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Operation 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.:	20201216-GYSB3			
Fees:	Medium (C1) i.e. US\$500 per year			
Fee Paid:	US\$2,500 for Five (5) years (May, 2021- April, 2026)			
Addressee:	Mr. Rabindranath Muneshwar Executive Director Guyana Shore Base Inc. Tract GIL2 and AM1 Rome Mr. Rabindranath Muneshwar ENVIRONMENTAL PROTECTION AGENCY Database Updated A. Griffith 02-Jun -21			
	East Bank Demerara.			
Activity:	Operation of a Wash Bay in support of the Oil and Gas Industry			

Guyana Shore Base 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 a Wash Bay in support of the Oil and Gas Industry at Tract Gil2 & AM1 Rome, East Bank Demerara, hereinafter referred to as the "Project", in a manner indicated in the Application for Environmental Authorisation submitted on December 16, 2020, 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 GENERAL OPERATION

1.1 Notify the Agency in writing and obtain its approval for ANY proposed changes in the Operation of the Wash Bay Facility at least fourteen (14) days before making the change. The notification shall contain a description of the proposed change in operation. It is not necessary to make such a notification if an Application to vary this permit has been made and the Application contains a description of the proposed change. In this condition 'change in operation' means a change in the nature or functioning, or an extension, of the installation, which may have consequences for the environment including but not limited to the following:

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- i. Changes in construction, structure, or layout of the facility and all associated buildings.
- ii. Installation of new and/or changes to equipment, machine, apparatus, mechanism, system or technology serving the facility.
- iii. Any technology used or installed at the facility from which effluent may be discharged.
- iv. Any other circumstance or condition prescribed by Regulation 20(3) of the Environmental Protection (Authorisations) Regulations
- 1.1 Employees shall be equipped with Personal Protective Equipment relevant to the occupational tasks during operation. These Personal Protective Equipment may include but not limited to:
 - Safety helmets
 - Protective respiratory devices
 - Safety boots with ankle support
 - Gloves with reinforced palms and fingers
 - Noise cancelling safety ear muffs

(Employees should at all times be well protected)

- 1.2 Guyana Fire Service Approval shall be maintained annually and shall be submitted as a component of the **Annual Report**.
- 1.3 The Project shall maintain fire prevention and control equipment in accordance with the Guyana Fire Service Approval. This may include a smoke detection and alarm system, fire extinguishers, fire hydrants or sprinkler systems as appropriate.
- 1.4 A fully functional First Aid Kit shall be maintained at the Project.
- 1.5 Heavy machinery such as forklifts and generators shall be parked on impervious surface.
- 1.6 The Project shall maintained adequate rain protection and ventilation for heat and smoke in the event of fire.
- 1.7 Unauthorised access to high risk areas of the Project shall be restricted and informed by signage and security measures.
- 1.8 Maintenance of generator(s), machines, equipment and tools shall be conducted in accordance to manufacturer's specification. Summarised maintenance records shall be submitted as a component of the **Annual Report**.

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- 1.9 Emergency spill cleanup kit(s) shall be maintained at the Project to respond to potential spills. Kit(s) should contain absorbent materials, drain seals and other appropriate tools for clean-up. Spills of hazardous materials including waste oil shall be immediately cleaned-up to prevent runoff into the waterways.
- 1.10 Standard Operating Procedures (SOPs) for safe use of equipment shall be established and maintained. Copies of these SOPs shall be submitted to the Agency as a component of the **Annual Report.**
- 1.11 All employees shall be trained on these SOPs outlined in **condition 1.10**. An Annual training schedule shall be submitted to the Agency as a component of the **Annual Report**.
- 1.12 The Project shall be clearly labeled, secured and well illuminated when not in use. The following warning signs shall be clearly posted by May 31, 2021:
 - i. Authorized Personnel Only
 - ii. Read and Follow all label directions
 - iii. No Smoking
 - iv. No Eating or Drinking
 - v. Exit
 - vi. Entrance
 - vii. Fire Safety Equipment
- 1.13 An Emergency Spill Response Procedure/Plan (ERP) shall be established by July 31, 2021. The Procedure shall include, but not be limited to local emergency response authorities, notification of national and local authorities, coordination of clean-up activities and assessment of health hazards to humans and the environment.

OPERATION OF WASH-BAY FACILITY

- 1.14 A sump shall be maintained at the wash bay to collect and trap all effluent. Effluent from the sump shall be directed to the waste water treatment system.
- 1.15 The facility floor shall be elevated at a sloped angle, directing all effluent toward the sump.
- 1.16 Best Available Technology shall be utilised to ensure that the sump does not overflow.
- 1.17 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.
- 1.18 Operation of the waste water treatment system shall be maintained in accordance to the manufacturer's requirements. Manufacturer's requirements shall be submitted to the EPA as a component of the required **Annual Report.**

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- 1.19 The wash bay floor shall maintain an impervious surface.
- 1.20 Perimeter berms shall be constructed on the northern and southern entrances of the project by May 31, 2021.
- 1.21 The treated water shall be directed from the waste water treatment system and into sealed plastic and metal tanks and shall be recycled in the project.

2.0 WATER QUALITY

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

- 2.1 Point source discharge of effluent from the Project into the surrounding environment is **strictly prohibited**.
- 2.2 All effluent shall be treated via the Waste Water Treatment System prior to reuse.
- 2.3 Storm water discharge shall be directed away from hazardous material storage areas.

3.0 AIR QUALITY AND NOISE MANAGEMENT

Adhere to the provisions of the Environmental Protection (Noise Management and Air Quality) Regulations, 2000.

3.1 Comply with 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 meters (50 ft) from the source or property boundary, whichever is closer.

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)

3.2 All significant noise-producing equipment, such as generators, shall be equipped with silencers or mufflers and/or be 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.

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3.3 Stack heights and configurations shall be determined using the Good Engineering Practice Stack Height (H_{GEP}) Formula to avoid excessive ground level concentrations of contaminants:

 $H_{GEP} = H + 1.5 L$

H_{GEP} = good engineering practice stack height, measured from the ground-level elevation at the base of the stack

H =height of nearby structure(s) measured from ground-level elevation at the base of the stack

L =lesser dimension, height (H) or projected width, of nearby structure(s)

The proposed stack height as determined by the H_{GEP} (inclusive of calculations and google map image showing the buildings under consideration) shall be submitted to the EPA for approval by **July 31, 2021**.

4.0 WASTE MANAGEMENT

- 4.1 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.
- 4.2 Waste materials shall not be burnt on site. All solid waste shall be disposed at an approved Solid Waste Disposal Site by an EPA Authorised Waste Disposal Company.
- 4.3 Good house-keeping, sanitary, and hygienic practices shall be maintained at all times. The facility's surroundings shall be kept free of vegetation and litter.
- 4.4 Solid waste receptacles shall be secured when not in use.

5.0 HAZARDOUS WASTE MANAGEMENT

Adhere to the provisions of the **Environmental Protection** (**Hazardous Waste Management**) **Regulations**, 2000.

- 4.5 Oil contaminated absorbent materials shall be double-wrapped in heavy duty garbage bags prior to disposal at an approved waste disposal facility. Hazardous contaminated absorbent pads must be disposed of by an authorised Hazardous Waste Disposal company.
- 4.6 Waste oil shall not be drained from equipment onto the ground or into waterways.
- 4.7 Pipe caps shall be uncontaminated and shredded prior to disposal.

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4.8 All hazardous waste shall be stored in containers appropriate for the waste stream. That is:

a) Sealed Plastic Containers

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

b) Sealed Metal Containers

- Solvents and Petroleum-based products
- Waste ink, Press-wash, Oil and Oily Absorbents ii.
- All hazardous waste containers shall be labelled with the following: 4.9
 - The words "Hazardous Waste"
 - ii. The type of waste
 - Beginning accumulation dateiii.
- All waste oil containers shall be labelled with the following:
 - The words "Waste Oil or "Used oil"
 - ii. Beginning accumulation date
- All hazardous waste shall be stored in a covered, bunded area. This area shall 4.11 include the following:
 - Signage- "Hazardous Waste Storage Area" i.
 - Low traffic ii.
 - iii. No floor drains
 - iv. Bunded area shall provide 110% containment of the largest volume stored therein.
- Hazardous wastes shall be stored based on their compatibility and similarity of hazard together such as, flammables with flammables or oxidizers with oxidizers to ensure safety.
- All hazardous waste including the filter paper from the waste water system, 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.

5.0 COMPLIANCE MONITORING AND REPORTING

5.1 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 humaninduced factors that cause or threaten to cause severe environmental damage as well as harm to human health or livelihood).

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- 5.2 Make all employees, and third parties under your direction, aware of the conditions of the Environmental Authorisation and provide training on good environmental practices. Annual training schedule shall be submitted in the **Annual Report.**
- 5.3 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.
- 5.4 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.
- 5.5 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).
- 5.6 Submit **Annual Reports** to the EPA on the progress of the operation and compliance with the conditions under which this Permit was granted on or before **March 31**, each year.
- 5.7 The Company shall respond to all environmental emergencies (e.g. spills, fires, etc.) in accordance with the **Emergency Response Plan** submitted to the EPA.
- 5.8 Report to the Agency any non-compliance(s) with the Operation Permit (Varied):
 - I. Within **twenty-four (24) hours** of the time the Holder of the Environmental Authorisation for Operation becomes aware of the non-compliance(s), the anticipated manner in which it may endanger human health or the environment.
 - II. Within **seventy-two (72) hours**, submit to the Agency a written report containing a description of the non-compliance(s), its cause and the period of non-compliance including exact dates and time.
 - III. 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.
- 5.9 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.
- 5.10 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.

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6.0 INSTITUTIONAL AUTHORITY/ LIABILITIES

- 6.1 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, the Environmental Protection (Amendment) Act, 2005, and the Environmental Protection Regulations, 2000.
- 6.2 The EPA reserves the right to review/amend the conditions attached to this Permit which also includes the review and/or amendment of permit fees in consideration of any changes in fee schedule as determined by the Agency for projects of this nature.
- 6.3 The Permit Holder, His Servants, Agents and/or Sub-Contractors 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.
- 6.4 The EPA shall have the right to cancel or suspend this Permit for breach of any of the terms and conditions contained herein.
- 6.5 The Permit Holder, his Servants, Agents and/or Sub-Contractors shall be strictly jointly and severally liable as follows:
 - a. For any activity that causes, or is likely to cause pollution of the environment, unless the person takes all reasonable and practicable measures to prevent or minimise any resulting adverse effect, in accordance with Section 19(1)(a) of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.
 - b. For any activity which results in the discharge, release or entry into the environment of any contaminant in any amount, concentration or level in excess of that prescribed by the regulations or stipulated by this Permit, in accordance with Section 19(1)(b) of the Environmental Protection Act, Cap. 20:05 Laws of Guyana.
 - c. The discharge or release of contaminants, such as hydraulic fluids, lubricants, fuel, or other industrial fluids relative to the Project, which are not stipulated herein, or by Regulations under the Environmental Protection Act, are strictly prohibited. Any such discharge or release shall be a violation of Section 19(1)(b) of the Environmental Protection Act.
 - d. For the compensation of any Party who suffers any loss or damage as a result of the project. (s.19(3)(e)) Environmental Protection Act, Cap. 20:05, Laws of Guyana.

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- e. For any material or serious environmental harm caused by pollution of the environment, whether intentionally or recklessly, in accordance with section 39 (1), (2), (3) and (4) of the Environmental Protection Act, 20:05, Laws of Guyana.
- f. Any gross negligence or wilful misconduct resulting in serious risk, or adverse effects to the marine environment, biodiversity, protected species and natural habitat with respect to any release or discharge, spill, contaminant fluids, oil, or lubricants from any facilities permitted under this project.
- g. For the payment of all costs and expenses related to the assessment of damage and investigations required, as result of any pollution incidents attributable to the activity for which this Permit has been issued.
- 6.6 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's lack of due care and diligence.
- 6.7 Should the Permit Holder contravene or is likely to contravene any condition of this Permit, the Agency (EPA) may serve him an enforcement notice in accordance with s. 26 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.
- 6.8 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, which may include an order to immediately cease the offending activity. See: s. 27 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.
- 6.9 This Operation Permit is effective for the period stipulated herein; **May, 2021 to April, 2026.**
- 6.10 This Operation Permit shall remain valid until April 30, 2026, 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.
- 6.11 This Permit must be renewed by submitting a completed Renewed Application Form for Environmental Authorisation to the Agency at least six months before this Permit expires, that is, no later than **October 30**, **2025**.

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- Any late submission of renewal application (s) after the specified date as stated above, shall 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.
- 6.13 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 other applicable.

Signed b	Share	fah	Laza	ack	1
	Ms. Sl				

on behalf of the Environmental Protection Agency.

Executive Director (Ag)

Date

2021.05-14

I hereby accept the above terms and conditions upon which this Operational Permit (Varied) 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, in any forthcoming regulations, guidelines, best practices and standards made under this Act.

NAME	SINDEE HEGRALALL
DATE	31st May, 2021
SIGNATURE	Afternalall for R. MUNESHWER
DESIGNATION	PROJECT SUPPORT OFFICER