



**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.:	20210504-VGMLB
Fee:	Medium (C1) i.e., US\$500 per year
Fees Paid:	US\$500 for one (1) year (November, 2022 – October, 2023)
Addressee:	Mr. Vijay Gangaram Managing Globe Manufacturing & Drug Company Limited 214, Yubani Avenue, Eccles East Bank Demerara
Activity:	Operation of Bleach (Marvex) Manufacturing and Storage of Bleach Production Chemicals



Globe Manufacturing & Drug Company Limited, hereinafter referred to as the “Permit Holder”, is hereby authorised in accordance with the Environmental Protection Act, Cap. 20:05, the Environmental Protection (Amendment) Act, 2005, and the Environmental Protection (Authorisations) Regulations, 2000, for the Operation of Bleach (Marvex) Manufacturing and Storage of Bleach Production Chemicals, at 40 and 41, Industrial Area, Beterverwagting, East Coast Demerara hereinafter referred to as the “Project”, in a manner indicated in the Application for Environmental Authorisation submitted on May 04, 2021, and subject to the terms and conditions set forth herein under the Environmental Protection Act, Cap. 20:05, Laws of Guyana, existing and/or forthcoming Regulations made under the said Act, and/or any other applicable laws, guidelines, best practices and standards relevant to this project.

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

1.0 GENERAL 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

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- discharge of effluents; or
- iv. effect any other change outlined in 20(3) of the Environmental Protection (Authorisations) Regulations.

- 1.2 Guyana Fire Service Approval shall be maintained and a copy of the approval shall be submitted to the EPA.
- 1.3 Fire prevention and control equipment shall be maintained in accordance with the Guyana Fire Service Approval.
- 1.4 Emergency spill clean-up kits shall be maintained at the project for response to spills. Kits must contain absorbent materials, drain seals and other appropriate tools for clean-up. Kits must be readily available and clearly identified at the Project.
- 1.5 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 kept and submitted to the Agency upon request.
- 1.6 **The Permit Holder is required to submit to the EPA upon receipt, the requisite approvals from the Central Housing and Planning Authority (CH&PA) and updated approvals from any other authority with jurisdiction and oversight over the Project.**
- 1.7 Adhere to the requirements of the **Occupational Safety and Health Act, Cap. 99:01, Laws of Guyana.**
- 1.8 Adhere to the **Pesticides and Toxic Chemicals Control Act 2000.**

2.0 BLEACH (Marvex) MANUFACTURING AND BOTTLING OPERATION

- 2.1 A Standard Operating Procedures (SOPs) for the manufacturing of bleach shall be established and maintained and shall be made available to the EPA upon request.
- 2.2 All employees shall be trained on the SOP for the manufacturing of bleach. Annual training records shall be maintained on-site and made available to the EPA upon request.
- 2.3 Install secondary containment around bleach mixing, bottling area and filtration tanks.
- 2.4 All tanks, pipes and valves at the Project shall be labelled with the contents and color-coded in keeping with safety procedures. Pipes shall be marked with arrows depicting directional flow.
- 2.5 Servicing and maintenance of all critical equipment, tanks, valves and pipe lines shall be conducted in accordance to manufacturer's specification. Maintenance records shall be maintained and made available to the EPA upon request.

3.0 STORAGE OF BLEACH PRODUCTION CHEMICALS (CAUSTIC SODA & CHLORINE GAS)

- 3.1 Chemicals shall be stored in accordance with the manufacturer's directions or Material Safety Data Sheet (MSDS) instructions.
- 3.2 Material Safety Data Sheets for chemicals shall be readily available and easily accessible at all times at the Project and in company Vehicles.
- 3.3 Chemicals shall be stored away from non-hazardous materials.
- 3.4 Chemicals shall be segregated and stored in accordance with their hazard characteristics compatibility e.g., toxic, corrosive, acid, etc.
- 3.5 Chemical containers shall be clearly labelled in accordance with the Globally Harmonized System of Classification and Labelling. The following must be evident:
 - i. Signal Word;
 - ii. GHS Symbols- (Hazard Pictograms);
 - iii. Manufacturer Information;
 - iv. Precautionary Statements/ First Aid;
 - v. Hazard Statements; and
 - vi. Product Name or Identifiers.
- 3.6 Chemicals **shall not** be stored on damaged, or inadequately secured racking or on damaged pallets to minimize the risk of spills.
- 3.7 A register of the quantities of chemicals stored at the Project shall be established and maintained. Registered information shall be maintained on site and made available to the EPA upon request.
- 3.8 All employees involved in the management of chemicals shall be trained on Hazardous Material Communication and Emergency Preparedness Response. Training reports shall be maintained on site and made available to the EPA upon request.

4.0 AIR QUALITY AND NOISE MANAGEMENT

- 4.1 Adhere to the provisions of the **Environmental Protection (Noise Management and Air Quality) Regulations, 2000.**
- 4.2 Air quality monitoring shall be conducted continuously at stack conditions to assess the levels of the following air pollutant, in accordance with Australia air Quality Guidelines 2015:

Air Pollutant	Time/ Duration	Maximum Level	Permissible
Chlorine Gas	Continuous	3ppm	

Monitoring shall be conducted during normal operations by trained personnel utilizing calibrated equipment. The Permit Holder shall determine an air quality monitoring plan and submit this plan along with the air quality test results to the Agency as part of the Annual Report.

- 4.3 In the event of equipment malfunction or **inefficiencies** which may result in emissions to air or, in the event of the malfunction leads to abnormal emissions, the operator shall:
- 4.3.1 Investigate and undertake remedial action **immediately**;
 - 4.3.2 Adjust the process or activity to minimize those emissions; and
 - 4.3.3 Record the events and actions taken. This shall be submitted in the annual report.

5.0 NOISE QUALITY MANAGEMENT

- 5.1 Adhere to the provisions of the **Environmental Protection (Noise Management) Regulations, 2000**.
- 5.2 Noise emissions shall be monitored at the Project's boundary to determine compliance with **Guyana National Bureau of Standards (GNBS) Guidelines for Noise Emissions** into the Environment, not exceeding the **Industrial Limits** listed below:

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

A **Noise 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 by **January 31, 2023**.

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.

- 5.3 All equipment and machinery shall be placed upon foundations properly designed to ensure effective damping of vibrations.
- 5.4 All significant noise-producing equipment, such as generators, shall be equipped with appropriate silencers or mufflers and/or are 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.

6.0 WATER QUALITY

- 6.1 Adhere with the provisions of the **Environmental Protection (Water Quality) Regulations, 2000**.

- 6.2 Construct and maintain a sump by **January 31, 2023** for the collection of effluent produced by the facility.
- 6.3 Install the Best Available Technology (BAT) for treatment of effluent in collection system.
- 6.4 Discharge from the sump into the environment should be in accordance with the Guyana National Bureau of Standards (GNBS) *Interim Guidelines for Industrial Effluent Discharge into the Environment*. The following allowable limits should not be exceeded:

Parameter	Maximum Concentration	Unit
Chemical Oxygen Demand (COD)	<250	mg/L
Chloride (Cl)	<0.2	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 by **January 31, 2023**.

Monitoring of the parameter 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.

7.1 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.
- 7.2 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.
- 7.3 Good house-keeping, sanitary, and hygienic practices shall be maintained at all times. The facility's surroundings shall be kept free of vegetation and litter.
- 7.4 Promote waste minimisation and the reuse and/or recycling of waste and other materials where practical.
- 7.5 Waste collection areas shall be kept clean. Dry methods shall be used when cleaning around waste handling and disposal areas (e.g., sweeping, use of absorbents).

8.0 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 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**.
- 8.3 Monitor the implementation of the conditions of this Permit, insofar as they involve adherence by your employees and all third parties under your direction.
- 8.4 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.
- 8.5 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.
- 8.6 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).
- 8.7 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.
- 8.8 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 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.
- 8.9 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.

- 8.10 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.


9.0 INSTITUTIONAL AUTHORITY/ 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 wilful misconduct caused by the Permit Holder, his Servants and/or Agents, to the environment, biodiversity, protected species and natural habitat with respect to any release, discharge, or spill, of contaminant fluids, oil or lubricants.
- 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 the offending activity, in accordance with Section 27 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.

- 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 The Environmental Permit is effective for the period stipulated herein from **November, 2022 to October, 2023.**
- 9.15 This Environmental Permit shall remain valid until **October, 2023**, unless otherwise suspended, canceled, 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.
- 9.16 This Permit shall be renewed by submitting a completed *Application Form for Environmental Authorisation* (Environmental Permit) to the Agency at least six months before this Permit expires, that is, no later than **April 30, 2023.**
- 9.17 Any late submission of renewal application(s) after the specified date as stated above, may require the Permit Holder to pay, in addition to the renewal fee, a late penalty fee (accruing at the time such obligation was first owed for renewal) at a rate of **two thousand dollars (\$2,000.00) per day for every day late, until such renewal application is submitted to the Agency**, without prejudice to any other rights of the Permit Holder in connection therewith.
- 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.

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

Date 2022. 11. 30

I hereby accept the above terms and conditions upon which this Environmental Permit is granted and agree to abide by the Environmental Protection Act, Cap. 20:05, 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	LATCHMAN RAMTANUL
DATE	05/12/2022
SIGNATURE	Latchman Ramtanhul
DESIGNATION	DATABASE OFFICER



