



**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.:	20200918-BHEGS
Fee:	US\$500 per year
Fee paid:	US\$2500 (5 years: December 2021 - November 2026)
Address:	Deodat Dhanraj Proprietor J&K First Street Bartica Essequibo Coast.
Activity:	Construction and Operation of a Gas Station

Mr. Deodat Dhanraj, operating under the name Sir Service Station hereinafter referred to as the "Permit Holder", is hereby authorized in accordance with the Environmental Protection Act, Cap.20:05, Laws of Guyana, the Environmental Protection (Amendment) Act, 2005, and the Environmental Protection (Authorizations') Regulations, 2000, to construct and operate a Gas Station located at Buck Hall, Essequibo River, hereinafter referred to as the "Project", in a manner indicated in the Application submitted on September 18, 2020, and subject to the terms and conditions set forth herein and any forthcoming regulations, best practices, guidelines and standards relevant to this project.

Terms and Conditions for operation to be adhered to by the Permit Holder, his servant(s), agent(s) and/or sub-contractor(s):

1.0 GENERAL

- 1.1 Make an application to the Agency to vary this Environmental Permit in instances where it becomes necessary to:
- Change the construction, operation, structure, or layout of the facility and all associated buildings;
 - Change equipment, machine, apparatus, mechanism, system or technology serving the facility;
 - Change the position and design of any outlet at the point or points of discharge of effluents; or
 - Affect any other change outlined in 20(3) of the Environmental Protection (Authorisations) Regulations.

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[Signature]

- 1.2 Submit to the Agency within **three (3) months** of receipt of the Permit, an **Emergency Response Plan (ERP)** for approval. This Plan shall be communicated to staff and contractor of the facility and shall include:
- i. Accident Prevention Procedures;
 - ii. First Person Response;
 - iii. Notification Procedures;
 - iv. Location of clean-up equipment;
 - v. An analysis of potential accidents and response;
 - vi. Materials safety data sheet for all materials which could be spilled; and
 - vii. An Incident Clean-up Plan.
- 1.3 A clear sign outlining spill clean-up procedures and emergency contact numbers shall be displayed at the Gas Station at all times.
- 1.4 Utilise the land in accordance with the approved site plan, all specifications of location, pathways, reserve and boundary lines must be adhered to, unless otherwise authorized.
- 1.5 Avoid construction works between 18:00 h and 06:00 h on any day. The Permit Holder must strictly abide with the Part III of the Environmental Noise Management Regulations.
- 1.6 Adhere to the Drainage & Irrigation Laws of Guyana. Cap.64:03.
- 1.6.1 Construct adequate drainage system at the facility and ensure that the land is level and appropriately built up to avoid floods and contamination of the receiving waters; and
 - 1.6.2 Construct a perimeter drain, which shall be adequately sloped to collect storm flow.
- 1.7 Identify suitable areas on the site for material stockpile and equipment during construction.
- 1.8 All building\construction materials stored in tiers shall be stacked, racked, blocked, interlocked, or otherwise secured to prevent sliding, falling or collapse.
- 1.9 Remove all construction tools, equipment, machinery, and waste material(s) from site on the completion of construction works.
- 1.10 Avoid road traffic hazards or unnecessary inconveniences to the general public through appropriate planning and management of the construction site.
- 1.11 The gas station shall be appropriately designed for its intended purpose including but not limited to safety, life span, corrosion resistance and maintenance, ease of access, ease of refilling and with the least number of environmental impacts possible.

- 1.12 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 and/or guidelines pertaining to the operation of Gas Station.
- 1.13 The gas station shall be constructed on properties that have the minimum required setbacks distance as follows:

Aboveground (Storage) Tank (ASTs):

- i. A minimum of thirty (30) feet away from any building within the compound;
 - ii. A minimum of three hundred (300) feet away from the property line; and
 - iii. If proposed location is situated within an urban industrial/commercial area and impossible to meet requirements, then the developer must comply with the requirements outlined below with regards to Above Ground Tanks.
- 1.14 **Prior to installation of the above-ground and underground double wall storage tanks the Permit Holder shall submit the following information to the EPA:**
- i. Letter from fabricator confirming that he/she was contracted to fabricate tanks and associated works/services;
 - ii. Detailed design, construction drawings, and specifications of foundation where tanks are resting;
 - iii. Detailed design, drawings, specifications, methodology of tanks being fabricated, pipes used, valves and accessories;
 - iv. Mill Test certificates of all steel used for fabrication of tanks and also pipe specifications;
 - v. Non- Destructive Test certificate or other test to verify the quality and integrity of the welds;
 - vi. Pressure test certificate on tanks, pipes and valves; and
 - vii. Any other relevant information deemed necessary by the EPA.
- 1.15 Construct an impervious secondary containment wall around the above-ground fuel storage tanks, creating a temporary holding area in the event of accidental spillage. The containment wall shall be fully sealed to prevent spillage into the receiving drainage system.
- 1.16.1 The containment wall for areas with multiple tanks shall have the capacity to provide at least 110% containment of the largest tank.
 - 1.16.2 The containment wall for areas with solitary tank shall have the capacity to provide 110% containment of the fuel tank.
- 1.16 Corrosion control measures shall be in place to prevent the corrosion of Aboveground Storage Tanks (ASTs) steel tanks and pipe work.

- 1.17 Install a sump below the fuel dispensers to capture any spillage that may occur.
- 1.18 Pipe entries under the pump sumps shall be sealed to prevent fuel leakage into ground and surface water.
- 1.19 Pipelines from tanks to offset filling points, dispensing equipment and vent pipes below the ground surface shall be well constructed and maintained.

1.19.1 Pipelines shall not be located under buildings and shall accessible for easy maintenance.

- 1.20 At least two (2) leak detection mechanisms shall be installed:

- i. An overflow alarms on tanks;
- ii. A gauging system;
- iii. Dipstick measurements; or
- iv. Sensors installed on walls of tanks.

- 1.21 Forecourt:

1.22.1 Refueling and Fuel Delivery Area

- I. Fuel deliveries shall be supervised and must be conducted within the forecourt containment area, or in an area with separate bunding;
- II. Fuel delivery points shall be equipped with a collection trap to collect spilt fuel and divert it to a 'slop tank';
- III. All inlets to underground storage tanks shall be located within a bunded area to contain any spills resulting from discharge of fuel from tankers;
- IV. Monitoring well in the forecourt shall be located downslope of the underground tanks so the wells can be assessed.

1.22.2 Canopy

- I. Cover the fuel dispensing area with a roof that has an overhang of at least 10 degrees.
- II. Direct uncontaminated rainwater away from the canopy and other roofed areas into storm water drains.

2.0 ABOVE-GROUND STORAGE TANKS (ASTs)

- 2.1 ASTs shall be located in impervious bunds to reduce the risk of groundwater and land contamination. Bund walls shall be used to divert storm-water away from storage

areas. Storage areas shall be located at least 100 meters away from waterways and areas prone to flooding.


- 2.2 Routinely monitor and maintain ASTs to prevent leaks. Areas to inspect include tank foundation, connections, coatings, tanks walls, and piping systems.
- 2.3 All fuels and waste oils shall be managed to ensure safety in handling and the prevention of spills at the storage and operating site(s).
- 2.4 Submit an Aboveground Storage Tank Decommissioning Plan to the EPA for approval at least **fourteen (14) days** prior to closure of ASTs.
 - 2.4.1 Temporary or permanent closure of ASTs shall be conducted in accordance with the Decommissioning Plan approved by the EPA.

3.0 EMPLOYEES, OCCUPATIONAL HEALTH AND SAFETY

- 3.1 Adhere to the requirements of the **Occupational Safety and Health Act, Cap. 99:01, Laws, of Guyana.**
 - 3.1.1 Employees shall be equipped with appropriate protective gear during construction and operation such as protective headgear, respirators, safety vests, construction boots, etc.
 - 3.1.2 Maintain a well-equipped first aid kit at all primary work sites and ensure that functional communication and transportation systems are in place to respond to emergencies.
- 3.2 Practice the use of caution signs to warn against potential hazards or to caution against unsafe practices.
- 3.3 Make all employees, and third parties under your direction, aware of the conditions of the Environmental Authorisation and provide training on good environmental practices. Prepare and maintain a training file for employees which shall be submitted to Officers upon request.

4.0 WATER AND SOIL QUALITY MANAGEMENT

- 4.1 Maintain the integrity of the existing waterways 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 this type of project and shall be not be exceeded:
 - i. Total Suspended Solid (TSS) < 100 mg/L;

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- ii. Oil and Grease < 20 mg/L; and
- iii. Total Dissolved Solid (TDS) < 40 mg/L.

A water quality monitoring plan including but not limited to sampling point/s displayed on a map and frequency of sampling shall be submitted to the EPA for approval.

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. Analyses shall be submitted to the Agency as part of the Annual Report.

- 4.2 Avoid soil and water contamination from fuel, grease, waste oils and other petroleum products that might be used at the construction site. Store all oils, fuel, paints and chemicals in a designated area, away from all watercourses and drainage channels.
- 4.3 Conduct equipment refueling, maintenance and placement on an impervious base to prevent fuel spills/leaks. Oil spills shall be cleaned-up by the best available technology (BAT) to prevent runoff into any watercourse within the project's area of influence.
- 4.4 All waste water shall drain into an oil separator and sand traps prior to discharge.
- 4.5 Do not discharge waste water effluents directly into receiving waters without prior treatment; maintain an oil-water separator at a strategic location in the area through which all effluent must pass before final discharge.

OPERATION

5.0 NOISE ABATEMENT AND AIR QUALITY MANAGEMENT

- 5.1 Strictly adhere to the provisions of the **Environmental Protection (Air Quality) Regulations 2000** and the **Environmental Protection (Noise Management) Regulations, 2000**.
- 5.2 Handle and store liquid fuel in such a manner so as to prevent the emission of offensive odors to the air outside the property boundary.
- 5.3 Monitor any system malfunction or breakdown which can lead to abnormal emissions and adjust process until normal operations can be restored.
- 5.4 Comply with the Guyana National Bureau of Standards (GNBS) *Guidelines for Noise Emissions into the Environment*. Sound levels from noise-making devices shall be not exceed the limits below, at a distance of 15 metres (50ft) from the source or property boundary, whichever is closer.

Construction Limits: **90 dB** during the daytime (06:00 h - 18:00 h)
75 dB during the night-time (18:00 h - 06:00 h)

Limit the time of driving piles to daylight hours, when persons are less likely to be affected by vibration and noise nuisance.

- 5.5 All sound-making devices, such as generators, shall be suitably enclosed and constructed with materials of good insulation properties (e.g., hollow concrete blocks, insulation boards, solid clay bricks, etc.) and equipped with silencers or mufflers to reduce the noise level.
- 5.6 Exhaust stacks of the generator(s) shall be **at least 2 meters above** the generator house or the tallest building nearby, to minimise adverse fumes/soot impacts to the contiguous areas.
- 5.7 Place all equipment on foundation properly designed to ensure effective damping of vibration.
- 5.8 Implement a vapor recovery system for the off-loading of bulk fuel on site. Measures to reduce loading/off-loading emissions shall include selection of alternate loading methods and application of vapor recovery equipment.
- 5.9 Comply with the *World Health Organization (WHO) Air Quality Guidelines for Air pollutants in the Environment*, not exceeding the limits below, and not limited to the list of pollutants:
 - CO- 9 ppm (8h)
 - H₂S- 10 ppm (8h)
 - NO₂- 0.1 ppm
 - VOC- 100 ppm
- 5.10 An air quality monitoring plan including but not limited to sampling point/s displayed on a map and frequency of sampling shall be submitted to the EPA for approval.
- 5.11 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. Analyses shall be submitted to the Agency as part of the Annual Report.

6.0 WASTE MANAGEMENT

- 6.1 In accordance to the **Environmental Protection (Litter Enforcement) Regulations, 2013**, promote good sanitation and solid waste disposal practices on site; covered garbage receptacles shall be placed at strategic locations at the facility. Waste shall be collected and disposed at an approved waste disposal facility.
- 6.2 Maintain a septic tank system on site. The septic tank shall not be located within 1.5 m of a building or property boundary and shall be accessible for cleaning and de-sludging. 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.*

- 6.3 Maintain good housekeeping, sanitary and hygienic practices and the aesthetic quality of your surroundings at all times.
- 6.4 Establish and maintain a waste disposal manifest; details must include:
 - i. Type of waste produce;
 - ii. Quantity of waste; storage method, etc.

7.0 HAZARDOUS WASTE MANAGEMENT

- 7.1 Strictly adhere to the provisions of the **Environmental Protection (Hazardous Wastes Management) Regulations 2000**.
- 7.2 Waste oils recovered from oil-water separator or from servicing of generators shall be stored in a covered, bunded area to minimize adverse impacts to the environment in the event of a spillage. The bunded area shall be clearly labeled and have the capacity to provide 110% containment of the total volume of waste oils stored.
- 7.3 Store any contaminated fuel in closed leak proof containers and label "slop tanks" or 'waste fuel'.
- 7.4 Store all fuel waste above ground level in a bunded area to allow easy maintenance and leak detection.
- 7.5 Oil/fuel contaminated absorbent materials shall be appropriately stored and disposed by double wrapping in heavy duty garbage bags.
- 7.6 Appropriate clean-up equipment such as spill trays, oil spill clean-up recover pump, sorbent pads, and absorbent material shall be readily accessible to respond to any spills that may occur on site.
- 7.7 Store all fuel away from ignition sources and have '**No Smoking**' signs posted where fuel is handled or stored.
- 7.8 Refrain from draining fuel/lubricants including waste oils of any quantity from equipment onto the ground or into waterways.
- 7.9 All pumps and underground tanks shall be inspected regularly for leak detection.
- 7.10 Submit an Incident Report to the Agency within **seven (7) days** of an unplanned release or spill of fuel and/or chemicals, detailing the root cause of the spill, volume spilled, immediate action(s) taken, recommendation(s) to be implemented to avoid a

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similar event, location of all materials stored on site and notification and clean-up measure for each site of operation.

8.0 COMPLIANCE, MONITORING AND REPORTING


- 8.1. 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).
- 8.2. 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.
- 8.3. 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.
- 8.4. 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, heat or combination of any of them).
- 8.5. Submit **Annual Reports** to the EPA on your compliance with this Permit on or before **March 31**, each year.
- 8.6. 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.
- 8.7. 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.

9.0 INSTITUTIONAL RESPONSIBILITY \LIABILITIES

- 9.1 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.
- 9.2 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.
- 9.3 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.
- 9.4 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.
- 9.5 The Permit Holder shall be liable to compensate any person who suffers any loss or damage as a result of contravening conditions 9.3 and 9.4 of this Environmental Permit, pursuant to s. 19 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.
- 9.6 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.
- 9.7 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.
- 9.8 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.
- 9.9 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 to offending activity, in accordance with Section 27 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.

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- 9.10 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.
- 9.11 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.
- 9.12 The EPA has the right to modify, cancel or suspend this Permit for breach of any of the terms and conditions contained herein.
- 9.13 **This Environmental Permit is not the final consent; all relevant Permissions should be obtained from other regulatory bodies for continued operation.**
- 9.14 This **Environmental Permit** is effective for the period stipulated herein, **December, 2021 to November, 2026.**
- 9.15 This **Environmental Permit** shall remain valid until **November 30, 2026**, 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.
- 9.16 This Permit must be renewed by submitting a completed Application form for Renewal of Environmental Authorisation to the Agency at least six (6) months before this Permit expires, that is, no later than **May 31, 2022.**
- 9.17 Any late submission of the application required by Condition 10.14 beyond the date specified therein, the agency may require the Permit Holder to pay, in addition to the application fee, a late penalty fee (accruing at the time such obligation was first owed for renewal) at a rate of two thousand dollars (GY\$2,000.00) per day for every business day late, until such application is submitted to the Agency, without prejudice to any other rights of the Permit Holder in connection therewith.
- 9.18 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.

23 Dec 2021 

Signed by *Kemraj Parsram* on behalf of the Environmental Protection Agency.

Kemraj Parsram
Executive Director

Date

2021.12.14

I hereby accept the above terms and conditions upon which this Environmental Permit is granted and agree to abide by the Environmental Protection Act, Laws of Guyana, the Environmental Protection (Amendment) Act, 2005, and the Environmental Protection (Authorisations) Regulations, 2000, and any forthcoming regulations, best practices and standards made under this Act.

NAME	<i>DEOGAT DHANRAJ</i>
DESIGNATION	<i>OWNER</i>
SIGNATURE	<i>Deo Rat Dhanraj</i>
DATE	<i>23rd Dec 2021</i>

