



Environmental Protection Agency

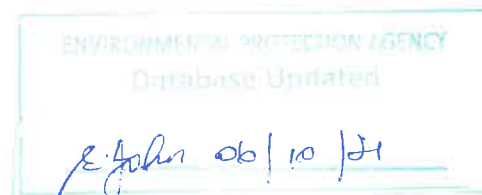
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Operation Permit

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.:	20200129 - IEBOM
Fee:	Small (C2) – US\$ 875 (5 years) i.e. US\$ 175 per year
Fees Paid	US\$ 875 (February 2020 to February 2025)

Addressee(s): Mr. Ivor English
Proprietor
245 Durban Backlands
Georgetown



Activity: Operation of a Sand and Loam Mine

Mr. Ivor English, 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 and Loam Mine within Block: E-2/MP/001, located at Manaka, Left Bank Essequibo River, hereinafter referred to as the "Project", in the manner indicated in the Application submitted on January 29, 2020, subject to the terms and conditions set forth herein and in any forthcoming regulations made under the said Environmental Protection Act and/or any other applicable laws, best practices, guidelines and standards relevant to this project.

Terms and Conditions for the Operation to be adhered to by the Permit Holder:

1.0 OPERATION

- 1.1 Notify the Agency in writing and obtain its approval for **ANY** proposed changes in operation of the Sand and Loam 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

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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.

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 37'11"W** and latitude **6 42' 35"N**, thence at true bearing of **270 degrees**, for a distance of approximately **1097 yards**, to **Point B**, located at geographical coordinates of longitude **58 37'44"W** and **6 42'36"N**, thence at true bearing of **0 degree**, for a distance of approximately **1103 yards**, to **Point C**, located at geographical coordinates of longitude **58 37'44" W** and latitude **6 43' 8"N**, thence at a true bearing of **90 degree**, for a distance of approximately **1095 yards**, to **Point D**, located at geographical coordinates of longitude **58 37'11" W** and latitude **6 43'30" N**, thence at true bearing of **180 degrees**, for a distance of approximately **1101 yards**, to 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 leave the mine adequately covered, so that there is no escape of sand particles.

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 employees with the necessary protective equipment to job specification such as: hi-visibility vests, respirator, hard hats, gloves, and appropriate footwear and ensure appropriate utilization of these gears. Prepare and maintain an employee log of distribution of Personal Protective Equipment.

2.3 Strictly ensure that no employee operates under unsafe conditions and prevent unstable mine faces so as to avoid the risks of collapse and subsidence of earth.

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- 2.4 Provide a well-equipped first aid kit at the work site and ensure that functional communication and transportation systems are in place to respond to emergencies.
- 2.5 Ensure all employees/third party contractors are aware of the Conditions of this Operation Permit and provide training on good environmental management practices. Prepare and maintain a training file for employees which should be available upon Officers request during Compliance Inspection.
- 2.6 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 to the sand and loam mine from the main access road.
- 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 roads be carried out as necessary to maintain road.
- 3.4 Provide adequate drainage to accommodate runoff from the road to prevent flooding and ensure that it is not discharged directly into water ways.
- 3.5 Ensure that transportation to and from the operation does not impede haul 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 Ensure vegetative debris is incorporated and stored with top soil to keep active for reuse in reclamation. In addition, practical measures, such as growing of vegetation such as shrubs and grasses on stockpiles of topsoil should be employed to reduce erosion.
- 4.2 Where possible, topsoil should be placed directly onto an area being rehabilitated to reduce double handling of soil.
- 4.3 Take preventative measures to reduce water and wind erosion at the project site.
- 4.4 Conduct reclamation activities at mined-out sites/pits, in accordance with the stipulations of the Environmental Codes of Practice for Sand and Loam Mining

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(Guyana Geology and Mines Commission, Environmental Management Codes of Practice 2010, Mining Amendment Regulations, 2005).

- (i) 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.
- 4.5 Not store top soil (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.

5.0 BUFFER ZONES

- 5.1 Maintain demarcated boundary limits for the site claim and a non-extractable, vegetated buffer zone at least 20 m wide as follows:
- (i) Between your mining blocks and other different contiguous land use activities.
 - (ii) Around the mine site.
 - (iii) Around the property boundary.
 - (iv) Around any water source/spring located on the property.
- 5.2 Establish and maintain a vegetated buffer zone 15 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 FUEL, AND HAZARDOUS WASTE MANAGEMENT

- 6.1 Adhere to the provisions of the **Environmental Protection (Hazardous Waste Management) Regulations, 2000.**
- 6.2 There shall be no release of any pollutants (i.e. fuel, waste oil, wood preservatives) to ground water or soil from the permitted installation. Accidental release of pollutants to soil and ground water should be recorded and reported within twenty four (24) hrs to the Agency for further investigation.

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- 6.3 Establish and maintain a designated area for refuelling and oil changes. The designated area should be surfaced with an impervious material such as concrete and so designed as to allow for easy cleanup of accidental fuel and oil spills.
- 6.4 Take the necessary precautionary measures such as the use of leak-proof and tightly closed containers during the transport of fuel to the operation.
- 6.5 Construct and maintain adequate containment with an impervious surface for the storage and handling of all hazardous materials, oils, lubricants and fuels. The containment should be constructed to store 110% of the total volume of the largest tank. Oil-water separators must be installed where necessary.
- 6.6 Store waste oil in tightly covered drums or barrels to avoid spillage.
- 6.7 Promote the reuse of waste oil, for example as a lubricant for equipment, where practical.
- 6.8 Ensure that oil/fuel containment absorbent materials are available for use in the event of an oil/fuel spill. Oily rags, filters and oil containers should be stored in labeled containers.
- 6.9 Where applicable, 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:
 - a) The identification information of the facility.
 - b) Type and quantities of hazardous waste generated.
 - c) Data concerning off-site shipments of waste.
 - d) Any applied treatment standards.
 - e) A summary of any accidents that may have occurred and any action taken.
 - f) Any waste minimization efforts undertaken by the generator.
 - g) Any other matter the Agency may require.

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

- 6.10 Take the necessary precautionary measures during the transport and use of fuel and other chemicals/hazardous materials. In addition, implement a programme to ensure regular and preventative maintenance of machinery and equipment to prevent leaks and minimise air emissions and hydrocarbon releases.

7.0 WASTE MANAGEMENT

- 7.1 Adhere to the provisions of the **Environmental Protection (Litter Enforcement) Regulations, 2013.**
- 7.2 Maintain good sanitary and hygienic practices and the aesthetic quality of your surroundings at all times.
- 7.3 Do not dispose waste in or near the waterways.
- 7.4 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.
- 7.5 Strictly prohibit all persons, both employees and general public, from disposing any garbage at the mining site. Appropriate signage communicating such prohibition must be erected.
- 7.6 Construct and maintain a solid waste disposal pit. The Pit should be located at least **one hundred (100) meters** away from watercourses, or habitation.
- 7.6.1 Storm water should be diverted from the waste pit. Pits should be maintained and covered on a regular basis to avoid fly and rodent infestations as well as mal-odour from leachate.
- 7.6.2 When the maximum capacity is reached, the solid waste pit should be covered with at least 0.3 metres of soil and a suitable site determined for another.
- 7.7 Construct and maintain a Ventilated Improved Pit (VIP) latrine according to the following requirements:
- 7.7.1 The environs of the latrine should be kept clean, in a hygienic manner and maintained both internally and externally. The latrine should be:
- Built with suitable materials such as hardwood or concrete materials;
 - Properly vented with a tall ventilation pipe located on the windward side;
 - 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 corrosion resistant material to withstand intense rainfall, high temperatures and strong sunlight;

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- Positioned at least thirty (30) metres away from surface and ground water sources, creeks, wells or springs.
- 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.).
- Easily reached during bad weather and will not cause odour.
- Covered with at least 0.3 metres of soil when its maximum capacity is reached and a suitable site determined for another latrine.

8.0 AIR QUALITY

- 8.1 Adhere to the provisions of the **Environmental Protection (Air Quality) Regulations, 2000.**
- 8.2 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 minimize atmospheric emissions.
- 8.3 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.
- 8.4 Take all necessary precautions to reduce any instances of air emissions into the environment from the operation.
- 8.5 Reduce speed limit for hauling trucks. Further, all hauling trucks should be covered to prevent release of fugitive dust.

9.0 NOISE MANAGEMENT

- 9.1 Adhere to the provisions of the **Environmental Protection (Noise Management) Regulations, 2000.**
- 9.2 Comply with the *Guyana National Bureau of Standards (GNBS) Interim 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))

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- 9.3 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.

10.0 COMPLIANCE MONITORING AND REPORTING

- 10.1 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.
- 10.2 Monitor the implementation of the conditions of this Permit, insofar as they involve adherence by your employees and all third parties under your direction.
- 10.3 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*).
- 10.4 Inform the Agency prior to or within **thirty (30) days** of any change of name or ownership of the operation.
- 10.5 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.
- 10.6 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.
- 10.7 Report to the Agency of non-compliance with the Operation Permit:
- 10.7.1 Within **twenty-four (24) hours** of the time the Holder of the Operation Permit becomes aware of the non-compliance, the anticipated manner in which it may endanger human health or the environment.
- 10.7.2 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.
- 10.7.3 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.

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- 10.8 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.
- 10.9 Prepare and submit a detailed **Reclamation Plan** for approval **six (6) months** before the actual reclamation process commences.
- 10.10 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.

11.0 INSTITUTIONAL AUTHORITY AND LIABILITIES

- 11.1 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 Regulations, 2000.
- 11.2 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.
- 11.3 The EPA shall have the right to cancel or suspend this Permit for breach of any of the terms and conditions contained herein.
- 11.4 The Permit Holder 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.
- 11.5 This Operation Permit is not the final consent; all relevant permission should be obtained from other regulatory bodies for continued operation.
- 11.6 Failure to comply with the requirements of this Permit shall render the Permit Holder liable to prosecution and to penalties prescribed under the Environmental Protection Act, Cap. 20:05, the Environmental Protection (Amendment) Act, 2005, and the Environmental Protection (Authorisations) Regulations, 2000, including civil penalties and injunctive relief.
- 11.7 The Permit Holder shall be strictly liable for any loss or damage to the environment through any act caused intentionally or recklessly, through the

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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 which are attributed to the Project, s. 19 (1) and (2) of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.

- 11.8 The Permit Holder 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.”
- 11.9 The Permit Holder shall be liable to any gross negligence or willful misconduct caused by the Permit Holder, and/or Agents, to the marine environment, biodiversity, protected species and natural habitat.
- 11.10 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.
- 11.11 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's lack of due care and diligence.
- 11.12 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.
- 11.13 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, 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.
- 11.14 This Permit is effective for the period stipulated herein **February 2020 to February 2025**.
- 11.15 This Operation Permit shall remain valid until **February 28, 2025 unless** otherwise cancelled, suspended, modified or varied in accordance with the provisions of this Permit or the Environmental Protection Act, Cap. 20:05, Laws of Guyana, the Environmental Protection (Amendment) Act, 2005, and the Environmental Protection (Authorisation) Regulations, 2000.
- 11.16 This Permit must be renewed by submitting a completed *Application Form for Renewal of Environmental Authorization* to the Agency at least six months

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before this Permit expires, that is, no later than **July 31, 2024**.

- 11.17 Any late submission of renewal application(s) after the specified date as stated above, shall 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.
- 11.18 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  on behalf of the Environmental Protection Agency.

Dr. Vincent Adams
Executive Director

Date: 25/02/2020

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

NAME	IVOR BURNETT ENGLISH
DESIGNATION	PRINCIPAL/ OWNER
SIGNATURE	<i>IB English</i>
DATE	21-09-21



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