



**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.: | 20031114- RICBF |
| Fee: | Large (C1)-US\$1500 per year |
| Fees Paid | US\$4500 for Three (3) years- (June 2023 – May 2026) |
| Addressee(s): | Mr. Maurice Gajadhar Chairman Rudisa Group of Companies Lot 6 Providence East Bank Demerara |
| Activity: | Construction and Operation of a Cement Bagging Plant |

Supply Cement Inc., hereinafter referred to as the "Permit Holder", is hereby authorised in accordance with the Environmental Protection Act, Cap 20:05 Laws of Guyana, Environmental Protection (Amendment) Act, 2005, and the Environmental Protection (Authorisations) Regulations, 2000, to Construct and Operate a Cement Bagging Plant at Lot 12, Supply, East Bank Demerara, hereinafter referred to as "the Project", in a manner indicated in the Application for Renewal of Environmental Authorisation submitted on November 25, 2022, 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 other applicable laws, best practices, guidelines and standards relevant to this project.

This is a Renewal of Environmental Permit, Reference No. 20031114-RICBF issued on June 8, 2021 and expired on May 31, 2023.

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

1.0 GENERAL

- 1.1 Make an application to the Agency to vary this 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;

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- 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 All employees and third parties under your direction shall be made aware of the conditions of the Environmental Authorisation.
- 1.3 The Permit Holder shall provide training on good environmental practices. Annual training records shall be maintained on-site and made available to the EPA upon request.
- 1.4 Standard Operating Procedures (SOPs) for Safe Operation of the Cement Bagging Plant and other associated equipment shall be established and maintained.
- 1.5 All employees shall be trained on these SOPs outlined in condition 1.4 above. Training records shall be maintained and submitted to the EPA upon request.
- 1.6 A well-equipped first aid kit shall be provided at the work site, including functional communication and transportation systems to respond to emergencies.
- 1.7 Fire prevention and control equipment shall be maintained in accordance with the **Guyana Fire Service Approval**.
- 1.8 Adhere to the requirements of the **Occupational Safety and Health Act, Cap. 99:01, Laws, of Guyana**.
- 2.0 CONSTRUCTION**
- 2.1 Land clearing and disturbance shall be limited to areas where immediate work is taking place.
- 2.2 Construction works shall **not be executed between 18:00 hrs. to 06:00 hrs.**, on any day, close to communal areas unless, approval is sought from the EPA. This requirement does not apply for large concrete pours or asphalt laying and earth removal where work in the early morning and late evening is required.
- 2.3 Areas for construction material stockpiles and equipment shall be clearly identified. Stockpile areas shall be downwind to avoid materials being dispersed by wind to sensitive areas. Loading and offloading activities shall, as far as possible, also be confined to this location.
- 2.4 Temporary stockpiles shall not exceed **twenty-four (24) hours** before being removed, or transferred to the designated stockpiling areas established by Condition 2.3.
- 2.5 Temporary stockpiles of construction materials, including excavated waste shall be

stored in a secured, designated area, and protected from wind and water erosion.

- 2.6 Stockpiles shall not exceed the height of parameter fence.
- 2.7 Stockpiles, including dusty materials transported to, from and within the site shall be enclosed or covered to reduce air borne emissions. Where this is not practical owing to frequent usage, employ wet suppression methods such as watering or erect dust screens/fences to control emissions.
- 2.8 Install a silt fence **at least 3 meters** from the boundary of any canal, drain or river to prevent any possible contamination from construction material. The height of the silt fence shall be **no less than 3 meters**; the distance between fence posts shall **not exceed 1.2 meters (4 ft.)**, and fence posts shall be installed at a depth of **at least 0.6 meters (24 inches)**.
- 2.9 Where feasible, pre-mixed, 'ready-mixed' concrete shall be used to reduce dust emissions caused by on- site preparation.
- 2.10 Measures shall be implemented for the removal of any contamination and or siltation of drains during construction.
- 2.11 All construction equipment and machinery shall be maintained in accordance to manufacturer's specification to avoid mechanical failures and abnormal noise pollution. Logs and records signed by the appropriate inspecting personnel shall be maintained and made available for inspection by the EPA upon request.
- 2.12 All cutting of wood and mixing of cement shall be done at least 15m from the perimeter drains to minimise pollution.
- 2.13 All oils, lubricants, and fuel shall be handled, managed (including refueling of equipment and machinery), and stored on impervious surfaces within secondary contained areas.
- 2.14 The land shall be utilised in accordance with the Site Plan & Elevation Views Design submitted to the Agency. All specifications of location, pathways, reserve and boundary lines must be adhered to, unless otherwise authorised.
- 2.15 All dusty activities on the construction site shall be re- scheduled where possible if high-wind conditions are encountered.

3.0 OPERATION OF CEMENT BAGGING PLANT

- 3.1 An automated system shall be maintained to support the manual shut-off of the Cement Bagging Plant in cases of emergencies.
- 3.2 Cement transfer equipment shall at all times be equipped with dust collectors to collect residual dust particles emitted during the transfer process.

- 3.3 Servicing and maintenance of the Cement Bagging Plant, Generator(s), and other equipment shall be conducted in accordance with the manufacturer's specification. Maintenance records shall be maintained and made available to the EPA upon request.
- 3.4 The Cement Bagging Plant, trucks, generators, and other associated equipment shall at all times be mounted or parked and serviced on impervious bases, to prevent fuel spills and leaks from entering the soil.
- 3.5 Clear signage and security measures shall be implemented to keep unauthorized persons from accessing restricted areas.

Storage of cement

- 3.6 Silos point of inlets and outlets shall be monitored to ensure there are **no signs of visible emission** of cement particles.
 - 3.6.1 If emissions of particulate matter are visible during silo filling, the operation of the plant shall cease; the cause of the problem should be rectified prior to the restart of the operation.

4.0 AIR QUALITY

- 4.1 Adhere to the provisions of the **Environmental Protection (Air Quality) Regulations, 2000.**
- 4.2 All mechanical equipment shall be operated and maintained in accordance with manufacturer's specifications at all times. Additionally, ensure that mechanical equipment work at their optimal levels to minimise atmospheric emissions.
- 4.3 Best Available Technologies (BATs) shall be implemented to reduce particulate matter (pm) emissions into the environment.
- 4.4 The Cement Bagging Plant shall be established within an enclosed facility/building to prevent particles from becoming airborne.
- 4.5 All spillages which may give rise to dust emissions should be cleaned **promptly**. Dry handling of dusty spillages should not be permitted other than in fully enclosed buildings.
 - 4.5.1 In the events of a major spillage, it should be dealt with on the same day that it occurs, and measures to minimise emissions, such as wetting the surface to create a crust, should be taken immediately.
- 4.6 Driveways and passageways within the Project shall be maintained with an impervious material to reduce dust emissions.
- 4.7 An air quality monitoring plan shall be established and submitted to the EPA by **July 11, 2023** for approval.

- 4.8 Ambient air quality monitoring shall be conducted annually at the boundary of the property to assess the levels of the following air pollutants, in accordance with the WHO Air Quality Guidelines 2005:

| No. | Air Pollutant | Averaging Time | Maximum Permissible Level | Type of Monitoring |
|-----|-------------------------------------|----------------|---------------------------|--------------------|
| 1. | Carbon Monoxide (CO) | 1 h | 35 ppm | Ambient |
| 2. | Nitrogen Dioxide (NO ₂) | 1 h | 200 µg/m ³ | Ambient |
| 3. | Sulfur Dioxide (SO ₂) | 24 h | 20 µg/m ³ | Ambient |
| 4. | PM _{2.5} | 24 h | 25 µg/m ³ | Ambient |
| 5. | PM ₁₀ | 24h | 50 µg/m ³ | Ambient |

- 4.9 Monitoring shall be conducted during normal operations by trained personnel utilising calibrated equipment.

5.0 NOISE QUALITY

- 5.1 Adhere to the provisions of the **Environmental Protection (Noise Quality) Regulations, 2000**.
- 5.2 All significant noise-producing equipment, such as generators, the bagging plant, etc. 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. In addition, ensure all equipment and machinery are placed on a foundation properly designed to ensure effective damping of vibrations.
- 5.3 Noise emissions shall be monitored annually at the Project's boundary or at distance of 15 m (50 ft) from the source to determine compliance with **Guyana National Bureau of Standards (GNBS) Guidelines for Noise Emissions** into the Environment, not exceeding the **Residential Limits** listed below:

Residential Limits: 75 dB (Day-time (06:00 h -18:00 h)
60dB (Night- time (18:00 h - 06:00 h)

- 5.4 Records of all monitoring exercises shall be kept and submitted to the Agency within the **Annual Report** or upon request.
- 5.5 Monitoring shall be conducted during normal operations by trained personnel utilising calibrated equipment.

6.0 WATER QUALITY

- 6.1 Adhere to the provisions of the **Environmental Protection (Water Quality) Regulations, 2000.**
- 6.2 Discharge of untreated wastewater into the surrounding waterways is **strictly prohibited.**
- 6.3 All wastewater (concrete washout) shall be directed to the **sedimentation pond** for collection and treatment.
- 6.3.1 Dried sediments shall be collected and reused in the batching process if applicable.
- 6.3.2 Discharge of sediments into waterways is **strictly prohibited**, where applicable this can be used in landfills.
- 6.4 The project shall conduct annual monitoring of the existing waterways to ensure the integrity of the waterways. Discharges 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 are the allowable limits for the general environment and should not be exceeded:
- pH 5.0-9.0;
 - Temperature < 40 °C;
 - Biological Oxygen Demand (BOD₅) < 50 mg/L;
 - Chemical Oxygen Demand (COD) < 250 mg/L;
 - Total Suspended Solid (TSS) < 50 mg/L; and
 - Oil and Grease < 10 mg/L.
- 6.5 Drainage systems shall be maintained and capable of handling the probable maximum precipitation during a storm event.
- 6.6 Storm water drains shall be kept flowing and free of debris and vegetation. Scheduled cleaning of the drainage network and the immediate environment shall be conducted.

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.
- 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 spill, 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 Monitor the implementation of the conditions of this Permit, insofar as they involve adherence by your employees and all third parties under your direction.
- 8.3 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.
- 8.4 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.
- 8.5 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).
- 8.6 Submit an **Annual Report** to the EPA on your compliance with this Environmental Permit on or before **March 31, each year**.
- 8.7 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 Authorisation 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.
- 8.8 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.

- 8.9 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.

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 7.3 and 7.4 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 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 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.
- 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 reserves 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; **June 2023 to May 2026.**
- 9.15 This Environmental Permit shall remain valid until **May 31, 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 Renewal Application Form for Environmental Authorisation to the Agency at least six months before this Permit expires, that is, no later than **November 30, 2025.**
- 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 (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.
- 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

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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 2023.04.17

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, the Environmental Protection (Amendment) Act, 2005, and the Environmental Protection (Authorisations) Regulations, 2000, and any forthcoming regulations, guidelines, best practices and standards made under this Act.

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| NAME | LAURICE R. GAJADHAR |
| DESIGNATION | CHAIRMAN |
| SIGNATURE |  |
| DATE | 19 APRIL, 2023 |

