



Environmental Protection Agency

Ganges Street, Sophia,
Georgetown, GUYANA
Tel.: (592) 225-2062 / 1218 / 0506/ 6917/
5467
Fax: (592) 225-5481
Email: epa@epaguyana
Website: www.epaguyana.org

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.:	20221102-CECBM
Fee:	Small (C2) US \$175 per year
Fees Paid:	US \$875 for Five (5) years (September 2023 - August 2028)
Addressee(s):	Mr. Collin Elcock Dequan Shipping and Trading Inc Lot 364, Omai Street, Prashad Nagar, Georgetown
Activity:	Construction and Operation of a Clay Brick Making Facility

Dequan Shipping and Trading 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 Clay Brick Making Facility at Lot 13, Hermitage Village, No. 19 Road, Corentyne, Berbice, hereinafter referred to as "the Project", in the manner indicated in the Application for Environmental Authorisation submitted on November 02, 2022, and subject to the terms and conditions set forth herein under the said Environmental Protection Act, Cap. 20:05, Laws of Guyana, existing and/or forthcoming regulations made under the said Act, and/or any 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 the Project:

1.0 CONSTRUCTION

- 1.1 Make an application to the Agency to vary this Environmental 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 discharge of effluents; or
 - iv. effect any other change outlined in 20(3) of the Environmental Protection

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- 1.2 **The Permit Holder is required to submit to the EPA upon receipt, the requisite approvals from the Central Housing and Planning Authority (CH&PA), or any other authority with jurisdiction and oversight over the Project.**
- 1.3 Employees shall at all times be equipped with appropriate protective gear during construction such as protective headgear, respirators, safety vests, construction boots, etc.
- 1.4 A well-equipped first aid kit shall be provided at the work site, including functional communication and transportation systems to respond to emergencies.
- 1.5 Areas for construction material stockpiles and equipment shall be identified. Stockpile areas shall be at least **3 metres** from any waterbody and 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.
- 1.6 Stockpiles shall not exceed **two (2) meters** in height.
- 1.7 Sediment control structures such as sediment traps and screens shall be installed to prevent the inflow of sediments to surface water.
- 1.8 Clear signage and security measures shall be implemented to keep unauthorised persons from accessing restricted areas.
- 1.9 The location of areas not to be disturbed prior to construction shall be delineated and identified on the ground. Land clearing and disturbance must be limited to areas where immediate work is taking place.
- 1.10 The land shall be utilized in accordance with the Site Plan submitted to the Agency. All specifications of location, pathways, reserve, and boundary lines must be adhered to unless otherwise authorised.
- 1.11 If the site plan submitted to the Agency changes, an updated site plan shall be submitted to the Agency prior to the commencement of construction activities.
- 1.12 All employees, contractors, sub-contractors, and agents of the Permit Holder shall be made aware of the Conditions of this Environmental Permit and shall be provided with training on good environmental management practices.
- 1.13 All oils, lubricants, and fuel shall be handled, managed (including refuelling of equipment and machinery), and stored on impervious surfaces within secondary contained areas.



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- 1.14 The Permit Holder shall adhere to the **Occupational, Health, and Safety (OHS) Act, Cap. 99:10, Laws of Guyana.**
- 1.15 Remove all construction tools, equipment, machinery, and waste material from the site on the completion of construction works.

2.0 OPERATION OF CLAY BRICK-MAKING FACILITY

- 2.1 Standard Operating Procedures (SOPs) for the safe operation of the kiln and other associated equipment used during the manufacturing process shall be established and maintained.
- 2.2 All employees shall be trained on these SOPs outlined in **condition 2.1** above. Training records shall be maintained and submitted to the EPA upon request.
- 2.3 The Processing Plant, trucks, generators, and other associated equipment shall at all times be mounted or parked and services on impervious bases, to prevent fuel spills and leaks from entering the soil.
- 2.4 The facility shall establish and maintain fire prevention and control equipment in accordance with the Guyana Fire Service Approval. This may include a smoke detection and alarm system, fire extinguishers, fire hydrants, or sprinkler systems as appropriate.
- 2.5 While digging the earth for making bricks in the area as marked for the same, the straight cutting of the earth should be avoided; instead cutting should be done with a slope of 1:3, so that soil erosion land can be minimized.
- 2.6 The excavated pits selected to be repurposed for the aquaculture project do not need to follow the slope ratio identified in **condition 2.5** above.

3.0 AIR QUALITY MANAGEMENT

- 3.1 Adhere to the provisions of the **Environmental Protection (Air Quality) Regulations, 2000.**
- 3.1 Driveways and passageways at the project site shall be maintained with impervious materials such as crusher-run or asphalt to reduce dust emissions. Should crusher-run wet suppression techniques shall be used to be manage dust.
- 3.2 Conduct visual monitoring of emissions being released by the operation and immediately respond to visible (opaque, grey to black) emissions that exceed six (6) minutes. Record the date and time of any such incident and any actions taken to resolve it. All records shall be available to the Agency upon request.

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- 3.3 Monitor ambient air quality at the boundary of the property to assess compliance with the requisite standards below:

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

An air quality monitoring plan shall be submitted to the EPA for approval. Monitoring of the parameters above shall be conducted in accordance with the approved monitoring plan and the results shall be submitted to the Agency as part of the **Annual Report**.

Note that the Agency reserves the right to request additional monitoring upon the review of the results submitted.

- 3.4 Particulate matter and dust suppression methods shall be maintained at the facility. These may include:
- 3.4.1 Wet suppression/watering to control dust emissions from material stockpiles, and other components of the operation that contribute to dust emissions in accordance with a schedule.
 - 3.4.2 Erecting dust screens/fences to control particulate matter/dust emissions

4.0 NOISE ABATEMENT

- 4.1 Adhere to the provisions of the **Environmental Protection (Noise Management) Regulations, 2000**.
- 4.2 All mechanical equipment shall be operated and maintained in accordance with the manufacturer's specifications at all times. Additionally, ensure that mechanical equipment work at its optimal levels to minimise atmospheric emissions. A maintenance schedule shall be submitted to the Agency as a component of the **Annual Report**.
- 4.3 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 metres (50ft) from the source or property boundary, whichever is closer.

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

4.4 All sound-making devices, such as generators, shall be suitably enclosed with materials of good insulation properties (e.g. hollow concrete blocks, insulation boards, solid clay bricks, etc.), be equipped with silencers or mufflers to reduce the noise level, and placed on a foundation properly designed to ensure effective damping of vibrations.

5.0 WATER QUALITY MANAGEMENT

5.1 Adhere to the provisions of the **Environmental Protection (Water Quality) Regulations, 2000.**

5.2 Construct a settling pond or sump at the facility for settlement of effluent before discharge. GPS coordinates for the final discharge point shall be submitted **prior to the operational stage of the facility.**

5.3 Untreated effluent discharges related to construction activities shall be **strictly prohibited.**

5.4 All cutting of wood and mixing of cement shall be conducted at least 15m from waterways to minimise pollution.

5.5 All oils, fuel, paints, and chemicals shall be stored in a designated area, at least 15m away from all watercourses.

5.6 Should there be any contamination or siltation of any watercourse or drain during construction, procedures for the removal, reversal, and clearing of these impacts shall be implemented.

5.7 Effluent discharge from the settling pond/sump 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	Maximum Concentration	Units	Sample type
pH	5.0 - 9.0		Grab
Temperature	<40	°C	Grab
Dissolved Oxygen	>40	mg/L	Grab
Total Suspended Solid (TSS)	<50	mg/L	Grab


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Total Dissolved Solid (TDS)	< 40	mg/L	Grab
Oil and Grease	<40	mg/L	Grab

5.7 Monitoring shall be conducted annually, and samples analyzed for the parameters listed above by a certified laboratory. The result of the analysis shall be submitted to the EPA as a component of the **Annual Report**.

6.0 HAZARDOUS MATERIALS MANAGEMENT

6.1 A register of the hazardous materials managed by the Project shall be established and maintained. The registered information shall be maintained and submitted to the EPA upon request.

6.2 Emergency spill clean-up kits shall be readily available, clearly identified, and maintained at the Project for response to spills. Kits must contain absorbent materials, drain seals, and other appropriate tools for clean-up.

6.3 Admixture Storage Areas shall be clearly labeled with “Danger, Chemical Storage Area- Authorized Personnel Only” where applicable as a spill control measure.

6.4 Secondary containment (bund area) shall be established and maintained around storage areas of all liquid Admixtures. The secondary containment shall have:

- i. A volume equivalent to the volume of liquid stored within the largest storage container and;
- ii. Walls constructed of impermeable materials.

6.5 Admixture containers shall be clearly labeled 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.

6.6 Admixtures **shall not** be stored on damaged or inadequately secured racking or on damaged pallets to minimise the risk of spills.

6.7 Safety Data Sheets for all Admixtures shall be readily available and easily accessible at all times at the Project.



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- 6.8 Admixtures shall be stored in accordance with the manufacturer's directions or Safety Data Sheet (SDS) instructions.
- 6.9 The SDS of the Admixture shall be adhered to regarding material incompatibility with other materials stored at the Project. Incompatible materials **shall not** be stored in proximity to Admixtures.
- 6.10 Chemical storage containers shall be inspected for signs of leakage or corrosion and damaged containers **must be** replaced **immediately**. Inspection reports shall be maintained and signed by the appropriate qualified inspecting officer and his/her supervisor.
- 6.11 All employees involved in the management of Admixtures shall be trained on Hazardous Material Communication and Emergency Preparedness Response. Training records shall be maintained and submitted to the EPA upon request.

7.0 WASTE MANAGEMENT

Adhere to the provisions of the **Environmental Protection (Litter Prevention) Regulations, 2013**.

- 7.1 Non-hazardous solid waste shall not be burnt on site. All solid waste (including damaged bricks and coal ashes) shall be disposed of at an approved Solid Waste Disposal Site, or reused where applicable.
- 7.2 Good housekeeping, sanitary, and hygienic practices shall be maintained at all times. The facility's drains and surroundings shall be kept free of vegetation and litter.
- 7.3 Solid waste receptacles shall be secured when not in use.
- 7.4 Promote waste minimisation and the reuse of waste materials and other suitable materials where practical, particularly, topsoil/overburden, steel and metal waste, and other inert construction materials.

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

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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, odour, sound, vibration, radiation, heat, or combination of any of them).
- 8.6 Submit an **Annual Report** to the EPA on your compliance with this 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 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.
- 8.8 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.



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- 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 (Renewed), 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 8.3 and 8.4 of this Environmental Permit (Renewed) 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, of any contaminant in any amount, concentration, ultrahazardous 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 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

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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; **September 2023 to August 2028.**
- 9.15 This Environmental Permit shall remain valid until **August 31, 2028**, 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 Renewed Application Form for Environmental Authorisation to the Agency at least six months before this Permit expires, that is, no later than **February 29, 2028.**
- 9.17 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 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 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.

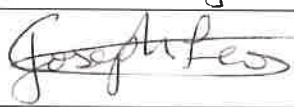
Kemraj Parsram
Executive Director

Date 2023-08-28

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

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	JOSEPH LEO
DATE	31 st August, 2023
SIGNATURE	
DESIGNATION	Engineer



