Demerara Block : Exploration
Drilling — EPA Permit
Application

Project Summary

Prepared on the 25 of November 2019

Title:

Offshore Well - Petroleum Exploration Drilling within the Demerara PPL

Name of Company:

CGX Resources Inc.

Name of Applicant(s)/Intended Permit Holder:

Professor Suresh Narine

Contact Details of Applicant(s):

Address:

21 Lamaha and Peter Rose Streets Queenstown, Georgetown, Guyana.

Telephone Number(s):

227-0521, 227-0943, 227-0944

Email:

snarine@cgxenergy.com

Prepared by:

1. Dr Suresh Narine, Ph.D., Professor and Executive Chairman Address: 21 Lamaha and Peter Rose Streets, Queenstown, Georgetown

Email: snarine@cgxenergy.com

- 2. Dr Laziz Bouzidi, Ph.D., Research Professor and HSE Consultant Address: Physics Department, Trent U, 1600 West Bank Dr., Peterborough, ON, K9J 7B8 Email: lbouzidi@cgxenergy.com
- 3. Michael Stockinger, Bs, Vice President Operations and Drilling Engineer Address: 810 Highway 6 South, Suite 240, Houston, TX, USA 77079

Email: mstockinger@cgxenergy.com

4. Carl Scharpf, MSc, Exploration Manager

Address: 810 Highway 6 South, Suite 240, Houston, TX, USA 77079

Email: cscharpf@cgxenergy.com

Description of the Project

The project is aimed at the drilling of an exploration well in the Demerara PPL. It will take place at approximately 175 km from Port Georgetown in a Northerly direction in the Atlantic Ocean. The project is confined within a 3 km x 5 km area and is located within the Demerara PPL which covers an area of 4,709 km². The map of the coordinates of the Demerara Prospect location is provided as an attachment (Figure 1).

Project design

The Well - Petroleum Exploration Drilling is a single stage project. The activity entails moving a drilling rig into position, then spudding and drilling of the Exploration well. The well will be evaluated for hydrocarbons, but no production is expected at this stage. Wellbore fluid samples can possibly be obtained. The Well - Petroleum Exploration Drilling will provide the company with logging results which will be interpreted. Prior to moving the rig off location, the well will be decommissioned. After the Exploration Drilling Programme is completed, the rig will be moved off location.

Project duration and capital investment

The actual project length will be 60 - 90 days to be executed in the period July 2020 to October 2020. The Project will involve shorebase facilities and marine/aviation services to support the drilling activities. Approximately 120 persons offshore and 25 persons at the shore base (storage area and wharf) will be working during the Exploration Drilling operations. The capital investment in the project is estimated to be approximately US\$ 60 Million.

Non-technical explanation of the project

The project is aimed at drilling of an Exploration well offshore Guyana in the Demerara Block approximately 175 km from Port Georgetown. The Exploration drilling operation will provide the company with valuable information for the assessment of the potential for oil production. Although no production is expected at this stage, the Exploration drilling may result in a find which would lead to a production stage.

Potential impacts of the project

The impact to land/soil of the Well - Petroleum Exploration Drilling would be localized and disturbance minimal, therefore, mitigation measures are not required. There will be limited air emissions (measurable, predictable and accounted). Significant levels of noise will occur in the engine room where hearing protection is required and will be provided. Noise outside the rig is within acceptable levels such that hearing protection is not required.

The Well - Petroleum Exploration Drilling vessel will be totally self – contained to maintain crew and support the operation. The only source of effluent is sewage and grey water from the crew. The rig comes equipped with an internationally approved sewage and water treatment facility. The vessel selected via competitive tender will have an internationally approved specific waste management plan. The Waste Management Plan is vessel specific and port specific and will be supplied by CGX Resources Inc. to the EPA to ensure compliance with EPA standards and regulations.

CGX has identified and assessed the environmental issues and risks associated with the activity. The company has implemented embedded controls into the Project design and established an appropriate Environmental Management Plan and requirements for emergency response preparedness. It has established Environmental Management Strategies (EMS) for the drilling campaign based on the assessment of the identified potential environmental hazardous routine and unplanned events and their environmental impacts. The company has also devised a robust management system for implementing the EMS which will ensure that recommended management measures are implemented as planned and effective. Emergency Response Plans are also established for the unplanned events.

With the adoption of such controls and plans, the Project is expected to pose only negligible risks to the environmental and socioeconomic resources of Guyana. The planned activities of the Project are predicted to have negligible impacts on physical resources (i.e., air quality, marine sediments, and water quality), no impacts on coastal biological resources, and negligible impacts on marine biological resources. Overall, the planned project presents very minimal to zero risk to marine life. The project will have a very small physical footprint and minimally disturb benthic habitat (less than 0.3 km²).