

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, the Environmental Protection (Amendment) Act, 2005, and the Environmental Protection (Authorisations) Regulations, 2000)

Reference No.:	20230214-GACAP	
Fee:	Large (C2) - US\$2000 per year	
Fees Paid:	US\$10,000 - Five (5) years – January, 2024 to December, 2028	

#### Addressee:

Mr. Reeaz Khan Managing Director GuyAmerica Construction Inc Lot 48 Stanley Place, Kitty, Georgetown, Guyana.

### Activity: Construction and Operation of an Asphalt Plant

Mr. Reeaz Khan, trading and operating under the name GuyAmerica Construction Inc., 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, to construct and operate an Asphalt Plant situated at Ideal Road, Linden Highway, East Bank Demerara, Guyana, hereinafter referred to as the "Project" in a manner indicated in the Application submitted on February 14, 2023, 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, standards and guidelines 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):

The Permit Holder shall:

1.0 GENERAL

JK.9

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

- The Permit Holder shall 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. Affect any other change outlined in 20(3) of the Environmental Protection (Authorisations) Regulations.
- The Permit Holder shall adhere to the Occupational Health and Safety Act requirements, Cap 99:10, Laws of Guyana.
- The Permit Holder shall employ or designate an employee to the role of an Occupational Health and Safety (OHS)/Environmental Officer to be responsible for the implementation and coordination of all safety requirements and terms and conditions stipulated in this Permit, as well as compliance monitoring with the preparation of all required reports.
- The Permit Holder Shall ensure that the operation support sites are not located near sensitive land uses/receptors such as hospitals, geriatric homes, churches, schools, densely urbanised residential areas, recreational areas, etc.
- The Permit Holder Shall take all necessary precautions to minimize potential adverse impacts on Public Health and the Environment in the transport, storage, and handling of operational materials, including crusher run, siftings, and sand that will emanate as a result of the Construction and Operation of the Asphalt Plant.
- The Permit Holder Shall create a buffer zone (vegetated or otherwise) around the Perimeter of the Project to mitigate the impacts of noise and dust on the surrounding environment.
- The Permit Holder Shall maintain the access road to avoid erosion and sedimentation into surrounding waterways.
- The Permit Holder Shall implement measures to prevent the escape of fugitive dust from the site, e.g., location and shelter for stockpiles and maintenance of roads.
- The Permit Holder Shall construct an enclosure for loading asphalt to mitigate the fumes' impact.
- During the Operation of the Asphalt Plant, ensure all fuel is stored away from ignition Sources and have 'No Smoking' signs posted where fuel is handled or stored.

Page 2 of 11

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

- 1.11 The Permit Holder Shall notify the public of the project's estimated duration, estimate work times, and expect difficulties, e.g., road closures and diversions, etc., that may occur due to the construction and operation of at least **two (2) weeks** in advance.
- 1.12 The Permit Holder Shall install adequate traffic control devices, signage, guardrails, and warning tape at work sites. Additionally, ensure that a speed limit is enforced to control traffic speed within the operation area of the Asphalt Plant.
- 1.13 The Permit Holder Shall take preventive measures for safe haulage of the materials such that there is no spillover during transportation on the road networks.
- 1.14 The Permit Holder shall submit an **Environmental Management Plan (EMP)** to the EPA for approval **within six (6) months of the date of issuance of the Environmental Permit** for the construction and operation aspect. The EMP must comply with the following guidelines and must be informed by a comprehensive stakeholder engagement program:
  - 1.15.1 Develop a Fire Prevention Plan in accordance with recommendations from the Guyana Fire Service should be submitted to the Agency within six (6) months of issuance of the **Permit.**
  - 1.15.2 Prepare and submit an Emergency Preparedness Plan to the Agency within four (4) months of issuing this Permit for approval. The plan shall include:
    - 1.15.2.1 The accident prevention procedures.
    - 1.15.2.2 First-person response.
    - 1.15.2.3 Notification procedures.
    - 1.15.2.4 Location of clean-up equipment.
    - 1.15.2.5 An analysis of potential accidents and responses.
    - 1.15.2.6 Material safety data sheets for all materials that could be spilled.

#### 2.0 EMPLOYEES SAFETY AND HEALTH

- 2.1 The Permit Holder Shall keep first Aid and Spill container kits onsite.
- 2.2 The Permit Holder Shall maintain and post an updated Evacuation Plan at strategic locations.
- 2.3 The Permit Holder Shall ensure that workers, at all times relevant to their activity at the processing plant, wear Personal Protective Equipment such as protective headgear, construction boots, appropriate dust masks, etc., throughout the operation phase.
- 2.4 The Permit Holder Shall ensure that adequate rest rooms/areas, waste disposal, and sanitary facilities are provided at construction sites for workers.
- 2.5 The Permit Holder Shall ensure training is conducted for all Occupational Safety and

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

Health employees, including first aid response, emergency response, and firefighting.

- 2.6 The Permit Holder Shall renew the Fire Safety Certificate annually and all firefighting equipment is maintained and serviced regularly. Fire Safety Certificate should be submitted to officers upon request during compliance inspection and in the Annual Report.
- 2.7 The Permit Holder shall ensure employees do not work shifts over eight hours to reduce fatigue and risks of accidents/injuries onsite.
- 2.8 The Permit Holder Shall install eye wash fountains and emergency showers for emergency use.

### 3.0 NOISE AND AIR QUALITY MANAGEMENT

- 3.1 The Permit Holder Shall Comply with the Environmental Protection (Air Quality) Regulations, 2000 and the Environmental Protection (Noise Management) Regulations 2000.
- 3.2 The Permit Holder Shall comply with the Guyana National Bureau of Standards (GNBS) Guidelines for Noise Emissions into the Environment at a distance of **15 m (50 ft)** from the source or at the location of the nearest receptor, whichever is closer.
  - Industrial Limits not exceeding
    100 dB daytime (06:00 h 18:00 h) and
    80 dB night time (18:00 h 06:00 h)
- 3.3 The Permit Holder Shall ensure that all sound-making devices such as generators, machines, etc., are suitably equipped with silencers or mufflers to reduce noise emission levels and are placed on foundation properly designed to ensure effective damping of vibrations. Additionally, ensure adequate equipment maintenance and that obsolete tools and equipment are replaced.
- 3.4 The Permit Holder Shall implement dust control measures at point sources to minimise dust pollution during the construction and operation of the Asphalt Plant.
- 3.5 The Permit Holder Shall stockpiled materials must be protected by tarpaulin and or permanent cover and wind breaker from wind dispersal throughout the project site and beyond.
- 3.6 The Permit Holder Shall implement good housekeeping practices to avoid or minimise the accumulation of dusty materials that have the potential to become airborne, and prompt immediate cleanup of spilled or accumulated materials.
- 3.7 The Permit Holder Shall ensure all vehicles transporting raw materials to the site and finished materials from the site must be covered/enclosed.
- 3.8 The Permit Holder Shall ensure the Asphalt plant follow appropriate measures to

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

prevent pollution and to ensure that:

- 3.8.1 All production machinery and equipment are serviced on a regularly scheduled basis per manufacturer's specifications and upgraded, if necessary, to meet minimum particulate emission criteria levels; and,
- 3.8.2 The proper operational procedures, equipment maintenance, and operator training are provided to ensure efficient equipment performance.
- 3.9 The Permit Holder Shall ensure excessive emissions of fugitive dust and or odours from any part of the construction and operation, which cause complaints, may necessitate instack and or ambient air monitoring, and or the installation of additional air pollution control equipment.
- 3.10 The Permit Holder Shall comply with the World Health Organisation (WHO) Air Quality Guidelines for Particulate Matter in the Environment, not exceeding the limits below:

**PM<sub>2.5</sub>:** 10  $\mu$ g/m<sup>3</sup> annual mean 25  $\mu$ g/m<sup>3</sup> 24-hour mean

**PM**<sub>10</sub>: 20 μg/m<sup>3</sup> annual mean 50 μg/m<sup>3</sup> 24-hour mean

- 3.11 The Permit Holder Shall comply with the World Health Organisation (WHO) Air Quality Guidelines for Air Pollutants in the Environment, not exceeding the limits below, and not limited to the list of pollutants:
  - CO 9 ppm (8h)
  - H<sub>2</sub>S 10ppm (8h)
  - $NO_2$  0.1ppm
  - VOC 100 ppm
- 3.12 The Permit Holder Shall conduct Air Quality Monitoring as per conditions 4.10 and 4.11 on a quarterly basis. Proposed sample points should be submitted to the EPA for approval prior to monitoring. A monitoring report should be submitted to the Agency as part of the requirements for Annual Report cited at **Condition 7.8.**
- 4.0 WATER AND SOIL QUALITY MANAGEMENT
- The Permit Holder Shall strictly comply with the provisions of the **Environmental Protection (Water Quality) Regulations 2000**.
- The Permit Holder Shall take necessary precautions to avoid soil compaction, erosion, siltation, and sedimentation during the construction and operation by limiting the size of areas that would be disturbed, slope length and gradient, and the duration of soil exposure.

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

- The Permit Holder Shall store stockpiles of materials, including production waste, in a secured, designated area and protected from wind and water erosion. Materials should not be placed within 10m of a watercourse or drain.
- The Permit Holder Shall avoid soil and water contamination from fuel, grease, waste oils, and other petroleum products. Store all oils, fuel, paints and chemicals in a designated area, 10m away from watercourses on an impervious base to minimise adverse environmental impacts in the event of spillage.
- The Permit Holder Shall limit vegetation removal to the extent necessary for works to proceed. In areas where soils are not to be removed, the grassed vegetation layer shall be maintained, where possible, to protect the soil from erosion and compaction.
- The Permit Holder Shall monitor the point of release of the internal drainage system before release into the surrounding drainage twice per year (June and December) and submit results, analysis methodology used, and atmospheric conditions in the Annual Report when the test was conducted to the Agency.
- The Permit Holder shall maintain all surface drains, ensuring that they are clear and accessible flowing, regularly monitor for blockage of the same, and immediately clean the drain/canal if the blockage is discovered.
- The Permit Holder Shall not discharge wastewater effluent directly into receiving waters without prior treatment. A silt trap should be installed on-site to collect runoff to discharge into external drains.
- The Permit Holder Shall ensure all wastewater from the operation is treated via the three-stage precipitation tank to remove sediments before discharge, and the pH of the water is monitored before release.
- The Permit Holder Shall conduct biannual water quality testing at the discharge points Of the site for **Dissolved Oxygen and pH** and submit those results to the Agency as **Part** of the requirements for the Annual Report cited in **Condition 7.8.**

## 5.0 HAZARDOUS MATERIALS/WASTE MANAGEMENT

- The Permit Holder Shall Comply with the Environmental Protection (Litter Enforcement) Regulations, 2013, and the Environmental Protection (Hazardous Waste Management) Regulations, 2000.
- The Permit Holder Shall prepare and submit to the Agency no later than forty-five (45) days after the end of the operating year a report relating to the activities for the previous Year. The report shall include:
  - 5.2.1 The identification information of the project.
  - 5.2.2 Type and quantities of hazardous waste generated.
  - 5.2.3 Data concerning off-site shipments of waste.

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

- 5.2.4 Any applied treatment standards.
- 5.2.5 A summary of any accidents that may have occurred and any action taken.
- 5.2.6 Any waste minimization efforts undertaken by the generator.
- 5.2.7 A pollution prevention plan for the project.
- 5.2.8 Any other matter the Agency may require.
- 5.3 The Agency considers all materials listed in Schedule I and II of the Environmental Protection (Hazardous Wastes Management) Regulations, 2000, hazardous.
- 5.4 The Permit Holder Shall submit the report of activities for the previous year in an electronic format acceptable to the Agency along with a hard copy, which the holder of the Authorisation should sign.
- 5.5 The Permit Holder Shall keep on-site books, documents, records, or things showing, as the case may be:
  - 5.5.1 The amount of hazardous wastes generated, stored, treated, transported, or disposed of.
  - 5.5.2 The dates pertinent to the activities referred to above.
  - 5.5.3 Signed copies of manifests.
  - 5.5.4 Records of test results, waste analyses, Permits, and standard conditions required by any authorization.
  - 5.5.5 And any information the Agency may require.
- 5.6 The Permit Holder Shall ensure that oil/fuel containment adsorbent materials are appropriately stored in slop tanks and disposed of in a manner approved by the EPA.
- 5.7 The Permit Holder Shall store, fuel and waste oil in an impervious, bunded area (secondary containment) to minimise adverse environmental impacts in the event of spillage. The bunded area must provide 110 percent containment of the most significant container/volume of fuel/waste oil stored within it.
- 5.8 The Permit Holder Shall ensure the containment (bunded area) must have a relief valve inserted to regulate, direct, or control the flow of the fluid in the instance that there is ponding or spill of fluid within the enclosed area.
- 5.9 The Permit Holder Shall store all fuel waste above ground level for easy maintenance and leak detection.
- 5.10 The Permit Holder Shall store fuel in a cool, dry place, away from any motor-driven machine that can cause sparks.
- The Permit Holder Shall ensure that all chemicals used as part of the process are handled, stored, and disposed of in accordance with the Material Safety Data Sheet (MSDS)/ Safety Data Sheet (SDS) and copies of MSDS/SDS sheets are located in central areas accessible to all staff on site, and employees are aware of same.
- 5.12 The Permit Holder Shall ensure that insect and rodent control measures are

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

implemented by a Person or Company certified by the Pesticide and Chemical Control Board to handle pesticides.

- 5.13 The Permit Holder Shall maintain a septic system on-site at all times. The septic tank should not be located within 1.5 m of a building or property boundary and should be accessible for cleaning and de-sludging. Any modification to the Septic tank must 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.
- The Permit Holder Shall promote good sanitation and solid waste disposal practices at construction sites. In particular, dispose of waste, including liquid/septic at an approved landfill site. Covered garbage receptacles must be placed at strategic locations on sites.
- The Permit Holder Shall promote waste minimisation and the reuse and or recycling of waste materials and other suitable materials where practical. Topsoil/overburden and other inert construction wastes/materials should be reused, e.g., for reclamation/landscaping, after construction (future) works are completed.
- 5.16 The Permit Holder Shall ensure the project site is kept clear and free of all debris, solid waste, and other extraneous matter.
- The Permit Holder Shall ensure that all wastes are sorted to separate reusable/recyclable materials. Hazardous wastes must be stored correctly in segregated, leak-proof containers at an appropriate on-site facility until ready for disposal. Disposal of hazardous waste shall be done in a manner approved by the EPA.

## 6.0 COMPLIANCE MONITORING AND REPORTING

- The Permit Holder Shall notify the Environmental Protection Agency within **twenty-four (24) hours** of any environmental emergencies.
- The Permit Holder Shall maintain and submit to the Agency records of the type, composition and quantity of contaminant (i.e. any solid, liquid, gas, odour, sound, vibration, radiation, heat or combination of any of them) released.
- The Permit Holder Shall notify the EPA of non-compliance with this Permit's conditions and any accidental discharge of environmental contaminants.
- The Permit Holder Shall monitor the implementation of the conditions of this Permit insofar as they involve adherence by your employees and all third parties under your direction.
- The Permit Holder Shall implement the Monitoring Protocol and processes stipulated in the Environmental and Management Plan (EMP) when submitted and approved by the EPA.
- The Permit Holder Shall make all employees/contractors aware of the Conditions of the

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

Operation Permit and provide training on sound environmental management practices.

- 6.7 The Permit Holder Shall report to the Agency any non-compliance(s) with the environmental authorisation:
  - 6.7.1 Within **twenty-four (24) hours** of the time the Holder of the environmental authorisation becomes aware of the non-compliance(s), the anticipated manner in which it may endanger human health or the environment.
  - 6.7.2 Within **seventy-two (72) hours**, submit to the Agency a written report containing a description of the non-compliance(s), its cause and the period of non-compliance(s) including exact dates and time.
  - 6.7.3 Submit a report to the Agency indicating the reasons and the anticipated time it is expected to continue if the non-compliance(s) has not been corrected.
- 6.8 The Permit Holder Shall submit Environmental 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** of each year.

## 7.0. INSTITUTIONAL AUTHORITY/LIABILITIES

- The Permit Holder shall be strictly liable for any loss or damage to the environment through any act caused intentionally or recklessly, through the adverse effect of any discharge or release, or cause or permit the entry of pollution, contaminant in any amount, concentration or level above that prescribed by the regulations or stipulated by this Operation Permit, which are attributed to the Project, pursuant to s. 39 and s. 19 (1) and (2) of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.
- 7.1 The Permit holder shall be guilty of an offence in accordance with s. 39 (1), (2), (3) and (4) of the Environmental Protection Act, Cap. 20:05, Laws of Guyana, which attribute liability for causing material or serious environmental harm by polluting the environment intentionally or recklessly and with the knowledge that material and/or environmental severe harm will or might result. If found guilty of an offence the Permit Holder shall be liable to the penalties prescribed under the said Act.
- 7.2 The Permit Holder shall compensate any Party who suffers any loss or damage as a result of the attributed Project (See: s. 19 (3)(e) of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.)
- 7.3 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.



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

- 7.4 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.
- 7.5 The 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 lack of due care and diligence.
- Should the Permit Holder contravene or is likely to contravene any condition of this Permit, the Agency (EPA) may serve on him an enforcement notice in accordance with s. 26 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.
- 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 severe pollution of the Environment or any damage to public health, issue to the Permit Holder a Prohibition Notice, which may order him to immediately cease the offending activity, in accordance with s. 27 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.
- 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.
- 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 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.
- 7.10 The EPA shall have the right to cancel or suspend this Permit for breach of any of the terms and conditions contained herein.
- 7.11 The Permit Holder is obligated to ensure that all other relevant Authorities permit the construction and operation of the Asphalt Plant.
- 7.12 This Operation Permit is effective for the period stipulated herein, **January 2024 to December 2028**.
- 7.13 This Environmental Permit shall remain valid until December 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.

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

- 7.14 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, no later than June 30, 2028.
- Any late submission of renewal application (s) after the specified date as stated above, shall 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.
- Failure to comply with the requirements of this **Environmental Permit** shall render the Permit Holder liable to prosecution and to civil penalties and/or injunctive reliefs prescribed under the Environmental Protection Act, Cap. 20:05, Laws of Guyana, the Environmental Protection (Amendment) Act, 2005, and the Environmental Protection Regulations, including under any existing and forthcoming regulations made under the said Act or any other applicable Laws of Guyana.

Signed by_	Ka	on behalf of the Environmental Protection Agency.
	Kemraj Parsram Executive Directo	,

Date 1. 2. 2024

hereby accept the above Terms and Conditions upon which this Operation Permit is granted and agree to abide by the Environmental Protection Act, Cap.20:05, Laws of Guyana, the Environmental Protection (Amendment) Act, 2005, the Environmental Protection (Authorisations) Regulations, 2000, and any forthcoming regulations, best practices, guidelines and standards made under this Act.

KITILY ISHACS	
SECURITY	
2024.02.01	5 27
	/