



**Environmental
Protection
Agency**

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Operation Permit

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.:	20190712-CDPDD
Fee:	Medium (C1) - US \$500 per year
Fee Paid:	US \$2,500 for Five (5) years – December 2020 to November 2025)
Addressee:	Demerara Distillers Limited (DDL) Plantation Diamond, East Bank Demerara.
Activity:	Processing and Storage of Carbon Dioxide Gas

Demerara Distillers Limited, 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 Regulations, 2000, for the processing and storage of a Carbon Dioxide Gas Plant located at Plantation Diamond, East Bank Demerara, hereinafter referred to as the “Project”, in a manner indicated in the Application submitted on July 12, 2019, 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 applicable laws, guidelines and standards relevant to this project.

Terms and Conditions for operation to be adhered to by the Permit Holder, His Servants, Agents and/or Sub-Contractor(s):

1.0 GENERAL OPERATION

1.1 Notify the Agency in writing and obtain its approval for **ANY** proposed changes in the Carbon Dioxide Facility **at least fourteen (14) days before making the change**. The notification shall contain a **description of the proposed change in operation**. It is not necessary to make such a notification if an **Application to vary** this Permit has been made and the Application contains a description of the proposed change. In this condition ‘**change in operation**’ means a change in the nature or functioning, or an extension, of the installation, which may have consequences for the environment including but not limited to the following:

- i. Changes in construction, structure, or layout of the facility and all associated buildings.
- ii. Installation of new and/or changes to equipment, machine, apparatus, mechanism, system or technology serving the facility.

- iii. Any technology used or installed at the facility from which effluent may be discharged.
- iv. Any other circumstance or condition prescribed by Regulation 20(3) of the Environmental Protection (Authorisations) Regulations.

1.2 Employees shall be equipped with Personal Protective Equipment relevant to the occupational tasks during operation. These Personal Protective Equipment may include but not limited to:

- Safety helmets;
- Protective respiratory devices
- Safety boots with ankle support;
- Gloves with reinforced palms and fingers;
- Eye protections; tightly fitted safety goggles.

(Employees should at all times be well protected)

1.3 Guyana Fire Service Approval shall be maintained annually and shall be submitted as a component of the Annual Environmental Report in **condition 6.6**.

1.4 A fully functional First Aid Kit shall be maintained on site.

1.5 A register of the types and quantities of materials stored to support the operation shall be maintained on site. Registered information shall be submitted to the EPA as a component of the required **Annual Report** required in **condition 6.6**.

1.6 Unauthorised access to chemical storage area at the facility shall be restricted and informed by signage and security measures.

1.7 Hazardous materials shall be stored in accordance to the manufacturer's directions or Safety Data Sheet (SDS) instructions.

1.8 Pipe works shall be colour-coded and labelled with directional arrow indicating direction of flow.

1.9 Maintenance of equipment and pipelines shall be conducted in accordance to manufacturer's specifications. Maintenance records shall be submitted as a component of the **Annual Report** required in **condition 6.6**.

1.10 Emergency spill cleanup kit/s shall be maintained at the facility for response to potential spills. Kit/s should contain absorbent materials, drain seals and other appropriate tools for clean-up.

2.0 WATER QUALITY

- 2.1 Adhere to the provisions of the **Environmental Protection (Water Quality) Regulation 2000.**
- 2.2 Discharges of effluent from water scrubbers, compressors, liquefying unit and wash down water from the facility 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	Daily Maximum Concentration	Units	Sample Type	Frequency of Analysis
pH	5.0 – 9.0	mg/L	Grab	Quarterly
Temperature	<40	mg/L	Grab	
Biological Oxygen Demand (BOD ₅)	<100	mg/L	Grab	
Chemical Oxygen Demand (COD)	<250	mg/L	Grab	
Oil and Grease	<10	mg/L	Grab	

Grab samples of effluent shall be collected quarterly at the final discharge point of the Carbon Dioxide Facility. GPS Coordinates for the final discharge point shall be submitted to the Agency as a component of the **Annual Report** required in **Condition 6.6.**

- 2.3 Sampling Methodology shall be conducted in accordance with EPA's approved process. Analysis shall be conducted by a certified and accredited laboratory.
- 2.4 The Sampling Methodology shall be submitted to the EPA for review and approval by **January 31, 2021.**
- 2.5 Grab samples shall representative of all effluent discharged from the facility.
- 2.6 Drainage system shall be kept flowing and free of debris and vegetation. Scheduled cleaning of the drainage network and the immediate environment shall be conducted.

3.0 AIR QUALITY AND NOISE MANAGEMENT

- 3.1 Adhere to the provisions of the **Environmental Protection (Noise Management and Air Quality) Regulations, 2000.**
- 3.2 All machines and equipment shall be serviced in accordance to Manufacturer's specifications to ensure efficiency and reduce the level of noise produced. Maintenance reports shall be submitted as a component in the **Annual Report.**
- 3.3 Comply with the Guyana National Bureau of Standards (GNBS) Guidelines for Noise Emission into the Environment at a distance of 15 m (50 ft) from the source or at the property boundary, whichever is closer.

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

- 3.4 Annual **sound level** monitoring shall be conducted during operational activities. Sampling shall be done at the boundaries of the property. All records of monitoring shall be maintained and submitted as a component of the **Annual Report** required in **condition 6.6.**

4.0 WASTE MANAGEMENT

- 4.1 In accordance with the Environmental Protection (Litter Enforcement) Regulations, 2013, promote good sanitation and solid waste disposal practices on site; covered garbage receptacles must be placed at strategic locations at the facility. Waste must be collected and disposed of at an approved waste disposal facility.
- 4.2 Waste materials shall not be burnt on site. All solid waste shall be disposed at an approved Solid Waste Disposal Site by an EPA Authorised Waste Disposal Company.
- 4.3 Solid waste receptacles shall be secured when not in use.

5.0 HAZARDOUS WASTE MANAGEMENT

- 5.1 Adhere to the provisions of the Environmental Protection (**Hazardous Waste Management**) Regulations 2000.
- 5.2 All hazardous waste shall be stored accordingly:
- a) **Sealed Plastic Containers**
 - i. Water- based wastes
 - ii. Fountain Solutions, Pre- Press
 - b) **Sealed Metal Containers**
 - i. Solvents and Petroleum- based products
 - ii. Waste ink, Press-wash, Oil and Oily Absorbents

- 5.3 All hazardous waste containers shall be labelled with the following:
- i. The words "**Hazardous Waste**"
 - ii. The type of waste
 - iii. Beginning accumulation date-
- 5.4 All expired hazardous materials shall be returned to source for treatment and/or disposal.
- 5.5 All 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. Impervious surface
 - v. Provides 110% containment of the largest volume contained therein.
- 5.6 All hazardous waste shall be treated and or disposed of by an EPA authorised Hazardous Waste Treatment or Disposal Facility. Waste Manifests for each disposal or treatment of waste shall be submitted in the **Annual Report** required in **condition 6.6**.

6.0 COMPLIANCE MONITORING AND REPORTING

- 6.1 Notify the Environmental Protection Agency **within one (1) hour** of the occurrence of any environmental emergencies (e.g. oil spills, hazardous materials/wastes, chemicals 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).
- 6.2 The Company shall respond to all environmental emergencies (e.g. fuel spills, fires, etc.) in accordance with the Environmental Response Plan (ERP) submitted to the EPA.
- 6.3 Make all employees, and third parties under your direction, aware of the conditions of the Environmental Authorisation and provide training on good environmental practices. Annual training schedule shall be submitted in the **Annual Report** referred to within condition **6.6**.
- 6.4 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.
- 6.5 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.
- 6.6 Submit **Annual Reports** to the EPA on the progress of the operation and compliance with the conditions under which this Permit was granted on or before **March 31** each

year.

6.7 Report to the Agency any non-compliance(s) with the Operation Permit:

- I. Within **twenty-four (24) hours** of the time the Holder of the Environmental Authorization for Operation becomes aware of the non-compliance, the anticipated manner in which it may endanger human health or the environment.
 - II. Within **seventy-two (72) hours**, submit to the Agency a written report containing a description of the non-compliance, its cause and the period of non-compliance including exact dates and time.
 - III. Submit a report to the Agency indicating the reasons and the anticipated time it is expected to continue if the non-compliance has not been corrected.
- 6.8 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.
- 6.9 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.

7.0 INSTITUTIONAL AUTHORITY/ LIABILITIES

- 7.1 The EPA reserves the right to conduct regular inspections of the Permit Holder's operation as part of its monitoring and enforcement requirements under the Environmental Protection Act, Cap. 20:05, the Environmental Protection (Amendment) Act, 2005, and the Environmental Protection Regulations, 2000.
- 7.2 The EPA reserves the right to review/amend the conditions attached to this Permit which also includes the review and/or amendment of permit fees in consideration of any changes in fee schedule as determined by the Agency for projects of this nature.
- 7.3 The Permit Holder, his Servants, Agents and/or Sub-Contractor(s) 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 s.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.
- 7.4 The EPA shall have the right to cancel or suspend this Permit for breach of any of the terms and conditions contained herein.


7.5 The Permit Holder, his Servants, Agents and/or Sub-Contractor(s) shall be strictly jointly and severally liable as follows:

- a. For any activity that causes, or is likely to cause pollution of the environment, unless the person takes all reasonable and practicable measures to prevent or minimise any resulting adverse effect, in accordance with Section 19(1)(a) of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.
- b. For any activity which results in the discharge, release or entry into the environment of any contaminant in any amount, concentration or level in excess of that prescribed by the regulations or stipulated by this Permit, in accordance with Section 19(1)(b) of the Environmental Protection Act, Cap. 20:05 Laws of Guyana.
- c. The discharge or release of contaminants, such as hydraulic fluids, lubricants, fuel, or other industrial fluids relative to the Project, which are not stipulated herein, or by Regulations under the Environmental Protection Act, are strictly prohibited. Any such discharge or release shall be a violation of Section 19(1)(b) of the Environmental Protection Act.
- d. For the compensation of any Party who suffers any loss or damage as a result of the project. (s.19(3)(e)) Environmental Protection Act, Cap. 20:05, Laws of Guyana.
- e. For any material or serious environmental harm caused by pollution of the environment, whether intentionally or recklessly, in accordance with section 39 (1), (2), (3) and (4) of the Environmental Protection Act, 20:05, Laws of Guyana.
- f. Any gross negligence or wilful misconduct resulting in serious risk, or adverse effects to the marine environment, biodiversity, protected species and natural habitat with respect to any release or discharge, spill, contaminant fluids, oil, or lubricants from any facilities permitted under this project.
- g. For the payment of all costs and expenses related to the assessment of damage and investigations required, as result of any pollution incidents attributable to the activity for which this Permit has been issued.

7.6 The Agency (EPA) shall notify the Permit Holder immediately of any written claim or notice sent by any Complainant seeking loss or damage for negligence as a result of the Permit Holder's lack of due care and diligence.

7.7 Should the Permit Holder contravene or is likely to contravene any condition of this Permit, the Agency (EPA) may serve him an enforcement notice in accordance with s. 26 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.

- 7.8 Where it appears to the Agency (EPA) that the Permit Holder is engaged in any activity that may pose serious threat to natural resources, serious pollution of the environment or any damage to public health, the EPA shall issue to the Permit Holder a Prohibition Notice, which may include an order to immediately cease the offending activity. [S. 27 Environmental Protection Act, Cap. 20:05, Laws of Guyana.
- 7.9 The Permit is effective for the period stipulated herein **December 2020 to November 2025**.
- 7.10 This Operation Permit shall remain valid until **November 30, 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.
- 7.11 This Permit must be renewed by submitting "an Application for Renewal of Environmental Authorisation to the Agency at least six (6) months before this Permit expires, that is, no later than **June 30, 2025**."
- 7.12 Any late submission of the application required by Condition 7.10 beyond the date specified therein, shall 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.
- 7.13 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.




Date 2020. 12. 22

Operation Permit-Ref #.20190712-CDPDD

Issued under the Environmental Protection Act, Cap. 20:05, Environmental Protection (Amendment) Act, 2005, and the Environmental Protection (Authorisations) Regulations, 2000.

I hereby accept the above terms and conditions upon which this Operational Permit 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, in any forthcoming regulations, guidelines, best practices and standards made under this Act.

NAME	SHARON SUE-HANG
DATE	2020 - 12 - 23
SIGNATURE	
DESIGNATION	DIRECTOR - TECHNICAL SERVICES.

