



**Environmental
Protection
Agency**

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Environmental Permit (Varied & Modified)

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.:	20190627-SPSGE
Fees Paid Prior:	<u>Storage of Pipe & Pipe Servicing</u> US\$500/year US\$2,500 for Five (5) years (December 2019 – November 2024)
Fees Varied:	<u>Storage of Oil & Gas Chemicals and Fuel</u> US \$ 800/year US\$2,400 for Three (3) years (December 2021 – November 2024)
Total Varied Fees to be Paid:	US\$ 2,400 – US\$ 1500 US\$ 900
Addressee:	Mr. Jodel Gopeesingh Gulf Engineering Services Guyana Inc. Tract G4-G5, Land of Canaan, East Bank Demerara
Activity:	Pipe Servicing and Storage of Pipes, Oil & Gas Production Chemicals and Fuel

Gulf Engineering Services Guyana 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 Environmental Protection Regulations, 2000, for the Storage of Pipes & Pipe Servicing and the Storage of Oil & Gas Chemicals and Fuel located at Track G 4- G5, Land of Canaan, East Bank Demerara, hereinafter referred to as the “Project”, in the manner indicated in the Applications for Environmental Authorisation and Variance of Environmental Authorisation submitted on June 27, 2019 and April 01, 2021 , respectively, and subject to the terms and conditions set forth herein under the Environmental Protection Act, Cap. 20:05, existing and/or forthcoming regulations made under the said Act, and/or any other applicable laws, guidelines, best practices and standards relevant to this project.

The Permit Holder, His Servants, Agents and/or Sub-contractors shall comply with the following Terms and Conditions:

1.0 GENERAL OPERATION

- 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 (Authorisations) Regulations.
- 1.2 **The Permit Holder shall submit to the Agency, upon obtaining the updated Central Housing and Planning Authority (CH&PA) approval for storage of oil & gas chemicals and fuel.**
- 1.3 Adhere to the requirements of **the Occupational Safety and Health Act, Cap. 99:01, Laws of Guyana.**
- 1.4 Emergency spill clean-up kits shall be maintained at the Project for response to spills. Kits shall contain absorbent materials, drain seals and other appropriate tools for clean-up, and must be readily available and clearly identified at the Project.
- 1.5 Obtain and maintain Guyana Fire Service Approval and submit a copy of the approval for the EPA's records.
- 1.5.1 Fire prevention and control equipment shall be maintained in accordance with this Guyana Fire Service Approval.
- 1.6 All equipment and machinery shall be placed on foundations properly designed to ensure effective damping of vibrations.

2.0 OPERATION OF WORKSHOP

- 2.1 All Servicing and maintenance operations shall be conducted within the confines of the workshop and on an impervious base.
- 2.2 The workshop shall be weatherproofed to prevent storm water mixing with contaminated effluent. All servicing activities shall occur within the workshop where this impractical the operations shall occur within a roofed and paved area.
- 2.3 Contaminated waste-water from cleaning of greasy hands and equipment shall be collected and/or routed through the oil-water separator prior to discharge into the environment.

3.0 STORAGE OF PIPES

- 3.1 A register of the types and sizes of pipes stored by the Project shall be maintained and made available to the EPA upon request.
- 3.2 Pipes shall be stored on impervious surface to reduce soil contamination by metals.
- 3.3 Washing and cleaning of pipes at the **storage area** is strictly prohibited.

4.0 WASH BAY

- 4.1 A sump shall be maintained at the wash bay to collect and trap all effluent. Effluent from the sump shall be directed to the holding tank.
- 4.2 Removal of effluent from holding tank for treatment and disposal shall be done by an authorized hazardous waste treatment facility.
- 4.3 The floor of the wash bay shall be an impervious surface and elevated at a sloped angle to direct all effluent toward the holding tank.
- 4.4 Secondary containment shall be maintained around the holding tanks. Secondary containment shall be impervious and provide 110% containment of the largest volume therein.
- 4.5 The **Best Available Technology** (BAT) shall be utilised to prevent the sump from overflowing.
- 4.6 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.

5.0 STORAGE OF OIL AND GAS PRODUCTION CHEMICALS

- 5.1 Adhere to the requirements of **the Pesticide and Toxic Chemical Control Board Act 2000**.
- 5.2 Chemicals stored by the Project shall be in accordance with the List of Chemicals submitted to the EPA on March 26, 2021.
- 5.3 The chemical storage area shall be clearly labeled with "Danger, Hazardous Storage Area- Authorized Personnel Only" where applicable as a spill control measure.
- 5.4 Flammable materials shall be stored away from ignition sources. '**No Smoking**' signs

shall be posted where these materials are handled and stored.

- 5.5 Secondary containment (bunded area) shall be established and maintained around storage areas of all liquid chemicals. The secondary containment (bunded area) shall possess 100% of the volume of liquid stored within the largest storage container and walls shall be constructed of impermeable materials.
- 5.6 Oil and gas production chemicals shall be stored in accordance with the manufacturer's directions or Safety Data Sheet (SDS) instructions.
- 5.7 Safety Data Sheets for all chemicals shall be readily available and easily accessible at all times at the Project.
- 5.8 Chemicals shall be stored away from non-hazardous materials.
- 5.9 Chemicals shall be segregated according to the following compatibility to reduce the risk from mixed spillages or fire:
- i. Acids separate from Bases
 - ii. Acids separate from Flammables
 - iii. Bases separate from Flammables,
 - iv. Oxidizers separate from Compressed Flammable Gases
 - v. Oxides separate from all other chemicals
 - vi. Any other stipulated standards for storage or segregation of chemicals.
- 5.10 Chemical containers shall be clearly labelled in accordance with the Globally Harmonized System of Classification and Labelling. The following must be evident:
- i. Signal Word
 - ii. GHS Symbols- (Hazard Pictograms)
 - iii. Manufacturer Information
 - iv. Precautionary Statements/ First Aid
 - v. Hazard Statements
 - vi. Product Name or Identifiers
- 5.11 Storage containers shall be inspected for signs of leakage or corrosion and damaged containers **must be** replaced **immediately**. Inspection reports must be maintained on site and made available to the EPA upon request.
- 5.12 Chemicals **shall not** be stored on damaged, or inadequately secured racking or on damaged pallets to minimise the risk of spills.
- 5.13 All employees involved in the management of oil and gas 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.

6.0 FUEL HANDLING AND STORAGE

- 6.1 Adopt and comply with the National SOP "Guidance for the Design, Construction, Modification, and Maintenance of Petrol Filling Stations" and any forthcoming code of practice/guidelines pertaining to the operation of fuel storage.
- 6.2 Fuel shall at all times be stored above-ground, in a cool, dry place and away from ignition sources. **'No Smoking'** signs shall be posted where fuel is handled or stored.
- 6.3 Existing secondary containment around the fuel tanks shall be inspected for cracks and breakage to ensure they are liquid tight to withstand hydrostatic pressure of any contaminated liquid when full. Inspection report shall be maintained on site and made available to the EPA upon request.
- 6.4 All secondary containment shall remain sealed and all piping must enter or exit the containment over the wall. Secondary containment shall provide total containment, and no part of the tank infrastructure (e.g. dispenser, filling hoses and valves) shall protrude outside the containment
- 6.5 Fuel storage tanks shall be visually inspected to verify their integrity. Inspection report shall be maintained on site and made available to the EPA upon request.
- 6.6 Protection measures for fuel storage tanks such as painting and coating shall be maintained to minimise corrosion of fuel tanks.
- 6.7 Maintenance and/ or repair of fittings, pipes and hoses shall be in accordance with manufacturer's specifications. Maintenance reports shall be maintained on site and made available to the EPA upon request.
- 6.8 Overfill protection shall be installed and maintained on all fuel storage tanks. This may include an automatic shut off device or an audible or visible overfill alarm.
- 6.9 The safe fill level shall be clearly identified on the gauge and set at 90% to prevent overfilling. In the event of overfilling, all discharges shall be released into the containment bund.
- 6.10 The Best Available Technology/ Technique (BAT) shall be employed to capture fuel lost during the unloading of fuel to storage tanks and refueling of equipment.
- 6.11 Secondary containment, drip trays or other overflow and drip containment measures shall be installed and maintained at connection points or other possible overflow points.

7.0 WATER QUALITY

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

- 7.2 Untreated effluent discharge into the surrounding environment is **strictly prohibited**.
- 7.3 Storm water discharge shall be directed away from storage areas for oil and gas production chemicals and fuel.
- 7.4 The oil water separator at the final discharge point shall be maintained. GPS coordinates for the final discharge point/s from the oil- water separator shall be submitted to the EPA by **December 30, 2021**.
- 7.5 Pipes from the pump shall be installed over the secondary containment and discharge directly into the oil- water separator.
- 7.6 Effluent from secondary containments at the Project site shall be directed to the oil-water separator and shall be in accordance with the Guyana National Bureau of Standards (GNBS) *Interim Guidelines for Industrial Effluent Discharge into the Environment*. The following allowable limits should not be exceeded:

Parameter	Maximum Concentration	Units
Oil and Grease	Total Petroleum Hydrocarbon (TPH) < 40	mg/L

A water quality monitoring plan including but not limited to sampling point/s displayed on a map and frequency of sampling shall be submitted to the EPA for approval.

Monitoring of the parameters above shall be conducted at the approved sampling point/s and the results analysed at a GNBS certified laboratory or trained personnel using calibrated equipment. Analyses shall be submitted to the Agency as part of the Annual Report.

8.0 NOISE MANAGEMENT

- 8.1 Adhere to the provisions of the **Environmental Protection (Noise Management) Regulations, 2000**.
- 8.2 The Best Available Technologies or measures; e.g. silencers, mufflers, enclosures or other appropriate devices, shall be utilized to mitigate adverse noise impacts from machinery on the environment.
- 8.3 Noise emissions shall be monitored at the Project's boundary **annually** 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))

Records of each monitoring exercise shall be maintained and results submitted to the Agency upon request.

- 8.4 The Generator and equipment e.g. forklifts, etc. shall be maintained in accordance with the manufacturer's instructions. Maintenance reports shall be maintained on site and made available to the EPA upon request.
- 8.5 In the event of equipment malfunction or **inefficiencies** which may result in visible and 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.
- 8.6 Record, investigate and address complaints of excessive noise, dust and vibrations by residents.

9.0 WASTE MANAGEMENT

- 9.1 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 upon impervious base at strategic locations, both within and outside facility.
- 9.2 Burning solid waste is **strictly prohibited**. All solid waste shall be disposed by an EPA Authorised Waste Disposal Company.
- 9.3 Good house-keeping, sanitary, and hygienic practices shall be maintained at all times. The facility's drains and surroundings shall be kept free of vegetation and litter.
- 9.4 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).

10.0 HAZARDOUS WASTE (Pipe Caps, Waste Oil and Oily Rags) MANAGEMENT

- 10.1 Adhere to the provisions of the **Environmental Protection (Hazardous Waste Management) Regulation 2000**.
- 10.2 Hazardous waste shall be stored in containers appropriate for the waste stream. That is:
- a) **Plastic Containers**
 - 1. Water- based wastes
 - 2. Fountain Solutions, Pre- Press
 - b) **Metal Containers**
 - 1. Solvents and Petroleum- based products
 - 2. Waste ink, Press-wash, Oil and Oily Absorbents
- 10.3 Hazardous waste containers shall be labelled with the following:
- 1. The words "**Hazardous Waste**"

2. The type of waste
 3. Beginning accumulation date-
- 10.4 Waste oil containers shall be labelled with the following:
1. The words **“Waste Oil or “Used oil”**
 2. Beginning accumulation date
- 10.5 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.
- 10.6 Hazardous waste shall be disposed and or treated by an EPA authorised Hazardous Waste Treatment Facility. All hazardous waste treatment and disposal shall be documented on a Waste Manifest Form which must be submitted to the EPA as a component of the **Annual Report**.
- 11.0 COMPLIANCE MONITORING AND REPORTING**
- 11.1 Notify the Environmental Protection Agency **within one (1) hour** of the occurrence of any environmental emergencies (e.g. oil spills, biohazardous 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).
- 11.2 Monitor the implementation of the conditions of this Permit, insofar as they involve adherence by your employees and all third parties under your direction.
- 11.3 Submit a hazardous waste manifest to the Agency before the transport of hazardous waste for treatment, storage or disposal.
- 11.4 The manifest shall contain the following particulars:
- a) The name and address of the waste generator;
 - b) The name and description of the waste and hazard class;
 - c) The number and type of containers;
 - d) The quantity of waste being transported, and;
 - e) The name and address of the facility designated to receive the waste.
- 11.5 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.
- 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 Maintain and submit to the Agency records of the type, composition and quantity of contaminant released (i.e. any solid, liquid, gas, odour, sound, vibration, radiation, heat or combination of any of them).
- 11.8 Submit an **Annual Report** to the EPA on your compliance with this Permit on or before **March 31, each year**.
- 11.9 Report to the Agency any non-compliance(s) with the Environmental Permit (Varied and Modified):
 - i. Within **twenty-four (24) hours** of the time the Holder of the Environmental Permit 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.
- 11.10 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.
- 11.11 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.

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 serious environmental harm caused by polluting the environment, pursuant to s. 39 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.
- 12.3 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.
- 12.4 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 in excess of that prescribed by the regulations or stipulated by this Environmental Permit

(Varied and Modified), pursuant to s. 19 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.

- 12.5 The Permit Holder shall be liable to compensate any person who suffers any loss or damage as a result of contravening conditions 12.4 and 12.5 of this Environmental Permit (Varied and Modified), pursuant to s. 19 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.
- 12.6 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.
- 12.7 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.
- 12.8 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.
- 12.9 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.
- 12.10 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.
- 12.11 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.
- 12.12 The EPA has the right to modify, cancel or suspend this Permit for breach of any of the terms and conditions contained herein.

- 12.13 **This Environmental Permit (Varied and Modified) is not the final consent; all relevant Permissions should be obtained from other regulatory bodies for continued operation.**
- 12.14 This Environmental Permit (Varied and Modified) is effective for the period stipulated herein **December 31 2021 to November 31, 2024.**
- 12.15 This Environmental Permit (Varied and Modified) shall remain valid until **November 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.
- 12.16 This Permit must be renewed by submitting a completed *Application Form for Renewal of Environmental Authorization* to the Agency at least six months before this Permit expires, that is, no later than **May 30, 2024.**
- 12.17 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 the 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.
- 12.18 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 *Sharifah Lazick* on behalf of the Environmental Protection Agency.

for **Kemraj Parsram**
Executive Director

Date

2021.12.15

I hereby accept the above Terms and Conditions upon which this Environmental Permit (Varied and Modified) is granted and agree to abide by the Environmental Protection Act, Cap, 20;05, Laws of Guyana, Environmental Protection (Amendment) Act, 2005, the Environmental Protection (Authorisations) Regulations, 2000, and any existing or forthcoming regulations, guidelines, best practices and standards made under this Act.

NAME	KENNETH L. MARTIN
DESIGNATION	COUNTRY MANAGER
SIGNATURE	
DATE	16/12/2021

