



**Environmental  
Protection  
Agency**

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## **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.:	20210924-SPIBF
Fees:	Large (C2) - US\$ 2,000 per year
Fees Paid:	US\$2,000 One (1) year: (December 2021 – November 2022)
Addressee:	Dhanmattie Kunjbehari Proprietor SDR Petroleum Inc. Lot 162 Parika East Bank Essequibo Guyana.
Activity	Bunkering of Fuel



SDR Petroleum Inc., owner and operator of the MV Ganga Maa, 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, the Environmental Protection (Authorisations) Regulations, 2000, and the Maritime Zones Act, Cap 63:01, Laws of Guyana (hereinafter referred to as "the Maritime Zones Act") to conduct Bunkering of Fuel, within Guyana's Inland Water, hereinafter referred to as the "Project", in a manner indicated in the Application submitted on September 24, 2021, 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, the Maritime Zones Act and any applicable regulations made thereunder, taking into account the international rules and standards, international treaties and conventions to which Guyana is a party.

Terms and Conditions for the operation to adhered to by the Permit Holder, his Servant(s), Agent(s) and/or Sub-contractor(s):

### **1.0 OPERATION**

- 1.1 Make an application to the Agency to vary this Environmental Permit in instances where it becomes necessary to:

- i. change the operation, structure, or layout of the bunkering operation and all associated facilities;
  - ii. change equipment, machine, apparatus, mechanism, system or technology serving the operation;
  - iii. change the position and design of any outlet at the point or points of discharge of effluents; or
  - iv. effect any other change outlined in 20(3) of the Environmental Protection (Authorisations) Regulations.
- 1.2 Comply with the provisions of the Environmental Protection Act Cap. 20:05, Petroleum Exploration and Production Act, 1986, the Petroleum Exploration and Production (Amendment) Act, 1992, the Pesticides and Toxic Chemicals Act, No. 13 of 2000, the Pesticides and Toxic Chemicals Regulations, No. 8 of 2004, and the Pesticides and Toxic Chemicals (Amendment) Regulations, No.8 of 2007, Laws of Guyana.
- 1.3 Comply with the International Maritime Organization's regulations/standards for lighting on the bunkering vessels.
- 1.4 Comply with any directives of the Agency where compliance with such directives is necessary for the implementation of any obligations of Guyana under any Treaty or International Law related to Environmental Protection.
- 1.5 Provide adequate fire protection measures. All firefighting equipment such as fire extinguishers shall be serviced regularly and placed at conspicuous locations onsite, in accordance with guidelines established by the Flag Ship.
- 1.6 Submit to the Agency within **three (3) months** of receipt of the Permit, an **Environmental Management Plan (EMP)** inclusive of an **Emergency Response Plan (ERP)** for approval. This **ERP** shall be communicated to staff and contractor of the facility and shall include but not be limited to:
  - i. Accident Prevention Procedures;
  - ii. First Person Response;
  - iii. Notification Procedures;
  - iv. Location of clean-up equipment;
  - v. An analysis of potential accidents and response;
  - vi. Materials safety data sheet for all materials which could be spilled; and
  - vii. An Incident Clean-up Plan.

## **2.0 BUNKERING ACTIVITIES**

- 2.1 Bunkering activities shall be conducted in accordance with the most recent edition of the International Safety Guide for Oil Tankers and Terminals (ISGOTT).

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- 2.2 Verify that conditions for bunkering are acceptable prior to the commencement of activities.
- 2.3 All vessels that carry heavy fuel oil shall be of double hull design.
- 2.4 Bunkering activities shall be supervised by the Officer on Watch, according to the conditions of the sea.
- 2.5 Execute the bunkering activities in accordance with an approved Bunkering Plan and Procedures and/or the equipment manufacturer's operating instructions.
- 2.6 Test all fuel storage tanks, pipelines fittings and hoses annually by a competent authority to verify their integrity. All tests shall be documented including a clear indication of the scope, type and results of the tests. The test methods and results shall be submitted to the EPA as a component of the **Annual Report**.
- 2.7 Employ effective operational and preventative maintenance systems on all aspects of the facility whose failure could impact the environment. A schedule of maintenance of all equipment, and/or plants shall be kept on site and made available for inspection on request by the Agency. Maintenance shall be carried out in accordance with manufacturer's specifications.
- 2.8 Utilize leak detection devices during bunkering (e.g., for breach of floating hose, instrumentation/procedures to perform volumetric checks, etc.).
- 2.9 Place warning labels and signs across the vessel, especially in the area where bunkering is taking place.
- 2.10 An overflow tank shall be installed to the bunker tank and bunker line. The overflow tank shall be kept empty to transfer excess fuel from the bunker tanks.
- 2.11 Inspect all hose, valves and pipeline, where accessible, prior to all bunkering activities to reduce the possibility of spillage. These connections shall be visually inspected before and after the transference of fuel.
- 2.12 Install an emergency shut-off switch on the vessel, the switch shall be checked before every operation.
- 2.13 One tank shall be filled at any given time to reduce the risk of spillage.
- 2.14 Pressure gauge, tank levels and associated valves shall operate with low flow rates during changing over tanks.
- 2.15 Remotely test the 'high level' and 'overflow' alarms.
- 2.16 First-response equipment shall be available adjacent to the manifold. This shall include a suitable portable pump and emergency containment.

- 2.17 Hydraulic pressure, as well as any back-up hand operated equipment, shall be available for hydraulic operated valves.
- 2.18 Bunker supplier shall have sufficient and appropriate drip containment and spill response equipment on board the bunker barge and/or at the location of the bunkering operations which shall be readily available for deployment.
- 2.19 During Bunkering operations, the Officer in Charge (OIC) and Bunker Supervisor shall ensure that all necessary measures are taken to prevent the spillage of fuel into the waters.
- 2.20 Ensure that 'No Hot Work' is done while bunkering activities are being conducted. A dry dock facility shall be used in the event that remedial works are to be conducted on the vessel at port when necessary.
- 2.21 Install "No Smoking/No Naked Flame" signs around the vessel where the fuel storage tanks are located.
- 2.22 Clear sign outlining spill clean-up procedures and emergency contact numbers shall be prominently displayed at the Vessel at all times.
- 2.23 Maintain at least **two (2)** of the following means of communication between the bunker vessel and the supplier:
  - i. Handheld radios;
  - ii. Staff at manifolds; or
  - iii. Spill response alarm.

### **3.0 EMPLOYEES**

- 3.1. Operate in accordance with Guyana's **Occupational Safety and Health Act, No. 32 of 1997.**
  - 3.1.1. Provide employees with the necessary personal protective equipment (PPE) to fit their job specification. PPE shall be worn in accordance with the manufacturer's recommendations indicated on their label.
- 3.2. All employees shall be trained in good environmental management practices and of their obligations under the Permit.
- 3.3. Provide certified Occupational Health and Safety (OHS) training for all employees before being permitted to work on the vessel.

- 3.4. Bunkering Safety Checklist shall be completed by the operator and signed by the officer responsible before the bunkering operation commences.

#### **4.0 WATER QUALITY**

- 4.1 Strictly comply with the provisions of the **Environmental Protection (Water Quality) Regulations, 2000.**
- 4.2 Adhere to the Vessel's **Shipboard Marine Oil Pollution Emergency Plan (SMOPEP)**, as required under Annex I of MARPOL 73/78 Regulations for the Prevention of Pollution by Oil.
- 4.3 Adhere to cooperative measures with Government Agencies as it relates to oil spill response as applicable and relevant notification process and procedures.
- 4.4 Condition above, is not to be interpreted as meaning that the Permit Holder will not be liable to fulfil its obligations under any other oil spill response plans, whether existing or forthcoming.
- 4.5 Connecting bunker hoses shall not be connected over the water ways.
- 4.6 Bunker hoses shall be of sufficient length, in good condition and properly rigged to allow for ship movement.
- 4.7 Discharge ballast water in accordance with established International Maritime Organisation's Guidelines and Legal Requirements, including but not limited to, the International Convention for the Prevention of Pollution from Ships (MARPOL 73/78) and the International Convention for the Control and Management of Ship's Ballast Water Sediments (2004).
- 4.7.1 Treat bilge water in accordance with MARPOL 73/78 requirements and not exceed an oil in water content of <15 ppm.
- 4.7.2 Wastewater that is released from the onboard Sewage and Wastewater Treatment facility shall meet the aquatic discharge standards in accordance with MARPOL 73/78 regulations.



## **5.0 NOISE AND AIR QUALITY MANAGMENT**

- 5.1 Strictly comply with the provisions of the **Environmental Protection (Noise Management) Regulations, 2000** and the **Environmental Protection (Air Quality) Regulations, 2000**.
- 5.2 In accordance with Annex VI of MARPOL 73/78 Regulations, ozone-depleting substances (ODS) shall not be discharged.

## **6.0 WASTE MANAGEMENT**

- 6.1 Strictly comply with the provisions of the **Environmental Protection (Hazardous Waste Management) Regulations, 2000**.
- 6.2 Manage and dispose all wastes in accordance with the vessel's **Garbage Management Plan** submitted on **April 19, 2021**. Obtain approval from the EPA to make changes to the disposal methods prior to disposal.
- 6.3 Handle, store, and dispose sewage and spillage in accordance with Annex IV of MARPOL 73/78 Regulations, for the Prevention of Pollution by Sewage from Ships.
- 6.4 Discharge diesel oil, or halogenated phenol compounds, into the marine environment is strictly prohibited.
- 6.5 Implement bunkering and transfer procedures to cater for retrieval of any waste accidentally released overboard.
- 6.6 Manage and dispose putrescible waste in accordance with Annex V of MARPOL 73/78 Regulations for the Prevention of Pollution by Garbage from Ships.
- 6.7 Record any accidental release of waste to the marine environment and corrective actions implemented, and submit a copy of the report to the EPA within **twenty-four (24) hours** of the incident.
- 6.8 Any changes to the bunkering schedule or bunkering sequence shall be agreed in writing by all parties. This shall be submitted to the Agency upon completion of the activity being undertaken for the Agency's records.
- 6.9 All vulnerable scuppers/drains shall be sealed and/or plugged in the event of a spill.

- 6.10 Upon completion of all Bunkering operations, the hoses shall be fully drained before disconnection takes place.
- 6.11 Upon completion of Bunkering operation all disconnection of hoses shall be done by placing a drip pan of an appropriate size below any disconnection point that is not banded.
- 6.12 Vessel filling ports shall be blocked immediately if they are no longer required.
- 6.13 Any spilt bunkers or bunkers contained in bunds or drip pans shall be mopped up and all contaminated material shall be disposed of through the appropriate segregated waste management system.

## **7.0 FUEL, WASTE OIL AND HAZARDOUS WASTE/MATERIAL MANAGEMENT**

- 7.1 Strictly comply with the provisions of the **Environmental Protection (Hazardous Waste Management) Regulations, 2000.**
- 7.2 Establish and maintain a register of hazardous materials or chemicals used or generated by your operation. Submit to the Agency biannually (June and December) a report relating to the activity of the previous six (6) months.
- 7.3 Oil/fuel contaminated absorbent materials shall be appropriately stored and disposed by double wrapping in heavy duty garbage bags in keeping with the vessel's Garbage Management Plan. All contaminated absorbent materials shall be disposed of at an authorized Hazardous Waste Disposal Facility.
- 7.4 Submit an Incident Report to the Agency within **seven (7) days** of an unplanned release or spill of fuel and/or chemicals, detailing the root cause of the spill, volume spilled, immediate action(s) taken, recommendation(s) to be implemented to avoid a similar event, on the vessel of all materials stored and notification and clean-up measures for each vessel.
- 7.5 Maintain emergency spill response equipment, such as a spill kit, on the vessel for response to potential spills. Oil spill equipment shall be readily available on both vessels during the transfer of fuel and train employees to use spill equipment

## **8.0 RESTRICTIONS**

- 8.1 Bunkering Operations involving Bunker Barges shall be suspended if there are any other vessels maneuvering within the vicinity of the Ship and Bunker Barge.

8.2 Bunkering Operations shall be conducted when there is adequate lighting.

## **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 spill, 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 and all third parties under your direction.
- 9.3 Submit an Annual Report to the EPA on your compliance with this Environmental Permit on or before March 31, each year. The Annual Report shall include, but not limited to the following:
- i. types and quantities (in metric units) of hazardous waste generated;
  - ii. manner of storage, use, any applied treatment standards/methods and disposal of these substances;
  - iii. data concerning off-site shipments of waste, i.e., local disposal facility utilised, country to which hazardous waste is shipped, purpose of shipment and amount of waste shipped;
  - iv. a summary of any accidents that may have occurred and any action taken;
  - v. any waste minimisation efforts undertaken by your facility for hazardous material/waste; and
  - vi. Any other matter the Agency may require.
- 9.4 Comply with any lawful directions given by the EPA from time-to-time in furtherance of the implementation of any international or other obligation for the environmental protection of Guyana.
- 9.5 Report to the Agency any non-compliance(s) 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.



- 9.6 Notify in writing of any changes of name or ownership of the Permit Holder's facility within thirty (30) days after the change has occurred.
- 9.7 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.

#### **10.0 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 12.3 and 12.4 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

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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 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. This 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. This 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 **(December, 2021 to November, 2022).**
- 10.15. This Environmental Permit shall remain valid until, **November 30, 2022**, 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, 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 months before this Permit expires, that is, no later than **May 31, 2022**.
- 10.17. Any late submission of renewal application(s) after the specified date as stated

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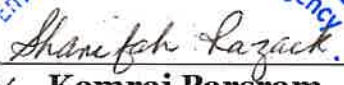

above, may require the Permit Holder to pay, in addition to the renewal fee, a late penalty fee (accruing at the time such obligation was first owed for renewal) at a rate of **two thousand dollars (\$2,000.00) per day for every business day late, until such renewal application is submitted to the Agency**, without prejudice to any other rights of the Permit Holder in connection therewith.

- 10.18. 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 Laws of Guyana.
- 10.19. The Permit Holder shall have insurance of such type and in such amount as is customary in the international petroleum industry in accordance with best practices for storing and transporting of fuel in progress offshore Guyana in respect of:
- i. Loss or damage to all assets used in Project;
  - ii. Pollution caused in the course of the Project for which the Permit Holder will be, jointly and severally, held responsible;
  - iii. Loss or damage to property or bodily injury suffered by any third party in the course of the Project for which the Permit Holder is liable to, according to the terms of the policy;
  - iv. Permit Holder's liability to its employees engaged in the Project; and
  - v. Any other requirement made by the EPA under this Environmental Authorization.
- 10.20. Condition **10.19** shall not be interpreted to mean that the Permit Holder, its Parent Company, Servants and/or Agents will not be liable to any other existing or forthcoming applicable laws, rules and regulations related to insurance for Petroleum Operations within or out the jurisdiction of Guyana.
- 10.21. **The EPA shall reserve the right to request and review the environmental liability insurance policy.** Such review is subject to the following:
- i. Provision of documentary evidence that the insurer is authorised to provide the insurance in the jurisdiction and to provide evidence of the insurer's financial strength;
  - ii. Provision of details of the amount of cover and the cost profile, evidence of authorisation of the institution or parent (insurer's) to provide insurance, as well as, evidence of any supplementary cover required to cover gaps in the primary cover, inclusive of details relevant to the excess level which is the responsibility of the policyholder to cover;

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- iii. Agreement to provide notification to the EPA of modification, cancellation, expiration, intent to renew, renewal or non-renewal and expiry dates of the policy;
- iv. Provide reports on whether the insurance policy is maintained or renewed so that the EPA can determine if it is acceptable or if it requires a replacement policy; and
- v. Provide the final insurance policy or certificate of insurance, evidence of financial strength and payment of premium

Signed by  on behalf of the Environmental Protection Agency.  
  
**Kemraj Parsram**  
Executive Director

Date 2021.12.13

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

<b>NAME</b>	DHANMATTIE KUNJ BEHARI
<b>DESIGNATION</b>	Proprietor
<b>DATE</b>	14/12/2021
<b>SIGNATURE</b>	