



**Environmental  
Protection  
Agency**

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## **Environmental Permit (Renewed)**

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.:	20170815- ZAHFW
Fee:	Medium (C2) i.e., US\$ 800 per year
Fee Paid:	US\$ 800 for one (1) year – March 2024 to February 2025
Addressee:	Mr. Zakir Ally Hack, Proprietor, 282-284 Section 'A' Plantation Triumph, East Coast Demerara.
Activity:	Operation of a Mechanical & Fabrication Workshop with Fuel Storage

Zeco Industrial Engineering. 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 282-284 Section 'A' Plantation Triumph, East Coast Demerara hereinafter referred to as the "Project", in a manner indicated in the Application for Environmental Authorisation submitted November 18, 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.

This is a Renewal of Environmental Permit Ref. #: 20170815 - ZAHFW issued to Zeco Industrial Engineering for the period March 2018 to February 2023.

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

### **1.0. OPERATION**

- 1.1 An application shall be made to the Agency to vary this Permit in instances where it becomes necessary to:
- 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 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.

1.3 The Guyana Fire Service approval shall be maintained and fire protection measures such as fire extinguishers and sand buckets shall be provided in accordance with this approval.

1.4 Fire prevention and control equipment shall be serviced and maintained in accordance with the Guyana Fire Service Approval.

1.5 All employees, and third parties under the Project's direction, shall be made aware of the conditions of the Environmental Authorisation and provide training on good environmental practices.

1.6 Scheduled training shall be maintained for employees involved in the Project. Training reports shall be made available for inspection by the EPA upon request.

1.7 Adhere to the requirements of the **Occupational Safety and Health Act, Cap: 99:06, 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 Inspection, maintenance, and repairs of all equipment used at the Project shall be conducted on an impervious base, in accordance with the Manufacturer's Specification. Summarised records shall be maintained and made available for inspection by 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 at the project.
- 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 at the Project's boundary biannually 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))**

Monitoring shall be conducted 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.

- 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) requirements.
- 3.4 Idling of equipment or vehicles shall be limited, as far as practical and all equipment or vehicles shall be switched off when not in use.
- 3.5 All equipment and machinery shall be placed upon foundations properly designed to ensure effective damping of vibrations.
- 3.6 All equipment e.g., forklifts, etc. capable of causing noise or emissions shall be maintained in accordance with the manufacturer's instructions to ensure efficiency and reduce the level of noise or emissions produced. Inspection and maintenance reports shall be maintained on-site and made available for inspection by the EPA upon request.

#### **4.0 AIR QUALITY MANAGEMENT**

- 4.1 Adhere to the provisions of the **Environmental Protection (Air Quality) Regulations, 2000.**
- 4.2 The Best Available Technology (BAT) shall be implemented to remove vapors/fumes from the workshop during welding and fabrication works.
- 4.3 Stack heights and configurations shall be in accordance with Good Engineering Practice. Stack Height to avoid excessive ground-level concentrations of contaminants shall be 2 meters above the tallest structure.
- 4.4 Ambient air quality monitoring shall be conducted at the boundary of the property during normal operations to assess the levels of the following air

<b>Air Pollutant</b>	<b>Averaging Time</b>	<b>Maximum Permissible Level</b>
Carbon Monoxide	1h	35ppm
Nitrogen Dioxide	1h	200µg/m <sup>3</sup>
Sulphur Dioxide	24h	20µg/m <sup>3</sup>
PM <sub>2.5</sub>	24h	50µg
PM <sub>10</sub>	24h	50µg

pollutants, in accordance with the WHO Air Quality Guidelines 2005:

Monitoring shall be conducted biannually during normal operations by trained personnel utilizing calibrated equipment. The results of all monitoring exercises shall be maintained and submitted as a component of the Annual Report.

- 4.5 In the event of equipment malfunction or inefficiencies which result in visible emissions into the air or, in the event the malfunction leads to abnormal emissions, the operator shall:
- Investigate and undertake remedial action **immediately**;
  - Adjust the process or activity to minimize those emissions; and
  - Record the events and actions taken.
  - A summary of these records shall be submitted as a component of the annual report.





## **5.0 FUEL STORAGE AND HANDLING**

- 5.1 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 for the operation of fuel storage.
- 5.2 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 for inspection by the EPA upon request.
- 5.3 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.
- 5.4 Visual/physical inspections of above-ground fuel tanks shall be conducted monthly. These records shall be maintained and made available for inspection by the EPA upon request.
- 5.5 The secondary containment of the fuel storage facility shall be inspected monthly for cracks and breakage to ensure it is liquid-tight to withstand the hydrostatic pressure of any contained liquid when full. Inspection reports shall be maintained and made available to the EPA upon request.
- 5.6 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.
- 5.7 The Best Available Technology (BAT) shall be maintained under the dispensers and at the unloading area to capture fuel loss while vehicles and daily tanks are being filled.
- 5.8 Overfill protection shall be maintained on all fuel tanks. This may include an automatic shut-off device or an audible or visible overfill alarm.
- 5.9 The safe fill level shall be 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.
- 5.10 Discharge from the secondary containment is **Strictly Prohibited**.
- 5.11 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.

- 5.12 Protection measures for fuel storage tanks such as painting and coating shall be maintained to minimise corrosion of fuel tanks.
- 5.13 Maintenance and/ or repair of fittings, pipes, and hoses shall be in accordance with the manufacturer's specifications. A summarised inspection report shall be kept and submitted to the EPA upon request.
- 5.14 All equipment refueling shall be conducted on an impervious surface.

## **6.0 WATER QUALITY**

- 6.1 Adhere to the provisions of the **Environmental Protection (Water Quality) Regulation, 2000.**
- 6.2 The integrity of the existing waterways shall be maintained at all times. Discharges into the environment 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 the general environment and should not be exceeded:

<b>Parameter</b>	<b>Daily Maximum Concentration</b>	<b>Units</b>
pH	5.0 – 9.0	
Total Suspended Solids (TSS)	<50	mg/L
Oil & Grease	<10	mg/L

Monitoring of the parameters above shall be conducted **annually** by trained personnel using calibrated equipment at the approved sampling point/s and the results analyzed at a GNBS-certified laboratory. The analysis shall be submitted to the Agency as part of the **Annual Report**.

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



## **7.0 WASTE MANAGEMENT**

- 7.1 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 project.
- 7.2 Burning solid waste is **strictly prohibited**. All solid waste shall be disposed of by an EPA Authorised Waste Disposal Company.
- 7.3 The Permit Holder shall maintain a septic tank system on site. The septic tank shall not be located within 1.5 meters of a building or property boundary and shall be accessible for cleaning and de-sludging.
- 7.4 Any modification to the Septic tank 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.
- 7.5 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).

## **8.0 HAZARDOUS WASTE MANAGEMENT (Waste Oil)**

- 8.1 Adhere to the provisions of the Environmental Protection (**Hazardous Waste Management**) Regulation 2000.
- 8.2 Hazardous waste shall be stored in sealed metal containers, appropriate for the waste stream.
- 8.3 Hazardous waste containers shall be labelled with the following:
- i. The words "**Waste Oil** or "**Used oil**" and "**Sludge**"
  - ii. Beginning accumulation date
- 8.4 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 is capable of containing 110% of the largest volume therein.

- 8.5 Hazardous Waste shall be treated and/ or disposed of by an EPA authorised Hazardous Waste Disposal Facility.
- 8.6 Each transport of hazardous waste shall generate a manifest. The manifest shall contain the following:
- i. The name and address of the waste generator;
  - ii. The name and description of the waste and hazardous class;
  - iii. The number and type of containers;
  - iv. The quantity of waste being transported; and
  - v. The name and address of the facility designated to receive the waste

Copies of signed manifests shall be maintained by the Project for not less than three years and made available for inspection by the EPA upon request.

## **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 the 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, of 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.



#### **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 10.2 and 10.3 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 (Renewed) is not the final consent; all relevant Permissions should be obtained from other regulatory bodies for continued operation.**
- 10.14 The Environmental Permit (Renewed) is effective for the period stipulated herein from March **2024 to February 2025.**
- 10.15 This Environmental Permit (Renewed) shall remain valid until **February 28, 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.
- 10.16 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 **August 31, 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

Date 2024.03.13



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	MICHAEL ROOPCHAND.
DATE	18.4.24.
SIGNATURE	M. Roopchand.
DESIGNATION	ZECO: SANDBLAST. SUPERVISOR

