



**Environmental  
Protection  
Agency**

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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:	20210615-SRHRF
Fees:	Medium (C2) US \$4000 for 5 years i.e., US \$ 800 per year
Fees paid	US\$ 4000 (July, 2022- June, 2027)

**Addressee(s):**

Mr. Sheik Rahman  
Proprietor  
Hubu AquaFarm Inc.  
Lot C, Le Destin,  
(Rahmansville),  
East Bank Essequibo.

**Activity:** Operation of an Aquaculture Farm and AgriPark

Sheik Rahman, trading and operating under the name, Hubu AquaFarm Inc., 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 an Aquaculture Farm and AgriPark located at Hubu, East Bank Essequibo, hereinafter referred to as the "Project", in a manner indicated in the Applications submitted on June 15, 2021 and February 8, 2022, subject to the terms and conditions set forth herein under the Environmental Protection Act, 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 Servant, Agents and/or Sub-Contractors shall comply with the following Terms and Conditions for the Operation:

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## **1.0 OPERATION**

- 1.1 Make an application to the Agency to vary this Permit in instances where it becomes necessary to:
- (a) change the construction, operation, structure, or layout of the facility and all associated buildings;
  - (b) change equipment, machine, apparatus, mechanism, system or technology serving the facility;
  - (c) change the position and design of any outlet at the point or points of discharge of effluents; or
  - (d) effect any other change outlined in Regulation 20(3) of the Environmental Protection (Authorisations) Regulations.
- 1.2 All ponds must be designed and constructed in accordance with the site layout plan submitted to the Agency. All berms and embankments should be stabilized to minimize erosion.
- 1.3 Ponds should provide storage volume for heavy rainfall to minimize storm overflow.
- 1.4 Carry out construction work during the 'dry' season to reduce sediment runoff that may pollute adjacent waters.
- 1.5 Install silt fences during construction of ponds to slow down and catch any suspended sediments.
- 1.6 **At all times**, all production ponds **must** be lined with food grade HDPE liners to prevent/ minimize seepage into surrounding soils.
- 1.7 The use of antibiotics or any other chemicals **are strictly prohibited**, unless written permission is granted by the Environmental Protection Agency.
- 1.8 All brood- stocks used for production must be certified by the **Guyana Livestock Development Authority and the Ministry of Agriculture Fisheries Department**.
- 1.9 In the event of a large shrimp kill or the outbreak of a disease the **EPA, the Guyana Livestock Development Authority and the Ministry of Agriculture Fisheries Department** should be contacted immediately.

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- 1.10 Routinely monitor ponds to ensure integrity in an effort to minimize seepages and/or overtopping.
- 1.11 Match feeding regime to the species life-cycle stage to minimize unconsumed fraction.
- 1.12 Regularly monitor feed uptake to determine whether it is being consumed and adjust feeding rates accordingly.
- 1.13 Store feed in a cool, dry facility and ideally for no longer than 30 days to avoid reduction in vitamin contents and/ or infestation by mold and other storage pest.
- 1.14 A foot bath containing a disinfectant solution must be placed at the entrance to aquaculture farm and its use should be mandatory before entrance.
- 1.15 Adequate security should be in place to prevent unauthorized persons from entering facility.

## **2.0 EMPLOYEES AND OCCUPATIONAL HEALTH AND SAFETY**

- 2.1 Ensure that employees are equipped with the Personal Protective Equipment (PPE's) relevant to employee duties during operating hours (e.g., lifejackets, gloves, helmets, safety glasses, long boots). Employees should at all times wear relevant PPE's while engaged in their duties of employment.
- 2.2 Ensure that adequate rest room/areas and sanitary facilities for workers are provided during the construction and operational phases.
- 2.3 A first aid kit equipped according to the Guyana Red Cross standards must be located on site at times.
- 2.4 Communication and transportation systems must be in place to respond to emergencies.
- 2.5 Provide training in correct handling of electric equipment (e.g. pumps and aerators to avoid the risk of electric shocks. Employ lock-out/tag-out procedures for all electric equipment on site.
- 2.6 All relevant employees must be made aware of the Conditions of this Environmental Permit, and be provided with training on the potential risks of

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exposure to biological agents, such as, waterborne diseases. Records of such training must be submitted as part of your Annual Report.

### **3.0 AGRIPARK**

- 3.1 All pesticide application should be done by a certified pest control operator.
- 3.2 Decontaminate all empty agro-chemical containers by complying with the decontamination procedures in accordance with their respective Safety Data Sheet (SDS), or where such procedures are not prescribed, the containers shall be decontaminated by triple-rinsing (rinsing three times). 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 metres away from any waterway.
- 3.3 The disposal of all spent agrochemical and fertilizer should be done in accordance with guidelines outlined in Material Safety Data Sheet (MSDS). A list of all fertilizers and chemical used and their MSDS sheets should be provided in EAMP.
- 3.4 All agrochemicals and fertilizers used should be stored in its original container in a designated area that is secured and stored in a designated storage area.
- 3.5 Ensure all working and storage areas are cleaned pre and post production. Remove waste products immediately from the production line to avoid contamination.
- 3.6 Ensure that adequate provisions are in place for ingress to and egress from the site.

### **4.0 WASTE MANAGEMENT**

- 4.1 Adhere to the provision of the **Environmental Protection (Litter Enforcement) Regulations 2013**.
- 4.2 Ensure effective management of recoverable materials and that all waste generated by the project, in accordance with s. 19(1), (2) and (3) of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.
- 4.3 Maintain good housekeeping, sanitary and hygienic practices, and the aesthetic quality of your surroundings at all times.

- 4.4 Covered garbage receptacles must be placed at strategic locations around the project site. Solid waste collected in these receptacles must be disposed of at an approved waste disposal facility.
- 4.5 Promote waste minimization and the reuse and/or recycling of waste materials where practicable.
- 4.6 Ensure all wastes (sludge) from the pond (i.e., undigested feed, prawn excrement, prawn shells) be treated and utilized in accordance with measures outlined in the Project Summary.
- 4.7 All sludge removed from aquaculture ponds **must** be stored in a designated area that is covered and has an impermeable base to minimize erosion and runoff to soil and surface water.
- 4.8 In the event of a mass shrimp kill, the EPA and the Ministry of Agriculture, Fisheries Department should be contacted immediately. Shrimp kill must be disposed of by incineration or some other method approved by the EPA.
- 4.9 The burning of solid waste on site is **strictly prohibited**.
- 4.10 Maintain a septic tank system, at all times, which should 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 WATER QUALITY MANAGEMENT**

- 5.1 Comply with the provisions of the **Environmental Protection (Water Quality) Regulations, 2000**.
- 5.2 Water in aquaculture ponds should be managed in accordance with the **water recirculation plan** outlined in the project summary. Water should **only** be discharged from ponds into receiving waterways **under special circumstances**, such as, in the event of heavy rainfall periods to prevent the overtopping of ponds. All water discharged to receiving environment must be treated to comply with discharge limits outlined in condition 5.3.



- 5.3 Discharges into the environment should only be done via the approved final discharge point (canal leading to Essequibo River) and should be in accordance with the Guyana National Bureau of Standards (GNBS) *Interim Guidelines for Industrial Effluent Discharge into the Environment*. The following are the allowable limits for this type of project and should not be exceeded:

Parameters	Maximum Allowable Limits
pH	5.0 -9.0
Temperature	<40 °C
Biological Oxygen Demand (BOD)	< 50 mg/l
Total Nitrogen	< 10 mg/l
Total Phosphorus	< 2mg/l
Total Suspended Solids (TSS)	< 50 mg/L
Oil and Grease	< 10 mg/l
Total Coliform Bacteria	≤ 400 *MPN / 100ml *Most probable Number

The Agency **must** be notified within 48 hours in instances of discharges. Water samples **must** be collected in accordance with **EPA Guidelines for Submission of Water Quality Analytical Data Wastewater, 2019** and analyzed by a certified laboratory. Laboratory analyses of results must be submitted to the Agency within thirty (30) working days of sampling exercise.

- 5.4 Ensure that filtration systems (sieves/filters) are placed at the entrances of the inlet structures to prevent unwanted species and/ or their larvae from entering and at the exits of the outlet structures to prevent cultured species escape.
- 5.5 All effluent generated from the dewatering of sludge from ponds must be treated to reach discharge limits outlined in condition 5.3 before final discharge to the environment.
- 5.6 The discharge or dumping of solid waste and/or untreated effluent into surrounding waterways is **strictly prohibited**.

## **6.0 AIR QUALITY AND NOISE MANAGEMENT**

- 6.1 Comply with the provisions of the **Environmental Protection (Air Quality) Regulations 2000** and the **Environmental Protection (Noise Management) Regulations, 2000**.

- 6.2 Identify suitable areas for construction material stockpiling and equipment during construction.
- 6.3 Remove all construction tools, equipment, machinery, and waste material from site on the completion of construction works.
- 6.4 All vehicles utilized for the transport of building material to the site must be appropriately covered to minimize the risk of dust emissions to the environment.
- 6.5 Employ reasonable and practical measures to eliminate or reduce mal-odour, particulate matter and gaseous emissions. This can be done by taking into account wind direction and speed, ensuring that odour generating activities are completed in as short a space of time as possible and by ensuring that any dead aquaculture organisms or unused feed are disposed of in accordance with best practices.
- 6.6 Comply with the Guyana National Bureau of Standards (GNBS) Guidelines for noise emission into the environment, not exceeding the limits below at a distance of 15 m (50 ft) from the source or property boundary, whichever is closer.

**Commercial Limits:**      **80 dB** (Day-time (06:00 h -18:00 h))  
   **60 dB** (Night-time (18:00 – 06:00 h))

- 6.7 Ensure all significant noise-producing equipment, e.g., generator (s), water pumps, 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 Guyana National Bureau of Standards (GNBS) requirement.
- 6.8 Ensure that the exhaust stack of generators is of an appropriate height, preferably above the tallest building nearby, to minimise adverse fumes/soot impacts to contiguous areas.
- 6.9 Ensure all equipment and machinery are placed on foundations that are properly designed to ensure effective damping of vibrations.
- 6.10 Implement all possible measures, such as ensuring equipment and machines are serviced and operated according to manufacturer's recommendations, to minimise the impact of sound levels on the environment.

**7.0 HAZARDOUS MATERIAL/ WASTE MANAGEMENT**

- 7.1 Comply with the provisions of the **Environmental Protection (Hazardous Waste Management) Regulations, 2000.**
- 7.2 Maintain 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.
- 7.3 Establish and maintain a designated area for repairs, fuelling and oil changes. The designated area should be surfaced with an impervious material such as concrete and so designed as to allow for easy clean-up of accidental fuel and oil spills. This area should be equipped with an oil-water separator.
- 7.4 There shall be no release of any pollutants (i.e., fuel, waste oil, wood preservatives) to ground water or soil from the permitted installation. Any accidental release of pollutants to soil and ground water must be recorded and reported within twenty-four (24) hours to the Agency for further investigation.
- 7.5 Take the necessary precautionary measures such as the use of leak-proof and tightly closed containers during the transport of fuel to the operation. Appropriate measures should also be taken during the handling and use of all Hazardous Wastes at the facility.
- 7.6 Store waste oil in tightly covered drums or barrels to avoid spillage. It is an offence to drain fuel/lubricants including waste oils of any quantity from equipment onto the ground, in drains or water ways.
- 7.7 Waste oils, used batteries, oily rags, filters and oil containers must be appropriately labelled, and stored in a containment bund with an impervious surface until such time for reuse or sale to an authorised dealer.
- 7.8 Promote the reuse of waste oil, for example, as lubricant for equipment, where practical.
- 7.9 Ensure that an appropriate spill containment kit is located onsite. The kit should contain absorbent materials to absorb spilt oil and/or other liquids.



## **8.0 COMPLIANCE MONITORING AND 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 Submit within **six (6) months** of receipt of Environmental Permit, a comprehensive **Environmental Assessment & Management Plan** for approval by the Agency.
- 8.3 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.
- 8.4 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 (Please see attached, the *Guidelines for the preparation of Environmental Annual Reports*).
- 8.5 Conform to all terms and conditions under which this Environmental Permit is granted and 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.
- 8.6 Inform the Agency prior to or **within thirty (30) days** of any change of name or ownership of the operation.
- 8.7 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.
- 8.8 Notify the EPA **within one (1) hour** of the occurrence of any environmental emergencies such as a sudden onset disaster, accident, natural, technological or human induced factors that cause or threaten to cause severe environmental damage as well as harm to human health or livelihood.
- 8.9 Report to the Agency of non-compliance with the Environmental Permit:
  - 5.8.1 Within **twenty-four (24) hours** of the time the Holder of the Environmental Permit becomes aware of the non-compliance, the

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anticipated manner in which it may endanger human health or the environment.

- 5.8.2 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.
- 5.8.3 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 / LIABILITIES**

- 9.1 The EPA reserves the right to conduct regular inspections of the Permit Holder's operation as part of its monitoring and enforcement requirements under the Environmental Protection Act, Cap 20:05, Laws of Guyana and its regulations.
- 9.2 The EPA shall have the right to cancel or suspend this Permit for breach of any of the terms and conditions contained herein.
- 9.3 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 authorised 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.
- 9.4 This Environmental Permit is not the final consent; all relevant permission should be obtained from other regulatory bodies for continued operation.
- 9.5 The Permit Holder shall compensate any Party who suffers any loss or damage as a result of the attributed Project (See: s. 19 (3)(e) of the Environmental Protection Act, Cap. 20:05, Laws of Guyana).
- 9.6 The Agency (EPA) shall notify the Permit Holder immediately of any written claim or notice sent by any complainant seeking loss or damage for negligence as a result of the Permit Holder lack of due care and diligence.
- 9.7 The Permit Holder shall be liable for any gross negligence or willful misconduct

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caused by the Permit Holder, his Servants and/or Agents, to the surrounding environment, including harm to biodiversity, protected species and natural habitat with respect to any release or discharge, spill, contaminant fluids, oil or lubricants from the fuel storage.

- 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 Environment or any damage to public health, issue to the Permit Holder a Prohibition Notice Order to immediately cease the offending activity (See s. 27 of the Environmental Protection 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 on him an Enforcement Notice, in accordance with s. 26 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.
- 9.10 This Environmental Permit is effective for the period stipulated herein **July, 2022 to June, 2027**. This Environmental Permit shall remain valid until **June 30, 2027**, unless otherwise varied, modified, suspended, cancelled, or revoked in accordance with the provisions of this Permit or the Environmental Protection Act, Cap. 20:05, Laws of Guyana and the Environmental Protection Regulations.
- 9.11 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 **December 31, 2026**.
- 9.12 Any late submission of renewal application (s) 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.
- 9.13 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 any other applicable Laws of Guyana.

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Signed by Shamifah Lazack on behalf of the Environmental Protection Agency.



Date

2022 - 07 - 25

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 and any forthcoming regulations and standards made under this Act.

NAME:	SHEIK RAHMAN
DESIGNATION:	C.E.O
SIGNATURE:	Sheik Rahman
DATE:	07-07-2022

