



**Environmental
Protection
Agency**

Ganges Street, Sophia,
Georgetown, GUYANA
Tel.: (592)-225-5467 / 5468 /
5469
Fax: (592) 225-5481
Website:
<http://www.epaguyana.org>
Email: epa@epaguyana.org

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.:	20190719-QMODL
Fees:	Small (C2) - US\$175 per year
Fees Paid:	US\$875 (5) years – (December 2019 to November 2024)

Addressee(s): Mr. Odinga Lumumba
Managing Director
Elaineville Housing Development Inc.
90, Laluni Street
Queenstown
Georgetown.



Activity: Sand Mining Operation


Mr. Odinga Lumumba, trading under the name Elaineville Housing Development Inc., 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, to be located within Block E-43/SMP/000, Dakoura, Linden/Soesdyke Highway, hereinafter referred to as the "Project", in a manner indicated in the Application submitted on July 19, 2019, subject to the terms and conditions set forth herein and 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.

Handwritten signature
C.S

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

1.0 OPERATION

- 1.1 Notify and obtain approval from the EPA of plans to change the facility or operation in any way that may impact the environment, positively, that is, adding value or negatively. To allow for timely approval, the Agency must be notified before implementation of the change, including but not limited to the following 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:

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

- 1.2 Ensure that trucking services do not cause any hindrance to public thoroughfare.
- 1.3 Adhere to the Guyana Geology and Mines Commission's (GGMC) **Code of Practice for Sand and Loam Mining**.
- 1.4 Submit to the Agency, a copy of the **Mining License** from the Guyana Geology and Mines Commission within 2 months of issuance of this Operation Permit.

2.0 EMPLOYEES

- 2.1 Provide employees with the necessary personal protective equipment to fit their job specification such as: hi-visibility vests, respirator, hard hats, gloves, and appropriate footwear and ensure appropriate utilisation of these gears. Prepare and maintain an employee log of distribution of Personal Protective Equipment which must be available upon request by Officers of the Agency.

- 2.2 Provide well-equipped first aid kits; including snake bite kits, at all work sites and ensure that functional communication and transportation systems are in place to respond to emergencies.
- 2.3 Make all employees/third party contractors aware of the Conditions of the Operation Permit and provide training on good environmental management practices. Prepare and maintain a training file inclusive of minutes and photographic documentation which should be available upon Officers' request during Compliance Inspection.
- 2.4 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. Employees must be notified of the agreed mechanism during recruitment.

3.0 ROADS AND BUFFER ZONE MANAGEMENT

- 3.1 Maintain demarcated boundary limits for the site claim. Ensure proper signage and security measures to keep unauthorised persons from accessing restricted and high-risk areas.
- 3.2 Maintain a non-extractable, vegetated buffer zone at least 20 m wide between your sand mine and other different contiguous land use existing around your operation.
- 3.3 Maintain a non-extractable vegetated buffer zone at least 20 m wide on each side of the Dakoura Creek.
- 3.4 Establish and maintain a vegetated buffer zone of 15 m wide from the centre line of the access road to the edge of the pit.
- 3.5 Re-contour mined-out areas within your concession to address the effects such as erosion, wildlife movement, landslide and Occupational Health and Safety hazards.
- 3.6 Use benchmarks to determine depth achieved during mining operations.
- 3.7 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.
- 3.8 Utilise only one access road/trail to the sand mine from the main access road.
- 3.9 Maintain the active road/trail leading to the site. In the event that ruts/holes develop as a result of usage of the main access road to the sand mine, fill in such ruts and holes with suitable material e.g. compacted fill, as possible to

reduce the potential for erosion.

- 3.10 Maintain the access road to provide for good drainage and dust management. The running surface of the road should be crowned with a compacted layer and with good drainage on both sides to catch and direct water to local drainage system. In addition, the road should be wetted as needed to meet ambient dust conditions.
- 3.11 Ensure that trucks are equipped with the necessary reflecting signage to warn the public of impending danger of parked/moving trucks on the public thoroughfare.
- 3.12 Install adequate safety signs along 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 it 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 Avoid denuding vegetation and overburden on sloping topography during wet conditions.
- 4.3 Where possible, topsoil should be placed directly onto an area being rehabilitated to reduce double handling of soil.
- 4.4 Stockpile topsoil in suitable storage sites, where reuse can be accomplished easily.
- 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*).
- 4.6 Progressively rehabilitate the site, allocating at least one metre of the top soil to be used as backfill material. Rehabilitation will include reduction of slopes to prevent landslides and/or erosion and re-vegetation.

5.0 AIR QUALITY MANAGEMENT

- 5.1 Comply with the provisions of the **Environmental Protection (Air Quality) Regulations, 2000** and the **Environmental Protection (Noise Management) Regulations, 2000**.

- 5.2 Employ all practical measures within the project site to reduce fugitive dust. Dust suppression methods such as watering, sealing/capping should be used during dry periods and as deemed necessary.
- 5.3 Cover sand during transport from mine to reduce emission of fugitive dusts into the surrounding environment.
- 5.4 Continue to operate and service all mechanical equipment in accordance with manufacturer's specifications at all times. Additionally, ensure that mechanical equipment and vehicles are regularly maintained and work at their optimal levels to prevent leaks and minimise atmospheric emissions.

6.0 NOISE MANAGEMENT

- 6.1 Comply with the provisions of the **Environmental Protection (Noise Management) Regulations, 2000**.
- 6.2 Comply with *Guyana National Bureau of Standards (GNBS) Guidelines for Noise Emissions into the Environment*, not exceeding the limits below at a distance of 15 meters (50 feet) from the source or property boundary, whichever is closer.

Industrial Limits: 100 dB (Daytime Limits 06:00 h – 18:00 h)
80 dB (Nighttime Limits 18:00 h – 06:00 h)

- 6.3 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.

7.0 WATER QUALITY

- 7.1 Comply with the provisions of the **Environmental Protection (Water Quality) Regulations, 2000**.
- 7.2 Ensure that the Dakoura Creek specifically in the vicinity of the project site is kept free of solid wastes such as food boxes, plastic bottles, etc.
- 7.3 Adequately store and protect overburden and waste especially in rainy conditions to avoid runoff into the Dakoura Creek.
- 7.4 Not store topsoil (overburden) within 20 m of any creek and spring located within your property.

- 7.5 Install monitoring stations at strategic points along the Dakoura Creek to monitor the creek's condition. Monitoring must occur at the two intersection points of the creek and mine boundaries indicated in the Site Map submitted in the Application.
- 7.6 Conduct a baseline sampling of the following parameters at strategic points: pH, Total Suspended Solids, Total Dissolved Solids, and Turbidity and submit results to the EPA **within three (3) months** after issuance of the Permit.
- 7.7 Conduct water quality monitoring for the parameters listed in condition 7.6 on a bi-annual basis (one in the wet season and one in the dry season), and submit result to the Agency as part submission in the Environmental Annual Report required in **Condition 10.3**. Samples for testing should be collected at locations determined in **Condition 7.5**.

8.0 WASTE MANAGEMENT

- 8.1 In accordance with the **Environmental Protection (Litter Enforcement) Regulations, 2013** provide covered garbage receptacles at strategic locations, at Project site which should be emptied, cleaned and maintained. As far as possible adequately reuse, recycle and compost waste materials.
- 8.2 Maintain good sanitary and hygienic practices and the aesthetic quality of your surroundings at all times.
- 8.3 Promote proper solid waste management and disposal practices at your facility. Ensure solid waste materials are appropriately stored until such time of disposal. Waste shall not be disposed of in or near the waterways.
- 8.4 At all times, the receptacles should be cleaned and maintained on a regular basis, to prevent the outflow of excess garbage into the surrounding environment and/or attraction of rodents and other vermin.
- 8.5 Strictly prohibit all persons, both employees and general public, from disposing all garbage matter into the open environment, commanding all garbage disposal to designated locations indicated in Condition 8.1. Appropriate signage must be erected communicating such prohibition.
- 8.6 Construct and maintain a Ventilated Improved Pit (VIP) latrine which should be:
 - Maintained and its environs kept in a clean and hygienic manner both internally and externally;
 - 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; the fly screen should have mesh apertures (holes) not exceeding 1.5 millimeters, be made with corrosion resistant material capable of withstanding exposure to intense rainfall, high temperatures and strong sunlight;
- 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 the maximum capacity is reached latrine and a suitable site determined for another (latrine).

9.0 FUEL, AND HAZARDOUS WASTE MANAGEMENT

- 9.1 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. Permanent storage of fuel is strictly prohibited directly at mining site.
- 9.2 Ensure that fuel stored permanently at project site is secured in a fuel containment bund that has a 110 % percent containment capacity of the largest storage tank/container, which must have an impervious surface for the handling of all oils, lubricants and fuels.
- 9.3 Waste oil generated on site should be stored in closed containers and disposed of in a manner approved by the EPA. It is an offence to drain fuel/lubricants including used oils of any quantity from equipment onto the ground, drains or water ways.
- 9.4 Take the necessary precautionary measures during the transport and use of fuel and other chemicals/hazardous materials.

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 Notify the Agency in writing of any change of name or ownership of the Permitted facility within **thirty days** after the change occurs.
- 10.5 Notify the Agency within **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 **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.

- 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 targeting, hunting and use of wildlife by its staff.

11.0 INSTITUTIONAL AUTHORITY/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.37 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.
- 11.5 Where it appears to the Agency 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 EP Act, Cap. 20:05, Laws of Guyana.
- 11.6 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 EP Act Cap. 20:05, Laws of Guyana.
- 11.7 This Operation Permit is not the final consent; all relevant permissions should be obtained from other regulatory bodies for continued operation.
- 11.8 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 in excess of that prescribed by the regulations or stipulated by any Operation Permit which are attributed to the Project, s. 19 (1)(2) Environmental Protection (EP) Act, Cap. 20:05, Laws of Guyana.

- 11.9 The Permit Holder shall compensate any Party who suffers any loss or damage as a result of the attributed Project (s. 19 (3) (e)) EP Act, Cap. 20:05, Laws of Guyana.
- 11.10 The Permit Holder shall be responsible for the payment of all costs related to the assessment of damage and costs for the independent assessor (s).
- 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 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 biodiversity, protected species and natural habitat.
- 11.13 This Operation Permit is effective for the period stipulated herein **December 2019 to November 2024.**
- 11.14 This Operation Permit shall remain valid until **November 30, 2024**, 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.
- 11.15 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 **April 31, 2024.**
- 11.16 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 (\$2000.00) 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.
- 11.17 Failure to comply with the requirements of this Permit shall render the Permit Holder liable to prosecution and to civil penalties and/or injunctive relief prescribed under the Environmental Protection Act, Cap. 20:05, Laws

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of Guyana 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  on behalf of the Environmental Protection Agency
Dr. Vincent Adams
Executive Director

Date

December 06, 2019

I 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 existing or forthcoming regulations, best practices, guidelines and standards made under this Act.

NAME	Cleo Singh
DESIGNATION	Secretary
SIGNATURE	
DATE	19/12/2019.

