

Ganges Street, Sophia, Georgetown, GUYANA

Tel.: (592)-225-2062 / 1218 /

0506 / 6917

Fax: (592) 225-5481

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.:	20191108-ETSDS
Fee:	Medium (C2) - i.e. US\$800 per year
Fee Paid:	US\$4,000 Five (5) years (November, 2020 to October 2025)
Addressee:	Mr. Eric Tucker Managing Director Sandip Waste Management Solutions Inc. 24 & 25 Plantation Resources Canal No. 2 West Bank Demerara
Activity:	Collection and Transportation of Solid and Septic Wastes (Domestic & Commercial Only).

Sandip Waste Management Solutions 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 collect and transport solid and septic wastes, located at 24 & 25 Plantation Resources, Canal No.2, West Bank Demerara, hereinafter referred to as the "Project", in a manner indicated in the Application submitted November 08, 2019, and subject to the terms and conditions set forth herein and any forthcoming regulations, best practices, guidelines and standards relevant to this project.

Terms and Conditions for Operation by Permit Holder, His Servants and/or Agents:

1.0 OPERATION

1.1 Notify the Agency in writing of any proposed changes in the *Collection and Transportation of Solid and Septic Wastes* operation 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

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or an extension, of the installation, which may have consequences for the environment, including but not limited to the following:

- I. Changes in construction, structure, or layout of the facility.
- II. Installation of new and/or changes to equipment, machine, apparatus, mechanism, system or technology serving the facility or operation.
- III. Any technology used or installed at the facility from which effluent may be discharged.
- IV. Any other circumstance or condition prescribed by Regulation 20(3) of the Environmental Protection (Authorisations) Regulations.
- 1.2 An area for employees' sanitation station shall be constructed and installed at the facility by **January 31, 2021**. The sanitation station shall include a wall-mounted liquid hand-soap disperser, along with hot air dryers or paper towel dispensers, and provide detergents and germicidal solutions next to the hand washing sink for use by working personnel.
- 1.3 Training in waste management best practices shall be provided annually to staff at the facility. A Training Schedule shall be submitted to the Agency, by **January 31**, **2021**, as a component of the Annual Report for the facility
- 1.4 A Transportation Procedure/Protocol shall be established, maintained and submitted to the EPA for approval by **January 31, 2021**.
- 1.5 All employees shall be equipped with Personal Protective Equipment relevant to their occupational tasks during operation. The following Personal Protective Equipment should include but not limited to:
 - I. Safety helmets;
 - II. Hearing protection;
 - III. Protective respiratory devices;
 - IV. Safety boots with ankle support;
 - V. Gloves with reinforced palms and fingers;
 - VI. Non-snag outer clothing appropriate to the prevailing weather conditions and high-visibility clothing; and
 - VII. Eye protections such as safety glasses, mesh face guards or goggles.
 - VIII. Face masks.
- 1.6 All Trucks (Compactor Truck & Sewage Truck) **MUST** be parked on an impervious surface.
- 1.7 A spill containment kit shall be stored at site. The kit shall contain absorbent material to absorb spilt hydraulic oil and other spilt liquids.
- 1.8 Trucks **shall not** be parked on the Government Reserve.





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2.0 SEPTIC COLLECTION & DISPOSAL

- 2.1 A trained operator or carrier shall at all times supervise, monitor and control the collection and transfer of septic waste, to prevent overfill and spill during the entire period of collection and/or transfer.
- 2.2 Collection of septic waste shall be conducted on an **impermeable** surface.
- 2.3 All vacuum trucks utilised for the collection and transport of septic waste shall satisfy the requirements of the **Road Traffic** Laws. Evidence of this requirement shall be submitted to the Agency as a component of the Annual Report for the facility
- 2.4 Vacuum truck hoses and fittings shall be inspected daily for signs of wear or breakage. Damaged hoses and fittings must be replaced immediately. Inspection reports shall be maintained and made available to the EPA upon request.
- 2.5 Vacuum trucks dedicated for collection and transportation of septic waste **shall not** be used for any other purpose.
- 2.6 A **Manual of Practice** shall be developed and submitted to the Agency for review and approval by **January 31, 2020**. The Manual of Practice shall include but not be limited to:
 - 2.6.1 Safety measures for adherence by employees during collection and transportation of septic waste:
 - 2.6.2 Step-by-step manual for operation of septic waste pumping equipment;
 - 2.6.3 Scheduling and routine manual for collection jobs;
 - 2.6.4 Site control, including post pumping clean-up;
 - 2.6.5 Transportation requirements, including rules of the road;
 - 2.6.6 Disposal procedures at the GWI approved discharge point;
 - 2.6.7 Septic tank pre-pump inspection procedure;
 - 2.6.8 List of tools used for de-sludging septic tanks and their individual purpose;
 - 2.6.9 Disinfecting and spill control procedure;
 - 2.6.10 Schedule for routine service of equipment greasing and oiling, minor repairs.
- 2.7 Establish and maintain a register of the quantities of septic waste transported and discharged at GWI approved site. The registered information shall be submitted to the Agency as a component of the Annual Report for the facility.

 2.8
- 2.9 Label should be affixed to all vacuum trucks used to transport septic waste and shall include the following information:

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Warning Septic Waste

- 2.9 The name and address of the facility's operator or the transporter, as the case may be, shall be displayed on the tag of the vacuum truck.
- 2.10 Carrying of passengers is **strictly prohibited**, and those associated with the waste haulers shall be permitted **only in the cabin**.
- 2.11 Gauges and valves shall be secured prior to transport of septic waste.
- 2.12 Septic waste shall be transported in secured, enclosed vehicles **ONLY**.
- 2.13 Septic waste shall be discharged at the Kingston Outfall **ONLY**.

3.0 Collection and Transportation of Solid Waste

- 3.1 All vehicles used for the collection and transportation of solid waste shall satisfy the requirements of the **Road Traffic** Laws. Evidence of this requirement shall be submitted to the Agency as a component of the Annual Report for the facility.
- 3.2 Solid waste collection vehicles shall be washed and maintained within an area that is:
 - I. Well-constructed with maintained impervious surfaces (i.e., concrete or plastic).
 - II. Sloped and surrounded by perimeter drains that allows for the discharge of untreated effluent into a treatment holding tank via an oilwater separator.
 - III. Comprised of a mesh/sieve that shall be maintained at the discharge point into the oil-waster separator.
 - IV. Extended to at least 1.3m on all sides of the vehicle to trap all overspray.
- 3.3 Nature's Solution Bio-Enzyme Deodorizer Spotter Digester **(Only)** shall be applied to the treatment tank according to the following requirements:
 - 3.3.1 2 ounces per gallon of water
 - 3.3.2 The 350 gallon holding tank shall be treated with 5.5 gallons
 - 3.3.3 The treatment shall sit for at least 24 hours to allow the pH 7.0 to be achieved before discharge into the environment.

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- 3.4 The use of detergents containing halogenated compounds, aromatic hydrocarbons, chlorinated hydrocarbons, petroleum-based cleaners or phenolic compounds to wash trucks and or to wash the parking area are **Strictly Prohibited.**
- 3.5 Recovered solid waste should be properly disposed at **Haags Bosch Landfill Site.**
- 3.6 Label shall be affixed to all solid waste collection vehicles used to transport septic waste and shall include the following information:

Warning Solid Waste

4.0 WATER QUALITY

- 4.1 Adhere to the provisions of the *Environmental Protection (Water Quality)***Regulations, 2000.
- 4.2 All effluent from treatment holdings shall be channeled through this oil-water separator before final discharge. The GPS coordinate for this final discharge point shall also be submitted by **December 31**, **2020**.
- 4.3 Discharges from the secondary containment area shall flow through the oil-water separator(s) and should be in accordance with the Guyana National Bureau of Standards (GNBS) *Interim Guidelines for Industrial Effluent Discharge into the Environment*. The following are the allowable limits should not be exceeded:

I. pH 5.0-9.0;

II. Temperature $< 40 \, {}^{\circ}\text{C};$

III. Total Suspended Solid (TSS) < 100 mg/L;

IV. Oil and Grease < 10 mg/L;

V. Total Dissolved Solid (TDS) <40 mg/L;

VI. Biological Oxygen Demand (BOD) < 50 mg/L

VII. Chemical Oxygen Demand (COD) 250 mg/L

VIII. Surfactants

IX. Total Nitrogen <3mg/L

X. Total Phosphorus <2 mg/L

XI. Total Coliform 400mpn

- 4.4 The parameters listed in condition **4.3** shall be monitored bi-annually at the final discharge point from the final discharge point after release from the treatment holding tank. The results of the water quality analysis shall be submitted to the Agency as a component of the **Annual Report** for the facility
- 4.5 Storm water drains shall be well maintained and be kept free of debris and





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vegetation.

4.6 Promote conservation of water resources by minimising water consumed in the operation processes.

5.0 AIR QUALITY AND NOISE MANAGEMENT

- 5.1 Adhere to the provisions of the Environmental Protection (Air Quality) Regulations, 2000 and the Environmental Protection (Noise Management) Regulations, 2000.
- 5.2 The Best Available Technologies (BATs) shall be utilized to minimise the impacts of air borne emissions from vehicles offloading and/or loading materials.
- 5.3 Comply with the Guyana National Bureau of Standards (GNBS) *Guidelines for Noise Emissions into the Environment*, not exceeding the commercial limits at a distance of 15 metres (50 ft) from the source or property boundary, whichever is closer.

Residential Limits 80 dB [Day-time (06:00 h -18:00 h)] **65 dB** [Night-time (18:00 h - 06:00 h)]

- All noise-producing equipment, e.g. generators, machines, etc. shall be equipped with silencers or mufflers and/or in suitable acoustic enclosures to reduce noise levels impacting the surrounding environment, to achieve compliance with GNBS requirement.
- 5.5 The generators shall be serviced in accordance with manufacturer's specification to ensure efficiency and reduce the level of noise produced. A copy of the specification shall be submitted to the Agency as a component of the **Annual Report** for the facility
- 5.6 The exhaust stack of the generator shall be maintained at a height of 2 meters above the tallest building nearby, to minimize adverse fumes/soot impacts to the contiguous areas.

6.0 WASTE MANAGEMENT

- 6.1 Adhere to the provisions of the Environmental Protection (Litter Enforcement) Regulations, 2013.
- 6.2 Garbage receptacles, both inside and outside of the park and washing areas, shall be emptied, cleaned and maintained as required by the capacity of the receptacles, to prevent the fall or flow of garbage in the surrounding environment and attraction of rodents and other vermin.

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6.3 Solid waste shall be disposed of at the **Haags Bosch Sanitary Landfill**. Every disposal of solid waste at Haags Bosch shall have a completed Waste Manifest. Completed Waste Manifest Form shall be submitted as a component of the **Annual Report** for the facility

7.0 HAZARDOUS WASTE MANAGEMENT

- 7.1 Adhere to the provisions of the Environmental Protection (Hazardous Waste Management) Regulations 2000.
- 7.2 All hazardous waste shall be stored in a covered, bunded area. This area shall include the following:
 - I. Signage-"Hazardous Waste Storage Area"
 - II. Low traffic
 - III. No floor drains
- 7.3 All containers used for storage of hazardous waste (waste oil) shall be labelled with the following:
 - I. The words "hazardous waste"
 - II. The type of waste
 - III. Beginning accumulation date- Date when hazardous waste is first placed within the container in Hazardous Waste Storage Area.
- 7.4 All hazardous waste shall be disposed of by an EPA authorised Hazardous Waste Disposal Facility. All hazardous waste treatment and disposal shall be documented on a Waste Manifest Form which must be submitted to the EPA as a component of the **Annual Report for** the facility.

8.0 ENVIRONMENTAL EMERGENCY RESPONSE

- 8.1 An **Emergency Response Plan (ERP)** for the Sandip's Waste Collection and Disposal Service shall be submitted to the Agency as a component of the **Annual Report** for the facility
- 8.2 Maintain the Guyana Fire Service for the operation of the facility. Further,
 - I. Maintain adequate fire protection measures such as the placement of fighting equipment e.g. fire extinguishers and sand buckets, at visible locations on site, in accordance with the guidelines established by the Guyana Fire Service.
 - II. All firefighting equipment MUST be regularly maintained and/or serviced and training, on the use of all equipment, MUST be provided to all employees.

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and copies of MSDS/SDS sheets shall be erected in central areas accessible to all staff onsite and employees must be aware of same.

9.0 COMPLIANCE, MONITORING AND REPORTING

- 9.1 Notify the Environmental Protection Agency within one (1) hour of the occurrence of any environmental emergencies (e.g. oil spills, hazardous materials/wastes, chemicals, sudden onset disaster, natural, technological or human- induced factors that cause or threaten to cause severe environmental damage as well as harm to human health or livelihood).
- 9.2 Monitor the implementation of the conditions of this Permit, insofar as they involve adherence by your employees.
- 9.3 All Employees, and Third parties under your direction, MUST be made aware of the condition of the Permit and training on good environmental practices must be provided.
- 9.4 Notify the Agency in writing of any change of name or ownership of the Permit Holder's facility within **thirty (30) days** after the change occurs.
- 9.5 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.
- 9.6 Notify the Agency any non-compliance(s) with this permit upon becoming aware of any violation:
 - 9.6.1 Within **twenty-four (24) hours** of the time the Holder of the Environmental Authorisation becomes aware of the non-compliance, 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(s), 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 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 of Guyana.
- 9.8 Submit **Annual Reports** to the EPA on the progress of the operation and compliance with the conditions under which this Permit was granted on or before **March 31** each year.



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- 9.7 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 of Guyana.
- 9.8 Submit **Annual Reports** to the EPA on the progress of the operation and compliance with the conditions under which this Permit was granted on or before **March 31** each year.

10.0 INSTITUTIONAL AUTHORITY/ LIABILITIES

- 10.1 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, the Environmental Protection (Amendment) Act, 2005, and the Environmental Protection Regulations, 2000.
- 10.2 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 schedule as determined by the Agency for projects of this nature
- 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 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.
- 10.4 The EPA shall have the right to cancel or suspend this Permit for breach of any of the terms and conditions contained herein.
- 10.5 The Permit Holder, his Servants, Agents and/or Sub-Contractors shall be strictly jointly and severally liable as follows:
 - a. For any activity that causes, or is likely to cause pollution of the environment, unless the person takes all reasonable and practicable measures to prevent or minimise any resulting adverse effect, in accordance with Section 19(1)(a) of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.
 - b. For any activity which results in the discharge, release or entry into the environment of any contaminant in any amount, concentration or level in excess of that prescribed by the regulations or stipulated by this Permit, in

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accordance with Section 19(1)(b) of the Environmental Protection Act, Cap. 20:05 Laws of Guyana.

- c. The discharge or release of contaminants, such as hydraulic fluids, lubricants, fuel, or other industrial fluids relative to the Project, which are not stipulated herein, or by Regulations under the Environmental Protection Act, are strictly prohibited. Any such discharge or release shall be a violation of Section 19(1)(b) of the Environmental Protection Act.
- d. For the compensation of any Party who suffers any loss or damage as a result of the project. (s.19(3)(e)) Environmental Protection Act, Cap. 20:05, Laws of Guyana.
- e. For any material or serious environmental harm caused by pollution of the environment intentionally or recklessly in accordance with section 39 (1), (2), (3) and (4) of the Environmental Protection Act, 20:05, Laws of Guyana.
- f. Any gross negligence or willful misconduct resulting in serious risk, or adverse effects to the marine environment, biodiversity, protected species and natural habitat with respect to any release or discharge, spill, contaminant fluids, oil, or lubricants from any facilities permitted under this project.
- g. For the payment of all costs and expenses related to the assessment of damage and investigations required, as result of any pollution incidents attributable to the activity for which this Permit has been issued.
- 10.6 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.
- 10.7 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.
- 10.8 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, which may include an order to immediately cease the offending activity. See: s. 27 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.
- 10.9 This Operation Permit is effective for the period stipulated herein; **November 2020 to October, 2025.**
- 10.10 This Operation Permit shall remain valid until **October 31, 2025**, unless Page 10 of 12

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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.

- 10.11 This Permit must be renewed by submitting a completed Renewed Application Form for Environmental Authorisation (Operation Permit) to the Agency at least six months before this Permit expires, that is, no later than **March 31, 2025.**
- 10.12 Any late submission of renewal application (s) after the specified date as stated above, shall require the Permit Holder to pay, in addition to renewal fee, a late penalty fee (accruing at the time such obligation was first owed for renewal) at a rate of two thousand dollars (GY\$2000.00) per day for every business day late, until such renewal application is submitted to the Agency, without prejudice to any other rights of the Permit Holder in connection therewith.
- 10.13 Failure to comply with the requirements of this Permit or with applicable laws and regulations, whether existing or forthcoming, shall render the Permit Holder liable to prosecution and to penalties, inclusive of civil penalties, injunctive relief and imprisonment, as prescribed under the Environmental Protection Act, Cap. 20:05, Laws of Guyana, the Environmental Protection Regulations and other applicable.

Signed by Shanfah Razack

Mazael on behalf of the Environmental Protection Agency.

Executive Director (ag)

Date: 2020 · 11 · 17

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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, Environmental Protection (Amendment) Act, 2005, the Environmental Protection (Authorisations) Regulations, 2000, and any existing or forthcoming regulations, guidelines, best practices and standards made under this Act.

NAME	ERIC TUCKER
DESIGNATION	Managing Director
SIGNATURE	To fa
DATE	10 Dec. 2020

