



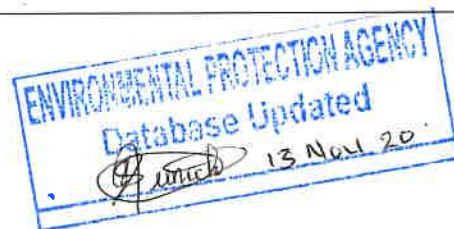
Environmental Protection Agency

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Operation Permit (Renewed)

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

Reference No.:	20130212 - BSSMO
Fee:	Small (C1)- US\$100 per year
Fees Paid	US\$500: Five (5) years (October, 2020 - September , 2025)
Addressee(s):	Mr. Bridgepaul Shivnauth G 17, New Road, Vreed-en-Hoop, West Coast Demerara.
Activity:	Operation of a Sand Mine



Mr. Bridgepaul Shivnauth, trading and operating under the name Shivnauth Sand Mining, 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 (Authorisations) Regulations, 2000, to operate a Sand Mine at Block Number: HR001: Left Bank Lukabuna Creek, Right Bank Hauraruni River, Right Bank Demerara River, Eastern side Soesdyke, Linden/Soesdyke Highway, hereinafter referred to as the "Project", in the manner indicated in the Renewed Application submitted on September 29, 2020, 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 any other applicable laws, best practices, guidelines and standards relevant to this Project.

This Operation Permit-Renewed is issued pursuant to the Environmental Protection (Authorisations) Regulations, 2000.

Terms and Conditions for the Operation to be adhered to by the Permit Holder, His Servants and/or Agents:

[Handwritten signature]
B.S.

1.1 OPERATION

- 1.1 Notify the Agency in writing and obtain its approval for **ANY** proposed changes in operation of the Sand Mining at least **fourteen (14) days before** making the change. The notification shall contain a **description of the proposed change in operation**. It is not necessary to make such a notification if an **Application to vary** this permit has been made and the Application contains a description of the proposed change. In this condition **'change in operation'** means a change in the nature or functioning, or an extension, of the installation, which may have consequences for the environment, including but not limited to the following:

- i. Change in construction, structure, layout of the facility;
- ii. Installation of new and/or changes to equipment, machine, apparatus, mechanism, system or technology serving the facility or operation; and
- iii. Any technology installed at the facility from which effluent may be discharged.

Note: For more information please see **Environmental Protection (Authorisations) Regulations 2000**.

- 1.2 Operate **only** within the description of the block granted by the Guyana Geology and Mines Commission (GGMC) as is described herein: **Point A**, located at geographical coordinates of longitude **58 13'58"W** and latitude **6 23' 26"N**, thence at true bearing of **90 degrees**, for a distance of approximately **371 yards**, to **Point B**, located at geographical coordinates of longitude **58 13'37" W** and latitude **6 21' 26"**, thence at true bearing of **180 degree**, for a distance of approximately **195 yards**, to **Point C**, located at geographical coordinates of longitude **58 13'37" W** and latitude **6 23'20 N**, thence at a true bearing of **270 degree**, for a distance of approximately **371 yards**, to **Point D**, located at geographical coordinates of longitude **58 13' 48" W** and latitude **6 23'20"N**, thence at true bearing of **360 degrees**, for a distance of approximately **195 yards**, to the point of commencement at **Point A**.
- 1.3 Ensure all areas that are mined are re-contoured so as to address the effects of erosion and landslide.
- 1.4 Ensure all trucks and other vehicles used for the transportation of sand from the mine are adequately covered to prevent any escape of sand particles during transportation.
- 1.5 Adhere at all times to the terms and conditions outlined in sections **5.0, 6.0 and 7.0 of the Guyana Geology and Mines Commission (GGMC) Draft Code of Practice for Sand and Saprolite Mining.**

2.0 EMPLOYEES, OCCUPATIONAL HEALTH AND SAFETY

- 2.1 Adhere to the requirements of **the Occupational Safety and Health Act, Cap. 99:01, Laws of Guyana.**
- 2.2 Provide the necessary protective equipment to employees as per job specification such as: hi-visibility vests, respirator, hard hats, gloves, and appropriate footwear and ensure that this protective gear is appropriately used.
- 2.3 Prepare and maintain an employee log for distribution of Personal Protective Equipment.
- 2.4 Provide a well-equipped First Aid Kit at the work site.
- 2.5 Ensure that functional communication and transportation systems are in place to respond to emergencies.
- 2.6 Ensure all employees/third party contractors are aware of the Conditions of this Operation Permit (Renewed) and provide training on the requirements of the Permit and good environmental management practices.
- 2.7 Prepare and maintain a training file of all training completed by employees/contractors. This file should be available upon request during a Compliance Inspection of the Sand Mining operation.
- 2.8 Ensure proper signage and security measures to keep unauthorized persons from accessing restricted areas.

3.0 ROADS

- 3.1 Utilise only one access road/trail from the main access road to the sand mine.
- 3.2 Contribute to the maintenance of the access road utilised for transportation to and from the Sand Mine.
- 3.3 Ensure that all measures such as, grading and compacting of the access road are carried out as necessary to maintain the road.
- 3.4 Construct roads with sufficient diversion drains and culverts to ensure that clean stormwater is diverted away from roads. Runoff from roads should be discharged to a vegetated area and not directly into waterways.
- 3.5 Ensure that transportation to and from the operation does not impede Road traffic.

- 3.6 Install adequate safety signs along haul roads informing users of dangerous bends, crossing of haul trucks, speed limits, etc.

4.0 VEGETATION CLEARING AND TOP SOIL STRIPPING

- 4.1 Where possible, topsoil should be placed directly onto an area being rehabilitated to reduce double handling of soil.
- 4.2 Take all necessary preventative measures to reduce the incidence of erosion that may result from water and wind at the project site.
- 4.3 Not store topsoil (overburden) within three metres (3m) of natural vegetation or mine face. Top soil and vegetation should 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 Erect silt fences or other sediment control devices in drainage lines/around the mine in erosion prone areas.
- 4.5 Conduct reclamation activities at mined-out sites/pits, in accordance with the stipulations of the Environmental Codes of Practice for Sand and Loam Mining (*Guyana Geology and Mines Commission, Environmental Management Codes of Practice 2010, Mining Amendment Regulations, 2005*).
- 4.5.1 Progressively rehabilitate the site allocating at least one metre (1 m) of the topsoil (including all vegetation cleared from the site) to be used as backfill material. Rehabilitation will include reduction of slopes to prevent landslides and/or erosion, and re-vegetation.

5.0 BUFFER ZONES AND SITE ACCESS MANAGEMENT

- 5.1 Maintain demarcated boundary limits for the site claim and a non-extractable, vegetated buffer zone at least 150 m wide from adjoining areas with different land uses unless otherwise approved by the EPA.
- (i) A non extractable buffer of 100 meters wide, must be maintained along the side of the mine/pit parallel to any main public or private road and power lines; and
- (ii) Do not operate within 200 metres of any river, creek, water source/spring located on the property.
- 5.2 Establish and maintain a vegetated buffer zone 50 m wide from the centre line of the access road to the edge of the pit.

- 5.3 Ensure to re-contour mined-out areas within your concession to address the effects such as erosion, wildlife movement, landslide and Occupational Health and Safety hazards.
- 5.4 Use benchmarks to determine depth achieved during mining operations.
- 5.5 Determine and demarcate the 'high' ground water depth. Conduct excavation to a depth that leaves two (2) m above the water table. No mining is allowed at or below the water table.

6.0 SOLID WASTE MANAGEMENT

- 6.1 Adhere to the provisions of the **Environmental Protection (Litter Enforcement) Regulations, 2013.**
- 6.2 Maintain good sanitary and hygienic practices and the aesthetic quality of your surroundings at all times.
- 6.3 Do not dispose of waste in or near the waterways.
- 6.4 Provide covered garbage receptacles at strategic locations, at the project site, which should be emptied, cleaned and maintained. As far as possible, adequately reuse, recycle and compost waste materials.
- 6.5 Strictly prohibit all persons, both employees and the general public, from disposing of solid waste at the mining site. Appropriate signage communicating such prohibition must be erected.
- 6.6 Construct and maintain new or existing Ventilated Improved Pit (VIP) latrine according to the following requirements:
 - 6.6.1 The environs of the latrine should be kept clean, in a hygienic manner and maintained both internally and externally. The latrine should be:
 - 6.6.2 Built with suitable materials such as hardwood or concrete and soil should be lined with at least 1.5 metres of clay/loam material to avoid leachate entering the ground water;
 - 6.6.3 Properly vented with a tall ventilation pipe located on the windward side; and Fitted with a fly screen on top of the vent to prevent the passage of flies and mosquitoes; The meshed apertures (holes) of the fly screen must not exceed 1.5 millimeters, made with

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corrosion resistant material to withstand intense rainfall, high temperatures and strong sunlight.

- 6.6.4 Positioned at least thirty (30) metres away from surface and ground water sources, creeks, wells or springs.
- 6.6.5 Dug at least 0.6 metres above the average ground water table and at least four (4) metres away from any dwelling (such as camps, and any sleeping and living quarters, etc.).
- 6.6.6 Easily reached during bad weather and will not cause odour.
- 6.6.7 When the maximum capacity is reached latrine should be covered with at least 0.3 metres of soil and a suitable site determined for another.

7.0 AIR QUALITY MANAGEMENT

- 7.1 Adhere to the provisions of the **Environmental Protection (Air Quality) Regulations, 2000.**
- 7.2 Operate all mechanical equipment in accordance with manufacturer's specifications. All mechanical equipment and vehicles should be regularly maintained and operated at their optimal levels to minimise atmospheric emissions.
- 7.3 Employ dust suppression methods such as watering, erecting dust screens/fences to control dust emissions from material stockpiles and other components that would generate dust.
- 7.4 Make all necessary precautions to reduce any instances of air emissions into the environment from the operation.
- 7.5 Reduce speed limit for hauling trucks. Further, all hauling trucks should be covered to prevent release of fugitive dust.
- 7.6 Maintain an inventory of all sources of air contaminants e.g. generators, trucks heavy duty machineries etc. on site. The inventory should be submitted in the Project's yearly Annual Report (see condition 10.2 below) or otherwise requested.

8.0 NOISE MANAGEMENT

- 8.1 Adhere to the provisions of the **Environmental Protection (Noise Management) Regulations, 2000.**

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- 8.2 Comply with the *Guyana National Bureau of Standards (GNBS) Guidelines for the Measurement and Assessment of Noise 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))

- 8.3 Ensure all significant noise-producing equipment e.g. front-end loaders, are equipped with appropriate silencers and mufflers where necessary, to reduce noise levels impacting the surrounding environment, to achieve compliance with the *National Bureau of Standards* GNBS requirements.
- 8.4 Locate noise making equipment in the least noise sensitive area, or enclose these operations, if necessary.

9.0 COMPLIANCE MONITORING AND REPORTING

- 9.1 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.
- 9.2 Submit to the EPA, the **Environmental Annual Reports** on the status of the project, progress of the implementation of the monitoring activities and compliance with the conditions contained herein by **March 31** every year (Please see attached, the *Guidelines for the preparation of Environmental Annual Reports*).
- 9.3 Inform the Agency prior to or within **thirty (30) days** of any change of name or ownership of the operation.
- 9.4 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.
- 9.5 Notify the EPA within **twenty-four (24) hours** of the occurrence of any environmental emergencies such as a sudden onset disaster, accident, natural, technological or human induced factors that cause or threaten to cause severe environmental damage as well as harm to human health or livelihood.
- 9.6 Report to the Agency any non-compliance(s) with the Operation Permit (Renewed):
- 9.6.1 Within **twenty-four (24) hours** of the time the Holder of the Operation Permit (Renewed) becomes aware of the non-


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compliance(s), the anticipated manner in which it may endanger human health or the environment.

9.6.2 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.

9.6.3 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.

9.7 Report all occurrences of illegal wildlife trapping and trading to the Guyana Wildlife Conservation and Management Commission and EPA. The Permit Holder shall discourage the trading, hunting and use of wildlife by its staff.

9.8 Prepare and submit a detailed **Reclamation Plan** for approval **six (6) months** before the actual reclamation process commences.

9.9 Submit to the Agency a detailed **Project Closure Plan** for review and approval **two (2) years** prior to closure. Thereafter, the closure plan will be updated and reviewed at a frequency agreed to with the Agency.

9.10 Submit to the EPA, the Mining License from the Guyana Geology and Mines Commission (GG&MC) within **one (1) week** of issuance.

10.0 INSTITUTIONAL AUTHORITY AND LIABILITIES

10.1 The EPA reserves the right to review and/or amend the conditions and fees 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.

10.2 The EPA shall have the right to cancel or suspend this Permit for breach of any of the terms and conditions contained herein.

10.3 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 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.

10.4 This Operation Permit (Renewed) is not the final consent; all relevant

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permissions should be obtained from other regulatory bodies for continued operation.

- 10.5 The Permit Holder, his Servants and/or Agents 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 in excess of that prescribed by the regulations or stipulated by any Operation Permit (Renewed) which are attributed to the Project, s. 19 (1) and (2) of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.
- 10.6 The Permit Holder, his Servants and/or Agents shall be guilty of any offence in accordance with s. 39(1), (2), (3), (4) of the Environmental Protection Act, Cap. 20:05, which states respectively –“every person who causes material or serious environmental harm by polluting the environment intentionally or recklessly and with the knowledge that material and/or serious environmental harm will or might result is guilty of an offence and shall be liable to the penalties prescribed under the Act.”
- 10.7 The Permit Holder shall be liable to any gross negligence or wilful misconduct caused by the Permit Holder, and/ or Agents, to the marine environment, biodiversity, protected species and natural habitat.
- 10.8 The Permit Holder shall compensate any Party who suffers any loss or damage as a result of the attributed project. (Part V, s. 19(3)(e)) of the Environmental Protection Act Cap. 20:05, Laws of Guyana.
- 10.9 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’s lack of due care and diligence.
- 10.10 Should the Permit Holder contravene or is likely to contravene any condition of this Permit, the Agency (EPA) may serve him an Enforcement Notice in accordance with s. 26 of the Environmental Protection Act Cap. 20:05, Laws of Guyana.
- 10.11 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, issue to the Permit Holder a Prohibition Notice Order to immediately cease the offending activity. S. 27 Environmental Protection Act, Cap. 20:05, Laws of Guyana.
- 10.12 This Permit is effective for the period stipulated herein **(October, 2020-September, 2025).**



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- 10.13 This Operation Permit (Renewed) shall remain valid until **September 30, 2025**, unless otherwise suspended or revoked in accordance with the provisions of this Permit or the Environmental Protection Act, 1996, the Environmental Protection (Amendment) Act, 2005, and the Environmental Protection Regulations, 2000.
- 10.14 This Permit must be renewed by submitting a completed *Application Form for Renewal of Environmental Authorisation* to the Agency at least six months before this Permit expires, that is, no later than **June 30, 2025**.
- 10.15 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, the Environmental Protection (Amendment) Act 2005, and the Environmental Protection (Authorisations) Regulations 2000, including under any existing and forthcoming regulations made under the said Act or any other applicable Laws of Guyana.

Signed by
Agency.



on behalf of the Environmental Protection

Date:

2020.10.23

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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 Operation Permit (Renewed) is granted and agree to abide by the Environmental Protection Act, Cap. 20:05, the Environmental Protection (Amendment) Act, 2005, and the Environmental Protection Regulations, 2000, existing and/or forthcoming regulations, best practices, guidelines and standards made under this Act.

NAME	BRIDGE PAUL SHUNATH
SIGNATURE	B. Shunath
DESIGNATION	OWNER
DATE	03.11.2020

