



**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.:	20190111-HRSRM
Fees:	Small (C2) - US\$175 per Year
Fees Paid	US\$875 - Five (5) years – April 2020 to March 2025)
Addressee(s):	Messrs Harripersaud & Sahadeo Ramsewack Proprietors Trans Rice Milling Complex Lot 5 Public Road, Good Hope, East Coast Demerara
Activity:	Operation of a Rice Mill

Harripersaud & Sahadeo Ramsewack, trading and operating under the name, Trans Rice Milling Complex, hereinafter referred to as the “Permit Holders”, are 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 Spooner, Mahaicony Branch Road, East Coast Demerara, hereinafter referred to as the “Project”, in a manner indicated in the Application submitted on January 11, 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 by Permit Holders:

1.0 GENERAL

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 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



Operation Permit - Ref. No. 20190111-HRSRM

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

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 Make all employees aware of the conditions of this Operation Permit and provide training on good environmental management practices inclusive of emergency response.
 - 1.3 Employees working in confined spaces must successfully complete training to work in confined spaces.
 - 1.4 At **All** times employees should be equipped with and trained in the use of Personal Protective Equipment (PPE) in accordance with their job specifications.
 - 1.5 Staff should not work for prolonged periods in areas where high heat levels are emitted.
 - 1.6 Provide a first aid kit equipped according to the Red Cross standards for a minimum of eighteen employees at the work site
 - 1.7 Maintain equipment according to manufacturers' specifications, to ensure that machinery works efficiently with all safeguards and electrical connections required by the manufacturer for safety.
 - 1.8 Maintain a valid license from the Guyana Energy Agency for the storage of fuel on site.
 - 1.9 Practice integrated pest control management. Ensure that all pest control applications are conducted by a Pest Control Operator (PCO) who is registered and certified by Pesticides and Toxic Chemicals Control Board (PTCCB).
 - a) Ensure the Pest Control Operative is equipped with Personal Protective Equipment (PPE) according to the Safety Data Sheets (SDS) during the mixing and application of pesticide including the

spraying and rinsing operations. Use **only pesticides** that are approved for use in Guyana by the PTCCB.

2.0 AIR QUALITY MANAGEMENT

2.1 Comply with the provisions of the **Environmental Protection (Air Quality) Regulations, 2000.**

2.2 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-hour mean

PM₁₀: 20 µg/m³ annual mean

50 µg/m³ 24-hour mean

B) Conduct monitoring of PM_{2.5} and PM₁₀ upwind and downwind of the rice mill, during one milling season and submit the data to the Agency within your Annual Report. *Please note the Agency reserves the right to request additional monitoring upon the review of the results submitted.*

2.3 Conduct air quality monitoring for air contaminants **annually**, including but not limited to particulate matter (PM₁₀ and PM_{2.5}), oxide of sulphur e.g. sulphur dioxide, volatile organic compounds (VOCs), carbon monoxide, oxides of nitrogen during the milling season.

2.4 Ensure that the exhaust stacks of the generator and dryer are at a height of at least two (2) meters above the tallest building in the surrounding area, so as to effectively disperse exhaust fumes and particles into the atmosphere.

2.5 Ensure that the following operational areas are fully enclosed: grain receiving and storage; cleaning house(s); mill house and load out; and packing and shipping.

2.6 An adequate dust/ash collection system with extractor fans and containment bin(s) must be in place. The storage bin(s) must have the capacity to store a minimum of 75 % of all paddy hull/ ash produced per typical milling season.

2.7 Employ appropriate particulate matter/dust suppression methods such as: wet suppression and the erection of dust screens/fences to control particulate matter/dust emissions to the environment.

- 2.8 Develop a maintenance schedule to reduce dust accumulation on ledges, floors and other exposed surfaces and submit to the Agency **within three (3) months** of the issuance of the Permit.
- 2.9 Utilise best available technologies such as filtration and vacuuming systems to reduce the emissions of particulate matter in the mill.
- 2.10 Recover and appropriately dispose of Paddy husk at a suitable location away from residents or re-use where practical. Re-use/recycle recovered paddy husk as bedding for poultry operations, land filling material or for energy generation.
- 2.11 At **All Times** truck trays must be covered to minimize particulate emissions along transport routes during movement of grains to milling complex.

3.0 NOISE MANAGEMENT

- 3.0 Comply with the provisions of the **Environmental Protection (Noise Management) Regulations, 2000.**
- 3.1 Comply with the *Guyana National Bureau of Standards (GNBS) Guidelines* for Noise Emissions into the Environment, Industrial Limits not exceeding 100 dB during the daytime (06:00 h - 18:00 h) and 80 dB during the night-time (18:00 h - 06:00 h) at a distance of 15 m (50 ft) from the source or at the property boundary, whichever is closer.
- 3.2 Equip all significant noise-producing equipment, such as, generators, with appropriate silencers and/or mufflers so as to reduce the levels of noise emitted to the environment.
- 3.3 Generator room must be fitted with materials of good insulation properties (e.g. hollow concrete blocks, insulation boards, solid clay bricks,
- 3.4 **All** equipment must be placed on foundations that are properly designed to ensure effective damping of vibrations.
- 3.5 Maintain an existing vegetative buffer on site to aid with the attenuation of fugitive noise and to improve the aesthetic quality of the surroundings.

4.0 WASTE MANAGEMENT

- 4.1 Ensure compliance with the Environmental Protection (Litter Enforcement) Regulations 2013, to ensure that your surroundings are kept free of litter.
- 4.2 Ensure that the drainage system is kept free of weeds and/or debris.

- 4.3 In accordance with the Litter Enforcement Regulations, 2013, provide covered garbage receptacles at strategic locations, both in and outside of project site. The burning of waste on project site is **strictly prohibited**.
- 4.4 Maintain a waste management register of all waste generated by the operation. Information must include, but not be limited to type of waste generate, quantity of each type generated (in kg/tonnes) and method/s of storage, treatment and disposal for waste generated. This information must be submitted in the Annual Report.
- 4.5 Maintain a Waste disposal manifest where necessary. Waste should be disposed of by an established waste disposal service provider.
- 4.6 Maintain a septic system on site at all times. The septic tank should not be located within 1.5 m of a building or property boundary and should be accessible for cleaning and de-sludging. Any modification to the Septic tanks 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 WATER QUALITY

- 5.1 Comply with the provisions of the **Environmental Protection (Water Quality) Regulations, 2000**.
- 5.2 Maintain the Integrity of the existing waterways at all times. Discharges into the environment should be in accordance with the Guyana National Bureau of Standards Interim Guidelines for Industrial Effluent Discharge into the Environment. The following are the allowable limits and should not be exceeded:
- pH 5.0-9.0;
 - Temperature < 40 °C;
 - Total Suspended Solid (TSS) <100 mg/l;
 - Total Dissolved Solids (TDS <40mg/L)
 - Oil and Grease < 10 mg/l; and
 - Biological Oxygen Demand (BOD) < 50 mg/l.
- 5.3 Conduct water quality monitoring of the parameters listed in condition 5.2 of waterway surrounding the facility on a biannual basis and submit reports to the EPA. Sample points should include the final discharge point(s) from the facility, as well as an upstream and downstream sample from the receiving body of water. The Rice mill should be in full operation during collection of samples.

Operation Permit - Ref. No. 20190111-HRSRM

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

- 5.4 Do not discharge or dispose of waste (such as paddy husk, paddy ash, etc.) and/or untreated effluent directly into the canal located north, west and south of the operation or any other surrounding waterways.
- 5.5 Sweep, shovel or vacuum spilt ingredients prior to cleaning. Solid material should NOT be washed into surrounding drains.
- 5.6 Install and maintain mesh/sieve at the end of the drains discharging wastewater from the rice mill into the canal. Recovered solid waste should be properly disposed of.
- 5.7 Promote conservation of water resources by minimizing water consumed in the production processes and reusing where possible.
- 5.8 Effluent from parboiling process should be treated before release to ensure that it does not exceed the interim effluent guideline for Biological Oxygen Demand (BOD), Chemical Oxygen Demand (COD), Total Dissolved Solids (TDS), Nitrogen and Nitrates.
- 5.9 Obtain approval from Hydrometeorological Service, Ministry of Agriculture for the onsite wells.
- 5.10 Monitor the wells for heavy metals within 60 days of the issuance of this Permit and every five (5) years thereafter. Monitor bacteria on a biannual basis and submit results to the Agency as part of the Annual Report. Comply with World Health Organisation (WHO) Water Quality Standards (1993), for heavy metals and Government Analyst Food and Drugs Department (GAF&DD) Guideline for potable water, not exceeding the limits shown in the table below:

Parameters	WHO Standards (mg/l)
Iron (Fe)	1.0
Copper (Cu)	2.0
Zinc (Zn)	3.0
Lead (Pb)	0.01
Manganese (Mn)	0.5
Arsenic (As)	0.01
Microbiological Parameters	GAF & DD Guideline
<i>E. coli</i>	0
Total coliform	<3/100 ml

6.0 FUEL, WASTE OIL & HAZARDOUS MATERIALS MANAGEMENT

- 6.1 Comply with the provisions of the Environmental Protection (Hazardous Waste Management) Regulations 2000).
- 6.2 Establish and maintain a register of hazardous materials or chemicals used or generated by your operation. Submit to the Agency **twice yearly** (June and December) a report relating to the activities from the previous six months including:
- a) the name, location and type of facility;
 - b) types and quantities (in metric units) of hazardous waste generated;
 - c) manner of storage, use, any applied treatment standards/methods and disposal of these substances;
 - d) data concerning off-site shipments of waste, i.e. local disposal facility utilized, country to which hazardous waste is shipped, purpose of shipment and amount of waste shipped;
 - e) a summary of any accidents that may have occurred and any action taken;
 - f) any waste minimization efforts undertaken by your facility for hazardous material/waste; and
 - g) 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).

- 6.3 All waste oils generated onsite must be stored in a covered and bunded area. The bunded area must provide containment for the total volume of waste oils stored.
- 6.4 Dispose of all waste oil in accordance with the Environmental Guidelines, 2011 for the 'Removal, Treatment and Disposal of Oily Sludge' (attached).
- 6.5 Store all fuel away from ignition sources and have '**No Smoking**' signs posted where fuel is handled or stored.
- 6.6 Ensure that oil/fuel contaminated absorbent materials are appropriately stored and disposed of at an approved waste disposal facility.
- 6.7 Refrain from draining fuel/lubricants including waste oils of any quantity from equipment onto the ground or into waterways.
- 6.8 Designate a bunded area for all oil changes/refueling and/ or storage of fuel. This bunded area must have an impervious base with at least 110% containment in the event of a spill.

- 6.9 Install oil-water separators on all relevant equipment (such as generators, forklift, etc) and construct a sump below the fuel dispensers to capture any spillage that may occur.
- 6.10 Store waste oil in a covered, bunded area to minimize impacts of the environment in the event of spillage. The bunded area must be able to provide containment for the maximum volume of waste oil on site.

7.0 ENVIRONMENTAL EMERGENCY

- 7.1 Obtain approval from the Guyana Fire Service and provide fire protection measures such as fire extinguishers and sand buckets in accordance with this approval. Ensure **all firefighting** equipment are maintained and serviced regularly and are stored in a visible location on site, in accordance with guidelines established by the Guyana Fire Service. Additionally, ensure all employees are trained in the use of the firefighting equipment approved by GFS, such as fire extinguishers and understand the firefighting protocol.
- 7.2 Treat and contain spills with absorbent materials.
- 7.3 Maintain a supply of oil-absorbent materials such as absorbent pads, sand, etc., at the site for the clean-up of spills.
- 7.4 Ensure that appropriate clean-up equipment such as spill trays, oil spill clean-up recover pump, oil spill dispersant spray system or sorbent pads are readily accessible during refueling exercises.

8.0 COMPLIANCE MONITORING & REPORTING

- 8.1 Notify the Environmental Protection Agency within **twenty-four (24) hours** of the occurrence of any environmental emergencies.
- 8.2 Notify the Agency 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 Monitor the implementation of the conditions of this Permit, insofar as they involve adherence by your employees and all other third parties under your direction.
- 8.4 Assign an individual responsible for coordinating environmental management, monitoring for compliance, reporting to the EPA, and implementing the conditions 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 Holders or if the Company becomes a party to an amalgamation.

8.7 Establish and maintain a Record of Incidents which should include but not be limited to:

- Date and time of incident;
- Description of incident;
- Persons involved in incident;
- Response measures employed;
- Remedial measures taken/put in place to prevent the recurrence of incident.

8.8 Report to the Agency of non-compliance with the Operation Permit:

- I. Within **twenty-four (24) hours** of the time the Holders 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 Agency 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 Agency indicating the reasons and the anticipated time it is expected to continue if the non-compliance has not been corrected.

8.9 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** of each year.

8.10 Maintain and submit to the Agency records of the type, composition and quantity of contaminant released (i.e. any solid, liquid, gas, odour, sound, vibration, radiation, heat or a combination of any of them).

8.11 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.

9.0 INSTITUTIONAL AUTHORITY AND LIABILITIES

9.1 The Permit Holders 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,

Operation Permit - Ref. No. 20190111-HRSRM

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

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 Holders shall comply strictly with section 39 (1), (2), (3) and (4) of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.
- 9.4 The Permit Holders shall strictly observe section 19 (3) of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.
- 9.5 The Permit Holders may be liable for environmental damage due to pollution from its activities within Guyana.
- 9.6 The Permit Holders 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 Holders shall be liable to penalties prescribed under paragraph (c) of the Fifth Schedule for doing so.
- 9.7 Where it appears to the Agency that the Permit Holders is engaged in any activity that may pose serious threat to natural resources or serious pollution of the Environment or any damage to public health, issue to the Permit Holders a Prohibition Notice Order to immediately cease the offending activity. S 27 EP Act, Cap. 20:05, Laws of Guyana.
- 9.8 The **Operation Permit** is effective for the period stipulated herein **April 2020 to March 2025**.
- 9.9 This **Operation Permit** shall remain valid until **March 31, 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.
- 9.10 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 **September 30, 2024**.

Operation Permit - Ref. No. 20190111-HRSRM

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

9.11 Any late submission of renewal application (s) after the specified date as stated above, shall require the Permit Holders 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 Holders in connection therewith.

9.12 Failure to comply with the requirements of this Permit shall render the Permit Holders 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

April 01, 2020

Operation Permit - Ref. No. 20190111-HRSRM

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

We 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:	<i>Kevin O. Fung - a Jit</i>
DESIGNATION:	<i>Driver</i>
SIGNATURE:	<i>Kevin Fung - a Jit</i>
DATE:	<i>2020-07-03</i>

NAME:	<i>Kevin O. Fung - a Jit</i>
DESIGNATION:	<i>Driver</i>
SIGNATURE:	<i>Kevin Fung - a Jit</i>
DATE:	<i>2020-07-03</i>



Handwritten signature/initials