



Environmental Protection Agency

Ganges Street, Sophia,
Georgetown, GUYANA
Tel.: (592) 225-0506
Fax: (592) 225-5481
Email: 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.:	20201020-KAVIC
Fee:	Medium (C1) i.e., US\$500 per year
Fee Paid:	US\$ 1,000 for Two (2) Years (July, 2023 - June, 2025)
Addressee:	Mr. Kevin Ritchie Owner K&V Investment Turn Basin, Port Kaituma, North West District, Region 1
Activity:	Operation of a Fuel Storage Facility- Diesel & Gasoline ONLY

K&V Investment, hereinafter referred to as the "Permit Holder", is hereby authorised in accordance with the Environmental Protection Act, Cap. 20:05, Laws of Guyana, Environmental Protection (Amendment) Act, 2005, and the Environmental Protection (Authorisations) Regulations, 2000, to store fuel (Diesel and Gasoline Only) at Left Bank Bakrimani Creek, Right Bank Barima River, North West District, Region 1, hereinafter referred to as the "Project", in a manner indicated in the Application for Environmental Authorisation submitted on October 20, 2020, 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 other applicable laws, guidelines, best practices, approvals, directives and standards relevant to this project.

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

1.0 OPERATION

- 1.1 The Permit Holder shall comply with any lawful directives given by the Agency from time-to-time, including directives in furtherance of the implementation of any international or other obligation for the environmental protection of Guyana.
- 1.2 The Permit Holder shall notify the Agency in writing and obtain its approval for **ANY** proposed changes to the operation at least **twenty-one (21) calendar days** prior to 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 of the facility, or an extension, or any additional

K.R.

installation, which may have consequences for the environment. Changes to operation may include but not be limited to the following:

- 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
- iv. any other change outlined in 20(3) of the Environmental Protection (Authorisations) Regulations.

1.3 The Permit Holder must submit to the EPA upon receipt, the requisite approvals from the following no later than six (6) months after the permit is issued, unless otherwise directed by the EPA:

- 1.3.1 Central Housing and Planning Authority (CH&PA)
- 1.3.2 Guyana Energy Agency License (Updated)

1.4 The Permit Holder shall adopt and comply with the Guyana National Bureau of Standards "*Guidance for the Design, Construction, Modification, and Maintenance of Petrol Filling Stations*" and any forthcoming code of practice/guideline pertaining to the operation of fuel storage facilities.

1.5 The Permit Holder shall establish and maintain a register of the types and quantities of fuel and associated hazardous materials stored onsite. A summary of the registered information shall be submitted to the Agency as a component of the Annual Report.

1.6 The Permit Holder shall adhere to the requirements of the **Occupational Safety and Health Act, Cap. 99:01, Laws, of Guyana.**

1.7 The Permit Holder shall develop and implement an appropriate Operation and Maintenance Standard Operation Procedure (SOP) for the Project. The SOP shall address all aspects of the on-going fuel storage facility and must include but not be limited to:

- i. maintenance and inspection schedules;
- ii. monitoring/investigation procedures;
- iii. emergency response plan;
- iv. management of waste oil;
- v. fuel transfer operations; and
- vi. training of staff on the SOPs.

1.7.1 The SOP shall be submitted to the EPA upon request.

1.8 The Permit Holder shall acquire an emergency spill cleanup kit by **July 30, 2023,**

for response to potential spills.

- 1.8.1 Emergency spill cleanup kits shall be readily available, accessible and maintained at the project site.
- 1.8.2 Spill kits shall contain absorbent materials, drain seals and other appropriate tools for clean-up of potential spills.
- 1.9 The Permit Holder shall adhere to the Drainage & Irrigation Laws of Guyana Cap.64:03.
- 1.10 Install an impervious secondary containment wall around the aboveground fuel storage tank, creating a temporary holding area in the event of accidental spillage.
 - 1.10.1 The containment wall shall be fully sealed to prevent spillage into the receiving drainage system.
 - 1.10.2 The containment wall for areas with solitary tank shall have the capacity to provide 110% containment of the fuel tank.
- 1.11 The aboveground storage tanks shall be located in an impervious bund to reduce the risk of groundwater and land contamination.
 - 1.11.1 A bund wall shall be used to divert storm-water away from storage areas.
- 1.12 All piping shall enter or exit over the containment wall. Secondary containment shall provide total containment, and no part of the tank infrastructure (e.g., dispenser, filling hoses and valves) shall protrude outside the containment.
- 1.13 Secondary containment around the fuel tank shall be inspected monthly for cracks and breakage to ensure they are liquid tight to withstand hydrostatic pressure of any contained liquid when full. A summarised inspection report shall be kept and submitted to the Agency upon request.
- 1.14 The base of the secondary containment of the fuel storage facility shall be of impervious material.
- 1.15 Make all employees, and third parties under your direction, aware of the conditions of the Environmental Authorisation and provide training on good environmental practices.

2.0 FUEL HANDLING AND STORAGE

- 2.1 Fuel shall at all times be stored above-ground, in a cool, dry place and away from ignition sources. **'No Smoking'** signs shall be posted where fuel is handled or stored.
- 2.2 The Permit Holder shall obtain and maintain Guyana Fire Service Approval and submit a copy of the approval for the Agency's records.

Environmental Permit Ref. No. 20201020-KAVIC

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

- 2.3 Fire prevention and control equipment shall be maintained in accordance with this Guyana Fire Service Approval.
- 2.4 Fuel storage tanks shall be inspected annually, to verify their integrity, and maintained in accordance with the manufacturer's specifications. Areas to inspect include tank foundation, connections, coatings, tank walls and piping systems. A summarized inspection report shall be compiled and submitted to the Agency as a component of the Annual Report.
- 2.5 Protection measures, such as anti-corrosive paints and coatings, shall be maintained to minimise corrosion of the fuel tanks and pipelines.
- 2.6 Install at least **two (2)** of the following leak detection mechanisms, by **September 30, 2023**:
 - i. Alarms for safe fill levels on tanks;
 - ii. Gauging systems;
 - iii. Dipstick measurements; and
 - iv. Emergency electric shut down buttons for pumps.
- 2.7 The safe fill level shall be clearly identified on the gauge and set at 90% to prevent overfilling. In the event of overfilling, all discharges shall be released into the containment bund.
- 2.8 The Best Available Technology/ Technique (BAT) shall be utilised and maintained to capture fuel lost during the unloading of fuel to storage tanks and refueling of equipment.
- 2.9 Secondary containment, drip trays or other overflow and drip containment measures shall be utilised and maintained at connection points or other possible overflow points.

3.0 JETTY

- 3.1 All access to the sea dam and reserve shall be kept clear and maintained in accordance with the Sea and River Defence, Laws of Guyana.
- 3.2 Removal of Mangroves is strictly prohibited. If there is need to remove Mangroves, permission shall be sought from the EPA and other relevant Agencies.
- 3.3 Dispensing of fuel to boats/vessels shall be supervised by the designated Officer in Charge (OIC).
- 3.4 A vegetated buffer zone shall be maintained along the edge of the river in order to provide bank stability.

- 3.5 Periodic maintenance of the jetty, such as painting, resurfacing, clearing of debris, or minor repairs, shall be conducted without causing any physical disruption of the watercourse. However, permission must be sought from the EPA at least fourteen (14) days prior to the commencement of major works on the jetty.

4.0 WATER QUALITY

- 4.1 Strictly adhere to the provisions of the **Environmental Protection (Water Quality) Regulation, 2000**.
- 4.2 Discharges from the fuel bund(s) 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. Total Suspended Solid (TSS) < 100 mg/L;
 - ii. Oil and Grease < 10 mg/L; and
 - iii. Total Petroleum Hydrocarbon (TPH) < 40 mg/L.

The Permit Holder shall monitor the parameters above on an annual basis and submit the results to the Agency as a component of the Annual Report. Samples shall be taken from a point after the oil-water separator but before the drainage system. Samples shall be analyzed by a certified laboratory.

- 4.3 Fuel/lubricants including waste oils shall not be drained from equipment onto the ground or into waterways.
- 4.4 Avoid soil and water contamination from fuel, grease, waste oils and other petroleum products. Store all oils, fuel, paints and chemicals in a designated area away from watercourses.

5.0 AIR QUALITY AND NOISE MANAGEMENT

- 5.1 Strictly adhere to the provisions of the **Environmental Protection (Air Quality) Regulations, 2000** and the **Environmental Protection (Noise Management) Regulations, 2000**.
- 5.2 Comply with the Guyana National Bureau of Standards (GNBS) *Guidelines for Noise Emissions into the Environment*. Sound levels from noise-making devices shall not exceed the limits below, at a distance of 15 metres (50ft) from the source or property boundary, whichever is closer.

Commercial Limits: 80 dB (Day-time (06:00 h -18:00 h))
65 dB (Night- time (18:00 h - 06:00 h))

Environmental Permit Ref. No. 20201020-KAVIC

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

- 5.3 Handle and store liquid fuel in such a manner so as to prevent the emission of offensive odours.
- 5.4 Monitor any malfunction or breakdown leading to abnormal emissions. Promptly adjust process until normal operations can be restored.
- 5.5 All sound-making devices, such as generators, shall be suitably enclosed and constructed with materials of good insulation properties (e.g., hollow concrete blocks, insulation boards, solid clay bricks, etc.) and equipped with silencers or mufflers to reduce the noise level.
- 5.6 All generators and sound making machines/equipment shall be serviced in accordance to manufacturer's specification to ensure efficiency and reduce the level of noise produced.
- 5.7 Exhaust stacks of the generator(s) shall be **at least 2 meters above** the generator house or the tallest building nearby, to minimise adverse fumes/soot impacts to the contiguous areas.

6.0 WASTE MANAGEMENT

- 6.1 In accordance with the **Environmental Protection (Litter Enforcement) Regulations, 2013**, promote good sanitation and solid waste disposal practices on site; covered garbage receptacles shall be placed at strategic locations at the facility, and waste shall be collected and disposed at an approved waste disposal facility.
- 6.2 Burning of waste is **strictly prohibited**.
- 6.3 Solid waste receptacles shall be covered when not in use.
- 6.4 Good house-keeping, sanitary, and hygienic practices shall be maintained at all times. The facility surroundings shall be kept free of vegetation and litter.

7.0 FUEL, WASTE OIL AND HAZARDOUS WASTE/ MATERIAL MANAGEMENT

- 7.1 The Permit Holder shall strictly adhere to the provisions of the **Environmental Protection (Hazardous Waste Management) Regulation 2000**.
- 7.2 Waste oils recovered from oil-water separator or from the servicing of generators shall be stored in a covered bunded area to minimize adverse impacts to the environment in the event of a spillage.
- 7.3 The bunded area shall be clearly labelled and have the capacity to provide 110% containment of the total volume of waste oils stored.
- 7.4 Oil/fuel contaminated absorbent materials shall be appropriately stored and

disposed by double wrapping in heavy duty garbage bags. All contaminated absorbent materials shall be disposed of at an authorized Hazardous Waste Disposal Facility.

- 7.5 Fuel/lubricants including waste oils shall not be drained from equipment onto the ground or into waterways.
- 7.6 All hazardous waste shall be treated and/or disposed by an Agency authorised Hazardous Waste Disposal Facility. All hazardous waste treatment and disposal shall be documented on a Waste Manifest Form which shall submitted to the Agency as a component of the Annual Report.

8.0 SPILLS AND EMERGENCY MANAGEMENT

- 8.1 The Permit Holder shall employ and maintain appropriate procedures in keeping with good international industry practice (GIIP) to minimize spill risks, detect leaks, capture spills and minimize the release of hydrocarbons during transport/transfer, resale and other Project related activities.
- 8.2 Notify the Environmental Protection Agency **within one (1) hour** of the occurrence of any environmental emergencies (e.g., oil spills, hazardous materials/wastes spills, 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).
- 8.3 All near misses, spills and unwanted/accidental discharges, **amounting to less than imperial five (5) gallons**, must be recorded and reported to the Agency as a component of the Annual Report.
- 8.4 Discharges of contaminants amounting to **five (5) imperial gallons or more** must be reported to the Agency by submitting an "Incident Notification Form for Spills in Onshore Operations" using the most recent template provided by the Agency, **within forty-eight (48) hours** of the incident. A follow-up incident notification form shall be submitted **within seventy-two (72) hours** of the submission of the initial notification form (a total of five days after the discharge of the contaminants).
- 8.5 The Permit Holder shall establish procedures for analyzing accidents and failures for the purpose of determining the causes of the failure and minimizing the possibility of a recurrence. This information shall be made available to the Agency upon request.
- 8.6 Submit an **Emergency Response Plan (ERP)** for the entire facility, inclusive of the pipeline system by **September 30, 2023**. The ERP shall contain, but may not be restricted to the following:
- i. Spill detection and mitigation procedures;

Environmental Permit Ref. No. 20201020-KAVIC

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

- ii. Escape, evacuation and rescue plan and assessment;
- iii. A list of responsible parties and duties;
- iv. A list of regulatory agencies to be notified;
- v. Names and addresses of response organizations;
- vi. Training procedures;
- vii. A list of equipment to be utilized;
- viii. Testing procedures to ensure that equipment to be used remain in working condition; and
- ix. Clean up and hazardous waste disposal procedures.

8.7 The Permit Holder shall install an emergency shut-off switch for the operations. The switch must be inspected and tested before every operation or as required by the manufacturer.

9.0 COMPLIANCE MONITORING AND REPORTING

9.1 The Permit Holder shall monitor the implementation of the conditions of this Permit, insofar as they involve adherence by your employees and all third parties under your direction.

9.2 The Permit Holder shall 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.

9.3 The Permit Holder shall 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.

9.4 The Permit Holder shall maintain and submit to the Agency records of the type, composition and quantity of contaminant released (i.e., any solid, liquid, gas, odor, sound, vibration, radiation, heat or combination of any of them).

9.5 The Permit Holder shall submit an **Annual Report** to the Agency containing the information required under this Environmental Permit on or before **March 31, each year**.

9.6 Report to the Agency any non-compliance with the Environmental Permit.

- I. Within **twenty-four (24) hours** of the time the Holder of the Environmental Permit becomes aware of the non-compliance outlining the anticipated manner in which human health or the environment may be impacted.
- II. Within **seventy-two (72) hours** of the time the Holder of the Environmental Permit becomes aware of the non-compliance, submit to the Agency a written report containing a description of the non-compliance, its cause, the period of non-compliance including exact dates and time and the

anticipated time it is expected to continue if the non-compliance(s) has not been corrected.

10.0 INSTITUTIONAL AUTHORITY/ LIABILITIES

- 10.1 The Permit Holder shall be liable for any material environmental harm caused by polluting the environment, pursuant to S. 39 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.
- 10.2 The Permit Holder shall be liable for any serious environmental harm caused by polluting the environment, pursuant to S. 39 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.
- 10.3 The Permit Holder shall be liable for any activity that causes or is likely to cause pollution of the environment unless all reasonable and practicable measures are taken to prevent or minimize any resulting adverse effect, pursuant to S. 19 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.
- 10.4 The Permit Holder shall be liable for discharging, causing or permitting the entry into the environment, of any contaminant in any amount, concentration or level excess of that prescribed by the regulations or stipulated by this Environmental Permit (Renewed), pursuant to S. 19 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.
- 10.5 The Permit Holder shall be liable to compensate any person who suffers any loss or damage as a result of contravening conditions 8.3 and 8.4 of this Environmental Permit, pursuant to S. 19 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.
- 10.6 The Permit Holder shall not be indemnified by the Agency for any activity that causes or is likely to cause pollution to the environment, resulting from adverse effects through the discharge, any contaminant in any amount, concentration, ultra-hazardous substances, chemicals or otherwise, and shall be rendered liable to prosecution and to penalties prescribed under the Environmental Protection Act and Regulations.
- 10.7 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 environment, biodiversity, protected species and natural habitat with respect to any release, discharge, or spill, of contaminant fluids, oil or lubricants.
- 10.8 Should the Permit Holder contravene or be likely to contravene any condition of this Permit, the Agency (EPA) may serve on him an Enforcement Notice in accordance with Section 26 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.
- 10.9 Where it appears to the Agency that the Permit Holder is engaged in any activity that may pose a serious threat to natural resources or the environment, or a risk of

Environmental Permit Ref. No. 20201020-KAVIC

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

serious pollution of the environment or any damage to public health, the EPA may issue to the Permit Holder a Prohibition Notice, which may order him to immediately cease the offending activity, in accordance with Section 27 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.

- 10.10 The EPA reserves the right to conduct regular inspections of the Permit Holder's activities as part of its monitoring and enforcement requirements under the Environmental Protection Act, Cap 20:05, and the Environmental Protection (Amendment) Act, 2005, and Environmental Protection (Authorisations) Regulations, 2000.
- 10.11 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 Section 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.
- 10.12 The EPA has the right to modify, cancel or suspend this Permit for breach of any of the terms and conditions contained herein.
- 10.13 **This Environmental Permit is not the final consent, all relevant Permissions shall be obtained from other regulatory bodies for continued operation.**
- 10.14 This Environmental Permit is effective for the period stipulated herein, **July 2023 to June, 2025.**
- 10.15 This Environmental Permit shall remain valid until **June 30, 2025**, 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.
- 10.16 This Permit shall be renewed by submitting a completed Application form for Renewal of Environmental Authorisation to the Agency at least **six (6) months** before this Permit expires, that is, no later than **December 31, 2024.**
- 10.17 Any late submission of renewal application (s) after the specified date as stated above, may 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 day late, until such renewal application is submitted to the Agency**, without prejudice to any other rights of the Permit Holder in connection therewith.
- 10.18 Failure to comply with the requirements of this Permit or with applicable laws and

Environmental Permit Ref. No. 20201020-KAVIC

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

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 Laws of Guyana.

Signed by



on behalf of the Environmental Protection Agency.

Date

2023-06-21

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

NAME	KEVIN RITCHIE
DATE	21/06/2023
SIGNATURE	K. Ritchie
DESIGNATION	



