



**Environmental  
Protection  
Agency**

Ganges Streets, Sophia,  
Georgetown, GUYANA  
Tel.: (592)-225-0506  
Fax: (592) - 225- 5481  
Email: [epa@epaguyana.org](mailto:epa@epaguyana.org)  
Website: <http://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.:	20221221-VPBSQ
Fee:	Large (C2) – US\$2000
Fee Paid:	US \$ 10,000 (June, 2023 to May, 2028) - five (5) years.
Addressee:	Mr. Vishwan Persaud Baichan Director V.P Baichan and Sons Enterprise Lot 2A, Grant 1804, Black Water, Crabwood Creek Corentyne Berbice.
Activity:	Operation of a Stone Quarry

Vishwan Baichan, trading and operating under V.P Baichan and Sons Enterprise, hereinafter referred to as the “Permit Holder”, is hereby authorised in accordance with the Environmental Protection Act, Cap. 20:05, Laws of Guyana, the Environmental Protection (Amendment) Act, 2005, and the Environmental Protection Regulations, 2000, to operate a Stone Quarry situated at Block B-1011/MP/000, at the confluence of Corentyne and Epira Rivers Region 06, hereinafter referred to as the “Project”, in the manner indicated in the Application for Environmental Authorisation dated December 21, 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 applicable laws, guidelines, standards and best practices relevant to this project.

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

**Environmental Permit - Ref. No. 20221221-VPBSQ**

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.

**1.0 GENERAL**

- 1.1 Submit to the EPA an **Environmental Assessment Management Plan (EAMP)** within **one (1) year** of the issuance of this Permit. The assessment should include a comprehensive analysis of all existing and future environmental impacts of the proposed development of mining block **B-1011/MP/000** owned and operated under V.P Baichan and Sons Enterprise.
- 1.2 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 effect any other change outlined in 20(3) of the Environmental Protection (Authorisations) Regulations.
- 1.3 Ensure all mining activities are conducted within the boundaries more fully described in the Mining Permit, bearing the **Block number: B-1011/MP/000/2017**, located at the confluence of Corentyne and Epira Rivers Region 6, issued under Section 63 of the Mining Act, 1989 and the Mining Regulations by the Guyana Geology and Mines Commission (GGMC).
- 1.4 Maintain all demarcated boundary limits for the site claim and the periphery of the concession as prescribed by the Guyana Geology and Mines Commission (GGMC), using signage, fences or other means; while maintaining demarcated boundary limits for the Mine Site and a non-extractable, vegetated buffer zone at least one hundred and fifty (150) meters wide as follows:
- a. Between your mining blocks and other different contiguous land-use activities;
  - b. Around the mine site;
  - c. Around the property boundary; and
  - d. Around any water source/spring located on the property.
- 1.5 Install and maintain proper signage and security measures to keep unauthorized persons from accessing restricted and high-risk areas.
- 1.6 Any other developmental activities which may significantly affect the environment apart from the activities covered by this Permit (extraction, blasting stockpiling of quarriable materials) are **strictly prohibited** without prior approval from the EPA.

- 1.7 Adhere to the stipulations within the **Mining Act, No. 20 of 1989, the Mining Regulations including the Mining (Amendment) Regulations, 2005, the Explosives Act, Cap 16:06, the Blasting Operations Act, Cap 65:03.**

## **2.0 MINE DEVELOPMENT**

- 2.1 Construct and maintain a good drainage system within the Mine Site and ensure that the land is levelled and appropriately built up to avoid floods and contamination of waterways within the project site and the Corentyne River.
- 2.2 Ensure that all the surface drains are free of debris. Regular cleaning of the drainage network and the immediate environment must be carried-out at all times.
- 2.3 Identify suitable areas for quarriable material stockpiles and equipment during operation.
- 2.4 Protect susceptible sloped surfaces with suitable revetment and appropriate cover to ensure stability of slopes and avoid erosion.
- 2.5 Avoid soil and water contamination from fuel, grease, waste oils and other petroleum products.
- 2.6 Take necessary precautions to avoid soil compaction, erosion, rutting, siltation and sedimentation during operation by limiting the size of the disturbed area, slope length and gradient, and the duration of soil exposure.
- 2.7 Consider the weather pattern before initiating major earthworks. Monitor areas of exposed soil during periods of heavy rainfall.

## **3.0 OCCUPATIONAL HEALTH AND SAFETY**

- 3.1 Adhere to the requirements of **the Occupational Safety and Health Act, Cap. 99:01, Laws of Guyana.**
- 3.2 Institute a transparent and accessible grievance mechanism for employees to relate and address any work-related concerns or problems which may arise and affect the well-being or performance of the workers.
- 3.3 Practice the use of caution signs to warn against potential hazards or to caution against unsafe practices.
- 3.4 Use accident prevention tags as a temporary means of warning employees of an existing hazard, such as defective tools, equipment, etc. such tags shall not be used in place of, or as a substitute for, accident prevention signs.

**Environmental Permit - Ref. No. 20221221-VPBSQ**

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.

- 3.5 Protect employees from excavated or other materials or equipment that could pose a hazard by falling or rolling into excavations. Protection shall be provided by placing and keeping such materials or equipment at least 2 feet from the edge of excavations, or by the use of retaining devices that are sufficient to prevent materials or equipment from falling or rolling into excavations, or by a combination of both if necessary.
- 3.6 Provide Employees with training on: good environmental management practices; occupational health and safety; and their obligations under this Permit on a regular basis.
- 3.7 Employees shall at all times be well protected and equipped with Personal Protective Equipment relevant to the occupational tasks during operation. These Personal Protective Equipment (PPE) must include but not be limited to:
- I. Safety helmets;
  - II. Protective respiratory devices
  - III. Safety boots with ankle support;
  - IV. Gloves with reinforced palms and fingers; and
  - V. Tightly fitted safety goggles.
- 3.8 Prepare and maintain an employee log of distribution of Personal Protective Equipment (PPE).
- 3.9 Provide well-equipped first aid and snake bite kits at the work site.
- 3.10 Ensure that communication and transportation systems are in place to respond to emergencies.

**4.0 VEGETATION CLEARING AND TOP SOIL STRIPPING**

- 4.1 Maintain natural vegetative cover as far as practical, especially in the vicinity of steep slopes occurring at project site and re-vegetate areas from which vegetation were removed.
- 4.2 Ensure that topsoil cleared from working areas is stripped carefully and reused immediately for rehabilitation of worked areas. Where possible, topsoil shall be placed directly onto an area being rehabilitated to reduce double handling of soil.
- 4.3 The storage of topsoil (overburden) within three meters (3m) of natural vegetation or mine face is strictly prohibited. Top soil and vegetation must be carefully stripped and stockpiled in an allocated area, marked by a sign, so that it can be used for reclamation and re-vegetation as mining finishes.
- 4.4 Where reuse cannot be accomplished immediately, the topsoil shall be stockpiled

wp 

**Environmental Permit - Ref. No. 20221221-VPBSQ**

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.

in a suitable storage site until such time for reuse.

- 4.5 Practice alternative methods of vegetation clearing rather than burning, such as, manual or mechanical felling or bulldozing.
- 4.6 Ensure vegetative debris is incorporated and stored with top soil to keep it active for reuse in site reclamation. In addition, practical measures, such as growing of vegetation such as shrubs and grasses on stockpiles of topsoil shall be employed to reduce erosion, and dust nuisance to surrounding ecosystems.
- 4.7 Store overburden stockpiles at least **two hundred (200) meters** away from any waterway, creek or drainage system. Runoff from this overburden shall be directed to the sedimentation/settling pond for treatment before discharge.
- 4.8 Ensure that all topsoil is kept separate from all overburden and gravel for use as backfill during progressive reclamation. Topsoil shall be replaced in its natural sequence during reclamation activities.
- 4.9 Maintain the integrity of areas where riparian vegetation is located to aid in mitigating erosion/sedimentation impacts at the site.

**5.0 DRILLING AND BLASTING**

- 5.1 Before blasting activities can commence on the concession, submit a detailed **Drilling and Blasting Plan** that is approved by the Guyana Geology and Mines Commission (GGMC) **at least three (3) months** after issuance of this Permit.
- 5.2 Adhere to the protocols outlined in the Drilling and Blast Plan; any modification of the said Plan must be approved by the GGMC and submitted to the Agency within **two (2) weeks** from date of approval.
- 5.3 Employ a drilling and blasting supervisor, who is certified and licensed by the Guyana Geology and Mines Commission (GGMC).
- 5.4 Ensure the use, storage, transport, handling, and general management of explosives are done in accordance with relevant laws and regulations including the **Explosives Act, 1989**, and subsequent amendments and the requirements of the Guyana Geology and Mines Commission and the Guyana Police Force.
- 5.5 Ensure the appropriate blast design parameters are in place prior to the actual blasting. Attain minimum ground vibration by the utilization of:
  - a. Appropriate delay intervals for charge ignition.

**Environmental Permit - Ref. No. 20221221-VPBSQ**

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.

- b. Appropriate pattern.
  - c. Orientation of blast holes.
  - d. Confinement of the charge.
- 5.6 Avoid secondary blasting as much as possible, rather, drop balling, using a heavy mass operated by a dragline shall be considered.
- 5.7 Ensure that a review of the blast design is undertaken where necessary, including the size of the Maximum Instantaneous Charges (MICs) and detonating sequence and that the correct stemming is in place.
- 5.8 Ensure that all measures such as the use of deck charges are utilised to reduce ground vibrations.
- 5.9 Ensure that all sites are evacuated and guarded before shots are fired. A distinctive **audible warning signal** must be given before firing and at the all-clear.
- 5.10 After the firing of Blast pattern, a Post Blast inspection must be conducted by a Certified Blaster/Shotfirer to identify any potential hazards or evidence of a misfire and/or the associated corrective action required to make the area safe before an "ALL Clear" is given prior to personnel and/or equipment being allowed back into blast radius.
- 5.11 Ensure that after blasting a "Post Blast Fume Dispersion" time of **30-40** minutes is observed, allowing prevailing winds or air currents enough time to readily dilute and dissipate to the atmosphere any gases generated in open pit blasting before re-entry of workers to the area.
- 6.0 ROADS**
- 6.1 Fill in ruts and holes that develop during road/trail use with suitable materials such as compacted fill and crush and run etc., and ensure roads are sloped to minimise the likelihood of soil erosion.
- 6.2 Ensure that the running surface of the road is crowned with a compacted layer and with good drainage on both sides to catch and direct water to the local drainage system.



**Environmental Permit - Ref. No. 20221221-VPBSQ**

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.

- 6.3 Ensure that adequate and appropriate road signage is installed with provisions for safe line of sight along all access roads and tracks. Signs shall inform users of dangerous bends, crossing of haul trucks, vehicle speed limits, etc.
- 6.4 Ensure that all reasonable and practical measures, such as, the provision of turnout drains at regular intervals, are implemented to prevent erosion of roads. Runoff from roads, stockpile areas, etc., shall not be discharged directly to natural water ways, such as, the **Corentyne River, Epira River, and/ or other tributaries** within or contiguous to the Project site.
- 6.5 Ensure roads are sloped and constructed to minimise the likelihood of soil erosion.
- 6.6 Ensure that activities as they relate to operation and maintenance of roads, drainage ditches, culverts and or berms, etc. are done in a manner that results in minimal impact on public health and the environment.

**7.0 WATER QUALITY MANAGEMENT**

- 7.1 Adhere to the provisions of the **Environmental Protection (Water Quality) Regulations, 2000.**
- 7.2 Maintain the integrity of the existing waterways at all times. Discharges from sediment ponds or the operation into the **Corentyne and Epira Rivers, and surrounding environment** should be in accordance with the Guyana National Bureau of Standards Interim *Guidelines for Industrial Effluent Discharge into the Environment* (IFC), US EPA and World Bank Water Quality Standards. The following maximum allowable limits should not be exceeded:

Parameter(s)	Maximum Allowable Limits	Frequency of Monitoring
pH	5.0 – 9.0	Bi- Annual
Temperature	<40°C	Bi- Annual
Biological Oxygen Demand (BOD)	<50 mg/L	Bi- Annual
Chemical Oxygen Demand (COD)	< 250 mg/L	Bi- Annual
Total Suspended Solids (TSS)	<50 mg/L	Bi- Annual

**Environmental Permit - Ref. No. 20221221-VPBSQ**

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.

Oil and Grease (O&G)	<20 mg/L	Bi- Annual
Turbidity (NTU)	<30 NTU	Bi- Annual
Total coliform	< count/100ml	Bi- Annual
N as NH <sub>3</sub>	<50mg/L	Bi- Annual

- 7.3 Ensure that sediment control structures such as soak ways, settlement/water detention ponds and silt fences, are implemented at the site(s) to prevent the direct inflow of sediments to surface water.
- 7.4 Limit the removal of vegetation 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.
- 7.5 Ensure that waste/spoil piles are surrounded by perimeter berms to manage discharges of sediment; all runoff from this area shall be directed to a settling pond.
- 7.6 Ensure erosion susceptible areas are sloped, benched or lined with erosion control structures to manage surface water runoff.
- 7.7 Establish and maintain a vegetative **two hundred (200) meters** buffer zone between the rock deposit and surrounding waterways (Corentyne and Epira Rivers) to reduce erosion.
- 7.8 Construct and maintain a good drainage system capable of handling the probable maximum precipitation storm event at all facilities. Storm water discharge shall be directed into appropriately designed sediment ponds before discharge into surrounding waterways.
- 7.9 Construct and maintain a settling pond at the Project Site. The pond must allow for maximum retention time of waste water to allow for settling of suspended solids and natural degradation of possible contaminants prior to water being released to the natural environment.
- 7.10 Silt fences shall be installed at discharge points of drainage systems to reduce the sediment loads entering sediment ponds.
- 7.11 As far as possible, divert surface water runoff from higher mine benches to prevent it from reaching lower workings. Where possible, strategically place low permeability materials to restrict water flow into mining areas.
- 7.12 Conduct an assessment to determine the status of groundwater levels in the vicinity of the mining concession **within the first year** after commencement of the Quarrying activities. The assessment shall present baseline information on water levels, flow and quality.

**Environmental Permit - Ref. No. 20221221-VPBSQ**

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.

**8.0 HAZARDOUS WASTE MANAGEMENT**

- 8.1 Adhere to the provisions of the **Environmental Protection (Hazardous Waste Management) Regulations, 2000**, and the stipulations within the **Pesticides and Toxic Chemicals Act, No. 13 of 2000**, the **Pesticides and Toxic Chemicals Regulations, No. 8 of 2004**, the **Pesticides and Toxic Chemicals (Amendment) Regulations, No. 8 of 2007**.
- 8.2 Establish and maintain a register of hazardous materials or chemicals used or generated by the operation. Submit to the Agency, **twice yearly (May and November)**, a report on hazardous waste generation and management for the previous six months using the most recent version of the EPA's Recording and Reporting Form of Hazardous Waste and including:
- a) The name, location and type of facility.
  - b) Types and quantities (in metric units) of hazardous waste generated.
  - c) Manner of storage, use, any applied treatment standards/methods and disposal of these substances.
  - d) Data concerning off-site shipments of waste, i.e., local disposal facility utilized, country to which hazardous waste is shipped, purpose of shipment and amount of waste shipped.
  - e) A summary of any accidents that may have occurred and any action taken.
  - f) Any waste minimization efforts undertaken by your facility for hazardous material/waste.
  - g) Any other matter the Agency may require.

The Agency considers all materials listed in Schedule I and II of the **Environmental Protection (Hazardous Wastes Management) Regulations, 2000**, to be hazardous. (Please see attached list.)

- 8.3 Refrain from draining fuel/lubricants, including waste oils of any quantity from equipment on to the ground and waterways.
- 8.4 Take the necessary precautionary measures during the transport, transfer, use and handling of all hazardous material at the Project Site.
- 8.5 Implement a programme to ensure regular and preventative maintenance of machinery and equipment to prevent leaks and minimize air emissions and

**Environmental Permit - Ref. No. 20221221-VPBSQ**

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.

hydrocarbon releases.

**9.0 WASTE MANAGEMENT**

- 9.1 Adhere to the provisions of the **Environmental Protection (Litter Enforcement) Regulations, 2013.**
- 9.2 Promote proper solid waste management and disposal practices at your facility at all times. Waste shall not be disposed of in or near to the Corentyne and Epira Rivers, or any other waterways.
- 9.3 Ensure that solid waste pits are located at least **one hundred (100) meters** away from any watercourses, or habitation. The waste sites shall be constructed above the ground water table and lined to the floor with an impervious earthen or other material to prevent leaching to ground water.
- 9.4 Maintain good house-keeping, sanitary and hygienic practices and the aesthetic quality of the surroundings at all times.
- 9.5 Construct and maintain a septic tank system at all times which shall be accessible for cleaning and de-sludging. Any modification to the Septic Tank (s) 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.***

**10.0 AIR QUALITY MANAGEMENT**

- 10.1 Adhere to the provisions of the **Environmental Protection (Air Quality) Regulations, 2000.**
- 10.2 Comply with the *World Health Organisation (WHO) Air Quality Guidelines for Particulate Matter in the Environment*, not exceeding the limits below:

<b>Air Pollutant</b>	<b>Maximum Pollutant Level</b>
<b>PM<sub>2.5</sub></b>	10 µg/m <sup>3</sup> annual mean
	25 µg/m <sup>3</sup> 24-hour mean
<b>PM<sub>10</sub></b>	20 µg/m <sup>3</sup> annual mean
	50 µg/m <sup>3</sup> 24-hour mean
	Primary 75 µg/m <sup>3</sup> annual geometric mean

**Environmental Permit - Ref. No. 20221221-VPBSQ**

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.

Total Particles (TSP)	Suspended	Primary 260 $\mu\text{g}/\text{m}^3$ 24-hour mean
		Secondary 60 $\mu\text{g}/\text{m}^3$ annual geometric mean
		Secondary 150 $\mu\text{g}/\text{m}^3$ 24-hour mean

- 10.3 Establish and maintain a vegetative buffer onsite to aid with the attenuation of fugitive noise and dust and to improve the aesthetic quality of the surroundings.
- 10.4 Employ dust suppression methods such as watering, erecting dust screens/fences etc. to control dust emissions from material stockpiles and other components of the development that would generate dust.
- 10.5 Ensure that appropriate measures are in place to minimise the impacts of air borne emissions from vehicles offloading and/or loading quarriable materials.
- 10.6 Establish a maximum speed limit or install traffic calming devices to reduce speeds to a rate that prevents off-property transport of dust entrained by vehicles.
- 10.7 Respond to equipment malfunction or **inefficiencies** which may result in visible air emissions. In the event of malfunction leading to abnormal emissions the operator shall:
- a) investigate and undertake remedial action **immediately**;
  - b) adjust the process or activity to minimise those emissions; and
  - c) record the events and actions taken.
- 10.8 Establish and maintain the vegetative buffer zone of at least **one hundred and fifty (150) meters** between the Quarry and other contiguous land uses to buffer noise and fugitive dust emissions.
- 10.9 As far as possible, site and orient stockpiles and storage areas to reduce wind exposure.
- 10.10 Operate and service all mechanical equipment and vehicles in accordance with manufacturer's specifications at all times to minimise atmospheric emissions.
- 10.11 Maintain an inventory of all sources of air contaminants e.g. Heavy duty equipment, trucks etc. on site. The Inventory should be submitted in the Project's Environmental Annual Report (**Condition 13.2**).



**Environmental Permit - Ref. No. 20221221-VPBSQ**

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.

**11.0 NOISE MANAGEMENT**

- 11.1 Adhere to the provisions of the **Environmental Protection (Noise Management) Regulations, 2000.**
- 11.2 Comply with the ***Guidelines for Noise Emissions into the Environment***, not exceeding the limits below at a distance of 15 m (50 ft) from the source or property boundary, whichever is closer.

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

- 11.3 Implement all possible measures to mitigate adverse noise impacts from heavy vehicle or machinery on the surrounding environment. Silencers, mufflers, enclosures or other appropriate sound attenuation measures/devices should be used.
- 11.4 Ensure to operate and service all mechanical equipment in accordance with manufacturer's recommendations to minimise the impact of sound levels on the environment at all times.

**12.0 BIODIVERSITY PROTECTION**

- 12.1 Identify and avoid sensitive ecological areas within your mining claim.
- 12.2 Undertake clearing of vegetation at a pace slow enough to ensure that terrestrial animals and aquatic life can move to other locations.
- 12.3 Conduct and record visual observances of aquatic and terrestrial biodiversity on a daily basis. Submit reports as a component of the Environmental Annual Report required in **Condition 13.2.**
- 12.4 Report all occurrences of illegal wildlife trapping and trading to the EPA and Wildlife Conservation and Management Commission.
- 12.5 Communicate to employees through trainings, signage and other practicable means, that the capture, trading and/or removal of endangered and vulnerable wildlife from the project area and surrounding areas is forbidden, in accordance with the **Wildlife Conservation and Management Act, 2016**, and any applicable forthcoming Regulations made under that Act.



**Environmental Permit - Ref. No. 20221221-VPBSQ**

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.

**13.0 COMPLIANCE MONITORING AND REPORTING**

- 13.1 Monitor the implementation of the conditions of this **Environmental Permit**, insofar as they involve adherence by employees and all third parties under your direction.
- 13.2 Submit **Environmental Annual Reports** to the EPA on or before **March 31** every year on your compliance with this Permit.
- 13.3 Ensure the reports and records of monitoring include the following:
- a) The names of the individuals and designations, who conducted sampling, prepared and compiled the reports;
  - b) The date, place/location, time, weather conditions, techniques and methods used in sampling;
  - c) The date the measurements were compiled or analysed and the names of the individuals who compiled the information;
  - d) Observations, readings, calculations, benchmarks, bench data, the results of analyses;
  - e) Limitations of the sampling process and all other occurrence at the time of study, which may affect the results;
  - f) Photographs and drawings of all relevant aspects of the operation; and
  - g) The state of operation of facilities at the time of measurement, including planned and unplanned shutdowns, production levels and achievement of design capacity, identification of release point, source of release and substances being released.
- 13.4 Comply with any lawful directions given by the EPA from time-to-time in furtherance of the implementation of any international or other obligations for the environmental protection.
- 13.5 Inform the Agency prior to or within **thirty (30) days** of any change of name or ownership of the operation.
- 13.6 Notify the Agency within **twenty-one (21) days** in event of bankruptcy, liquidation or receivership of the Permit Holder or if the Company becomes a party to an amalgamation.
- 13.7 Notify the EPA within **sixty (60) minutes** of the occurrence of any environmental emergencies such as a sudden disaster, accident, natural,



W

technological or human induced factors that cause or threaten to cause severe environmental damage as well as harm to human health or livelihood.

- 13.8 Report to the Agency any non-compliance(s) with the **Environmental Permit:**
- 13.8.1 Notify the EPA within **one (1) hour** of any accidental release of contaminants or incident of pollution into the environment.
  - 13.8.2 Within **twenty-four (24) hours** of the time the Holder of the Environmental Permit becomes aware of the non-compliance or accidental release of contaminants or pollution, the anticipated manner in which it may endanger human health or the environment.
  - 13.8.3 Within **seventy-two (72) hours**, submit to the Agency a written report containing a description of the non-compliance, its cause and the period of non-compliance including exact dates and time.
  - 13.8.4 Submit a report to the Agency indicating the reasons and the anticipated time it is expected to continue if the non-compliance has not been corrected.
- 13.9 Implement relevant measures/agreements to avoid conflicts with other land users/communities. Conflicts should be reported to the relevant authorities if they occur.
- 13.10 Inform the **National Trust and Walter Roth Museum** if any artefacts of archaeological and anthropological significance are unearthed during Essequibo Stone Quarry operations.
- 13.11 Submit to the Agency a detailed **Project Closure Plan** for approval **two (2) years** prior to closure. Thereafter, the closure plan will be updated and reviewed at a frequency agreed to with the Agency, as needed.
- 13.12 The Permit Holder shall provide the financial, equipment and technical capacity to adequately respond to any emergency that may occur on site and emergency response shall be immediate.

hsp



**Environmental Permit - Ref. No. 20221221-VPBSQ**

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.

**14.0 INSTITUTIONAL AUTHORITY/LIABILITIES**

- 14.1 The Permit Holder shall be liable for any loss or damage to the environment through any act caused intentionally or recklessly, including the adverse effect of any discharge or release of contaminants in excess of the levels stipulated herein or the Regulations, or any activity which causes or is likely to cause pollution. (Section 19(1) EP Act, Cap. 20:05, Laws of Guyana).
- 14.2 The Permit Holder shall not contravene the provisions of Section 39 (1), (2), (3) and (4) of the Environmental Protection Act Cap 20:05, Laws of Guyana.
- 14.3 The Permit Holder shall strictly observe section 19(3) of the Environmental Protection Act Cap 20:05, Laws of Guyana.
- 14.4 The Permit Holder may be liable for environmental damage due to pollution from its activities within Guyana.
- 14.5 The EPA reserves the right to conduct regular inspections of the Permit Holder's operation as part of its monitoring and enforcement requirements under the Environmental Protection Act, Cap. 20:05, Laws of Guyana, the Environmental Protection (Amendment) Act, 2005, and the Environmental Protection (Authorisations) Regulations, 2000.
- 14.6 The Permit Holder, Her Servants, Agents and/or Sub-Contractor(s) 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 Environmental Protection Act, Cap. 20:05, 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 be liable to penalties prescribed under paragraph (c) of the Fifth Schedule for doing so.
- 14.7 The EPA reserves the right to review/amend the conditions attached to this Permit, which also includes the review and/or amendment of permit fees in consideration of any changes in fee structure as determined by the Agency for projects of this nature.
- 14.8 The EPA shall have the right to cancel or suspend this Permit for breach of any of the terms and conditions contained herein.
- 14.9 This Environmental Permit (Renewed) is not the final consent; all relevant permission shall be obtained from other regulatory bodies for continued operation and maintained thereafter.
- 14.10 The Permit Holder shall be responsible for the payment of all cost related to the assessment of damage and costs for the independent assessor(s).

**Environmental Permit - Ref. No. 20221221-VPBSQ**

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.

- 14.11 The Agency (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.
- 14.12 Should the Permit Holder contravene or is likely to contravene any condition of this Permit, the Agency (EPA) may serve on her an enforcement notice in accordance with section 26 of the Environmental Protection Act, Cap.20:05, Laws of Guyana.
- 14.13 Where it appears to the Agency (EPA) that the Permit Holder is engaged in any activity that may pose serious threat to natural resources or serious pollution of the environment or any damage to public health, the Permit Holder shall be issued with a Prohibition Notice Order to immediately cease the offending activity in accordance with Section 27 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.
- 14.14 Where the Permit Holder in accordance with Section 19(3) of the Environmental Protection Act, is found liable for the release or discharge of any contaminant or for the process involving the contaminant, the Permit Holder shall:
- a) Immediately notify the Agency of the discharge;
  - b) Concentration and amount of contaminant;
  - c) Circumstances of the discharge; and
  - d) What action he/she has taken or intends to take to restore the natural environment; and
  - e) Be liable to pay for the cost of an independent investigation into the discharge.
- 14.15 The Permit Holder shall be liable for any gross negligence or willful misconduct caused by the Permit Holder, her Servants and/or Agents, to the marine environment, biodiversity, protected species and natural habitat with respect to any release, discharge or spill of contaminant fluids, oil or lubricants from any facilities permitted under this project.
- 14.16 This Environmental Permit is effective for the period stipulated herein **June, 2023 to May, 2028**.
- 14.17 This Environmental Permit shall remain valid until **May 31, 2028**, unless otherwise cancelled, suspended, modified or varied in accordance with the provisions of this Permit or the Environmental Protection Act, Cap. 20:05, Laws

**Environmental Permit - Ref. No. 20221221-VPBSQ**

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.

of Guyana, the Environmental Protection (Amendment) Act, 2005, and the Environmental Protection (Authorisation) Regulations, 2000.

- 14.18 This Environmental Permit must be renewed by submitting a completed *Application Form for Renewal of Environmental Authorization* to the Agency at least six months before this Permit expires, that is, no later than **November 30, 2027**.
- 14.19 Any late submission of renewal application(s) after the specified date as stated above, may require the Permit Holder to pay, in addition to the renewal fee, a late penalty fee (accruing at the time such obligation was first owed for renewal) at a rate of **two thousand dollars (\$2,000.00) per day for every day late**, until such renewal application is submitted to the Agency, without prejudice to any other rights of the Permit Holder in connection therewith.
- 14.20 Failure to comply with the requirements of this 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 and its regulations, including under any existing and forthcoming regulations made under the said Act or any other applicable Laws of Guyana.

Signed by \_\_\_\_\_ on behalf of the Environmental Protection Agency



Date: 30.6.2023

*HPK*



**Environmental Permit - Ref. No. 20221221-VPBSQ**

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.

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, 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.

NAME:	DISHWANTH P BAREHAM.
SIGNATURE:	Dishwan . P Bareham .
DESIGNATION:	Director
DATE:	2023 . 06 . 30