



**Environmental
Protection
Agency**

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Environmental Permit (Renewed)

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.:	20200701-GPLKS
Fee:	Extra Large (C2) - US\$3100 per year
Fees Paid:	US\$ 3,100 for one (1) year – January, 2023 to December, 2023

Addressee: Mr. Amir Dillawar
Program Coordinator
Power Utility Upgrade Program
Guyana Power & Light (GPL)
40 Main St,
South Cummingsburg,
Georgetown.

Activity: Interconnection Upgrade Project (Installation of Hardware and L5 Transmission line from Kingston to Sophia)

Guyana Power & Light (GPL), herein referred to as the "Permit Holder", is hereby authorised in accordance with the Environmental Protection Act, Cap 20:05, Laws of Guyana, Environmental Protection (Amendment) Act, 2005, and the Environmental Protection (Authorisations) Regulations, 2000, to construct and install Hardware and L5 Transmission line from Kingston to Sophia, Georgetown, Guyana, hereinafter referred to as "the Project", in the manner indicated in the Renewal Application submitted on October 06, 2016, subject to the terms and conditions set forth herein under the Environmental Protection Act, existing and/or forthcoming regulations made under the said Act, and/or any other applicable laws, best practices, guidelines and standards relevant to this project.

This is a Renewal of the Environmental Permit, Reference # 20200701-GPLKS, issued on February 25, 2021, which expired on December 31, 2022. This Environmental Permit – Renewed is issued pursuant to the Environmental Protection (Authorisations) Regulations, 2000.

Terms and Conditions for Construction to be adhered to by the Permit Holder, his Servants, Agents and/or Sub-Contractors:

1.0 GENERAL

- 1.1 Make an application to the Agency to vary this Environmental Permit in instances where it becomes necessary to:
 - I. Change the construction, operation, structure, or layout of the facility and all associated buildings;
 - II. Change equipment, machine, apparatus, mechanism, system or technology serving the facility;
 - III. Change the position and design of any outlet at the point or points of discharge of effluents; or
 - IV. Affect any other change outlined in 20(3) of the **Environmental Protection (Authorisations) Regulations**.
- 1.2 The Project shall be implemented in accordance to the plans submitted to the Agency, all specifications of location, pathways, reserve and boundary lines must be adhered to, unless otherwise authorised; evidence of which must be provided to the Agency.
- 1.3 Ensure that all construction works at the project site are conducted in accordance with Drainage & Irrigation Laws of Guyana.
- 1.4 Consult and coordinate with contractors/subcontractors and the relevant/affected utility companies, local government bodies, government organisations, such as, the Guyana Lands & Surveys Commission (GLSC), Neighbourhood Democratic Councils (NDCs), Guyana Water Inc. (GWI), and Guyana Telephone and Telegraph Co Ltd (GTT), etc. to establish schedules and mechanisms for implementation of the Project. Additionally, ensure that utility providers and relevant authorities are consulted on the location of their facilities such as conduits and cables, etc. to ensure that appropriate actions are taken such as relocation of utility poles, markings, temporary shut off of utilities, etc. prior to the commencement of works.
- 1.5 Construction works shall not be executed between 22:00 hrs to 06:00 hrs, on any day, close to communal areas unless, approval is sought from the EPA. This requirement does not apply for large concrete pours or asphalt laying and earth removal where work in the early morning and late evening is required.
- 1.6 Upon completion of works remove all barriers, equipment/material staging areas, and all support infrastructure, facilities and equipment in accordance with documents and plans submitted to the Agency.
- 1.7 Adhere to requirements of the **Occupational Health and Safety Act, Cap 99:10, Laws of Guyana**.



- 1.8 Employ or designate an employee to the role of an **Occupational Health and Safety (OHS)/Environmental Officer** to be responsible for the implementation and coordination of all safety requirements and terms and conditions stipulated in this Permit, as well as compliance monitoring with the preparation of all required reports to the EPA.
- 1.9 Working environment shall be monitored at all times for occupational hazards.
- 1.10 Implement all mitigation measures/recommendations as outlined in the approved **Environmental and Social Impact assessment (ESIA)**.

2.0 TRAFFIC MANAGEMENT AND PUBLIC SAFETY

- 2.1 Take all necessary precautions to minimise potential adverse impacts on public health and the environment in the transport, storage and handling of construction materials.
- 2.2 Make suitable provisions to accommodate vehicular and pedestrian traffic safely with minimum inconvenience through and around the construction site(s).
- 2.3 Traffic control devices, signage, guardrails and cautioning tape shall be installed at work sites. Speed limits shall be strictly enforced to minimise dust particles from becoming airborne.
- 2.4 Notify the public of the estimated duration of the project, estimated times of works, and expected difficulties, e.g. road closures and diversions, etc. that may be encountered as a result of construction at least two weeks in advance.
- 2.5 Access shall be provided to all properties adjacent to the project site for the duration of the construction period.

3.0 WATER AND SOIL QUALITY MANAGEMENT

- 3.1 Strictly comply with the provisions of the **Environmental Protection (Water Quality) Regulations 2000**.
- 3.2 Maintain the integrity of the existing waterways at all times. Discharges into the environment shall 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:



Total Suspended Solid (TSS) < 100 mg/L;

Total Dissolved Solid (TDS) < 40 mg/L;

Oil and Grease < 20 mg/L.

- 3.3 Avoid erosion, siltation and sedimentation of existing water bodies/drains within the vicinity of the project site.
- 3.4 Install sediment controls along site perimeter areas that will receive effluent and remove sediments before it accumulates to half of the above-ground height of the perimeter control.
- 3.5 Protect susceptible sloped surfaces with suitable revetment and appropriate cover to ensure the stability of slopes and avoid erosion. Install down gradient sediment control systems (e.g., buffers, perimeter controls, exit point controls, storm drain inlet protection) that manage discharges from the initial site clearing, grading, excavating, and other earth-disturbing activities.
- 3.6 Limit the removal of vegetation to the minimum extent necessary for works to proceed. In areas where soils are not to be removed, the vegetation layer shall be maintained to protect the soil from erosion.
- 3.7 Stabilize exposed portions of the soil. Implement and maintain stabilization measures (e.g., seeding protected by erosion controls until vegetation is established, sodding, mulching, erosion control blankets, hydromulch, gravel) that minimize erosion from exposed portions of the site.
- 3.8 Locate piles outside of any natural buffers and away from any stormwater conveyances, drain inlets, and areas where stormwater flow is concentrated.
- 3.9 Avoid soil and water contamination from fuel, grease, waste oils and other petroleum products that might be used at the project site.
- 3.10 Store all chemicals in leak-proof containers that are kept under water-resistant cover and surrounded by secondary containment structures (e.g., spill berms, decks, spill containment pallets) to minimize the potential discharge of chemicals in stormwater and external waterways.

4.0 AIR QUALITY MANAGEMENT AND NOISE ABATEMENT

- 4.1 Strictly comply with the **Environmental Protection (Air Quality) Regulations, 2000** and the **Environmental Protection (Noise Management) Regulations 2000**.

- 4.2 Noise emissions shall not exceed the Guyana National Bureau of Standards (GNBS) ***Guidelines for Noise Emissions into the Environment*** as stated below.

Construction Limits: 90 dB during Day-time (06:00 h - 18:00 h)

75 dB during Night-time (18:00 h - 06:00 h)

- 4.3 Locate generators away from sensitive receptors. Ensure that the exhaust stacks of generators are at a sufficient distance from communal areas to minimise adverse fumes/soot impacts to the contiguous areas.
- 4.4 Employ dust suppression methods such as watering, erecting dust screens/fences to control dust emissions from material stockpiles and other components of the development that would generate dust.
- 4.5 Stockpiles shall be relatively flat on top, and not exceed a height of eight (8) feet. Remove material from the stock pile on the leeward side to avoid the removal of material on the windward side.
- 4.6 Cover all potential sources of dust nuisance such as material stock piles, loaded transport trucks, etc to minimise impacts to sensitive receptors.
- 4.7 Monitor Air Quality in accordance to the approved Environmental Assessment and Management Plan, and also the World Health Organisation (WHO) ***Air Quality Guidelines for Particulate Matter in the Environment***, not exceeding the limits below:

PM_{2.5}: 25 µg/m₃ 24-hour mean

PM₁₀: 50 µg/m₃ 24-hour mean

- 4.8 Record, investigate and address complaints of excessive noise, dust and vibrations from the public promptly upon receipt. Maintain a record of all complaints received and the action taken.

5.0 FUEL AND HAZARDOUS/ WASTE MANAGEMENT

- 5.1 Strictly adhere to the provisions of the **Environmental Protection (Litter Enforcement) Regulations 2013** and the **Environmental Protection (Hazardous Waste Management) Regulations, 2000**.

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- 5.2 Maintain good housekeeping, sanitary and hygienic practices and the aesthetic quality of the surroundings at all times.
- 5.3 Promote proper solid waste management and disposal practices at the project site, place covered garbage receptacles at strategic locations around the project site.
- 5.4 Reuse waste material where practical such as land-filling material for the project site.
- 5.5 Dumping of waste into the surrounding environment is **strictly prohibited**. Waste, inclusive of waste oil and/or fuel, shall not be stored within 10 meters of any waterways.
- 5.6 Hazardous waste shall be treated and/or disposed by an EPA authorised Hazardous Waste Disposal Facility. All hazardous waste treatment and disposal shall be documented on a Waste Manifest Form which shall be submitted to the EPA as a component of the **Annual Report**.
- 5.7 Conduct refuelling, oil changes and maintenance of equipment on an impervious base.
- 5.8 Spill equipment shall be available and utilised for containing and mitigating spills from fuel, waste oils, lubricants, paints, etc.
- 5.9 Designate an area for the storage of fuel, used oil, washing detergents, sanitisers and other hazardous materials. Hazardous materials/ waste storage areas shall be clearly labelled and secured. The following warning signs shall be clearly posted:
 - a. "Hazardous Waste Storage Area"
 - b. Danger - "Authorised Personnel Only"
 - c. No eating, drinking or smoking
- 5.10 Hazardous waste shall be contained in bunded /kerbed storage areas. These areas shall adhere to the following requirements:
 - a. Be situated in low traffic areas;
 - b. No interceptor drains shall be constructed; and
 - c. Be bunded to provide 110% containment of the largest volume of hazardous materials stored therein.
- 5.11 Hazardous waste shall be stored in containers appropriate for the waste stream; that is:



- a. Sealed Plastic Containers
 - I. Water-based waste
 - b. Sealed Metal Containers
 - I. Solvents and petroleum-based products
 - II. Oil and oily absorbents
- 5.12 Adequate toilets, waste disposal and sanitary facilities must be provided at all site(s).

6.0 COMPLIANCE MONITORING AND REPORTING

- 6.1 Strictly comply with any lawful directions given by the Agency from time-to-time in furtherance of the implementation of any international or other obligation for the environmental protection of Guyana.
- 6.2 Monitor the implementation of the conditions of this Environmental Permit, insofar as they involve adherence by employees and all third parties under your direction.
- 6.3 Report to the Agency any non-compliance(s) with this Environmental Permit.
 - 6.3.1 Within **twenty-four (24) hours** of the time the Holder of this Environmental Permit becomes aware of the non-compliance, with the anticipated manner in which it may endanger human health or the environment may be impacted.
 - 6.3.2 Within **seventy-two (72) hours** of the time the Holder of the Environmental Permit becomes aware of the non-compliance, submit to the Agency a written report containing a description of the non-compliance, its cause, the period of non-compliance including exact dates and time and the anticipated time it is expected to continue if the non-compliance(s) has not been corrected.
- 6.4 Submit an **Annual Report** to the EPA at the end of the construction year (February - March) on your compliance with this Permit. The report shall include:
 - 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 utilised, 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; any waste minimisation efforts undertaken by your facility for hazardous material/waste; and any other matter the Agency may require.
- f. any waste minimisation 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.*

- 6.5 Notify the EPA within **twenty-four (24) hours** of the occurrence of any environmental emergencies (e.g. oil spills, hazardous materials/wastes spill, sudden onset disaster, natural, technological or human-induced factors that cause or threaten to cause severe environmental damage as well as harm to human health or livelihood).
- 6.6 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.
- 6.7 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.

7.0 INSTITUTIONAL AUTHORITY/LIABILITIES

- 7.1 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.**
- 7.2 The Permit Holder shall be liable for any serious environmental harm caused by polluting the environment, pursuant to **s. 39 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.**
- 7.3 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.**



- 7.4 The Permit Holder shall be liable for discharging, causing or permitting the entry into the environment, of any contaminant in any amount, concentration or level excess of that prescribed by the regulations or stipulated by this Environmental Permit, pursuant to **s. 19** of the **Environmental Protection Act, Cap. 20:05, Laws of Guyana**.
- 7.5 The Permit Holder shall be liable to compensate any person who suffers any loss or damage as a result of contravening conditions 6.3 of this Environmental Permit pursuant to **s. 19** of the **Environmental Protection Act, Cap. 20:05, Laws of Guyana**.
- 7.6 The Permit Holder shall not be indemnified by the Agency for any activity that causes or is likely to cause pollution to the environment, resulting from adverse effects through the discharge, any contaminant in any amount, concentration, ultra hazardous substances, chemicals or otherwise, and shall be rendered liable to prosecution and to penalties prescribed under the Environmental Protection Act and Regulations.
- 7.7 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.
- 7.8 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**.
- 7.9 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 immediately cease the offending activity, in accordance with **Section 27** of the **Environmental Protection Act, Cap. 20:05, Laws of Guyana**.
- 7.10 The EPA reserves the right to 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**.
- 7.11 The Permit Holder, His Servants and/or Agents 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 **Section 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

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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.

- 7.12 The EPA has the right to modify, cancel or suspend this Permit for breach of any of the terms and conditions contained herein.
- 7.13 This Environmental Permit is not the final consent; all relevant Permissions should be obtained from other regulatory bodies for continued operation.
- 7.14 This **Environmental Permit** is effective for the period stipulated herein, **January 2023 to December 2023**.
- 7.15 This Environmental Permit shall remain valid until **December 31, 2023**, unless otherwise suspended, cancelled, modified or varied, in accordance with the **Environmental Protection Act, Cap. 20:05, Laws of Guyana, Environmental Protection (Amendment) Act, 2005, and the Environmental Protection (Authorisations) Regulations, 2000**.
- 7.16 This Environmental Permit shall be renewed by submitting "an Application for Renewal of Environmental Authorisation to the Agency at least six (6) months before this Permit expires, that is, no later than **June 30, 2027**."
- 7.17 Any late submission of renewal application(s) after the specified date as stated above, may require the Permit Holder to pay, in addition to renewal fees, a late penalty fee (accruing at the time such obligation was first owed for renewal) at a rate of **two thousand dollars (GY\$2,000.00) 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.
- 7.18 Failure to comply with the requirements of this Environmental Permit shall render the Permit Holder liable to prosecution and to penalties prescribed under the **Environmental Protection Act, Cap. 20:05, Laws of Guyana, the Environmental Protection (Amendment) Act, 2005, and the Environmental Protection Regulations, 2000**, including civil penalties and injunctive relief.



Environmental Permit - Ref. No.: 200110509-OA100

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.

Signed by *Shanfah Razack* on behalf of the Environmental Protection Agency.

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Kemraj Parsram

Executive Director

Date

2023-01-13

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 (Authorisations) Regulations, 2000, and any forthcoming regulations, best practices, guidelines and standards made under this Act.

NAME:	GEORGE DYALL
SIGNATURE:	<i>George Dyall</i>
DESIGNATION:	Transmission Engineering Specialist
DATE:	2023-01-18

