



**Environmental
Protection
Agency**

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Environmental Permit (Renewed & Modified)

(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.: | 20031103-BDIHP |
| Fee: | Medium (C2) i.e., US\$800 per year |
| Fee Paid: | US\$4000 for (5) years (March 2023 – February 2028) |
| Addressee: | Banks DIH Limited D'Aguiar's Industries and Holdings Thirst Park, Ruimveldt, Georgetown. |
| Activity: | Operation of Seven (7) Power Generation sets with Fuel Storage, Vehicle Maintenance Workshop inclusive of Welding, Spray Painting booth & Upholstery. |

Banks DIH Limited: D'Aguiar's Industries and Holdings, 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 seven (7) Power Generation Sets with Fuel Storage, and Vehicle Maintenance Workshop inclusive of Welding, Spray Painting Booth & Upholstery, located at the Banks DIH Limited River Front Property, Ruimveldt, Georgetown, hereinafter referred to as the "Project", in a manner indicated in the Application for Renewal of Environmental Authorisation submitted on June 08, 2022, and subject to the terms and conditions set forth herein under the Environmental Protection Act, existing and/or forthcoming regulations made under the said Act, and/or guidelines, best practices and standards relevant to this project.

This is a Renewal & Modification of the Environmental Permit, Reference No. 20031103-BDIHP issued on August 25, 2017, and expired on July 31, 2022.


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The Project Holder, His Servants, Agents, and/or Sub-Contractors shall comply with the following Terms and Conditions for Operation:

1.0 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 An Operation and Maintenance Manual for Power Generation shall be developed and submitted to the EPA for review and approval by **June 30, 2023**. The Manual shall address all aspects of the ongoing operation, including but not limited to the required maintenance and inspection schedule, monitoring/investigation procedures, emergency response, and requirements for review of the Manual.
- 1.3 A register of the quantities of fuel and associated hazardous materials stored onsite shall be established and maintained. Registered information shall be maintained on-site and made available to the EPA upon request.
- 1.4 Emergency spill clean-up kits shall be maintained at the Project site for response to spills. Kits shall contain absorbent materials, drain seals, and other appropriate tools for clean-up, and shall be readily available and clearly identified at the Project.
- 1.5 All employees and third parties under the Project's direction shall be made aware of the conditions of the Environmental Authorisation.
- 1.6 The Permit Holder shall provide training on good environmental practices. The annual training schedule shall be submitted to the EPA upon request.
- 1.7 Fire prevention and control equipment shall be maintained in accordance with this **Guyana Fire Service Approval**.

- 1.8 The Permit Holder is required to submit to the EPA upon receipt, the requisite approvals/license from the **Guyana Energy Agency** and updated **Petroleum license**.
- 1.9 Adhere to the requirements of **the Occupational Safety and Health Act, Cap. 99:01, Laws of Guyana**.

2.0 OPERATION OF WORKSHOP

- 2.1 Servicing, maintenance, and storage of heavy-duty equipment shall be conducted within the confines of the workshop and on an impervious base and in keeping with procedures outlined in the manual requested in **condition 1.2** of this Permit.
- 2.2 A drip pan shall be utilised to capture waste oil spills during servicing and maintenance activities.
- 2.3 Engine oil, grease, lubricants and other chemicals used at the Project shall be stored in accordance with the Safety Data Sheets (SDS). SDS shall be readily available and easily accessible.
- 2.4 Flammable materials shall be stored away from ignition sources.
- 2.5 **'No Smoking** signs shall be posted where such materials are handled and stored.

3.0 SPRAY PAINTING

- 3.1 The spray-painting booth shall be well-ventilated with a fume extractor fan of relevant capacity or other Best Available Technology (BAT) to provide a continuous, uniform, and evenly distributed supply of airflow throughout the spray-painting area to exhaust outlets.
- 3.2 Spray booth walls shall be smooth without edges to avoid the trapping of residue.
- 3.3 The Best Available Technology (BAT) shall be implemented to filter or absorb vapours from the spray booth so as to minimise the release of fugitive emissions to the environment.
- 3.4 The Best Available Technology (BAT) referenced in **condition 3.3** shall be submitted by **April 30, 2023** to the Agency for its approval of the technology specifications.

- 3.5 'NO SMOKING' signs shall be placed outside the spray booth to reduce the risk of fire.
- 3.6 Spray-painting activities shall **NOT be conducted outdoors**. All spray-painting activities shall be conducted within the spray booth.
- 3.7 In the event that Dry Sanding is conducted at the Project site, the following shall be implemented:
- i. Sanding shall only be conducted in designated areas to minimise the spread of waste;
 - ii. Dust shall be collected as sanding tasks are completed to prevent tracking outside the designated area;
 - iii. Avoid excessive sweeping to minimise dust emissions into the atmosphere; and
 - iv. Do not wash dust to the outside of the workshop or into storm drains.
- 3.8 In the event that Wet Sanding is conducted at the Project, the following shall be implemented:
- i. Sanding shall only be conducted in designated areas to minimise the spread of waste;
 - ii. Use a spray bottle to wet a small surface area and collect the waste in a drip pan; and
 - iii. Do not sweep or wash sanding dust to storm drains or areas outside the workshop.
- 3.9 Hazardous materials including paints and flammable solvents shall be stored within secondary containment (bund area) to minimise the spread/ release of spillage from the storage area.
- 3.10 Paint cans shall be tightly sealed and kept off the floor on pallets to reduce the occurrence of spills.
- 3.11 Compressed cylinders shall be stored and managed in accordance with supplier's recommendations. Air compressors should also be operated in accordance with the manufacturer's instructions.
- 3.12 Safety Data Sheets for paints, solvents, and other hazardous materials shall be readily available and easily accessible at all times at the Project site.

- 3.13 A register of the quantities of paints, solvents, and other hazardous materials stored at the Project shall be established. Registered information shall be maintained on-site and made available to the EPA upon request.

4.0 FUEL HANDLING AND STORAGE (DIESEL ONLY)

- 4.1 Adopt and comply with the National SOP "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.
- 4.2 Fuel shall at all times be stored above-ground and away from ignition sources.
- 4.3 **'No Smoking'** signs shall be posted where fuel is handled or stored.
- 4.4 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 summarized inspection report shall be kept and provided to the EPA upon request.
- 4.5 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.
- 4.6 Fuel storage tanks shall be visually inspected to verify their integrity. A summarised inspection report shall be kept and provided to the EPA upon request.
- 4.7 Protection measures for fuel storage tanks such as painting and coating shall be maintained to minimise corrosion of fuel tanks.
- 4.8 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.
- 4.9 Overfill protection systems shall be installed and maintained on all fuel tanks. This may include an automatic shut-off device or an audible or visible overfill alarm.
- 4.10 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.


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- 4.11 Hoses and couplings shall be inspected before use. Hoses showing deterioration, leakage, or weakness in the body of the hose or at the couplings shall be removed from service.

5.0 POWER GENERATION

- 5.1 Commissioning Reports shall be submitted for the Hyundai engines by **April 30, 2023.**
- 5.2 The most recent copy of the inspection and maintenance report of the Hyundai Engine shall be submitted to the EPA **by April 30, 2023.**
- 5.3 The following records shall be maintained for all power generation engines identified at the Project:
- a. Megawatt thermal input
 - b. Calorific value
 - c. Fuel-oil consumption
- 5.4 The records outlined in **condition 5.3** shall be submitted to the EPA as a component of the **Annual Report.**

6.0 AIR QUALITY

- 6.1 Adhere to the provisions of the **Environmental Protection (Air Quality) Regulations, 2000.**
- 6.2 The Best Available Technology (BAT) shall be implemented to remove vapors/ fumes from the workshop during Spray painting, welding, and fabrication work so as to minimise the release of fugitive emissions to the environment.
- 6.4 Filters used in spray painting shall be non-combustible and the same filter shall not be used when spraying with different coating materials if the combination of materials may spontaneously ignite.
- 6.5 Generators shall use retro-fitted emission controls to reduce particulate matter emissions to the atmosphere.
- 6.6 Generators shall be equipped with stacks that extend two (2) meters above the tallest building within a 500m radius of the development, to minimize adverse fumes/soot impacts to the contiguous areas.

- 6.7 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 | Frequency |
|-------------------|----------------|---------------------------|-----------|
| PM _{2.5} | 24h | 50µg | Ambient |
| PM ₁₀ | 24h | 50µg | Ambient |
| Sulfur Dioxide | 24h | 20 µg/m ³ | Ambient |
| Carbon Monoxide | 1h | 35ppm | Ambient |
| Nitrogen Dioxide | 1h | 200µg/m ³ | Ambient |
| O ₃ | 8h | 100 µg/m ³ | Ambient |

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 above and include but not limited to the location. Monitoring shall be conducted during normal operations by trained personnel utilizing calibrated equipment.

- 6.8 Welding gas cylinders shall be stored and managed according to the supplier's recommendations.
- 6.9 In the event of equipment malfunction or **inefficiencies** that may result in visible emissions to air or, in the event of the malfunction leads to abnormal emissions, the operator shall:
- Investigate and undertake remedial action **immediately**;
 - Adjust the process or activity to minimise those emissions; and
 - Record the events and actions taken. This shall be submitted in the annual report.

7.0 NOISE MANAGEMENT

- 7.1 Adhere to the provisions of the **Environmental Protection (Noise Management)**

Regulations, 2000.

- 7.2 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.
- 7.3 Noise emissions from the operation shall be monitored at the property boundary to determine compliance with the Guyana National Bureau of Standards (GNBS) Guidelines for Noise Emission into the Environment.

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

80dB (Night- time (18:00 h - 06:00 h))

8.0 WATER QUALITY

- 8.1 Adhere to the provisions of the **Environmental Protection (Water Quality) Regulations, 2000.**
- 8.2 The oil-water separator at the Project shall be maintained and the GPS coordinate for this separator and its final discharge point shall be submitted to the EPA by April **30, 2023.**
- 8.3 All effluent from secondary containments at the Project shall flow through the oil-water separator and shall be in accordance with the Guyana National Bureau of Standards (GNBS) *Interim Guidelines for Industrial Effluent Discharge into the Environment*. The following allowable limits shall not be exceeded:

| Parameter | Maximum Concentration | Units |
|------------------|--|-------|
| Oil and Grease | Total Petroleum Hydrocarbon (TPH) < 40 | mg/L |
| Thermal effluent | <40 | °C |

- 8.4 Water quality monitoring results from monitoring shall be maintained and submitted as a component of the **Annual Report.**
- 8.5 Fuel/lubricants including waste oils/used oil shall not be drained from equipment onto the ground or into waterways.
- 8.6 Contaminated wastewater from greasy hands and equipment cleaning shall be collected and/or routed through the oil-water separator before discharge into the


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environment.

- 8.7 Perimeter drains shall be maintained on-site, they must be adequately sloped to collect storm flow.

9.0 HAZARDOUS WASTE (Waste Oil, Oily Rags, Etc.) MANAGEMENT

- 9.1 Adhere to the provisions of the **Environmental Protection (Hazardous Waste Management) Regulation 2000.**

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

- i. Metal Containers
- ii. Solvents and Petroleum- based products;
- iii. Waste ink, Press-wash, Oil, and Oily Absorbents

- 9.3 Hazardous waste containers shall be labelled with the following:

- i. The words "**Hazardous Waste**"
- ii. The type of waste
- iii. Beginning accumulation date

- 9.4 Waste oil containers shall be labelled with the following:

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

- 9.5 Hazardous waste shall be stored in a covered, bunded area. This area shall include the following:

- i. Signage- "**Hazardous Waste Storage Area**"
- ii. Low traffic
- iii. No floor drains
- iv. Bunded area shall provide 110% containment of the largest volume stored therein.

- 9.6 Oil-contaminated waste from servicing and maintenance activities such as rags, filters, etc. shall be collected, treated, and disposed of by an EPA Authorised Hazardous Waste Disposal Facility.

- 9.7 Hazardous waste shall be disposed of and or treated by an EPA-authorized Hazardous Waste Treatment 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 WASTE MANAGEMENT

- 10.1 In accordance with the **Environmental Protection (Litter Enforcement) Regulations 2013**, promote good sanitation and solid waste disposal practices on site. Place covered garbage receptacles, each on an impervious base and at a strategic location, within and outside the storage facility.
- 10.2 Burning of solid waste is **strictly prohibited**. All solid waste shall be disposed at an approved Solid Waste Disposal Site by an EPA Authorised Disposal Company.
- 10.3 Good housekeeping, sanitary, and hygienic practices shall be maintained at all times.
- 10.4 Waste collection areas shall be kept clean. Dry methods shall be used when cleaning around waste handling and disposal areas (e.g., sweeping, use of absorbents).

11.0 COMPLIANCE MONITORING AND REPORTING

- 11.1 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).
- 11.2 Monitor the implementation of the conditions of this Permit, insofar as they involve adherence by your employees and all third parties under your direction.
- 11.3 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.
- 11.4 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.
- 11.5 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).
- 11.6 Submit **Annual Reports** to the EPA on your compliance with this Environmental

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.

- 12.12 The EPA has the right to modify, cancel or suspend this Permit for breach of any of the terms and conditions contained herein.
- 12.13 **This Environmental Permit (Renewal & Modified) is not the final consent; all relevant Permissions shall be obtained from other regulatory bodies for continued operation.**
- 12.14 This Environmental Permit (Renewed & Modified) is effective for the period stipulated herein; **March 2023 to February 2028.**
- 12.15 This Environmental Permit (Renewed & modified) shall remain valid until **February 28, 2028**, 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.
- 12.16 This Permit must be renewed by submitting a completed Renewal Application Form for Environmental Authorisation to the Agency at least six months before this Permit expires, that is, no later than **August 31, 2027.**
- 12.17 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 the 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.
- 12.18 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 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.

Environmental Permit (Renewed & Modified) Ref. No. 20031103-BDIHP
((Issued under the Environmental Protection Act, Cap. 20:05, Laws of Guyana, the Environmental Protection (Amendment) Act, 2005, and Environmental Protection Regulations, 2000))


Signed by  on behalf of the Environmental Protection Agency.

Kemraj Parsram
Executive Director

Date

2023.03.02

I hereby accept the above terms and conditions upon which this Environmental Permit (Renewed & Modified) is granted and agree to abide by the Environmental Protection Act, Cap. 20:05, the Environmental Protection (Amendment) Act, 2005, and the Environmental Protection (Authorisations) Regulations, 2000, and any existing or forthcoming regulations, guidelines, best practices, and standards made under this Act.

| | |
|--------------|---|
| NAME: | AFESHA BURKE |
| DATE: | 31-03-2023 |
| SIGNATURE: |  |
| DESIGNATION: | ENVIRONMENT & SAFETY EXECUTIVE |



Permit on or before **March 31, each year.**

- 11.7 Report to the Agency any non-compliance(s) with the Environmental Permit:
- i. Within **twenty-four (24) hours** of the time the Holder of the Environmental Permit for Operation 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.
- 11.8 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.
- 11.9 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.

12.0 INSTITUTIONAL AUTHORITY/ LIABILITIES

- 12.1 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.
- 12.2 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.
- 12.3 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.
- 12.4 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.

- 12.5 The Permit Holder shall be liable to compensate any person who suffers any loss or damage as a result of contravening conditions 10.3 and 10.4 of this Environmental Permit, pursuant to s. 19 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.
- 12.6 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.
- 12.7 The Permit Holder shall be liable of any gross negligence or willful 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.
- 12.8 Shall 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.
- 12.9 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.
- 12.10 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, and the Environmental Protection (Amendment) Act, 2005, and Environmental Protection (Authorisations) Regulations, 2000.
- 12.11 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