




**Environmental
Protection
Agency**

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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 (Authorisations) Regulations, 2000.

Reference No.:	20051219-JFLDW
Fee:	Large C1, i.e. US\$ 1,150 per year
Fee Paid:	US\$ 5,750 for 5 years (April 2019 to March 2024)
Varied Fees to be Paid:	US\$ 100
Addressee:	John Fernandes Limited Lot 24, Water Street Georgetown Guyana 
Activity:	Operation of Container Terminal and Diesel Mechanic Workshop Facilities with Storage of Fuel and Radioactive Materials (Multiphase Flow Meters)

John Fernandes Limited, hereinafter referred to as the "Permit Holder", is hereby authorized 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 Container Terminal and Diesel Mechanic Workshop Facilities with Storage of Fuel and Radioactive Materials (Multiphase Flow Meters) at Industrial Site, Mandela Avenue Ruimveldt Georgetown, Guyana hereinafter referred to as the "Project", in a manner indicated in the Application for Environmental Authorisation submitted on September 11, 2015, and June 24, 2021 and subject to the terms and conditions set forth herein and in any existing or forthcoming regulations, guidelines, best practices and standards relevant to this project.

This is a Variance of Environmental Permit, Reference No. 20051219-JFLDW, issued on April, 2019 and expires in March, 2024.

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 Obtain and maintain Guyana Fire Service Approval and submit a copy of the approval to the EPA.
- 1.3 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.
- 1.4 Adhere to the **Occupational, Health and Safety (OHS) Act, Cap. 99:10, Laws of Guyana.**

2.0 OPERATION OF CONTAINER TERMINAL

- 2.1 Adhere to the provisions of the **Environmental Protection (Noise Management) and Environmental Protection (Air Quality) Regulations, 2000.**
- 2.2 Empty containers shall be stacked separately from those with cargoes.
- 2.3 Containers shall be stacked corner post to corner post and the point of contact shall be flush and not off centered.
- 2.4 Stacking of containers shall not exceed eight (8) containers on top of each other.
- 2.5 The buffer zone of 200ft. in the western area close to the Houston and D'Aguiar's park residents shall be maintained
- 2.6 The area between the cold storage to the extension of the buffer zone shall be zoned and enforced as a "No Horn" area at all times.
- 2.7 Monitor noise emissions from the operation at the property boundary to determine compliance with the Guyana National Bureau of Standards (GNBS) Guidelines for Noise Emission into the Environment. Noise levels shall not exceed the following:

Industrial Limits: 100 dB (Day-time (06:00 h -18:00 h))
80 dB (Night-time (18:00 – 06:00 h))

Specifically, at the Southern Portion of the Operation in close proximity to residents (Houston Gardens and D'Aguiar's Park noise level shall not exceed:

Residential Limits: 60 dB (Night-time (18:00 h – 06:00 h))

Monitoring shall be conducted on a regular basis **(determined by the Permit**

Holder and approved by the EPA) by trained personnel using calibrated Type 2 sound Level Meters. Records of all monitoring exercises shall be maintained and submitted as part of the Annual Report.

- 2.8 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.
- 2.9 The Best Available Practices shall be implemented at the southern plot of the container terminal (21 N 0371828 UTM 0750586) to reduce noise emission when operational after 06:00 pm to 06:00 am, especially in areas of the facility where operations are approximately 50-100 Meters of residential communities. Measures shall include but not be limited to;
- i. a reduction/restriction of horn honking by heavy duty machineries (haulers, lifters, etc.); and
 - ii. adhering to speed limits to limit the revving of haulers and other machinery to abate noise nuisances emanating from the said activity.
- 2.10 Wetting of Container Terminal shall extend to both the northern and southern plots (21 N 0371828 UTM 0750586); in close proximity to residents and shall be conducted at minimum of three (3) times per day. ***The frequency of wetting shall be increased as necessary during very dry weather conditions.***
- 2.11 Monitor ambient air quality at the boundary of the property to assess compliance with the requisite standards below:

No.	Air Pollutant	Averaging Time	Maximum Permissible Level	Type of Monitoring	Frequency of Monitoring
1.	Carbon Monoxide	1 h	35ppm	Ambient	Annual
2.	Nitrogen Dioxide	1 h	200µg/m ³	Ambient	Annual
3.	Sulphur Dioxide	24 h	20 µg/m ³	Ambient	Annual
4.	PM _{2.5}	24 h	25 µg/m ³	Ambient	Bi Annual
5.	PM ₁₀	24h	50µg/m ³	Ambient	Bi Annual

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

3.0 OPERATION OF FUEL STORAGE FACILITY

FUEL HANDLING AND STORAGE

- 3.1 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.

- 3.2 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

- 3.3 Existing secondary containment around the fuel tank shall be inspected 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**.
- 3.4 Containment bunds shall remain sealed and all piping must enter or exit the bund over the wall. Bunds shall provide total containment, and no part of the tank infrastructure (e.g. dispenser, filling hoses and valves) shall protrude outside the bund.

Fuel Tank and Pipeline Maintenance

- 3.5 Fuel storage tanks shall be visually inspected to verify their integrity. A summarised inspection report shall be compiled and submitted to the EPA as part of the **Annual Report**.
- 3.6 Protection measures for fuel storage tanks such as painting and coating shall be maintained to minimise corrosion of fuel tanks.
- 3.7 Maintenance and/or repair of fittings, pipes and hoses shall be conducted in accordance with manufacturer's specifications. A summarised inspection report shall be compiled and submitted to the Agency as part of the **Annual Report**.

Overfill Protection & Leak Detection

- 3.8 Overfill protection shall be maintained on all fuel tanks. This may include an automatic shut off device or an audible or visible overfill alarm.
- 3.9 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.
- 3.10 Dispensing equipment shall be designed with the Best Available Technology (BAT) to minimise spills e.g. suction, pressure or gravity systems.

Fuel Transfer

- 3.11 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.
- 3.12 Secondary containment, drip trays or other overflow and drip containment measures shall be installed and maintained at connection points or other possible overflow points.

- 3.13 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**.
- 3.14 All employees shall be trained on the SOP outlined in **condition 2.12** An Annual training schedule shall be submitted to the EPA as a component of the **Annual Report**.

4.0 OPERATION OF DIESEL MECHANIC WORKSHOP

- 4.1 All servicing and maintenance operations shall be conducted within the confines of the workshop and on an impervious base.
- 4.2 The workshop areas must be adequately weatherproofed to prevent storm water mixing with wastewater and process fluids. All servicing and parts-cleaning operations should occur within the workshop. Where this is impractical, these operations should occur within a roofed, paved area.
- 4.3 Equipment parts shall not be clean over internal drains. Contaminated waste water from cleaning of greasy hands and equipment shall be collected and routed to the oil/water separators located on-site.
- 4.4 Implement the use of dip trays when working on the radiator, brakes and oil systems. Recovered liquids must be stored in secure containers for recycling or disposal.
- 4.5 Grease, solvents, lubricants, acids, brake fluid, radiator coolant, and any other liquid shall not discharged into any storm water drain, land surface or water body.
- 4.6 Emergency spill cleanup kit/s shall be maintained at the Project for response to potential spills. Kit/s should contain absorbent materials, drain seals and other appropriate tools for clean-up.

5.0 STORAGE OF MULTIPHASE FLOW METERS

- 5.1 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.
- 5.2 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.
- 5.3 Adhere to the John Fernandes Ltd. Radiation Safety Manual – Jumper's Multi – Phase Subsea Flow Meter Import/ Export, Transport and Temporary Storage and the Inland Terminal Facility Security Plan/ Emergency Response Plan to ensure the safe and secure storage and handling of the Multi Phase Flow Meters.

- 5.4 The As Low As Reasonably Achievable (ALARA) principle shall be applied at all times.
- 5.5 Adhere to the Inland Terminal Facility Security Plan/ Emergency Response Plan. Secure all sealed radioactive sources at all times against unauthorized removal and tampering.
- 5.6 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.
- 5.7 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.
- 5.8 Maintain an inventory of all stored radioactive sources on site. Ensure that the inventory is updated quarterly and submitted to the Agency.
- 5.9 Radioactive sources shall NOT be stored with explosives or highly flammable substances at the project site.
- 5.10 Mark the storage area with hazard signs, to indicate the presence of radiation.
- 5.11 Within one (1) hour upon the discovery that a multiphase meter containing a radioactive source is lost or stolen, the EPA shall be notified.
- 5.12 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.
- 5.13 All employees exposed to radiation shall be equipped with dosimeters and ensure their exposure does not exceed 1mSv in a year.
- 5.14 Only trained and certified personnel shall handle the Multi Phase Flow Meter during assembly.
- 5.15 Human limb shall not be placed inside the pipe containing the radioactive source.

6.0 WATER QUALITY

- 6.1 Adhere to the provisions of the **Environmental Protection (Water Quality) Regulation 2000.**
- 6.2 The oil-water separator shall be maintained at the final discharge point of drains influenced by the fuel tank containment areas or refueling areas through which all effluent must pass before final discharge.
- 6.3 Contaminated waste water discharges from the oil water separator(s) shall 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 oil and grease (contaminant likely related to the operation) should not be

exceeded:

Parameter	Maximum Concentration	Units	Sample type	Frequency of Analysis
Oil and Grease	Total Petroleum Hydrocarbon (TPH) < 40	mg/L	Grab	Annual

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.

7.0 HAZARDOUS WASTE (WASTE OIL AND OIL RAGS) MANAGEMENT

- 7.1 Adhere to the provisions of the **Environmental Protection (Hazardous Waste Management) Regulation 2000**.
- 7.2 Hazardous waste shall be stored in sealed metal containers, appropriate for the waste stream.
- 7.3 Waste oil containers shall be labelled with the following:
- i. The words **“Waste Oil or “Used oil”**
 - ii. Beginning accumulation date
- 7.4 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 capable of containing 110% of the largest volume therein.

EMERGENCY PREPAREDNESS PLAN

- 7.5 Establish and submit an emergency preparedness plan to the Agency for approval. The plan shall identify mechanisms that shall be put into practice to minimize hazards from fires, explosions or accidental release of hazardous waste.
- 7.6 The Emergency Preparedness Plan shall be communicated to staff and contractors of the facility and shall include information in respect of;
- (a) accident prevention procedures;
 - (b) first person response;
 - (c) notification procedures;
 - (d) location of clean-up equipment;
 - (e) an analysis of potential accidents and response; and

- (f) materials safety data sheets for all materials which could be spilled.

7.7 The Project shall submit, to the Agency, a plan showing;

- (a) the location of all materials stores; and
- (b) a notification and clean-up plan for each proposed site of operation in the event of a spill.

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

7.9 The Waste 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.

8.0 WASTE MANAGEMENT

8.1 In accordance with the **Environmental Protection (Litter Enforcement) Regulation, 2013**, promote good sanitation and solid waste disposal practices on site; covered garbage receptacles must be placed at strategic locations at the facility.

8.2 Waste materials shall not be burnt on site. All solid waste shall be disposed of, at an approved Solid Waste Disposal Site, by an EPA Authorised Waste Disposal Company.

8.3 Good house-keeping, sanitary, and hygienic practices shall be maintained at all times. The facility surroundings shall be kept free of vegetation and litter.

8.4 Solid waste receptacles shall be secured when not in use.

9.0 COMPLIANCE MONITORING AND REPORTING

9.1 Notify the Environmental Protection Agency within **one (1) hour** of the discovery of the occurrence of 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). Notification as prescribed by Section 19(3)(a) of the Environmental Protection Act, shall be submitted to the EPA within **twenty-four (24) hours** of discovery of the incident occurring.

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

9.3 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.

- 9.4 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.
- 9.5 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).
- 9.6 Submit an **Annual Report** to the EPA on your compliance with this Environmental Permit on or before **March 31, each year**.
- 9.7 Report to the Agency of non-compliance with the Environmental Permit:
- 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.
- 9.8 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.
- 9.9 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.
- 9.10 Obtain Export Permit for each shipment of Used Lead Acid Batteries under the Basel Convention for Transboundary Movement of Hazardous Wastes and their Disposal.

10.0 INSTITUTIONAL AUTHORITY/ LIABILITIES

- 10.1 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.
- 10.2 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.
- 10.3 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.

- 10.4 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.
- 10.5 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.
- 10.6 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.
- 10.7 The Permit Holder shall be liable of any gross negligence or wilful 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.
- 10.8 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.
- 10.9 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.
- 10.10 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, the Environmental Protection (Amendment) Act, 2005, and Environmental Protection (Authorisations) Regulations, 2000.
- 10.11 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.

10.12 The EPA has the right to modify, cancel or suspend this Permit for breach of any of the terms and conditions contained herein.

10.13 **This Environmental Permit (Varied) is not the final consent; all relevant Permissions should be obtained from other regulatory bodies for continued operation.**

10.14 The Environmental Permit (Varied) is effective for the period stipulated herein from **April 2019 to March, 2024.**

10.15 This Environmental Permit (Varied) shall remain valid until **March 30, 2024**, 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.

10.16 This Permit shall 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 **October 30, 2024.**

10.17 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.

10.18 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 Parsram**
Executive Director
Executive Director

Date

2022.06.10

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, Laws of Guyana, Environmental Protection (Amendment) Act, 2005, the Environmental Protection (Authorisations) Regulations, 2000, and any existing and or forthcoming regulations, best practices, guidelines and standards made under this Act.

NAME	Jeremy Fernandes
DATE	24 th June, 2022
SIGNATURE	
DESIGNATION	Agency Manager

