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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

<b>Reference No.:</b>	20190604-BHJLG
Fee:	Medium (C1) - US\$500 per year
Fee Paid:	US\$1,000: Two (2) years (February 2022 to January, 2024)
Addressee:	Baker Hughes Guyana Company Inc. 51, Eccles, Industrial Site East Bank Demerara
Activity:	Oil Fields Completion Sales and Services

Baker Hughes Guyana Company Inc., hereinafter referred to as the "Permit Holder", is hereby authorised 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 operation of an Oil Fields Workshop and Warehouse at Plot Lot 51, Eccles, Industrial Site, East Bank Demerara, hereinafter referred to as the "Project", in a manner indicated in the Application for Renewal of Environmental Authorisation submitted on December 29, 2020, and subject to the terms and conditions set forth herein under the Environmental Protection Act, Cap. 20:05, existing and/or forthcoming regulations, guidelines, best practices and standards relevant to this project.

This is a Renewal Operation Permit, Reference No: 20190604-BHJLG issued on November 2019 and expired on October 2020.

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

#### 1.0 GENERAL OPERATIONS

- 1.1 Make an application 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;
  - 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

    Page 1 of 9

NS- 86

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## (Authorisations) Regulations.

- Inspection, maintenance and repairs of all equipment or tools at the Project, including fittings, pipes and hoses shall be conducted in accordance with the Project's Standard Operation Procedure (SOP) submitted to the EPA on **December 20, 2020.**
- 1.3 Required servicing and maintenance operations shall be conducted within the confines of the Workshop and on an impervious base.
- 1.4 Emergency spill clean-up kits shall be maintained at the Project for response to spills. Kits must contain absorbent materials, drain seals and other appropriate tools for clean-up. Kits must be readily available and clearly identified at the Project.
- 1.5 Make all employees, and third parties under your direction, aware of the conditions of this Environmental Authorization and provide training on good environmental practices. Submit details of training to the Agency as part submission of the required **Annual Report.**
- Adhere to the requirements of the Occupational Safety and Health Act, Cap. 99:01, Laws of Guyana.

## 2.0 STORAGE OF GREASE, LUBE OIL AND OTHER HYDROCARBON MATERIALS

- 2.1 The Storage Area shall be clearly labeled with "Danger, Hazardous Storage Area-Authorized Personnel Only" where applicable as a spill control measure.
- 2.2 Secondary containment (bunded area) shall be established and maintained around storage areas of all liquid chemicals. The secondary containment shall have:
  - i. A volume equivalent to the volume of liquid stored within the largest storage container and;
  - ii. Walls constructed of impermeable materials.
- 2.3 Grease, Lube Oil and other Hydrocarbon Materials shall be stored in accordance with the manufacturer's directions or Safety Data Sheet instructions.
- 2.4 Safety Data Sheets shall be readily available and easily accessible at all times at the Project.
- 2.5 Grease, Lube Oil and other Hydrocarbon Materials shall be stored away from non-hazardous materials.
- 2.6 Adhere to the labelling of all chemicals with regards to incompatibility with other materials stored within the Facility.
- 2.7 Material containers shall be clearly labelled in accordance with the Globally Harmonized System of Classification and Labelling. The following must be evident:

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- i. Signal Word
- ii. GHS Symbols- (Hazard Pictograms)
- iii. Manufacturer Information
- iv. Precautionary Statements/ First Aid
- v. Hazard Statements
- vi. Product Name or Identifiers
- 2.8 Materials **shall not** be stored on damaged, or inadequately secured racking or on damaged pallets to minimise the risk of spills.
- 2.9 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.
- 2.10 A register of the quantities of grease, lube oil and other hydrocarbon materials stored at the Project shall be established and maintained. A summary of the registered information shall be submitted to the Agency as part of the **Annual Report**.

#### 3.0 WASH BAY

- 3.1 A sump shall be maintained at the wash bay to collect all effluent. Effluent from the sump shall be directed to the holding tank before removal by the disposal service.
- 3.2 The floor of the wash bay shall be impermeable and elevated at a sloped angle, directing all effluent toward the holding tank.
- 3.3 Best Available Technology shall be utilised to ensure that the sump does not overflow.
- 3.4 Biodegradable, low-phosphate content and water-based cleaners shall be utilized whenever possible, to avoid the use of halogenated compounds, aromatic hydrocarbons, chlorinated hydrocarbons, petroleum-based cleaners or phenolics.
- 3.5 Secondary containment shall be maintained around the holding tanks. Secondary containment shall be impervious and provide 110% containment of the largest volume therein.

#### 4.0 NOISE MANAGEMENT

- 4.1 Adhere to the provisions of the Environmental Protection (Noise Management) Regulations, 2000.
- 4.2 Equip all significant noise-producing equipment, such as generators, with silencers or mufflers and/or enclose in suitable acoustic enclosures where necessary, to reduce noise levels impacting the surrounding environment and to achieve compliance with Page 3 of 9

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### GNBS requirement.

- 4.3 All generators and machines/equipment shall be serviced in accordance to manufacturer's specification to ensure efficiency and reduce the level of noise produced. A summarised maintenance report shall be submitted to the EPA as a component of the Annual Report.
- 4.4 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** (Day-time (06:00 h-18:00 h)) **80 dB** (Night-time (18:00 h- 06:00 h)

A noise quality monitoring plan shall be submitted to the EPA for approval. Noise monitoring shall be conducted in accordance to the approved plan and the results shall be submitted to the Agency as part of the Annual Report.

- 4.5 In the event of equipment malfunction or **inefficiencies** which may result in visible or abnormal emissions to air, the operator shall:
  - investigate and undertake remedial action immediately.
  - adjust the process or activity to minimize those emissions; and
  - •record the events and actions taken. This shall be submitted as a component of the **Annual Report.**

#### 5.0 WASTE MANAGEMENT

- In accordance with the Environmental Protection (Litter Enforcement) Regulations, 2013, promote good sanitation and solid waste disposal practices on site; covered garbage receptacles must be placed at strategic locations at the facility.
- 5.2 Burning of waste is **strictly prohibited**. All solid waste and sewage shall be disposed by an EPA Authorised Waste Disposal Company.
- 5.3 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).

#### 6.0 HAZARDOUS WASTE MANAGEMENT

- 6.1 Adhere to the provisions of the Environmental Protection (Hazardous Waste Management) Regulation 2000.
- 6.2 Hazardous waste shall be stored in containers appropriate for the waste stream. That is:

#### a) Plastic Containers

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- i. Water-based wastes
- ii. Fountain Solutions, Pre- Press

#### b) Metal Containers

- i. Solvents and Petroleum- based products
- ii. Waste ink, Press-wash, Oil and Oily Absorbents
- 6.3 Hazardous waste containers shall be labelled with the following:
  - i. The words "Hazardous Waste"
  - ii. The type of waste
  - iii. Beginning accumulation date-
- 6.4 Waste oil containers shall be labelled with the following:
  - i. The words "Waste Oil or "Used oil"
  - ii. Beginning accumulation date
- 6.5 Hazardous waste shall be stored in a covered, bunded area. This area shall include the following:
  - i. Signage- "Hazardous Waste Storage Area"
  - ii. Low traffic
  - iii. No floor drains
  - iv. Bunded area shall provide 110% containment of the largest volume stored therein.
- 6.6 Hazardous waste shall be disposed and or treated by an EPA authorised Hazardous Waste Disposal Facility. All hazardous waste treatment and disposal shall be documented on a Waste Manifest Form which must submitted to the EPA as a component of the **Annual Report.**

#### 7.0 COMPLIANCE MONITORING AND REPORTING

- 7.1 Notify the Environmental Protection Agency within one (1) hour of the occurrence of any environmental emergencies (e.g. oil spills, hazardous materials/wastes spills, 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).
- Monitor the implementation of the conditions of this Permit, insofar as they involve adherence by your employees and all third parties under your direction.
- 7.3 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.
- 7.4 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.

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- 7.5 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).
- 7.6 Submit **Annual Reports** to the EPA to the EPA on your compliance with this Environmental Permit (Renewed) on or before **March 31**, **each year**.
- 7.7 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 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 Authorisation 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.
- 7.8 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.
- 7.9 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.

## 8.0 INSTITUTIONAL AUTHORITY/LIABILITIES

- 8.1 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.
- 8.2 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.
- 8.3 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.
- 8.4 The Permit Holder shall be liable for discharging, causing or permitting the entry into

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the environment, of any contaminant in any amount, concentration or level excess of that prescribed by the regulations or stipulated by this Environmental Permit (Renewed), pursuant to s. 19 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.

- 8.5 The Permit Holder shall be liable to compensate any person who suffers any loss or damage as a result of contravening conditions 8.4 and 8.5 of this Environmental Permit (Renewed), pursuant to s. 19 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.
- 8.6 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.
- 8.7 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.
- 8.8 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.
- 8.9 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.
- 8.10 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, and the Environmental Protection (Amendment) Act, 2005, and Environmental Protection (Authorisations) Regulations, 2000.
- 8.11 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 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.

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- 8.12 The EPA has the right to modify, cancel or suspend this Permit for breach of any of the terms and conditions contained herein.
- 8.13 This Environmental Permit (Renewed) is not the final consent; all relevant Permissions should be obtained from other regulatory bodies for continued operation.
- 8.14 This Environmental Permit (Renewed) is effective for the period stipulated herein; February 2022 to January, 2024.
- 8.15 This Environmental Permit (Renewed) shall remain valid until **January 31**, **2024**, 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.
- 8.16 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 **July 31, 2023**.
- 8.17 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.
- 8.18 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 Shanifah Lazack on behalf of the Environmental Protection Agency.

Kemrai Parsram

Executive Director

Date

2022.02.10

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

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:	NARVAN SINGH
DATE:	14. June 2022
SIGNATURE:	Narvan Sift
DESIGNATION:	Sr. Businoss Manager