition Notice Order to immediately cease the offending activity. S 27 EP Act, Cap. 20:05, Laws of Guyana.

- 9.9 Should the Permit Holder contravene or is likely to contravene any condition of this Permit, the Agency (EPA) may serve him an Enforcement Notice in accordance with s.26 of the EP Act, Cap. 20:05, Laws of Guyana.
- 9.10 The **Operation Permit** is effective for the period stipulated herein **May 2020, to April 2025**.
- 9.11 This **Operation Permit** shall remain valid until **April 30, 2025**, 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.
- 9.12 This **Operation Permit** must be renewed by submitting a completed Application Form for Renewal of Environmental Authorisation to the Agency at least six months before Permit expires, that is, no later than **October 31, 2024**.
- 9.13 Any late submission of renewal application (s) after the specified date as stated above, shall 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 day late, until such renewal application is submitted to the Agency, without prejudice to any other rights of the Permit Holder in connection therewith.
- 9.14 Failure to comply with the requirements of this Permit shall render the Permit Holder liable to prosecution and to civil penalties and/or injunctive reliefs prescribed under the Environmental Protection Act, Cap. 20:05, the Environmental Protection (Amendment) Act 2005, and the Environmental Protection (Authorisations) Regulations 2000, including under any existing and forthcoming regulations made under the said Act or any other applicable Laws of Guyana.

Signed by  on behalf of the Environmental Protection Agency.

Dr Vincent Adams
Executive Director

Date

May 13, 2020

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

I hereby accept the above Terms and Conditions upon which this Operation 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 (Authorisations) Regulations, 2000, and any forthcoming regulations, best practices, guidelines and standards made under this Act.

NAME:	HEMRAS RAMDEO
DESIGNATION:	DEVELOPER
SIGNATURE:	Hemraj Ramdeo
DATE:	06.08.2020



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