



**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:	20100504-BMGSO
Fee:	US\$375 per year
Fee Paid:	US\$1875 (5 years: November, 2021 – October, 2026)
Addressee:	Mr. Basdeo Manman Proprietor Basdeo Manman & Company General Hardware Contracting Services & Service Complex Plots A & B, Lot 5, Adventure Essequibo Coast Region 2.
Activity:	Operation of a Gas Station, Wharf & Cement Storage Bond

Mr. Basdeo Manman, operating under the name Basdeo Manman & Company General Hardware Contracting Services & Service Complex, hereinafter referred to as the "Permit Holder", is hereby authorised in accordance with the Environmental Protection Act, Cap.20:05, Laws of Guyana, the Environmental Protection (Amendment) Act, 2005, and the Environmental Protection (Authorisations) Regulations, 2000, to operate a Gas Station, located at Plots A & B, Lot 5, Adventure, Essequibo Coast Region 2, hereinafter referred to as the "Project", in a manner indicated in the Application for Renewal of Environmental Authorization submitted on August 18, 2021, 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 the Operation Permit, Reference # 20100504-BMGSO, issued on October 31, 2019, which expired on September 30, 2021.

Terms and Conditions for operation to be adhered to by the Permit Holder, his Servants, Agent (s) and / or Sub-contractor(s):

1.0 GENERAL

- 1.1 Make an application to the Agency to vary this Environmental Permit (Renewed) 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 Make all employees and third parties under your direction, aware of the conditions of the Environmental Permit (Renewed) and provide training on good environmental practices. Annual training schedule shall be submitted in the Annual Report.

2.0 GAS STATION

- 2.1 Notify the Agency in writing and obtain its approval at least **fourteen (14) days** before any replacement of underground storage tanks. When this happens, the underground storage tanks **must** be changed to double walls tanks, and the specification **must** be submitted to the Agency.
- 2.2 Adopt and comply with the Guyana National Bureau of 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 the Service Stations.
- 2.3 Maintain a sump below each fuel dispenser to capture any spillage that may occur.
- 2.4 Pipe entries under the pump sumps shall be sealed to prevent fuel leaks.
- 2.5 Route pipelines from tanks to offset filling points, dispensing equipment and vent pipes below the ground surface. Pipelines shall not be located under buildings and there shall be free access to the pipeline system for easy maintenance.
- 2.6 Maintain an impervious secondary containment wall around above-ground fuel storage tanks. The containment wall for areas with multiple



tanks shall have the capacity to provide at least 110% containment of the largest tank, and the containment wall for areas with solitary tanks shall have the capacity to provide 110% containment of each fuel tank.

- 2.7 An electronic shut down system shall be installed as a primary leak detection mechanism, along with any one or more of the following:
- i. A gauging system;
 - ii. An overflow alarm on tanks;
 - iii. Dipstick measurements; or
 - iv. Sensors installed on walls of tank.
- 2.8 Corrosion control measures shall be in place to prevent the corrosion of underground steel tanks and pipe work.
- 2.9 Maintain an impervious drainage system around the fuel dispensers. The drain must be at least 2 meters from the dispensers and leading to the oil-water separator.
- 2.10 The Gas station shall be provided with adequate fire prevention and control equipment. This may include a smoke detection and alarm system, access to fire extinguishers, fire hydrants or sprinkler systems as appropriate.
- 2.11 Submit a groundwater monitoring plan including location and design of wells for review and approval by the Agency.
- 2.12 Install minimum of three (3) groundwater monitoring wells around the storage facility within six (6) months of receipt of this permit. The groundwater monitoring wells shall be installed by a licensed well driller company.

FORECOURT

2.13 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 that can collect any 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 area shall be located downslope of the underground tanks so the site can be assessed.

2.14 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.

UNDERGROUND STORAGE TANKS (UST)

- 2.15 All fuel tanks shall be equipped with a functional leak and overfill protection system in place as required in **condition 2.7**
- 2.16 All metallic components (such as tanks, piping, and joints) in contact with soil shall have corrosion protection. Tanks shall be placed in an inert material first, e.g., sand.
- 2.17 Submit an Underground Storage Tank Decommissioning Plan to the EPA for approval at least fourteen (14) days prior to closure of USTs.
- 2.18 Temporary or permanent closure of USTs shall be conducted in accordance with the Decommissioning Plan approved by the EPA.

ABOVE-GROUND STORAGE TANKS (AST)

- 1.19 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.
- 1.20 ASTs shall have impervious impoundments with a storage capacity of 110% of the largest storage tank.



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- 1.21 Buried piping shall be protectively wrapped and/or coated to prevent corrosion, and periodically tested for structural integrity.
- 1.22 Routinely monitor and maintain ASTs to prevent leaks. Areas to inspect include tank foundation, connections, coatings, tanks walls, and piping systems.
- 1.23 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).

3.0 WHARF

- 3.1 Avoid erosion, siltation, and sedimentation of the Essequibo River and in the vicinity of the Project Site during the operation phase of the Wharf.
- 3.2 All operations of the Wharf shall be conducted in accordance with MARAD and the Sea and River Defense and Drainage & Irrigation Laws of Guyana.
- 3.3 Ensure that employees are at all times, equipped with appropriate protective gear during construction such as protective headgear, respirators, safety vests, construction boots, etc. Employees should at all times be well protected.
- 3.4 Conduct periodic maintenance of the Wharf. Painting, resurfacing, clearing of debris, or minor repairs, should be carried out without causing physical disruption of the watercourse.
- 3.5 Maintain a vegetative buffer zone along the edge of the Essequibo River in order to provide bank stability.
- 3.6 Moore vessels at adequate depths to prevent propellers from distributing bottom sediments.
- 3.7 Spill trays shall be readily available at the wharf when off-loading and on loading fuel.
- 3.8 A marine spill kit shall be located at the Wharf at all times.



4.0 CEMENT STORAGE BOND

- 4.1 All equipment used in the Project shall be monitored and maintained in accordance with the manufacturer's specifications.
- 4.2 Servicing of machinery and transport equipment at the Project site, including but not limited to forklift and trucks, shall be **STRICTLY PROHIBITED**.
- 4.3 Emergency exits **shall not** be obstructed by material storage containers.
- 4.4 Packaged Cements **shall not** be stored on damaged, or inadequately secured racking or on damaged pallets.
- 4.5 Packaged Cements **shall not** be stored in passageways including forklift truck routes, other vehicle routes and pedestrian walkways on site
- 4.6 Cements stored in ton bags and totes shall:
 - a. Be covered to prevent exposure to dirt, dust, and moisture; and
 - b. Not hang over the side of pallets used for stacking.
- 4.7 Stacking options for cements stored in ton bags and totes shall be in accordance with one of the following:
 - i. **Pyramid Stacking** – each bag/tote above the first layer must sit on at least four (4) lower bags. Each layer is subsequently tiered inwards forming a pyramid structure,
 - ii. **Supported Stacking** - stacked bags/ totes formed against two (2) retaining walls of sufficient strength.
- 4.8 Fork Lifts used for lifting packaged cements must be free of sharp edges and protrusions.
- 4.9 Submit an updated Central Housing and Planning Authority (CH&PA) approval for the cement storage bond.

5.0 WATER QUALITY MANAGEMENT

- 5.1 Strictly adhere to the provisions of the **Environmental Protection (Water Quality) Regulations, 2000**.
- 5.2 Maintain an oil-water separator through which all effluent must pass before the final discharge.



- 5.3 Do not discharge effluent directly into receiving waters without prior treatment. Discharges from the oil water separator/s into the environment must 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 a Service Station and should not be exceeded:
- Total Suspended Solid (TSS) < 100 mg/L;
 - Oil and Grease < 10 mg/L; and
 - Total Petroleum Hydrocarbon (TPH) < 40 mg/L.
- 5.4 Method of sampling the parameters above and its frequency shall be determined by the Permit Holder. Sampling shall be conducted at the final discharge point (after the oil water separator but before the drainage system) and analyzed by a certified laboratory. Submit the results to the EPA as a component of the Annual Report.
- 5.5 Maintain an interceptor drain, which must be adequately sloped to collect storm flow.

6.0 AIR QUALITY AND NOISE MANAGEMENT

- 6.1 Strictly adhere to the provisions of the **Environmental Protection (Air Quality) Regulations, 2000 and the Environmental Protection (Noise Management) Regulations, 2000.**
- 6.2 Comply with the Guyana National Bureau of Standards (GNBS) *Guidelines for Noise Emissions into the Environment*. Sound levels from noise-making devices should not exceed the limits below, at a distance of 15 meters (50 ft) from the source or property boundary, whichever is closer:

Commercial Limits: **80 dB** [Day-time (06:00 h -18:00 h)]
75 dB [Night-time (18:00 h - 06:00 h)]

- 6.3 Enclose all sound-making devices, such as generators, in structures constructed with materials of good insulation properties (e.g., hollow concrete blocks, insulation boards, solid clay bricks, etc.), equip with silencers/mufflers to reduce noise level, and placed on properly designed foundations to ensure effective damping of vibrations.

- 6.4 Exhaust stacks of the generator shall be at least 2 meters, above the generator room, to minimise adverse fumes/soot impacts to contiguous areas.
- 6.5 Operate and service all mechanical equipment in accordance with manufacturer's specifications to ensure efficiency. Mechanical equipment shall be regularly maintained, and operate at their optimal levels to reduce the level of noise produced and minimise atmospheric emissions.
- 6.6 Implement a vapor recovery system for the offloading of bulk fuel, on site. Measures to reduce emissions include selection of alternate loading methods and application of vapor recovery equipment.
- 6.7 Implement and maintain the **Best Available Technique (BAT)** to reduce particulate matter (PM) emissions into the environment from the handling and storage of packaged cements.
- 6.8 The impervious surface roadways (including driveways into and out of the plant) and any other areas shall be maintained where there is a regular movement of vehicles, to reduce dust emissions.

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 facility. Waste must be collected and disposed of at an EPA approved waste disposal facility.
- 7.2 Utilise the best practicable means of handling, storing and disposing of all waste materials at all times.
- 7.3 Maintain a septic system on site at all times. The septic tank should not be located within 1.5 m of a building or property boundary, and should be accessible for cleaning and de-sludging. Any modification to the septic tanks 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*.
- 7.4 Maintain good housekeeping, sanitary and hygienic practices and the aesthetic quality of your surroundings at all times.
- 7.5 Burning of garbage is **strictly prohibited** on site.

8.0 ENVIRONMENTAL EMERGENCY RESPONSE

- 8.1 Provide adequate fire protection measures in accordance with approval from Guyana Fire Service.
- 8.2 All firefighting equipment such as fire extinguishers and sand buckets shall be serviced regularly and placed at conspicuous locations onsite.
- 8.3 In an emergency switch off all pumps using the automatic pump cut-off. Switches shall be readily accessible to the console attendant and be clearly marked 'Emergency Shut-off Switch'.
- 8.4 Ensure that an appropriate spill containment kit is located at the Service Station. The kit should contain absorbent material to absorb spilt oil and other spilt liquids etc. at the site for the clean-up of spills.
- 8.5 Submit to the Agency within **three (3) months** of receipt of the Permit, an **Environmental Management Plan** for approval. This Plan must be communicated to all employees and third parties and shall include but not be limited to:
- i. Accident Prevention Procedures;
 - ii. Fire 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.
- 8.6 A clear sign outlining spill clean-up procedures and emergency contact numbers shall be prominently displayed at the Gas Station, Wharf and Cement Storage Bond at all times.
- 8.7 Appropriate clean-up equipment such as spill trays, oil spill clean-up recover pump, oil spill dispersant spray system or sorbent pads shall be readily accessible to respond to any spills that may occur onsite.
- 8.8 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 similar event, location of all materials stored on site and notification and clean-up measure for each site of operation.
- 8.9 Utilized the absorbents in the spill kit to absorb as much fuel as possible when a spill (accidental release) of fuel.



9.0 FUEL, WASTE OIL AND HAZARDOUS WASTE/MATERIAL MANAGEMENT

- 9.1 Strictly adhere to the provisions of the **Environmental Protection (Hazardous Waste Management) Regulations, 2000.**
- 9.2 At all times utilise the best practicable means of handling, storing and disposing of all waste materials.
- 9.3 Prepare and submit to the Agency no later than **forty-five (45)** days after the end of the operating year, a report relating to the activities for the previous year (please see attached form). The report shall include:
- 9.4 Establish and maintain a register of hazardous materials or chemicals used or generated by your operation. Submit to the Agency biannually (June and December) a report relating to the activity of the previous months.
- 9.5 Store waste oil (recovered from oil-water separator or from servicing of generators) 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.
- 9.6 Ensure that an appropriate spill containment kit is located at the Service Station. The kit should contain absorbent material to absorb spilt oil and other spilt liquids.
- 9.7 Store any contaminated fuel in closed leak proof containers and label "slop tanks" or 'waste fuel'.
- 9.8 Store all fuel waste above ground level in a bunded area to allow easy maintenance and leak detection.
- 9.9 Ensure that oil/fuel contaminated absorbent materials are appropriately stored and disposed of by double wrapping in heavy duty garbage bags. All contaminated absorbent materials must be disposed of at an authorized Hazardous Waste Disposal Facility.
- 9.10 Store all fuel away from ignition sources and have '**No Smoking**' signs posted where fuel is handled or stored.
- 9.11 Refrain from draining fuel or lubricants including waste oils of any quantity from equipment onto the ground or into waterways.



10.0 COMPLIANCE, MONITORING AND REPORTING

- 10.1 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).
- 10.2 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.
- 10.3 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, odor, sound, vibration, heat or combination of any of them).
- 10.6 Submit **Annual Reports** to the EPA on your compliance with this Permit on or before **March 31**, each year.
- 10.7 Report to the Agency any non-compliance(s) with the Environmental Permit (Renewed):
 - i. Within **twenty-four (24) hours** of the time the Holder of the Environmental Permit (Renewed) 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 (Renewed) 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.



11.0 INSTITUTIONAL RESPONSIBILITIES/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 (Renewed), pursuant to s. 19 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.
- 11.5 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.
- 11.6 The Permit Holder shall be liable to compensate any person who suffers any loss or damage as a result of contravening conditions 7.3 and 7.4 of this Environmental Permit (Renewed), pursuant to s. 19 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.
- 11.7 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.
- 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.
- 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 construction 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.
- 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 (Renewed) is not the final consent; all relevant Permissions should be obtained from other regulatory bodies for continued operation.**
- 11.14 This **Environmental Permit (Renewed)** is effective for the period stipulated herein **(November 2021 to October 2026)**.
- 11.15 This **Environmental Permit (Renewed)** shall remain valid until, **October 31, 2026**, unless otherwise cancelled, suspended, 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.
- 11.16 This Permit must be renewed by submitting a completed Application Form for Renewal of Environmental Authorisation to the Agency at least six months before this Permit expires, that is, no later than **April 31, 2026**.
- 11.17 The Permit Holder shall provide to the Agency yearly, updated contact information and updated documentations for the Gas Station.
- 11.18 Any late submission of renewal application(s) after the specified date as stated above, the agency 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 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.

- 11.19 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
Agency.



on behalf of the Environmental Protection

Date

2021. 11. 11

I hereby accept the above Terms and Conditions upon which this Environmental Permit (Renewed) 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 or forthcoming regulations, standards and best practices made under this Act.

NAME	<u>Basdeo Murrain</u>
DESIGNATION	<u>Owner</u>
DATE	<u>12TH Nov 2021</u>
SIGNATURE	<u>R. Murrain</u>

