



**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.:	20231011 - FLGCS
Fees:	Medium (C2) - US\$ 800 per year
Fees paid:	US\$ 4000 (5 years): July, 2024 to June, 2029)

**Addressee(s):** Dean Hassan  
Director  
Farmlands Guyana Inc.  
Lot 79 Premniranjan Place,  
Prashad Nagar,  
Georgetown, Guyana.

**Activity:** Operation of a Crop Farm (Planting of Corn and Soya Bean).

Farmlands Guyana Inc., hereinafter referred to as the "Permit Holder", is hereby authorized in accordance with the Environmental Protection Act, Cap. 20:05, Laws of Guyana, the Environmental Protection (Amendment) Act, 2005, and Environmental Protection (Authorisations) Regulations, 2000, to operate a Crop Farm (Planting of Corn and Soya Bean) located at Tract 'BWPI', Ebini, In the Intermediate Savannahs of Ebini, Right Bank Wiruni River, Right Bank Berbice River, Region 10, hereinafter referred to as the "Project", in the manner indicated in the Application submitted on October, 11 2023, subject to the terms and conditions set forth herein and any 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 Environmental Permit in instances where it becomes necessary to:
- i. change the construction, operation, structure, or layout of the facility and all associated buildings;
  - 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 effect any other change outlined in Regulation 20(3) of the Environmental Protection (Authorisations) Regulations.
- 1.2 Operate in a manner that protects the faunal and floral diversity of the area.
- 1.3 Ensure that good house-keeping, sanitary and hygienic practices and the aesthetic quality of your surroundings are maintained at all times.
- 1.4 **Submit to the Agency within 90 days of receipt of this Environmental Permit an Environmental Assessment Management Plan (EAMP).**
- 1.5 Regulate the use of pesticides and herbicides to minimize their impact on the environment and nearby sensitive areas. This includes:
- I. Using integrated pest management (IPM) practices to reduce reliance on chemical inputs.
  - II. Properly storing and disposing of pesticides and herbicides to prevent contamination and,
  - III. Implement buffer zones between corn and soya bean fields and sensitive areas to reduce drift and runoff of chemicals.
- 1.6 Implement soil conservation practices to prevent erosion and maintain soil health. This may involve:
- 1.5.1 Implementing conservation tillage techniques, such as no-till or reduced tillage, using cover crops to protect soil during non-growing seasons, and implementing erosion control measures, such as contour plowing or terracing

**2.0 EMPLOYEES HEALTH AND SAFETY**

- 2.1 Adhere to the requirements of **the Occupational Safety and Health Act, Cap. 99:01, Laws of Guyana.**



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- 2.2 Ensure that all employees are equipped with Personal Protective Equipment (PPE) such as protective head gear, respirators/dust masks, safety vests, ear muffs, and construction boots, etc., which are necessary and relevant to their occupational role.
- 2.3 Make all employees/third party contractors aware of the conditions of the 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 Inspection.
- 2.4 Ensure that the Environmental Management Personnel is also responsible for implementing the terms and conditions of this Environmental Permit, monitoring for compliance and making all required reports to the EPA.
- 2.5 Ensure that adequate rest room/areas, waste disposal and sanitary facilities are provided for onsite for workers.
- 2.6 Ensure warning signs are placed at strategic locations and walk paths to avoid accidents with individuals in relation to the operation at the facility.

**3.0 LAND**

- 3.0 Utilize the land in accordance with the map showing the layout of operation submitted to the Agency. All specification of locations, pathways, reserve and boundary lines must be adhered to, unless otherwise approved by the EPA.
- 3.1 Take all necessary practicable measures to prevent erosion of the soil during land development activities (ploughing/harrowing, sowing of seeds, etc.).
- 3.2 Construct and maintain drainage and irrigation systems that will reduce the likelihood of erosion and sedimentation runoff.

**4.0 ROADS**

- 4.1 Ensure that all reasonable and practical measures are implemented to prevent erosion of roads during construction and operation. Runoff from roads, etc. should not be discharged directly into natural water ways.
- 4.2 Ensure that activities as they relate to construction, operation and maintenance of roads, bridges, culverts and trails are done in the manner that will result in minimal impact to the biodiversity of the area.

## **5.0 AIR QUALITY AND NOISE MANAGEMENT**

- 5.1 Adhere to the provisions of the **Environmental Protection (Air Quality) Regulations 2000 and the Environmental Protection (Noise Management) Regulations 2000.**
- 5.2 Implement dust and particulate control measures during land preparation activities. Cover loads of construction material during transport through inhabited areas to reduce dust emissions.
- 5.3 Reduce speed limits during dry periods to minimize dust generation on routes traversed by vehicles.
- 5.4 Ensure that sound-making devices, such as, generators are enclosed in suitable structures and constructed with materials of good insulation properties (e.g., hollow concrete blocks, insulation boards, solid clay bricks, etc.) and are equipped with silencers or mufflers to reduce the noise level and are placed on foundation properly designed to ensure effective damping of vibrations. Additionally, ensure adequate equipment maintenance is provided and obsolete tools and equipment are replaced.
- 5.5 Ensure that the exhaust stack of the generator(s) is at least 2 metres above the tallest building nearby, to minimise adverse fumes/soot impacts to the contiguous areas.
- 5.6 Operate all mechanical equipment in accordance with manufacturer's specifications. All mechanical equipment, vehicles, should be regularly maintained and operated at their optimal levels to minimize atmospheric emissions.
- 5.7 Adhere to the *Guyana National Bureau of Standards (GNBS) Guidelines for Noise Emissions into the Environment*. Sound levels from noise-making devices should not exceed the limits below, at a distance of 15 metres (50 ft) from the source or 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)

## **6.0 WATER QUALITY MANAGEMENT**

- 6.1 Adhere to the provisions of the **Environmental Protection (Water Quality) Regulations, 2000.**
- 6.2 Not allow the discharge of fertilizers, manure, trade effluent, and agrochemicals directly into creeks and other water ways.

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- 6.3 Monitor groundwater wells on an annual basis and ensure that the following parameters are in accordance with the World Health Organisation (WHO) Water Quality Standards (1993), Guideline for potable water, not exceeding the limits shown in the table below:

<b>Parameters</b>	<b>WHO Standards (1993) mg/L</b>
Aluminium	0.2
Iron	0.3
Copper	2.0
Lead	0.01
Zinc	3.0
Nitrates	50
Sulphate	500
<b>Microbiological Parameters</b>	<b>WHO Standards (2006)</b>
<i>E. coli</i>	0 count/100ml
Total coliform	0 count/100ml

- 6.4 Utilize agrochemicals that are not harmful to the aquatic environment.
- 6.5 Use pesticides as a last resort. Employ/use alternative pest control measures such as crop rotation, use of pest-resistant crops. Pesticides should not be applied before precipitation is forecast to occur, or before irrigation.
- 6.6 Utilize methods to apply pesticide that are less harmful to the environment. Soil incorporation, or tilling the pesticide into the top couple of inches of soil, may reduce the amount of pesticide carried away by runoff.
- 6.7 Promote water conservation by implementing measures that will restrict wastage and encourage recycling or re-use of wastewater emanating from the Project Activities.
- 6.8 Avoid water contamination from fuel, grease, waste oils and other petroleum products. Store all oils, fuel, paints and chemicals in a designated area, away from watercourses.
- 6.9 Avoid the use/spray of fertilizers, pesticides around the well.

## **7.0 WASTE MANAGEMENT**

- 7.1 Adhere to with the provisions of the **Environmental Protection (Litter Enforcement) Regulations, 2013.**
- 7.2 Ensure that all waste management practices are in compliance with the Guidelines specified within the Application and Project Summary for Environmental Authorisation.
- 7.3 In accordance with the Environmental Protection (Litter Enforcement) Regulations, 2013 provide covered garbage receptacles at strategic locations, both within and outside of the various buildings found on the Farm. At all times, garbage receptacles, both inside and outside of the facility, should be emptied, cleaned and maintained on a regular basis, to prevent the fall or flow of garbage in the surrounding environment and attraction of flies, rodents and other vermin.
- 7.3.1 Ensure the compost pit(s) is properly managed and maintained to avoid mal-odour and attraction of flies and vermin.
  - 7.3.2 Waste pit(s) should be constructed at least 100 meters away from waterways, above the water table and lined the base of the pit with at least 1.5 meters of clay/loam material to avoid leachate entering the ground water.
  - 7.3.3 Storm water should be diverted from the waste pit and covering and compacting of the pit with suitable material should be conducted on a regular basis to prevent contamination of the ground water and proliferation of flies, vermin and malodour.
  - 7.3.4 When the maximum capacity is reached, the solid waste pit should be covered with at least 0.3 meters of soil, identified on the project map and a suitable site determined for another.
- 7.4 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.
- 7.4.1 Septic tanks should be located at least 100 meters from all waterways.

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- 7.5 Ensure as far as possible the reuse and composting of waste materials.
- 7.6 Not discharge or dump effluent directly into the receiving waters without prior treatment.

**8.0 FUEL, WASTE OIL AND HAZARDOUS MATERIALS MANAGEMENT**

**8.1 Adhere to the provisions of the Environmental Protection (Hazardous Waste Management) Regulations, 2000, and the Pesticides and Toxic Chemicals Act.**

8.1.1 Establish and maintain a register of hazardous materials or chemicals used or generated by your operation. Submit to the Agency no later than **forty-five (45) days**, a **Report** relating to the activities for the previous six months including:

- a) Establish 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.

8.1.2 Take **all** necessary precautionary measures when transporting fuel and handling fuel within the project boundary, for example; when re-fueling the generator set, etc. In addition, implement a programme to ensure regular and preventative maintenance of machinery and equipment to prevent leaks.

8.1.3 Label, store, and dispose of waste oil in a manner approved by the EPA.

8.1.3.1 Waste/used oil, oily rags, filters, contaminated soil and oil containers should be stored in tightly closed containers in a centralized location. Store waste/used oil in a bunded area to minimize adverse impacts to the environment in the event of spillage. The bunded area must be able to provide





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containment for the maximum volume of waste/used oil on site.

- 8.1.4 Ensure that chemicals and fertilizers are collected and stored within a secure and ventilated bond/room which must have an impervious surface and 110% containment of the largest storage container.
- 8.1.5 Designate an area for the collection and storage of fuel. All oils, lubricants, waste oils and fuels tanks should be stored on an impervious surface, within a bunded wall with the capacity to hold 110% containment of the largest storage container.
- 8.1.6 Obtain under the Pesticides and Toxic Chemical Regulations a separate license for use of poisonous substances.
- 8.1.7 Store Pesticides and Toxic Chemicals in their original packaging.
- 8.1.8 Pesticides and Toxic Chemicals should be stored in an impervious location with appropriate signage.
- 8.1.9 Restrict Access to Pesticides and Toxic Chemicals to authorized persons.
- 8.1.10 Refrain from draining fuel/Lubricants including waste/used oil of any quantity from equipment onto the ground or into waterways. Ensure that water used to clean greasy hands and equipment are collected or routed through the oil/water separator located on site. It is an offence to drain fuel/lubricants including waste/used oil of any quantity from equipment onto the ground or water way.
- 8.1.11 Keep on site, books, documents, records or things showing, as the case may be:
  - a) The number 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.
- 8.1.12 Maintain an oil/water separator (s) on site, through which all effluent (oily water) must pass before final discharge. Recovered oil must be stored and disposed of in a manner approved by the EPA as per conditions.





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- 8.1.13 Ensure that all servicing and maintenance operations are conducted within the confines of the mechanization center, and on an impervious base.
- 8.1.14 Ensure that an appropriate spill containment kit is located on site. The kit should contain absorbent material to absorb spilt oil and other liquids.
- 8.1.15 Ensure that oil/fuel containment absorbent materials are appropriately stored.
- 8.1.16 Implement the use of drip tray (s) when working on the radiator, brakes, and oil systems. Recovered liquids must be stored in secure containers for recycling or disposal in a manner approved by the Agency.
- 8.1.17 Treat and contain spills of even a minor nature with absorbent materials.
- 8.1.18 Maintain a supply of oil absorbent materials such as absorbent pads, sand, etc., at the site for the clean-up of spills.

**9.0 ENVIRONMENTAL EMERGENCY**

- 9.1 Maintain a supply of oil-absorbent materials such as absorbent pads, sand, etc., at the site for the clean-up of spills.
- 9.2 Provide adequate fire protection measures such as maintaining and placing firefighting equipment such as fire extinguisher, sand bucket, at a visible location on site, in accordance with guidelines established by the Guyana Fire Service's (GFS).
- 9.3 Treat and contain spills of even a minor nature with absorbent materials.
- 9.4 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.

**10.0 BIODIVERSITY PROTECTION**

- 10.1 Undertake construction, including clearing of vegetation, at a pace slow enough to ensure that animals and aquatic life can move to other locations.



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- 10.2 Prohibit the hunting, trapping, fishing and trading of endangered and locally protected wildlife species. Further, ensure that the prohibition of capture, trading and removal of wildlife be a term of employment for all contractors and employees.
- 10.3 Undertake removal of trees and vegetation in areas where only absolutely necessary.
- 10.4 Minimise the use of Agrochemicals that would be harmful to Flora and Fauna in and around the project area. Agrochemicals used should not be persistent in the Environment and correct dosage application should be encouraged at all times.

**11.0 COMPLIANCE MONITORING & REPORTING**

- 11.1 Adhere to 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.
- 11.2 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.
- 11.3 Submit to the EPA, the **Environmental Annual Report** 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*).
- 11.4 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.
- 11.5 Inform the Agency prior to or **within thirty (30) days** of any change of name or ownership of the operation.
- 11.6 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.
- 11.7 Notify the EPA **within one (1) hour** of the occurrence of any environmental emergencies such as a sudden onset disaster, accident, natural, technological or human induced factors that cause or threaten to cause severe environmental damage as well as harm to human health or livelihood.
- 11.8 Report to the Agency any non-compliance with the Environmental Permit as follows:



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- 11.8.1 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.
- 11.8.2 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.
- 11.8.3 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.

**12.0 INSTITUTIONAL AUTHORITY/LIABILITIES**

- 12.1 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.
- 12.2 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 minimize any resulting adverse effect, pursuant to s. 19 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.
- 12.3 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 Interim Environmental Permit, pursuant to s. 19 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.
- 12.4 The Permit Holder shall be liable to compensate any person who suffers any loss or damage as a result of contravening conditions 7.2 and 7.3 of this Interim Environmental Permit, pursuant to s. 19 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.
- 12.5 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.
- 12.6 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.
- 12.7 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 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

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immediately cease the offending activity, in accordance with Section 27 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.

- 12.8 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.
- 12.9 The EPA has the right to modify, cancel or suspend this Permit for breach of any of the terms and conditions contained herein.
- 12.10 **This Environmental Permit is not the final consent; all relevant Permissions should be obtained from other regulatory bodies for continued operation.**
- 12.11 This Environmental Permit is effective for the period stipulated herein; **July, 2024 to June, 2029.**
- 12.12 This Environmental Permit shall remain valid until **June 30, 2029**, 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.
- 12.13 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 **December 31, 2028.**
- 12.14 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.
- 12.15 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 2024.07.26

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, Environmental Protection (Amendment) Act, 2005, and the Environmental Protection (Authorisations) Regulations, 2000, and any forthcoming regulations, best practices, guidelines and standards made under this Act.

NAME:	Abigail Welch
DESIGNATION:	Project Consultant
SIGNATURE:	
DATE:	21/8/2024



