



**Environmental
Protection
Agency**

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Operation 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.:	20191011-YMFIG
Fees:	Tubular Running Service Workshop: Medium (C1) US\$2500 (i.e US\$500 per year)
Fees Paid Prior:	US\$2500 - Five (5) Years (January 2020 to December 2024)
Fees varied for:	Waste Water Treatment System Small (C1)- US\$400 (i.e US\$100 per year) Fuel Storage Facility: Medium (C1)- US\$2000 (i.e US\$500 per year)
Total varied Fees to be paid:	US\$ 2350 Four (4) Years (January 2021 to December 2024)
Addressee:	Mr. Braylon Hurd, Country Manager Frank's International Guyana Inc. JFL Inland Terminal 40-55, Mandela Avenue Industrial Estate, Georgetown, Guyana
Activity:	Operation of Tubular Running Services Workshop with Waste Water Treatment System and Fuel Storage

Frank's International 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 the Environmental Protection (Authorisations) Regulations, 2000, to operate a Tubular Running Services Workshop with a Waste Water Treatment System and Fuel Storage at Area J, Plantation, Houston, East Bank Demerara, hereinafter referred to as the "Project", in a manner indicated in the Applications for Environmental Authorisation and Variance of Environmental Authorisation submitted on May 04, 2020 and September 04, 2020 respectively, and subject to the terms and conditions set forth herein and in any forthcoming regulations made under the said Environmental Protection Act, and/or any other applicable laws, guidelines, best practices and standards relevant to this project.

Terms and Conditions for operation to be adhered to by the Permit Holder:

1.0 GENERAL OPERATION

1.1 Notify the Agency in writing and obtain its approval for **ANY** proposed changes in the operations **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:

- 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.

1.2 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
- Eye protections such as tightly fitted safety goggles.

(Employees should at all times be well protected)

1.3 Guyana Fire Service Approval shall be maintained annually and shall be submitted as a component of the **Annual Report** in **condition 7.6**.

1.4 The facility 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.

1.5 A fully functional First Aid Kit shall be maintained on site.

1.6 Heavy machinery shall be parked on impervious surface.

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- 1.7 The roof of the warehouse shall provide protection from rain and ventilation for heat and smoke in the event of fire.
- 1.8 Unauthorised access to high risk areas of the facility shall be restricted and informed by signage and security measures.
- 1.9 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** required in **condition 7.6**.
- 1.10 Emergency spill cleanup kit(s) shall be maintained at the workshop for response to potential spills. Kit(s) should contain absorbent materials, drain seals and other appropriate tools for clean-up. Oil spills should be immediately cleaned-up to prevent runoff into the waterways.
- 1.11 An Operation and Maintenance Manual shall be established and maintained. The Manual shall address all aspects of on-going operations, including the required maintenance and inspection schedule, loss monitoring/investigation procedures, emergency response and requirements for review of the Manual.
- 1.12 The Operation and Maintenance Manual shall be submitted to the Agency for review and approval **by March 31, 2021**.
- 1.13 A register of the quantities of fuel and 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** required in **condition 7.6**.
- 1.14 An Emergency Preparedness Plan shall be submitted **by March 31, 2021**, for review and approval. The plan shall include:
 - The accident prevention procedures.
 - First person response.
 - Notification procedures.
 - Location of clean-up equipment.
 - An analysis of potential accident and responses.
 - Material safety data sheets for all materials which could be spilled.

OPERATION OF SAND BLASTING FACILITY

- 1.15 All abrasive blasting shall be conducted in an enclosed structure to contain the emission of particulate matter (dust) emitted by the blasting operation.
- 1.16 Escape routes shall be closed during abrasive sand blasting. Signs and or Notices shall be placed at routes to inform all employees of this requirement.
- 1.17 Records of the total amount of crushed glass blasting media used and any control methods employed, shall be maintained. These records shall be submitted to the



EPA as a component of the required **Annual Report** required in **condition 7.6.**

OPERATION OF WASH-BAY FACILITY

- 1.18 **All effluent shall be treated via the Waste Water Treatment System before final discharge.**
- 1.19 The facility floor shall be elevated at a sloped angle, directing all effluent toward the wastewater holding tank.
- 1.20 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.
- 1.21 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** required in **condition 7.6.**
- 1.22 The wash bay floor shall maintain an impervious surface.
- 1.23 Secondary containment shall be maintained around the facility. Secondary containment shall be impervious and provide 110% containment of the largest volume therein.
- 1.24 The wastewater holding tank shall be visually inspected monthly for leaks and damages. Summarised inspection report shall be submitted to the EPA as a component of the **Annual Report** required in **condition 7.6.**
- 1.25 Fuel/lubricants including waste oils shall not be drained from equipment onto the ground or into waterways.
- 1.26 A sump, complete with filter system shall be maintained at the wash bay to collect and trap all effluent. Effluent from the sump shall be directed to the waste-water holding tank.

2.0 OPERATION OF A FUEL STORAGE FACILITY

- 2.1 Adopt and comply with the National Standard "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.
- 2.2 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.

Secondary Containment

- 2.3 Existing secondary containment around the fuel tanks shall be inspected monthly for cracks and breakage to ensure they are liquid tight to withstand hydrostatic pressure of any contained liquid when full. A summarised inspection report shall be submitted to the Agency as a component of the **Annual Report** required in **condition 7.6**.
- 2.4 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.

Fuel and Pipeline Tank Maintenance

- 2.5 All fuel storage tanks shall be tested by competent persons to verify their integrity once every five years. All tests should be documented including a clear indication of the scope, type and results of the tests. The test methods and results shall be submitted to the Agency as a component of the **Annual Report** required in **condition 7.6**.
- 2.6 Visual inspections of fuel tanks shall be conducted in accordance with the specifications outlined below. These results shall be submitted to the Agency as a component of the **Annual Report** required in **condition 7.6**.
1. Quarterly inspections internally by Frank's International Guyana Inc.
 2. Formal External Inspection by a certified inspector bi- annually
- 2.7 Protection measures for fuel storage tanks such as painting and coating shall be maintained to minimise corrosion of fuel tanks.
- 2.8 Maintenance and/ or repair of fittings, pipes and hoses shall be conducted monthly and in accordance to manufacturer's specifications. A summarised inspection report shall be compiled and submitted to the Agency as part of the **Annual Report** required in **condition 7.6**.

Overfill Protection & Leak Detection

- 2.9 Overfill protection shall be installed and maintained on all fuel tanks. This may include an automatic shut off device or an audible or visible overfill alarm.
- 2.10 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.
- 2.11 Leak detection systems shall be installed on all fuel tanks. At least two (2) of the following measures should be implemented:



1. Overflow alarms on tanks;
2. Gauging system;
3. Dipstick measurements;
4. Sensors on walls of tanks or;
5. Electric shut down buttons.

Fuel Transfer

- 2.12 The Best Available Technology/ Technique (BAT) shall be employed to capture fuel lost during the unloading of fuel to storage tanks and refuelling of equipment.
- 2.13 Secondary containment, drip trays or other overflow and drip containment measures shall be installed and maintained at connection points or other possible overflow points.
- 2.14 A Standard Operating Procedure (SOP) for fuel transfer operations including a checklist of measures to follow during filling operations shall be established and maintained. A copy of this SOP shall be submitted to the EPA as a component of the **Annual Report** required in **condition 7.6**.
- 2.15 All employees shall be trained on the SOP outlined in **condition 2.14**. An Annual training schedule shall be submitted to the EPA as a component of the **Annual Report** required in **condition 7.6**.

3.0 WATER QUALITY

- 3.1 Adhere to the provisions of the Environmental Protection (Water Quality) Regulation 2000.
- 3.2 All effluent from the workshop and fuel storage facility shall be directed to the waste water holding tank.
- 3.3 Discharge from the waste water holding tank shall flow to the waste water treatment system before final discharge into the environment.
- 3.4 Final discharge shall be in accordance with the *Guyana National Bureau of Standards Interim Guidelines for Industrial Effluent Discharge into the Environment* and within the following allowable limits:

Parameter	Daily Maximum Concentration	Units	Sample Type	Frequency of Analysis
pH	5.0 – 9.0	mg/L	Grab	
Temperature	<40	mg/L	Grab	
Biological Oxygen Demand (BOD ₅)	<50	mg/L	Grab	

Total Suspended Solid (TSS)	<100	mg/L	Grab	Annually
Oil and Grease	<10	mg/L	Grab	
Total Coliforms	< 400 MN per 100	ml	Grab	
Phenols	< 0.5 mg	mg/L	Grab	
Total Heavy Metal	< 5	mg/L	Grab	
Sulphides	< 1	mg/L	Grab	
Chlorides	< 600	mg/L	Grab	
Total Petroleum Hydrocarbon (TPH)	< 40	mg/L	Grab	
Diesel Range Organics	<100	mg/L	Grab	

Grab samples of effluent shall be collected annually at the final discharge point from the Waste Water Treatment System. GPS Coordinate for the final discharge point shall be submitted to the Agency by **March 31, 2021**.

- 2.4 Grab samples shall be collected and processed by a certified laboratory. Result/Analysis shall be submitted to the EPA as a component of the **Annual Report** required in **condition 7.6**.
- 2.5 Drainage system shall be kept flowing and free of debris and vegetation. Scheduled cleaning of the drainage network and the immediate environment shall be conducted.

4.0 AIR QUALITY AND NOISE MANAGEMENT

- 4.1 Adhere to the provisions of the Environmental Protection (Noise Management and Air Quality) Regulations, 2000.
- 4.2 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)



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- 4.3 Comply with the *World Health Organisation (WHO) Air Quality Guidelines for Particulate Matter in the Environment*, not exceeding the limits below:

Air Contaminant	Maximum Permissible Limit	Averaging Time
PM _{2.5}	25 µg/m ³	24-hour
PM ₁₀	50 µg/m ³	24-hour

- 4.4 Air Quality shall be monitored upwind and downwind during operation. Monitoring shall be conducted by a trained personnel using calibrated equipment to ensure accuracy and reliability of data. Results shall be submitted to the Agency as a component of the **Annual Report** required in **condition 7.6**.
- 4.5 An engineered ventilation air system with filters/scrubbers shall be installed by the facility in accordance to the American Conference of Governmental Industrial Hygienists (ACGIH) standards.
- 4.6 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.
- 4.7 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 as a component of the **Annual Report** required in **condition 7.6**.
- 4.8 The height of the generator's exhaust stack from the base to the point of emission shall not be less than 2.5 metres above the tallest building within an 800 metres radius of the generator's house.

5.0 WASTE MANAGEMENT

- 5.1 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.
- 5.2 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.
- 5.3 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.
- 5.4 Solid waste receptacles shall be secured when not in use.

6.0 HAZARDOUS WASTE MANAGEMENT

- 6.1 Adhere to the provisions of the Environmental Protection (**Hazardous Waste Management**) Regulations, 2000.
- 6.2 Oil/fuel 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.
- 6.3 All 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, Press-wash, Oil and Oily Absorbents
- 6.4 All hazardous waste containers shall be labelled with the following:
- i. The words “**Hazardous Waste**”
 - ii. The type of waste
 - iii. Beginning accumulation date-
- 6.5 All waste oil containers shall be labelled with the following:
- i. The words “**Waste Oil** or “**Used oil**”
 - ii. Beginning accumulation date
- 6.6 All 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.
- 6.7 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.
- 6.8 All 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** required in **condition 7.6**.



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).
- 7.2 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** required in **condition 7.6**.
- 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.
- 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 on the progress of the operation and compliance with the conditions under which this Permit was granted on or before **March 31**, each year.
- 7.7 The Company shall respond to all environmental emergencies (e.g. spills, fires, etc.) in accordance with the **Emergency Response Plan** submitted to the EPA.
- 7.8 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.



- 7.9 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.
- 7.10 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.

8.0 INSTITUTIONAL AUTHORITY/ LIABILITIES

- 8.1 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.
- 8.2 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.
- 8.3 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.
- 8.4 The EPA shall have the right to cancel or suspend this Permit for breach of any of the terms and conditions contained herein.
- 8.5 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.
 - 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.
- 8.6 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.
- 8.7 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.
- 8.8 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.
- 8.9 This Operation Permit (Varied) is effective for the period stipulated herein; **January 2021 to December 2024.**
- 8.10 This Operation Permit (Renewed) shall remain valid until **December 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.

Operation Permit (Varied)-Ref No.20191011-YMFIG
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- 8.11 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 **June 30, 2024**.
- 8.12 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.
- 8.13 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 by  on behalf of the Environmental Protection Agency.
Ms. Sharifah Razack
Executive Director (Ag)

Date 2021.01.21

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	Braylon Hurd
DATE	02/01/2021
SIGNATURE	B. Hurd Sr.
DESIGNATION	Country Manager

