

Ganges Street, Sophia, Georgetown, GUYANA Tel.: (592) 225-0506

Fax: (592) 225-5481

Email: epa@epaguyana.org
Website: http://www.epaguyana.org

Environmental Permit

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

Reference No.:	20230822- ICEPI
Fees:	Medium (C1) i.e., US\$500 per year
Fee Paid:	US\$1000 for Two (2) years (November 2023 to October 2025)
Addressee:	Mr. Linden Edmondson Chief Executive Officer Itha-Ca Energy Partners Inc. (IEP) Lot 757-758 Block XXIII Plantation Great Diamond East Bank Demerara Guyana
Activity:	Storage of Oil and Gas Chemicals

Itha-Ca Energy Partners Inc., hereinafter referred to as the "Permit Holder", is hereby authorized in accordance with the Environmental Protection Act, Cap. 20:05, the Environmental Protection (Amendment) Act, 2005, and the Environmental Protection (Authorisations) Regulations, 2000, for the Storage of Oil and Gas Chemicals at Lot 3494, Plantation Prospect, East Bank Demerara, hereinafter referred to as the "Project", in a manner indicated in the Application for Environmental Authorisation submitted on August 23, 2023, and 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 applicable laws, guidelines, best practices, and standards relevant to this project.

The Permit Holder, His Servants, Agents, and/or Sub-Contractor(s) shall comply with the following Terms and Conditions for Operation:

1.0 OPERATIONS

- 1.1 An application shall be made to the Agency to vary this 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;

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- iii. change the position and design of any outlet at the point or points of discharge of effluents; or
- iv. effect any other change outlined in 20(3) of the Environmental Protection (Authorisations) Regulations.
- 1.2 Fire prevention and control equipment shall be maintained at the Project in accordance with this Guyana Fire Service Approval.
- 1.3 Employees and third parties under the Project's direction shall be made aware of the conditions of the Environmental Authorisation.
- Adhere to the requirements of the Occupational Safety and Health Act, Cap. 99:01, Laws, of Guyana.

2.0 STORAGE OF OIL & GAS PRODUCTION CHEMICALS

- 2.1 Adhere to the **Pesticides and Toxic Chemicals Control Act 2000.**
- 2.2 The Project is permitted to store the below-listed oil and gas production chemicals **ONLY:**
 - i. Barite
 - ii. Sodium Chloride
 - iii. Calcium Carbonate
 - iv. Class-G Cement
- 2.3 A register of the quantities of Chemicals stored at the Project shall be established and maintained. Registered information shall be maintained on-site and made available for inspection by the EPA upon request.
- 2.4 Chemical Storage Areas shall be clearly labeled with "Danger, Chemical Storage Area- Authorized Personnel Only" where applicable as a spill control measure.
- 2.5 Flammable materials shall be stored away from ignition sources. '**No Smoking'** signs shall be posted where these materials are handled and stored.
- 2.6 Chemicals shall be stored in accordance with the manufacturer's directions or Safety Data Sheet instructions.
- 2.7 Safety Data Sheets for all Chemicals shall be readily available and easily accessible at all times in Chemical Storage Areas.
- 2.8 Chemicals shall be segregated as indicated below to reduce the risk of mixed spillage and fire:
 - i. Bases separate from Flammables;
 - ii. Corrosives separate from Flammables;
 - iii. Oxides separate from all other chemicals;

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- iv. Organic reactive separate from inorganic reactive (metals); and Any other stipulated standards for the storage or segregation of chemicals
- 2.9 Chemical storage packages shall be clearly labeled in accordance with the Globally Harmonized System of Classification and Labeling. The following must be evident:
 - i. Signal Word;
 - ii. GHS Symbols- (Hazard Pictograms);
 - iii. Manufacturer Information;
 - iv. Precautionary Statements/ First Aid;
 - v. Hazard Statements; and
 - vi. Product Name or Identifiers.
- 2.10 Chemical storage packages shall be inspected for signs of leakage or corrosion and damaged packages **must be** replaced **immediately.** Inspection reports shall be maintained on-site and made available to the EPA upon request.
- 2.11 Chemicals **shall not** be stored on damaged or inadequately secured racking or on damaged pallets to minimize the risk of spills.
- 2.12 Chemicals stored in ton bags and totes shall:
 - a) Be protected from UV rays;
 - b) Be covered to prevent exposure to dirt, dust, and moisture; and
 - c) Do not hang over the side of pallets used for stacking.
- 2.13 Emergency spill clean-up kits shall be maintained for response to spills. Kits shall contain absorbent materials, drain seals, and other appropriate tools for clean-up, and shall be readily available and identified.
- 2.14 Employees involved in the management of chemicals shall be trained on Hazardous Material Communication and Emergency Preparedness Response. Training reports shall be maintained on-site and made available to the EPA upon request.
- 2.15 Third-party contractor(s) utilized for the transport of chemicals to and from the Facility shall be authorized by the EPA.

3.0 AIR QUALITY MANAGEMENT

- 3.1 Adhere to the provisions of the Environmental Protection (Air Quality) Regulations, 2000.
- 3.2 Ambient air quality monitoring shall be conducted during normal operations to assess the levels of the following air contaminants, in accordance with the WHO Air Quality Guidelines 2005 and US EPA National Ambient Air Quality Standards (NAAQs):

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No.	Air Pollutant	Averaging Time	Maximum Permissible Level
1.	Carbon Monoxide	1 h	35ppm
2.	Nitrogen Dioxide	1 h	200μg/m ³
3.	Sulphur Dioxide	24 h	20 μg/m ³
1.	$PM_{2.5}$	21	25 µg/m³
5.	PM ₁₀	24h	50μg/m ³
6.	Total Suspended Particles (TSP)	24h	20 μg/m³

Air quality monitoring shall be **conducted bi-annually** for the parameters listed above by trained personnel utilizing calibrated equipment. Monitoring records shall be maintained on-site and submitted to the EPA as a component of the **Annual Report**.

- 4.3 In the event of equipment malfunction or **inefficiencies** which may result in visible emissions to air or, in the event of the malfunction leads to abnormal emissions, the operator shall:
 - 4.3.1 Investigate and undertake remedial action **immediately**;
 - 4.3.2 Adjust the process or activity to minimise those emissions; and
 - 4.3.3 Record the events and actions taken. This shall be submitted in the annual report.

5.0 NOISE MANAGEMENT

- 5.1 Adhere to the provisions of the Environmental Protection (Noise Management) Regulations, 2000.
- Noise emissions shall be monitored at the Project's boundary to determine compliance with Guyana National Bureau of Standards (GNBS) *Guidelines for Noise Emissions into the Environment*, not exceeding the industrial limits listed below:

Industrial Limits: 100 dB during the daytime (06:00 h - 18:00 h) 80 dB during the night-time (18:00 h - 06:00 h)

Noise level monitoring shall be conducted bi-annually, and records maintained onsite by the Project. Noise quality reports shall be submitted to the EPA as a component of the **Annual Report**.

5.3 Significant noise-producing equipment, such as generators, shall be equipped with silencers or mufflers and/or enclosed in suitable acoustic enclosures to reduce noise levels impacting the surrounding environment and to achieve compliance with Guyana National Bureau of Standards (GNBS) requirement.

6.0 WATER QUALITY

6.1 Adhere to the provisions of the Environmental Protection (Water Quality) Regulations, 2000.

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- 6.2 Discharges from the Chemical Storage Bond are **strictly prohibited**.
- 6.3 Chemical spills occurring during the handling and loading of Oil and Gas Chemicals **shall be** immediately cleaned as guided by the respective Safety Data Sheet and disposed of at an EPA-authorised disposal facility.

7.0 WASTE MANAGEMENT

- 7.1 In accordance with the Environmental Protection (Litter Enforcement) Regulations, 2013, promote good sanitation and solid waste disposal practices on site; covered garbage receptacles shall be placed at strategic locations at the facility.
- 7.2 Burning of waste is **strictly prohibited**. All solid waste shall be disposed of by an EPA Authorised Waste Disposal Company.
- 7.3 Waste collection areas shall be kept clean. Dry methods shall be used when cleaning around waste handling and disposal areas (e.g., sweeping, use of absorbents).
- 7.4 The Permit Holder shall construct and maintain a septic tank system on site 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:
 - i) The septic tank shall not be located within 1.5 meters of a building or property boundary;
 - ii) septic tanks shall be installed with a sand and charcoal filter bed, or other appropriate design for further treatment; and
 - iii) shall be accessible for cleaning and de-sludging.
- 7.5 Any modification to the Septic tank shall 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.

8.0 COMPLIANCE MONITORING AND REPORTING

- 8.1 Notify the Environmental Protection Agency within **one (1) hour** of the discovery of the occurrence of 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). Notification as prescribed by Section 19(3)(a) of the Environmental Protection Act, shall be submitted to the EPA within **twenty-four (24) hours** of discovery of the incident occurring.
- 8.2 Monitor the implementation of the conditions of this Permit, insofar as they involve adherence by your employees and all third parties under your direction.
- 8.3 Notify the Agency in writing of any change of name or ownership of the Permit Page 5 of 9

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Holder's facility within **thirty (30) days** after the change occurs.

- 8.4 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.
- 8.5 Maintain and submit to the Agency records of the type, composition and quantity of contaminant released (i.e., any solid, liquid, gas, odor, sound, vibration, radiation, heat or combination of any of them).
- 8.6 Submit an **Annual Report** to the EPA on your compliance with this Environmental Permit on or before **March 31**, **each year**.
- 8.7 Report to the Agency any non-compliance(s) with the Environmental Permit (Renewed):
 - i. Within **twenty-four (24) hours** of the time the Holder of the Environmental Authorisation for Operation becomes aware of the non-compliance outlining the anticipated manner in which human health or the environment may be impacted.
 - ii. 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.
- 8.8 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.
- 8.9 It is the responsibility of the Permit Holder to ensure the permitted activity and premises are secured and that all practicable steps necessary to prevent fires, explosions, leaks, or suspected leaks and spills at the permitted premises are taken.

9.0 INSTITUTIONAL AUTHORITY/ LIABILITIES

- 9.1 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.
- 9.2 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.
- 9.3 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

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to prevent or minimize any resulting adverse effect, pursuant to s. 19 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.

- 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.
- 9.5 The Permit Holder shall be liable to compensate any person who suffers any loss or damage as a result of contravening conditions 9.3 and 9.4 of this Environmental Permit, pursuant to s. 19 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.
- 9.6 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 of any contaminant in any amount, concentration, ultra-hazardous substances, chemicals or otherwise, and shall be rendered liable to prosecution and penalties prescribed under the Environmental Protection Act and Regulations.
- 9.7 The Permit Holder shall be liable for 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.
- 9.8 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.
- 9.9 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.
- 9.10 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.
- 9.11 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 offense to assault, obstruct or hinder an authorized person in the execution of his/her duty under the said Act or its Regulations, and the Permit Holder shall be liable to penalties

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prescribed under paragraph (c) of the Fifth Schedule for doing so.

- 9.12 The EPA has the right to modify, cancel, or suspend this Permit for breach of any of the terms and conditions contained herein.
- 9.13 This Environmental Permit is not the final consent; all relevant Permits should be obtained from other regulatory bodies for continued operation.
- 9.14 This Environmental Permit is effective for the period stipulated herein; **November 2023 to October 2025.**
- 9.15 This Environmental Permit shall remain valid until **October 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.
- 9.16 This Permit must be renewed by submitting a completed Renewal Application Form for Environmental Authorisation to the Agency at least six months before this Permit expires, that is, no later than **April 30**, **2025**.
- 9.17 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 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.
- 9.18 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.

Signed by Shaufah Rayack on behalf of the Environmental Protection Agency.

Kemraj Parsram

Executive Director

Executive Director

Date <u>2023 · 11 · 10</u>

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I hereby accept the above terms and conditions upon which this Environmental Permit (Renewed) is granted and agree to abide by the Environmental Protection Act, Cap. 20:05, the Environmental Protection (Amendment) Act, 2005, and the Environmental Protection (Authorisations) Regulations, 2000, and any existing or forthcoming regulations, guidelines, best practices and standards made under this Act.

NAME:	COLIN ED MONDSON
DATE:	NOVEMBER 2023
SIGNATURE:	A Elm
DESIGNATION:	
	DRECTOR

