



**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.:	20230728-CGCBP
Fee:	Medium (C2) - US\$800 per year
Fees Paid:	US\$ 4000 for Five (5) years (November 2023 – October 2028)
Addressee:	Messrs. Sieunarine Coosal & Rajiv Coosal Directors Coosal's Guyana Construction Incorporation Lot 169 Charlotte Street, Lacytown, Georgetown.
Activity:	Concrete Batching Plant

Coosal's Guyana Construction Incorporation, 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 Environmental Protection (Authorisations) Regulations, 2000, to Operate a Concrete Batching Plant Tract TJ, Rome, East Bank Demerara, hereinafter referred to as the "Project", in the manner indicated in the Application for Environmental Authorisation submitted on July 28, 2023, 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, 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:

1.0 OPERATIONS

- 1.1 An application shall be made 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;
 - change the position and design of any outlet at the point or points of discharge

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

- 1.2 All employees and third parties under the Project's direction shall be made aware of the conditions of the Environmental Authorisation.
- 1.3 The Permit Holder shall provide training on good environmental practices.
- 1.4 Standard Operating Procedures (SOPs) for the Safe Operation of the Batching Plant and other associated equipment shall be established and maintained on-site and made available for inspection by the EPA upon request.
- 1.5 All employees shall be trained on the SOPs outlined in **condition 1.4**.
- 1.6 Training records shall be maintained onsite and made available for inspection by the EPA upon request.
- 1.7 Servicing and maintenance of the batching plant, generator(s), and other equipment shall be conducted in accordance with the manufacturer's specifications. Summarised maintenance records shall be maintained on-site and made available for inspection by the EPA upon request.
- 1.8 The batching plant, trucks, generators, and other associated equipment shall at all times be mounted or parked on impervious bases, to prevent fuel spills and leaks from entering the soil.
- 1.9 Adhere to the **Occupational Safety and Health Act, Cap. 99:06, Laws of Guyana** requirements.

2.0 AIR QUALITY MANAGEMENT

- 2.1 Adhere to the provisions of the **Environmental Protection (Air Quality) Regulations, 2000**.
- 2.2 Best Available Technologies (BATs) shall be implemented to prevent overfilling silo and bulk containers holding dusty materials beyond capacity.
- 2.3 Sealed tanker trucks shall be used to transport and offload cement to the plant.
- 2.4 Driveways and passageways within the Project shall be maintained with impervious materials such as concrete or asphalt to reduce dust emissions.
- 2.5 Ambient air quality monitoring shall be conducted at the boundary of the property during normal operations to assess the levels of the following air pollutants, in accordance with the WHO Air Quality Guidelines 2021:

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Air Pollutant	Averaging Time	Maximum Permissible Level	Type of Monitoring	Frequency
Carbon Monoxide	24 h	4 mg/m ³	Ambient	Bi-annually
Nitrogen Dioxide	24 h	25 µg/m ³	Ambient	Bi-annually
Sulphur Dioxide	24 h	40 µg/m ³	Ambient	Bi-annually
PM _{2.5}	24h	15 µg/m ³	Ambient	Bi-annually
PM ₁₀	24h	45 µg/m ³	Ambient	Bi-annually

Air Quality monitoring shall be conducted in accordance with the parameters listed above by trained personnel utilizing calibrated equipment. Records shall be maintained and submitted to the EPA as a component of the **Annual Report**.

2.6 Particulate matter and dust suppression methods shall be maintained around the stockpiles and plant.

2.6.1 Wet suppression to control dust emissions from material stockpiles, and other components of the operation that contribute to dust emissions in accordance with a schedule;

2.6.2 Erecting dust screens/fences to control particulate matter/dust emissions;

2.6.3 Stockpiles of sand and other dusty materials shall be located in an area of low winds as far as possible from nearby residents;

2.6.4 Storage of sandstone and other aggregates on the roadway and government reserves is strictly prohibited;

2.6.5 Stockpiles shall be relatively flat on top, and shall not exceed a height of two (2) meters;

2.6.6 Cover stockpiles of sand and other dusty materials with tarpaulin or other suitable material, when not in use for extended periods, to prevent particles from becoming airborne.

2.7 In the event of equipment inefficiencies or malfunctions that may result in visible or abnormal emissions to the air, the operator shall:

2.7.1 Investigate and undertake remedial action immediately;

2.7.2 Adjust the process or activity to minimise those emissions; and

2.7.3 Record the events and actions taken. This shall be submitted in the annual report.

3.0 NOISE MANAGEMENT

- 3.1 Adhere to the provisions of the **Environmental Protection (Noise Management) Regulations, 2000.**
- 3.2 All significant noise-producing equipment, such as generators, 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.
- 3.3 All machines and equipment shall be serviced in accordance with the manufacturer's specifications to ensure efficiency and reduce the level of noise produced. Inspection and maintenance reports shall be maintained on-site and made available to the EPA upon request.
- 3.4 Noise emissions shall be monitored 15 meters away from the source of noise (at the Project's boundary) **annually** 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))

Noise Quality monitoring shall be conducted in accordance with the parameters listed above by trained personnel utilizing calibrated equipment. Records of each monitoring exercise shall be maintained and results submitted to the Agency as a component of the Project's **Annual Report**.

4.0 WATER QUALITY MANAGEMENT

- 4.1 Adhere to the provisions of the **Environmental Protection (Water Quality) Regulations, 2000.**
- 4.2 Discharge of untreated liquid effluent into the surrounding waterways is **strictly prohibited.**
- 4.3 An oil-water separator shall be installed at the point of final discharge from the secondary containment for the fuel storage facility.
- 4.4 All wastewater (concrete washout) shall be directed to the **sedimentation pond** for collection and treatment.
 - 4.4.1 Dried sediments shall be collected and reused in the batching process if applicable.
 - 4.4.2 Discharge of sediments into waterways is **strictly prohibited**, where applicable this can be used in landfills.

- 4.5 The project shall maintain the integrity of the existing waterways at all times. 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:

Parameter	Daily Maximum Concentration	Units	Frequency
pH	5.0 – 9.0		Annually
Temperature	40	°C	Annually
Biological Oxygen Demand (BOD)	<50	mg/L	Annually
Chemical Oxygen Demand (COD)	<250	mg/L	Annually
Total Suspended Solids (TSS)	<100	mg/L	Annually
Oil and Grease	Total Petroleum Hydrocarbon (TPH) < 40	mg/ L	Annually

Water quality sampling shall be conducted to verify the integrity of the existing waterway. Monitoring shall be conducted by a registered laboratory and results shall be submitted to the Agency along with the certificate of competency as a component of the **Annual Report**.

- 4.6 Adequately sloped perimeter drains shall be maintained to collect storm flow. Stormwater discharges shall be directed away from the washout bund.
- 4.7 Fuel/lubricants including waste oils shall not be drained from the equipment onto the ground or into waterways.

5.0 STORAGE OF HAZARDOUS MATERIALS (ADMIXTURES and FUEL)

- 5.1 A register of the hazardous materials managed by the Project shall be established and maintained. The registered information shall be maintained on-site and made available for inspection by the EPA upon request.
- 5.2 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.
- 5.3 Admixture Storage Areas shall be clearly labeled with “**Chemical Storage Area- Authorized Personnel Only**” where applicable as a spill control measure.
- 5.4 Fuel shall at all times be stored above ground and away from ignition sources. ‘**No Smoking**’ signs shall be posted where fuel is handled or stored.

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- 5.5 Safety Data Sheets (SDS) for all Admixtures shall be readily available and easily accessible at all times at the Project.
- 5.6 Admixtures shall be stored in accordance with the manufacturer's directions SDS instructions.
- 5.7 The SDS of the Admixture shall be adhered to regarding material incompatibility with other materials stored by the Project.
- 5.8 Any chemical spills occurring during the handling and loading of Admixtures, shall be immediately cleaned and disposed of as guided by the respective Safety Data Sheet, at an EPA authorised disposal facility.
- 5.9 Secondary containment (bund area) shall be established and maintained around all liquid Admixtures and Fuel storage areas. The secondary containment shall have:
- A volume equivalent to the volume of liquid stored within the largest storage container and;
 - Walls constructed of impermeable materials;
 - The base of the fuel storage facility's secondary containment shall be impervious material.
- 5.10 Admixture containers shall be clearly labelled in accordance with the Globally Harmonized System of Classification and Labelling. The following must be evident:
- Signal Word;
 - GHS Symbols- (Hazard Pictograms);
 - Manufacturer Information;
 - Precautionary Statements/ First Aid;
 - Hazard Statements; and
 - Product Name or Identifiers.
- 5.11 Admixtures **shall not** be stored on damaged or inadequately secured racking or on damaged pallets to minimise the risk of spills.
- 5.12 Incompatible chemicals **shall not** be stored in close proximity to Admixtures.
- 5.13 Chemical storage containers shall be inspected for signs of leakage or corrosion and damaged containers **must be replaced immediately**. Inspection reports must be maintained and signed by the appropriate qualified inspecting officer and his/her supervisor.
- 5.14 All employees involved in the management of Admixtures shall be trained in Hazardous Material Communication and Emergency Preparedness Response. Training records shall be maintained on-site and made available for inspection by the EPA upon request.
- 5.15 All expired Admixtures shall be returned to the source for treatment and/or disposal.

Where applicable Local Hazardous Waste Treatment Companies approved and authorized by the EPA may be utilized.

6.0 WASTE MANAGEMENT

- 6.1 Adhere to the provisions of the **Environmental Protection (Hazardous Waste Management) Regulations, 2000.**
- 6.2 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.
- 6.3 Burning of solid waste **is strictly prohibited**. All solid waste shall be disposed of by an EPA-Authorised Waste Disposal Company.
- 6.4 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.
- 6.5 Promote waste minimisation and the reuse and/or recycling of waste and other materials where practical.
- 6.7 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).
- 6.8 Hazardous waste (oily rags, waste oil, etc.) generated from the servicing of the vehicles and generator onsite shall be collected, stored, and treated by an EPA Authorized Hazardous Waste Treatment Facility.
- 6.9 The Permit Holder shall construct and maintain a septic tank system on site 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*:
 - i) The septic tank shall not be located within 1.5 meters of a building or property boundary;
 - ii) septic tanks shall be installed with a sand and charcoal filter bed, or other appropriate design for further treatment; and
 - iii) shall be accessible for cleaning and de-sludging.
- 6.10 Any modification to the Septic tank shall 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*.

7.0 COMPLIANCE MONITORING AND REPORTING

- 7.1 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).

- 7.2 Monitor the implementation of the conditions of this Permit, insofar as they involve adherence by your employees and all third parties under your direction.
- 7.3 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.
- 7.4 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.
- 7.5 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).
- 7.6 Submit an **Annual Report** to the EPA on your compliance with this Environmental Permit on or before **March 31, of each year**.
- 7.7 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 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 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.
- 7.8 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.
- 7.9 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.

8.0 INSTITUTIONAL AUTHORITY/ LIABILITIES

- 8.1 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.

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- 8.2 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.
- 8.3 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.
- 8.4 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.
- 8.5 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, pursuant to s. 19 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.
- 8.6 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.
- 8.7 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.
- 8.8 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.
- 8.9 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.
- 8.10 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.

- 8.11 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.
- 8.12 The EPA has the right to modify, cancel or suspend this Permit for breach of any of the terms and conditions contained herein.
- 8.13 **This Environmental Permit is not the final consent; all relevant Permissions should be obtained from other regulatory bodies for continued operation.**
- 8.14 This Environmental Permit is effective for the period stipulated herein; **November 2023 to October 2028.**
- 8.15 This Environmental Permit shall remain valid until **October 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.
- 8.16 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 **April 30, 2028.**
- 8.17 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.
- 8.18 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.

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Signed by


Kemraj Parsram
Executive Director
Executive Director

on behalf of the Environmental Protection Agency

Date: 2023.11.03

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

NAME:	DINESH SUKHU
DESIGNATION:	SENIOR MANAGER
SIGNATURE:	
DATE:	21 st November 2023



