



**Environmental  
Protection  
Agency**

Ganges Street, Sophia,  
Georgetown, GUYANA  
Tel.: (592) 225-0506  
Fax: (592) 225-5481  
Email: [epa@epaguyana.org](mailto: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 (Authorisations) Regulations, 2000.**

|                       |  |
|-----------------------|--|
| <b>Reference No.:</b> | <b>20201127-JSSSF</b>  |
| <b>Fee:</b>           | <b>Medium (C1) - US\$500 per year</b>  |
| <b>Fees Paid:</b>     | <b>US\$2,500 for Five (5) years (November 2021 – October 2026)</b>   |
| <b>Addressee:</b>     | <b>Mr. Thuranthiran Nadarajah<br/>Managing Director<br/>Saipem Guyana Inc.<br/>225, New Market Street<br/>Georgetown</b> |
| <b>Activity:</b>      | <b>Operation of a Fabrication Yard</b>   |

Saipem 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, to operate a Fabrication Yard located at Lot A, Lot B, Mudlot A, Mudlot B & Water Parts of Pitman & Ashley Square, Water & Holmes Street, South Cummingsburg, hereinafter referred to as the “Project”, in the manner indicated in the Application for Environmental Authorisation submitted on November 27, 2020 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. Adhere to the requirements of the Occupational Safety and Health Act, Cap. 99:01, Laws of Guyana.
- 1.2. 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.
- 1.3. Inspection, maintenance and repairs of all equipment, tools and machinery utilized by the Project, shall be conducted in accordance with Manufacturer's Specification on impervious bases.
- 1.4. A drip pan shall be utilized to capture waste oil spills when the oil is being applied to the equipment and tools.
- 1.5. Obtain and maintain Guyana Fire Service Approval and submit a copy of the approval for the EPA's records.
- 1.6. Fire prevention and control equipment shall be maintained in accordance with this Guyana Fire Service Approval. This may include a smoke detection and alarm system, fire extinguishers, fire hydrants or sprinkler systems as appropriate.
- 1.7. Make all employees, and third parties under your direction, aware of the conditions of this Environmental Permit (Renewed) and provide training on environmental practices.

## **2.0 STORGAE AND ASSEMBLANCE OF MULTIPHASE FLOW METERS TO RUNNERS**

- 2.1 Notify the EPA of the intent to store multiphase flow meters containing Cs 137 at the approved location at least seventy-two (72) hours before arrival.
- 2.2 Submit an inventory of all multiphase flow meters containing Cs 137 to the Agency at least seventy -two (72) hours before arrival. The inventory should be completed in accordance with the requirements of the Application Form for Nuclear Safety and Radiation Protection.
- 2.3 Adhere to the Saipem Guyana Inc. Multi – Phase Subsea Flow Meter Temporary Storage and Handling Radiation Protection Programme to ensure the safe and secure storage and handling of the Multi Phase Flow Meters.
- 2.4 The as low as reasonably achievable (ALARA) principle shall be applied at all times.
- 2.5 Adhere to the Site Security Plan. Secure all sealed radioactive sources at all times against unauthorized removal and tampering.
- 2.6 Conduct a leak test of all multi-phase flow meters containing a radioactive source upon receipt. Submit Leak Test Certificate within three months of testing.
- 2.7 Label all packages, with at least two labels in opposite sides of the package. All packages shall be marked with the United Nations number assigned to the material.

- 2.8 Maintain an inventory of all stored radioactive sources on site. Ensure that the inventory is updated quarterly. Submit an updated inventory as part of the Annual Report due **March 31 each year**.
- 2.9 Radioactive sources with explosives or highly flammable substances shall NOT be stored at the project.
- 2.10 Mark the storage area with hazard signs, to indicate the presence of radiation.
- 2.11 Within one (1) hour upon the discovery that a multiphase meter containing a radioactive source is lost or stolen, the EPA shall be notified.
- 2.12 Monitor the area for radiation exposure to ensure it does not exceed 1mSv in a year. Maintain records of monitoring exercises and make available to the Agency upon request.
- 2.13 All employees exposed to radiation shall be equipped with dosimeters and ensure their exposure does not exceed 1mSv in a year.
- 2.14 Only trained and certified personnel shall handle the Multi Phase Flow Meter during assembly.
- 2.15 Human limb shall not be placed inside the pipe containing the radioactive source.

### **3.0 AIR QUALITY AND NOISE MANAGEMENT**

- 3.1 Adhere to the provisions of the **Environmental Protection (Air Quality) Regulations, 2000 and the Environmental Protection (Noise Management) Regulations, 2000.**
- 3.2 The Best Available Technologies or measures; e.g. silencers, mufflers, enclosures or other appropriate devices, shall be utilized to mitigate adverse noise impacts from heavy machinery on the environment.
- 3.3 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 as a component of the Project's **Annual Report**.

- 3.4 All equipment and machinery shall be placed upon foundations properly designed to ensure effective damping of vibrations.

- 3.5 All equipment e.g. forklifts, etc. capable of causing, or preventing, noise emissions shall be maintained in accordance with the manufacturer's specifications. Maintenance records shall be maintained on site and submitted to the EPA upon request.
- 3.6 Idling of equipment or vehicles shall be limited, as far as practical and all equipment or vehicles switched off when not in use.
- 3.7 Complaints of excessive noise, dust and vibrations stakeholders shall be recorded, investigated and addressed promptly. Records of complaint investigation shall be submitted to the EPA **within twenty-four (24) hours of investigation**.
- 3.8 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:
- 2.7.1 Investigate and undertake remedial action **immediately**;
  - 2.7.2 Adjust the process or activity to minimise those emissions; and
  - 2.7.3 Record the events and actions taken. This shall be submitted in the annual report.
- 3.9 Monitor ambient air quality at the Project boundaries to determine compliance with the requisite standards captured in the Table below.

| Air Pollutant    | Averaging Time | Maximum Permissible Level | Type Monitoring of |
|------------------|----------------|---------------------------|--------------------|
| Carbon Monoxide  | 1 h            | 35ppm                     | Ambient            |
| Nitrogen Dioxide | 1 h            | 200µg/m <sup>3</sup>      | Ambient            |
| Sulphur Dioxide  | 24 h           | 20 µg/m <sup>3</sup>      | Ambient            |

Monitoring shall be conducted on a regular basis (**determined by the Permit Holder and approved by the EPA**) by trained personnel using calibrated equipment. Records of all monitoring exercises shall be maintained and submitted as part of the **Annual Report**.

#### 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. Waste must be collected and disposed of at an approved waste disposal facility.
- 4.2 Waste material **shall not** be burnt on site. Dispose of solid waste at an EPA



authorised Solid Waste Disposal Site.

- 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 Promote waste minimisation and the reuse and/or recycling of waste and other materials where practical.
- 4.5 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).

#### **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, chemicals 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).
- 5.2 Make all employees, and third parties under your direction, aware of the conditions of this Operation Permit and provide training on environmental practices.
- 5.3 Annual Training schedules and reports shall be kept and submitted to the Agency upon request. Training shall include but not limited to Employees working in confined spaces and prolonged noisy areas.
- 5.4 Monitor the implementation of the conditions of this Permit, insofar as they involve adherence by your employees.
- 5.5 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.
- 5.6 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.
- 5.7 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.
- 5.8 Report to the Agency any non-compliance(s) with the Operation Permit:
  - I. Within **twenty-four (24) hours** of the time the Holder of the Environmental Authorisation for Operation becomes aware of the non-compliance, 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, its cause and the period of non-compliance including exact dates and time 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.

#### **6.0 INSTITUTIONAL AUTHORITY/ LIABILITIES**

- 6.1 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.
- 6.2 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.
- 6.3 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.
- 6.4 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.
- 6.5 The Permit Holder shall be liable to compensate any person who suffers any loss or damage as a result of contravening conditions 7.3 and 7.4 of this Environmental Permit, pursuant to s. 19 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.
- 6.6 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.
- 6.7 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.


- 6.8 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.
- 6.9 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.
- 6.10 The EPA reserves the right to conduct regular inspections of the Permit Holder's construction 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.
- 6.11 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.
- 6.12 The EPA has the right to modify, cancel or suspend this Permit for breach of any of the terms and conditions contained herein.
- 6.13 The Permit Holder is obligated to ensure that construction of the office building is permitted by **all other relevant authorities.**
- 6.14 This Environmental Permit is valid for the period stipulated herein **November, 2021 to October, 2026.**
- 6.15 This Environmental Permit shall remain valid until **October 31, 2026**, unless otherwise suspended or revoked in accordance with the provisions of this Permit or the Environmental Protection Act, Cap. 20:05, Laws of Guyana, the Environmental Protection (Amendment) Act, 2005, and the Environmental Protection (Authorisations) Regulations, 2000.
- 6.16 This Permit must be renewed by submitting a completed Application Form for Renewal of Environmental Authorisation to the Agency at least six months before this Permit expires, that is, no later than **March 31, 2026.**
- 6.17 Any submission of the application required by Condition 7.15 beyond the date

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specified therein, the agency may require the Permit Holder to pay, in addition to the application fee, 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 application is submitted to the Agency, without prejudice to any other rights of the Permit Holder in connection therewith.

- 6.18 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  on behalf of the Environmental Protection Agency.  
**Kemraj Parsarm**  
Executive Director

Date 2021.11.22

**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, the Environmental Protection (Amendment) Act, 2005, and the Environmental Protection (Authorisations) Regulations, 2000, and any forthcoming regulations, guidelines, best practices which are relevant to this project.**

|             |   |
|-------------|---|
| NAME        | Akil Gittens  |
| DESIGNATION | Subcontract Administrator   |
| SIGNATURE   |  |
| DATE        | 25/10/2021  |

