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Environmental Protection Agency
Ganges Street
Sophia, Georgetown, Guyana

Att: The Executive Director

Date: 02/08/2024

Subject: **Request for the Approval for a License for the Storage, Transportation and distribution of fuel (bunkering) by vessels**

Reference: L-PL-SV-EPA-003
Our reference: 10.6342-VOO-EPA-LET-007
Your reference: n/a
Contract No.: n/a
Project: Guyana Gas to Energy EPC5

Dear Sirs,
Van Oord requires the services of a bunkering vessel to support offshore pipeline installation activities in Guyana; Van Oord is therefore requesting a license for the storage, transportation, and distribution of fuel from the vessel, **Enterprise** to our offshore construction fleet from the Guyana EPA. By way of background, please see a summary of planned project activities below.

Project Description

The Gas to Energy (GTE) project in Guyana is an offshore/onshore development in the vicinity of Georgetown, Guyana that will provide gas from the existing offshore developments to an onshore Natural Gas Liquids (NGL) plant and power plant (third-party operated). This will enable the Government of Guyana (GoG) to provide low cost and reliable energy source to the people of Guyana.

The project will utilize produced gas from the existing Floating Production, Storage, and Offloading Vessels (FPSOs) "Destiny" and "Unity", to be transported to shore via a ~245 km 12 inch pipeline system. The pipeline will transport up to approximately 50 million standard cubic feet per day (MSCFD) of rich gas to the NGL Plant. The NGL plant will lower the pressure; dehydrate; separate out propane, butane, and pentanes+; and treat the gas to the required specifications of the power plant.

In this respect Esso Exploration and Production Guyana Limited (EEPGL) has requested the Consortium of Subsea 7 LCC and Van Oord Offshore (EPC5) to install a 12.75" OD Gas pipeline system from existing gas production facilities offshore Guyana towards the shore.

The gas export pipeline (NPS 12) starts at the single hub, Pipeline End Termination (PLET) at the gathering location and terminates at the battery limit located at the pipeline landing location for a total length of approximately 195 km. Figure 1 shows the preliminary offshore pipeline corridor with a notional description of pipeline segments.

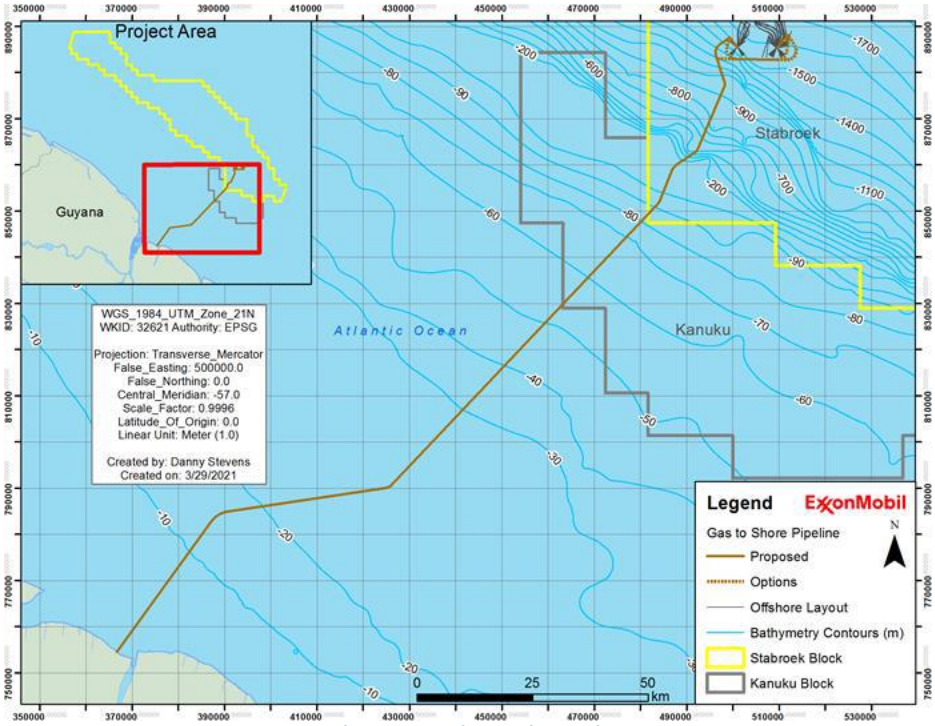

Figure 1 Project schematic

The Guyana Environmental Protection Agency approved the EEPGL Gas to Energy Project in November 2022, and EPC 5 project implementation will commence in Q2-2023.

Bunkering constraints in Guyana

Van Oord will operate a fleet of up to 20 vessels and Barges in field that will include the following:

- Shallow Water Pipelay vessels (2x)
  - 1x Water depth ≤ 5,0 meters
  - 1x Water depth ≥ 5,0 meters
- Pipe supply vessels
- Anchor handlers
- Crane barges
- Survey vessels
- Supply vessel (other than pipes)
- Crew Transport vessels
- Accommodation vessel
- Specialised vessels for lowering of the pipeline below the seabed

Several of the above are stationary barges (on anchors) whilst others can sail on their own keel. In this regard it is anticipated that Van Oord will encounter the following constraints associated with bunkering these offshore Vessels / Barges;

- Stationary vessels:
  These types of vessels (pipe lay vessel, flat bottomed barges, accommodation vessel) are required to remain offshore, and therefore need an offshore bunkering solution.
- Sailing vessels (on their own keel):
  Do have the ability to sail into one of the ports in Georgetown however will encounter:
  - Limited port refuelling facilities
  - Long sailing times for offshore vessels
    - Additional time of project activities
    - Higher fuel consumption, meaning more greenhouse gases
  - Additional traffic to the local port activities

"Enterprise"
For the above stated reasons Van Oord proposes to use some of its support vessels as a bunkering vessels which will provide services exclusively to the Van Oord construction fleet during the project.

"Enterprise" (IMO: 8987424) is a Multicat that has been build in 1987 is sailing under the flag of The Netherlands. Her length overall (LAO) is 36 meters and her width is 11.50 meters. The "Enterprise" is equipped with a certified fuelling station in order to bunker other vessels and barges.

Figure 2 Enterprise

Potential effects on the Environment
Offshore bunkering can pose a pollution risk to the marine environment in the unlikely event that a spill should occur. Based on thorough management and mitigation measures, supported by the inductions and training of crew with close monitoring during operations, Van Oord will strive to maintain preventative measures to reduce the likelihood of a spill occurring during bunkering offshore.

These measurements shall include but are not limited to the following:
- Project Spill Prevention Plan (provided in support of this application).
- Rigorous Hazard Identification and Risk Assessment (HIRA) for offshore bunkering.
- Bunkering procedure and checklist.
- Bunkering Manual (provided in support of this application).
- Induction and training of crew.

Van Oord's objective is to minimise and prevent risks to the environment; However, in the highly unlikely event of a spill the vessel Shipboard Oil Pollution Emergency Plan (SOPEP) provides spill response details and the Enterprise along with all vessels in the fleet shall be equipped with SOPEP spill kits and equipment. Training drills will be conducted with all vessel crews with respect to spill prevention and response.

Supporting Documentation
In support of this application please see the following information package:
- Enterprise Permit Application form

- Vessel particulars
- Certificate of Registry
- International Oil Pollution Prevention Certificate
- International Air Pollution Prevention Certificate
- In Water Authorisation from the Maritime Administration (MARAD)
- International Energy Efficiency Certificate
- International Sewage Pollution Prevention Certificate
- Insurance Certificate
- Attestation regarding compliance with the Ballast Water Management Convention
- Statement of Compliance for Prevention of Pollution by Garbage
- SOPEP Manual
- Bunkering Manual
- Project Spill Prevention Plan

Yours Faithfully,

Bert Bouwmeester
Project Manager (Van Oord)
C.C. Bruce Yoder (Subsea7)

Encl: Attached Supporting Documentation