



**Environmental
Protection
Agency**

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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.

Reference No.:	202220506_STSFE
Fee:	Medium (C2) - US\$ 800 per year
Fee Paid:	US \$2400 for Three (3) year (February, 2023 – January, 2026)
Addressee:	Mr. Dylan Fields Director Industrial Fabrications Inc. 1 Good Hope East Coast Demerara
Activity:	Operation of a Mechanical & Fabrication Workshop with Fuel Storage

Industrial Fabrications 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, for the Operation of a Mechanical & Fabrication Workshop with Fuel Storage at Lot 1, Good Hope, East Coast Demerara, hereinafter referred to as the “Project”, in a manner indicated in the Application for Environmental Authorisation submitted on May 6, 2022, 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 applicable laws, guidelines, best practices, and standards relevant to this project.

Terms and Conditions for Operation to be adhered to by Permit Holder, His Servants, Agents, and/ or Sub- Contractors:

1.0. GENERAL OPERATION

- 1.1. The Permit Holder shall submit to the Agency upon receipt, an updated Central Housing and Planning Authority (CH&PA) approval for the Operation of a Mechanical & Fabrication Workshop with Fuel Storage.
- 1.2 Make an application to the Agency to vary this Permit in instances where it becomes necessary to:

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- 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 Emergency spill clean-up kits shall be maintained at the Project for response to spills. Kits shall contain absorbent materials, drain seals, and other appropriate tools for clean-up, and be readily available and clearly identified at the Project.
- 1.4 Fire prevention and control equipment shall be maintained in accordance with **Guyana Fire Service Approval**.
- 1.5 All employees and third parties under your direction shall be made aware of the conditions of the Environmental Authorisation.
- 1.6 The Permit Holder shall provide training on good environmental practices. Annual training records shall be maintained on-site and made available to the EPA upon request.
- 1.7 Adhere to the requirements of the **Occupational Safety and Health Act, Cap. 99:01, Laws of Guyana**.

2.0 OPERATION OF A WORKSHOP

- 2.1 Welding, fabrication, and other maintenance activities shall at all times be conducted within the confines of the workshop and on an impervious base.
- 2.2 Operation and maintenance of machines, equipment, and tools used at the workshop shall be conducted in accordance with the manufacturer's specifications. Summarised maintenance records shall be maintained and submitted to the EPA upon request.
- 2.3 The Best Available Technology (BAT) shall be implemented to remove vapors/ fumes from the workshop during welding and fabrication work.
- 2.4 Welding gas cylinders shall be stored and managed according to the supplier's recommendations.
- 2.5 Engine oil, grease, and paint used at the workshop shall be stored within secondary containment (bundled area) to minimise the spread/ release of spillage from the storage area.

- 2.6 All chemicals used at the workshop shall be stored in accordance with the Safety Data Sheets (SDS). SDS shall be readily available and easily accessible.
- 2.7 Flammable materials shall be stored away from ignition sources. 'No Smoking' signs shall be posted where such materials are handled and stored.

3.0 NOISE MANAGEMENT

- 3.1 Adhere to the provisions of the **Environmental Protection (Noise Management) Regulations, 2000.**
- 3.2 Noise emissions shall be monitored annually 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 **commercial limits** listed below:

Commercial Limits: 80 dB (Day-time (06:00 h -18:00 h))
65 dB (Night- time (18:00 h - 06:00 h))

- 3.3 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.
- 3.4 All equipment and machinery shall be placed upon foundations properly designed to ensure effective damping of vibrations.
- 3.5 The exhaust stack of the generator shall be at a height not less than 2 meters above the tallest building nearby, to minimise adverse fumes/soot impacts to the contiguous areas.

4.0 SPRAY PAINTING

- 4.1 The project shall establish and maintain a spray-painting booth by **April 30, 2023.**
- 4.2 The Best Available Technology (BAT) shall be implemented to remove vapours during spray painting operations so as to minimize the release of fugitive emissions to the environment.
- 4.3 'NO SMOKING' signs shall be mounted at the spray-painting area to reduce the risk of fire.
- 4.4 Spray-painting activities shall **NOT** be conducted outdoors. All spray-painting activities shall be conducted within the workshop.

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- 4.5 Spray painting chemicals including paints and flammable solvents shall be stored within secondary containment (bundled area) to minimise the spread/ release of spillage from the storage area.
- 4.6 Paint cans shall be tightly sealed and kept off the floor on pallets to reduce the occurrence of spills.
- 4.7 Compressed cylinders shall be stored and managed in accordance with the supplier's recommendations. Air compressors should also be operated in accordance with the manufacturer's instructions.
- 4.8 Safety Data Sheets for paints, solvents and other chemicals shall be readily available and easily accessible at all times at the Project site.

5.0 AIR QUALITY MANAGEMENT

- 5.1 Adhere to the provisions of the **Environmental Protection (Air Quality) Regulations, 2000.**
- 5.2 Ambient air quality monitoring shall be conducted at the boundary of the property during normal operations to assess the levels of the following air pollutants, in accordance with the WHO Air Quality Guidelines 2005:

Air Pollutant	Averaging Time	Maximum Permissible Level
Carbon Monoxide	1h	35ppm
Nitrogen Dioxide	1h	200µg/m ³
Sulphur Dioxide	24h	20µg/m ³
PM _{2.5}	24h	50µg
PM ₁₀	24h	50µg
O ₃	8h	100µg/m ³

The Permit Holder shall prepare and submit to the EPA for approval by **April 30, 2023**, a sampling and monitoring plan for air quality monitoring. The plan shall consider the parameters in the table above and include but not limited to the location and frequency of monitoring. Monitoring shall be conducted during normal operations by trained personnel utilizing calibrated equipment.

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

- 5.3 In the event of inefficiencies which may result in visible or abnormal emissions to air, the operator shall:
- 5.3.1 Investigate and undertake remedial action immediately;
 - 5.3.2 Adjust the process or activity to minimise those emissions; and
 - 5.3.3 Record the events and actions taken. This shall be submitted in the annual report.

6.0 FUEL HANDLING AND STORAGE

- 6.1 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.
- 6.2 A register of the quantities of fuel and associated hazardous materials stored onsite shall be established and maintained. The registered information shall be maintained and made available to the EPA upon request.
- 6.3 Fuel shall be stored above-ground and below ground, in a cool, dry place away from ignition sources. '**No Smoking**' signs shall be posted where fuel is handled or stored.
- 6.4 Underground fuel storage tanks shall be tested by competent persons to verify their integrity every five (5) 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 maintained and made available to the EPA upon request.
- 6.5 Visual/physical inspections of above ground fuel tanks shall be conducted annually. These results shall be maintained and made available to the EPA upon request.
- 6.6 The secondary containment of the fuel storage facility shall be inspected monthly for cracks and breakage to ensure it is liquid tight to withstand hydrostatic pressure of any contained liquid when full. Inspection reports shall be maintained

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and made available to the EPA upon request.

- 6.7 All secondary containment shall remain sealed and all piping must enter or exit the containment over the wall. Bund walls shall provide total containment, and no part of the tank infrastructure (e.g., dispenser, filling hoses and valves) shall protrude outside the bund.
- 6.8 The Best Available Technology (BAT) shall be maintained under the dispensers and at unloading area to capture fuel loss while vehicles and daily tank are being filled.
- 6.9 Overfill protection shall be maintained on all fuel tanks. This may include an automatic shut off device or an audible or visible overfill alarm.
- 6.10 The safe fill level shall be clearly identified on the gauge and set at 90% to prevent overfilling. The tanks shall be fitted with an overflow system and any discharges shall be released into the bunded area.
- 6.11 Discharge from the secondary containment is **Strictly Prohibited**.
- 6.12 Contaminated wastewater from the secondary containment shall be pumped to a collection vessel and collected and treated by an EPA Authorised Hazardous Waste Disposal Facility.
- 6.13 Protection measures for fuel storage tanks such as painting and coating shall be maintained to minimise corrosion of fuel tanks.
- 6.14 Maintenance and/ or repair of fittings, pipes and hoses shall be in accordance with manufacturer's specifications. A summarised inspection report shall be kept and submitted to the EPA upon request.
- 6.15 All equipment refueling shall be conducted on an impervious surface.

7.0 WATER QUALITY

- 7.1 Adhere to the provisions of the **Environmental Protection (Water Quality) Regulation, 2000**.
- 7.2 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:

Parameter	Daily Maximum Concentration	Units
pH	5.0 – 9.0	
Temperature	40	°C
Biological Oxygen Demand (BOD ₅)	<50	mg/L
Chemical Oxygen Demand (COD)	<250	mg/L
Total Suspended Solids (TSS)	<50	mg/L
Oil & Grease	<10	mg/L

A water quality monitoring plan including but not limited to sampling point/s at the oil-water separator and frequency of sampling shall be submitted to the EPA for approval by **April 30, 2023**.

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

- 7.3 An oil water separator shall be maintained at the final discharge.
- 7.4 Fuel/lubricants including waste oils **shall not** be drained from equipment onto the ground or into waterways.
- 7.5 Interceptor drains shall be maintained on site. These must be adequately sloped to collect storm flow.

8.0 WASTE MANAGEMENT

- 8.1 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.
- 8.2 Burning solid waste is **strictly prohibited**. All solid waste shall be disposed by an EPA Authorised Waste Disposal Company.

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- 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 Promote waste minimisation and the reuse and/or recycling of waste and other materials where practical.
- 8.5 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).

9.0 HAZARDOUS WASTE MANAGEMENT (Waste oil)

- 9.1 Adhere to the provisions of the Environmental Protection (**Hazardous Waste Management**) Regulation 2000.
- 9.2 In the event that waste oil (recovered from servicing machinery) is stored on site, it should be stored in a covered, bunded area to minimise adverse impacts to the environment in the event of spillage. The bunded area should be extended to provide 110% containment of the largest volume of waste oil stored therein.
- 9.3 Waste oil shall be stored in containers appropriate for the waste stream.
That is:
 - a) Plastic Containers**
 - i. Water- based wastes
 - ii. Fountain Solutions, Pre- Press
- 9.4 All waste oil containers shall be labelled with the following:
 - i. The words "**Waste Oil or "Used oil"**
 - ii. Beginning accumulation date
- 9.5 Waste oil 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
- 9.6 Waste oil 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**.

10.0 COMPLIANCE MONITORING AND REPORTING

- 10.1 Notify the Environmental Protection Agency within **one (1) hour** of the discovery of the occurrence of environmental emergencies (e.g., oil spills,



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- 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.
- 10.2 Monitor the implementation of the conditions of this Permit, insofar as they involve adherence by your employees and all third parties under your direction.
 - 10.3 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.
 - 10.4 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.
 - 10.5 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).
 - 10.6 Submit an **Annual Report** to the EPA on your compliance with this Environmental Permit on or before **March 31, each year**.
 - 10.7 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.
 - 10.8 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.
 - 10.9 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.

11.0 INSTITUTIONAL AUTHORITY/ LIABILITIES

- 11.1 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.
- 11.2 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.
- 11.3 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.
- 11.4 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.
- 11.5 The Permit Holder shall be liable to compensate any person who suffers any loss or damage as a result of contravening conditions 5.3 and 5.4 of this Environmental Permit, pursuant to s. 19 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.
- 11.6 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.
- 11.7 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.
- 11.8 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.

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- 11.9 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.
- 11.10 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.
- 11.11 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.
- 11.12 The EPA has the right to modify, cancel or suspend this Permit for breach of any of the terms and conditions contained herein.
- 11.13 **This Environmental Permit is not the final consent; all relevant Permissions should be obtained from other regulatory bodies for continued operation.**
- 11.14 The Environmental is effective for the period stipulated herein from **February, 2023 to January 2026.**
- 11.15 This Environmental Permit shall remain valid until **January 31, 2025**, 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.
- 11.16 This Permit shall be renewed by submitting a completed *Application Form for Environmental Authorisation* (Environmental Permit) to the Agency at least six months before this Permit expires, that is, no later than **July 31, 2025.**
- 11.17 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.

11.18 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
 by April 30, 2023,

Date 2023.02.22

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, 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	SANDEEP SAMWAROO
DATE	28 TH FEBRUARY, 2023
SIGNATURE	
DESIGNATION	OPERATION & PRODUCTION SUPPORT.

