



**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 (Varied)**

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.:	20191004- TECHB
Fees:	Medium (C1) i.e., US\$500 per year
Fee Paid:	US\$2,500 for Five (5) years (November 2021 to October 2026)
Addressee:	Mr. Bryan Sangster Onshore Operations Manager TechnipFMC Guyana Block "EVC" of Area AM1 Plantation Rome (North Section) McDoom District Georgetown
Activity:	Operation of an Oil and Gas Service Company Equipment Base (Subsea Service Base)
Varied Activity	Construction of a Base Office, and Expansion of the Warehouse and Low Bay Structure.

TechnipFMC Guyana, 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, to Operate the Oil and Gas Service Company Equipment Base (Subsea Service Base) at Block "EVC" of Area AM1, Plantation Rome (North Section), McDoom District, Georgetown, hereinafter referred to as the "Project", in a manner indicated in the Application for Renewal of Environmental Authorisation submitted on October 15, 2021, and the Variance Application submitted on April 21, 2023, 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.

This is a Variance of Environmental Permit, Reference No. 20191004- TECHB issued on November 2021, and expires on October 2026.

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

## 1.0 CONSTRUCTION

- 1.1 Construction works shall **not be executed between 18:00 hrs to 06:00 hrs**, on any day, close to communal areas unless, approval is sought from the EPA. This requirement does not apply for large concrete pours or asphalt laying and earth removal where work in the early morning and late evening is required.
- 1.2 Areas for construction material stockpiles and equipment shall be clearly identified. Stockpile areas shall be downwind to avoid materials being dispersed by wind to sensitive areas. Loading and offloading activities shall, as far as possible, also be confined to this location.
- 1.3 Temporary stockpiles shall not exceed **twenty-four (24) hours** before being removed, or transferred to the designated stockpiling areas established by **Condition 1.2.**

- 1.4 Temporary stockpiles of construction materials, including excavated waste shall be stored in a secured, designated area, and protected from wind and water erosion.

- 1.5 Stockpiles shall not exceed the height of the parameter fence.

- 1.6 Stockpiles, including dusty materials transported to, from, and within the site shall be enclosed or covered to reduce airborne emissions. Where this is not practical owing to frequent usage, employ wet suppression methods such as watering or erecting dust screens/fences to control emissions.

- 1.7 Where feasible, pre-mixed, 'ready-mixed' concrete shall be used to reduce dust emissions caused by on-site preparation.

- 1.8 Measures shall be implemented for the removal of any contamination and or siltation of drains during construction.

- 1.9 All construction equipment and machinery shall be maintained in accordance to the manufacturer's specification to avoid mechanical failures and abnormal noise pollution. Logs and records signed by the appropriate inspecting personnel shall be maintained and made available for inspection by the EPA upon request.

- 1.10 All cutting of wood and mixing of cement shall be done at least 15m from the perimeter drains to minimise pollution.

## 2.0 GENERAL OPERATION

- 2.1 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.
- 2.2 Maintenance of generator(s), machines, equipment, and tools shall be conducted in accordance with the manufacturer's specifications. Summarised maintenance records shall be submitted to the EPA as a component of the **Annual Report**.
- 2.3 Heavy machinery such as cranes, forklifts, etc. shall be parked on impervious surfaces, to prevent fuel spills and leaks from entering the soil.
- 2.4 Standard Operating Procedures (SOPs) for safe use of tools and equipment shall be established and maintained.
- 2.5 All employees shall be trained on these SOPs outlined in **condition 1.4**. An Annual training schedule shall be submitted to the Agency as a component of the **Annual Report**.
- 2.6 Unauthorised access to high-risk areas of the Project shall be restricted and informed by signage and security measures.
- 2.7 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 phenolic.
- 2.8 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, and must be readily available and clearly identified at the Project.
- 2.9 A register of the quantities of associated hazardous materials stored onsite shall be established and maintained. A summary of the registered information shall be submitted to the Agency as a component of the **Annual Report**.
- 2.10 Obtain and maintain Guyana Fire Service Approval and submit a copy of the approval for the EPA's records.
- 2.11 Fire prevention and control equipment shall be maintained in accordance with this Guyana Fire Service Approval.
- 2.12 Adhere to the requirements of **the Occupational Safety and Health Act, Cap. 99:01, Laws of Guyana**.

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### 3.0 STORAGE OF CHEMICALS

3.1 Antifreeze, lubricants, or any other liquid chemicals used at the Project shall be stored in a secondary containment (bunded area). The secondary containment shall have a volume equivalent to that of the liquid stored within the largest storage container and walls shall be constructed of impermeable materials.

3.2 Flammable materials shall be stored away from ignition sources. **'No Smoking'** signs shall be posted where these materials are handled and stored.

3.3 Chemical Storage Areas shall be clearly labeled with "Danger, Chemical Storage Area- Authorized Personnel Only" where applicable as a spill control measure.

3.4 Flammable materials shall be stored away from ignition sources. **'No Smoking'** signs shall be posted where these materials are handled and stored.

3.5 Chemicals shall be stored in accordance with their hazard characteristics compatibility e.g., flammable, corrosive, etc.

3.6 Chemicals shall be stored in accordance with the manufacturer's directions or Safety Data Sheet (SDS) instructions.

3.7 Safety Data Sheets for all chemicals shall be readily available and easily accessible at all times at the Project.

3.8 Where applicable, chemical storage areas shall possess ventilation in accordance with at least one of the following:

- i. Gravity ventilation to the outside with a capacity of one cubic foot per minute per square foot or floor space;
- ii. Mechanical ventilation with on/ off switches at points of ingress that are capable of exhausting the outside; or
- iii. Natural ventilation.

3.9 Chemical storage containers shall be inspected weekly for signs of leakage, deterioration, or corrosion and damaged containers **must be** replaced **immediately**. Inspection reports must be maintained and signed by the appropriately qualified inspecting officer and his/her supervisor.

3.10 Chemical storage container inspection reports shall be summarised and made available for inspection by the EPA upon request.

### 4.0 WATER QUALITY

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



- 4.2 Maintain the integrity of the existing waterways at all times. Discharges into the environment should be in accordance with the Guyana National Bureau of Standards (GNBS) *Interim Guidelines for Industrial Effluent Discharge into the Environment*. The following are the allowable limits for the general environment and should not be exceeded:

- pH 5.0-9.0;
- Temperature < 40 °C;
- Biological Oxygen Demand (BOD<sub>5</sub>) < 50 mg/L;
- Chemical Oxygen Demand (COD) < 250 mg/L;
- Total Suspended Solid (TSS) < 50 mg/L;
- Oil and Grease < 10 mg/L; and

The Permit Holder shall determine a water quality monitoring plan and submit this plan along with the water quality test results to the Agency as part of the **Annual Report**.

- 4.3 Discharge of untreated wastewater into the surrounding waterways is **strictly prohibited**.
- 4.4 All wastewater (excluding sewage) shall be directed to the double-walled fiberglass tank for collection and treatment. This wastewater shall be collected and disposed of by an EPA-authorized Hazardous Waste Treatment Facility.
- 4.5 Adequately sloped interceptor drains shall be maintained by the Project to collect storm flow. Drains shall be kept flowing and free of debris and vegetation.
- 4.6 Stormwater discharges shall be directed away from the wastewater holding tank.
- 4.7 Fuel/lubricants including waste oils shall not be drained from equipment onto the ground or into waterways.

## **5.0 AIR QUALITY AND NOISE QUALITY**

- 5.1 Adhere to the provisions of the **Environmental Protection (Air Management) Regulations 2000 and the Environmental Protection (Noise Management) Regulations, 2000**.
- 5.2 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)

The Permit Holder shall determine a noise quality monitoring plan and submit this plan along with noise quality test results to the Agency as part of the Annual Report.

Monitoring shall be conducted by trained personnel using calibrated Type 2 Sound Level Meters.

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

5.4 Stack heights and configurations shall be determined using the Good Engineering Practice Stack Height (HGEP) Formula to avoid excessive ground-level concentrations of contaminants:

$$HGEP = H + 1.5 L$$

HGEP = 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 HGEP (inclusive of calculations and google map image showing the buildings under consideration) shall be submitted to the EPA for approval by **December 31, 2021**.

## 6.0 WASTE MANAGEMENT

6.1 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.

6.2 Waste materials shall not be burnt on site. All solid waste and sewage shall be disposed of by an EPA Authorised Waste Disposal Company.

6.3 Good housekeeping, sanitary, and hygienic practices shall be maintained at all times. The facility's surroundings shall be kept free of vegetation and litter.

6.4 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).

6.5 The septic tank system shall be maintained on-site for the collection of all sewage. The septic tank should not be located within 1.5 m of a building or property boundary and should be accessible for cleaning and de-sludging. Any modification to the Septic tanks must 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.

## **7.0 HAZARDOUS WASTE MANAGEMENT**

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

7.2 Hazardous waste shall be stored in containers appropriate for the waste stream. That is:

### **a) Sealed Plastic Containers**

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

### **b) Sealed Metal Containers**

- i. Solvents and Petroleum- based products
- ii. Waste ink, Presswash, Oil and Oily Absorbents

7.3 Hazardous waste containers shall be labelled with the following:

- i. The words "**Hazardous Waste**"
- ii. The type of waste
- iii. Beginning accumulation date- The date when the container was first placed in the Hazardous Waste Storage Area. Should the hazardous waste container be reused, the date hazardous waste was first placed in the container shall be recorded on the container.

7.4 Waste oil containers shall be labelled with the following:

- i. The words "**Waste Oil or 'Used oil'**"
- ii. Beginning accumulation date

7.5 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. Secondary containment must be capable of containing 110% of the largest volume therein.

7.6 Hazardous waste shall be treated and/ or disposed by an EPA authorised Hazardous Waste Disposal Facility.

7.7 A record of the types and quantities of hazardous wastes generated yearly shall be maintained and submitted to the EPA as a component of the **Annual Report.**

7.8 Each transport of hazardous waste shall generate a manifest. The manifest shall contain the following:

- a) The name and address of the waste generator;
- b) The name and description of the waste and hazardous 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

The transporter must sign and date the manifest upon receiving the hazardous waste from the generator. Upon completion of the transport of hazardous waste to its final destination, the hazardous waste transporter shall provide a copy of the manifest to the generator of the waste.

## 8.0 COMPLIANCE MONITORING AND REPORTING

8.1 Notify the Environmental Protection Agency **within one (1) hour** of the occurrence of any 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).

8.2 Make all employees, and third parties under your direction, aware of the conditions of the Permit and provide training on good environmental practices.

8.3 Monitor the implementation of the conditions of this Permit, insofar as they involve adherence by your employees and all third parties under your direction.

8.4 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.

8.5 Notify the Agency **within (21) days** in the event of death, bankruptcy, liquidation, or receivership of the Permit Holder or if the Company becomes a party to an amalgamation.

8.6 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, heat, or combination of any of them).

8.7 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.**

8.8 Report to the Agency any non-compliance(s) with the Environmental Permit:

1. Within **twenty-four (24) hours** of the time the Permit Holder of becomes aware of the non-compliance, the anticipated manner in which it may endanger human health or the environment.

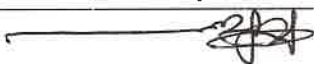


- II. Within **seventy-two (72) hours**, submit to the Agency a written report containing a description of the non-compliance, its cause, and the period of non-compliance including exact dates and time.
  - III. Submit a report to the Agency indicating the reasons and the anticipated time it is expected to continue if the non-compliance has not been corrected.
- 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 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.
- 9.2 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.
- 9.3 Permit Holder 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 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 prescribed under paragraph (c) of the Fifth Schedule for doing so.
- 9.4 EPA shall have the right to cancel or suspend this Permit for breach of any of the terms and conditions contained herein.
- 9.5 Permit Holder shall be strictly liable for the adverse effect of any discharge or release, or cause or permit the entry of pollution, a contaminant in any amount, concentration, or level in excess of that prescribed by the regulations or stipulated by this environmental authorization, as is attributed to projects of this nature and in accordance with section 19(1), (2), and (3) of the Environmental Protection Act, Cap. 20:05.
- 9.6 Permit Holder shall be guilty of any offense in accordance with s. 39(1), (2), (3), (4) of the EP Act, Cap. 20:05, which states respectively – “every person who causes material or serious environmental harm by polluting the environment intentionally or recklessly and with the knowledge that material and/or serious environmental harm will or might result is guilty of an offense, and shall be liable to the penalties prescribed under the Act.”

- 9.7 Permit Holder shall be liable to any gross negligence or willful misconduct caused by the Permit Holder, his Servants, and/ or Agents, to the marine or terrestrial environment, biodiversity, protected species, and natural habitat with respect to any release or discharge, spill, contaminant fluids, oil or lubricants from the fuel storage facility.
- 9.8 Permit Holder shall compensate any Party who suffers any loss or damage as a result of the attributed project. (See: s. 19(3)(e) of the Environmental Protection Act, Cap. 20:05).
- 9.9 Permit Holder, his Servants, and/or Agents 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 minimize 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.
  - e. For any material or serious environmental harm caused by pollution of the environment, whether intentionally or recklessly, in accordance with sections 39 (1), (2), (3), and (4) of the Environmental Protection Act, 20:05, Laws of Guyana.
  - f. Any gross negligence or willful 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 a result of any pollution incidents attributable to the activity for which this Permit has been issued.
- 9.10 Permit Holder shall compensate any Party who suffers any loss or damage as a result of the attributed project. (See: s. 19(3)(e) of the Environmental Protection Act, Cap. 20:05).
- 9.11 The Permit Holder shall be responsible for the payment of all costs related to the assessment of damage and costs for the independent assessor (s).
- 9.12 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.
- 9.13 Should the Permit Holder contravene or be likely to contravene any condition of this Permit, the Agency (EPA) may issue an Enforcement Notice to him, in accordance with s.26 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.
- 9.14 Where it appears to the Agency (EPA) that the Permit Holder is engaged in any activity that may pose a serious threat to natural resources or serious pollution of the Environment or any damage to public health, the Agency may 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).
- 9.15 The Permit Holder is obligated to ensure that the Operation of Aerial Spraying using Aircraft is permitted by other relevant authorities.
- 9.16 The Environmental Permit (Varied) is effective for the period stipulated herein from **November 2021 to October 2026**.
- 9.17 This Environmental Permit (Varied) shall remain valid until **October 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, the Environmental Protection (Amendment) Act, 2005, and the Environmental Protection (Authorisations) Regulations, 2000.
- 9.18 This Permit must be renewed by submitting a completed *Application Form for Environmental Authorisation* (Operation Permit) to the Agency at least six months before this Permit expires, that is, no later than **April 30, 2026**.
- 9.19 Any late submission of renewal application(s) after the specified date as stated above, 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 (\$2,000.00) per day for every day late**, until such renewal application is submitted to the Agency, without prejudice to any other rights of the Permit Holder in connection therewith.

9.20 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.

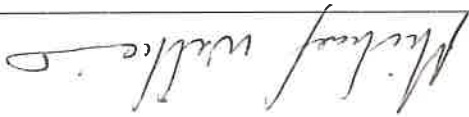
Signed by  on behalf of the Environmental Protection Agency.

**Kemraj Parsram**  
Executive Director

Date 25.9.2023



I hereby accept the above terms and conditions upon which this Environmental 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, and any existing or forthcoming regulations, guidelines, best practices, and standards made under this Act.

NAME	MICHAEL GORDON WILLIAMS
DATE	25th September 2023
SIGNATURE	
DESIGNATION	HSES Analyst