

**Comments on the Draft Terms of Reference**  
***Environmental & Social Impact Assessment for Liza Phase 1 Development Project***  
**Esso Exploration and Production Guyana Ltd. (EEPGL)**

Submitted by: Conservation International – Guyana  
Submitted to: The Environmental Protection Agency

## **INTRODUCTORY REMARKS**

Conservation International-Guyana is committed to the conservation and sustainable use and management of Guyana's natural resources, which forms the base for the country's socio-economic development. We are therefore pleased to provide comments on the draft Terms of Reference (ToR) for the Environmental and Social Impact Assessment (ESIA) for the *Liza Phase 1 Development Project by Esso Exploration and Production Guyana Ltd (EEPGL)*.

Our comments reflect our position that the development of the ESIA by an independent consultant is meant to strengthen the environmental management processes to ensure a successful project, and that existing national legislation serves as a basis and frame of reference in which the independent consultant carries out its work. Our comments therefore are not directed to the developer. They are directed to the independent consultant and to the EPA.

All projects must result in net positive impacts to Guyana and CI-Guyana is committed to working with EEPGL and authorities to ensure this outcome. The ESIA is the chief tool for facilitating informed and participatory decision-making on the Project and to ensure accountability. We expect a robust process to identify and evaluate the potential impacts the project may have on aspects of Guyana's natural, social, and economic environment. We are pleased that Guyana's legislation features the mitigation hierarchy and that mitigation measures will be identified to eliminate, minimize, reduce, or compensate for adverse impacts while enabling positive impacts and opportunities, wherever possible. Our comments mainly relate to the strengthening the ESIA. These considerations will also assist EEPGL in fulfilling its role of a responsible corporate partner in the development of Guyana's natural resources sector, thereby facilitating its 'social licence to operate'.

Our comments address information presented by Environmental Resources Management (ERM) in the *Draft Terms of Reference* (August 16, 2016), with reference to relevant and supporting documents of the Project: *Supplemental Information to the Application for Environmental Authorisation for EEPGL's Liza Phase 1 Development, Stabroek License Area, Offshore Guyana* (August 2, 2016), *Revised Project Summary* (September 8, 2016), *Environmental Baseline Study* (September 19, 2016) and *Strategic Environmental Assessment* (September 26, 2016).

Our comments also reflect expectations generated from the Draft ToR Stakeholder Engagement Forum held in Georgetown, Guyana on October 5, 2016, in which it was communicated by ERM and EEPGL that both the ESIA and the Project will be implemented to international best practice and/or industry standards.

## **GENERAL COMMENTS**

This Project is unique within the natural resources sector in Guyana, being the first oil and gas project to be developed to this extent. The high level of complexity in the technical aspects of its operations and an inherent high variability and complexity of oceanic systems (and more broadly, water as a medium), create conditions in which there could be far-reaching impacts. This warrants that the Precautionary Principle (Section 4(a) of the Environmental Protection Act, 2006 “*where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing measures to prevent environmental degradation*”) and a general precautionary approach, be at the forefront of evaluating the Project impacts.

Given the nature of the project, setting the bar for future exploration and development projects in the oil and gas sector is paramount and we believe that the well-established EEPGL is in an excellent position to do so. While there are best practices for the sector that may be applied successfully in developed oil and gas economies, Guyana's now emerging sector faces significant capacity limitations in the form of limited institutional capacities, nascent and evolving policies and regulations for the sector, as well as socioeconomic challenges on the whole. In this context, we view the project as one that must abide by high standards in order

to inform policy and regulatory decision-making in the country to ensure high standards of accountability and good governance of the sector.

Overall, the draft ToR, in addition to containing the expected impact categories<sup>1</sup> to evaluate for offshore projects, makes mention of several good practice concepts. These include adhering to the mitigation hierarchy, defining an area of Influence (AOI)<sup>2</sup>, considering cumulative impacts and conducting stakeholder engagement.

## **SPECIFIC COMMENTS ON THE DRAFT TERMS OF REFERENCE**

### **Section 4.0 – Project Description**

Given the historical nature of this project and the significance to both Guyana and EEPGL, we believe that a section on 'Project Benefits' is important. This should summarize how the project is envisaged to benefit the economy and people of Guyana.

#### **Section 4.10 - End of Phase 1 Operations**

This section states that *“the FPSO will then be towed out of the Liza field.”* Consideration should be given to a decommissioning plan early on in the project's life that can be updated throughout. This can include assessments of health and safety risks, potential environmental and social risks, and environmental monitoring. A post-decommissioning survey to ensure the process was carried out correctly should also be considered. Collaboration with the EPA and Fisheries authorities would be important for this process.

In this context, the ESIA should specify how the FSPO will be decommissioned or refurbished and reused. It should state the intermediate and final location of the facility during any decommissioning and whether relevant authorizations have been acquired by the receiving jurisdiction(s). It should also detail how waste generated from decommissioning is managed.

### **Section 5.0 - Administrative Framework**

The national policy frameworks should also include the EPA's Environmental Impact Assessment Guidelines for Mining, the Protected Area Act 2006 (given the project's location close to Shell Beach Protected Area), Guyana's National Biodiversity Strategy and Action Plan (2012-2020) any relevant domestic Labour laws, the Low Carbon Development Strategy, Codes of Practice for the natural resource management sectors, and the newly evolving policy initiative green economy plans.

The relevant conventions defined by the International Maritime Organization and International Labour Organization should be acknowledged.

The Section should also include all relevant authorities that the project team must relate to, including the Ministry of Natural Resources, Ministry of Agriculture (with responsibility for Fisheries), Maritime Administration Department, Protected Areas Commission etc. Guyana's Intended Nationally Determined Contributions should also feature in this section.

### **Section 6.1 - The Area of Influence**

The Area of Influence has been delineated based solely on bio-geophysical resources and impacts. However, the AOI should also capture the geographical extent of socioeconomic / non-technical resources and impacts. The Area of Influence should also consider spatial changes in biogeophysical and socioeconomic resources along the time dimension, considering the minimum 20-years production span of the Project. This is particularly relevant within the context of climate change and its impacts on Guyana's shoreline resources.

For areas outside the project development area, it is important to evaluate the potential transboundary/international impacts (e.g. as a result of an oil spill).

### **6.2 Project Interactions with Environmental and Socioeconomic Receptors**

Project components missing from the list include the Project's financial and legal activities (e.g., impact and benefit agreements) which will affect economic and political resources and receptors. Inclusion of these

---

<sup>1</sup> Potential environmental issues associated with offshore oil and gas development projects include: air emissions, wastewater discharges, solid and liquid waste management, noise generation (including underwater) and spills.

<sup>2</sup> Of additional positive note, the document even acknowledges that AOI may be different for various impacts assessments (i.e. air emissions AOI's can be different than a spill or release.) this is an important distinction that some ESIA's fail to consider.

components would ensure consistency with *Table 9.1 Summary of Resources/Receptors, Potential Impacts, Sources of Potential Impacts, and Analytical Approach*.

### **Section 6.3 - Scope of the Environmental and Social Management and Monitoring Plan**

Considering the of the oil and gas sector within Guyana is in its infancy, the ESMP should be designed as an organizational learning process in which the lessons experienced are fed back into policy, institutions and subsequent project designs, thus building our capacity to manage such large-scale projects in the future.

The hierarchy of controls (i.e. Mitigation Hierarchy) should reflect best practice in environmental assessment and environmental management such that “Off-Setting” and “Compensation” are included as separate categories of control. This is needed to address residual negative impacts that cannot be further reduced via Avoid, Reduce and Remedy strategies [as per page 76 - “ERM will perform a final impacts assessment during the EIA which includes an assessment of the identified residual impacts (i.e., considering the implementation of the identified management measures)"]. This will also meet requirements under the application of the Polluter Pay Principle of Section 4(a) of the Environmental Protection Act, 2006 - “the polluter should bear the cost of measures to reduce pollution decided upon by public authorities, to ensure the environment is in an acceptable state, and should compensate citizens for the harm they suffer from pollution.”

Other components which should be considered within the ESMP are:

- Use of independent, third-party monitors to periodically spot-check monitoring plans and data;
- Measures to ensure the costs of managing expected on-going and unanticipated post-decommissioning environmental and social risks are covered and promised social benefits can still be delivered (e.g., performance bonds, insurance agreements, escrow accounts); this should also consider managing on-going and newly arising expected and unexpected environmental and social risks arising from Reduce and Remedy strategies within the Hierarchy of Controls.

### **Section 7.0 - Description of Existing Conditions**

While good practice guidance for the offshore environment does exist, as with all ecological constructs, specific contextual attributes of a site can complicate efforts to apply that guidance uniformly. Thus understanding (i.e. via adequate sampling) the local context is paramount. In the Draft ToRrs, prior and on-going sampling that contributes to a greater understanding of potential impacts has been described, however it is not evaluated whether such sampling is adequate. Will the biological surveys already conducted and the desktop review guarantee that all potentially significant impacts will be identified? While some surveys allude to the adequateness of sampling (e.g. page 73 section 7.6 - “the largest database of marine mammal detections in the immediate vicinity of the Project”), have the methods, sampling effort and periodicity of sampling been assessed? Do these studies capture the seasonality and migratory behavior of the species that possess those behaviors? We suggest that great care be given to discussing and validating biological studies proposed or conducted to date.

Ensuring sufficient and sound data is not only critical for informed identification and evaluation of impacts and mitigation actions, but also important as a means of strengthening Guyana’s ability to attract future investments by reducing uncertainty. This is one potential positive impact that the project can document.

Furthermore, given the 20+ year lifespan of the Project, surveys and analysis should explicitly describe and consider projected changes in climate, and consequently ecological conditions, over time, including expected changes in occurrence (duration, frequency and magnitude) of extreme climate events.

### **Section 8.0 - Methodology for Preparing the ESIA**

While it was stated “For the purposes of the ESIA, an “impact” will be defined as any alteration of existing conditions, adverse or beneficial, caused directly or indirectly by the Project” it should be noted that an “adverse impact” should be further qualified using the definition provided in Section 2 of the Environmental Protection Act, 2006:

- “adverse effect” means one or more of the following-
- (i) impairment of the quality of the natural environment or any use that can be made of it;
  - (ii) injury or damage to property or to plant or animal life
  - (iii) harm or material discomfort to any person;
  - (iv) an adverse effect on the health of any person;
  - (v) impairment of the safety of any person
  - (vi) rendering any property or plant or animal life unfit for use by human or unfit for its role in its ecosystem;

- (vii) *loss of enjoyment of normal use of property; and*
- (viii) *interference with the normal conduct of business;”*

### **Section 8.2.1 Magnitude Element**

It should be explicitly stated what criteria and methods were used to combine the various dimensions (extent, duration, scale, frequency, likelihood) of the magnitude of an impact are combined to produce the magnitude ratings (negligible, small, medium, large), so that it is clear the logic and validity of the evaluation. Additionally, the level of uncertainty associated with the predictions should be indicated.

Regarding the assertion - *“Some impacts will result in changes to the environment that may be immeasurable, undetectable or within the range of normal natural variation. Such changes will be regarded as essentially having no impact, and will be characterized as having a negligible magnitude”* - the ESIA should explicitly state the reasons why such impacts have been classified as immeasurable and undetectable (e.g., technology unavailable, time frame used for detection of impacts, etc.).

### **Section 8.2.2. - Sensitivity / Vulnerability / Importance Element**

It should be explicitly stated what criteria and methods were used to combine the various dimensions (sensitivity, vulnerability, importance) of resource/receptor to produce the designations (low, medium, high), so that it is clear the logic and validity of the evaluation.

### **Section 8.2.3 Determining Impact Significance**

Regarding the procedure - *“Management measures will be developed by the Project to address potential adverse impacts which are deemed significant by ERM”* - it should be noted the determination of significance is not a purely technical procedure to be completed only by the environmental consultants. Best practice recognises that this procedure should effectively integrate value judgments and preferences of affected stakeholders and the general public, regarding the acceptability of environmental and social risks.

Regarding the assertion - *“Management is also not required in the case of positive impacts. Magnitudes are therefore generally not assigned in the case of positive impacts. It is usually sufficient to indicate that the Project will result in a positive impact, without characterizing the exact degree of positive change likely to occur”* - we recommend characterisation of the degree of positive impact to the same level of detail applied for adverse impacts. This is essential in substantiating the justification of the Project, EEPGL's social licence to operate, and meeting ERM's stated objectives of the ESIA (Section 3.0) - *“Provide the factual and analytical basis required by EPA and the Guyana Geology and Mines Commission (GGMC) to make an informed decision on EEPGL's Application for Environmental Authorisation to permit the Project.”*

Regarding the procedure - *“the concept of reversibility will be addressed, as appropriate”* - it should be noted that even loose interpretations of Sections 4(a) and 11(5) of the Environmental Protection Act, 2006 and the EPA's Environmental Impact Assessment Guidelines for Mining (2000), suggest that evaluation of reversibility of impacts is a non-negotiable component of an ESIA. Accordingly, it should be consistently addressed within the Impact Significance Rating Matrix, possibly integrated within the evaluation of the magnitude of the impact.

### **Section 9.0 - Scoping and Identification of Potential Sources of Project-generated Impacts**

Evaluation of potential impacts and resources/receptors should also include:

- ⤴ Social integration issues concerning contact between foreign and local populations
- ⤴ Current, evolving and potential managerial, financial, legal and political impacts and risks associated with the petro-industrialisation of the economy
- ⤴ Potential impacts to habitats, wildlife and other land-uses, of the onshore component of the Project

### **Section 9.1 - Additional Analyses to Support the ESIA**

Most of the literature cited for the supporting but relevant documents *Environmental Baseline Study (EBS)* and *Strategic Environmental Assessment* was 5-10 years old or more. As scientific understanding of the character and behaviour of complex socio-ecological systems has significantly advanced within recent years, in conjunction with and as a consequence of improved methods and tools for data collection and analysis, sources consulted for the ESIA should incorporate where available, more recent, but relevant, literature.

In the absence of such more current information, the EPA should ensure that there is included in the environmental management plan, a structured independent research programme that will allow for better decision making thus, reducing the more risk-mitigation approach required by the strict application of the Precautionary Principle

### **Section 9.1.1 - Oil Spill Modelling & Section 9.1.2 - Offshore Discharge Modelling**

The modelling of impacts for planned and unplanned events should include scenarios which address seasonal variability, extreme climate and oceanic events, multiple discharge points and rates, in order to capture the full breadth of risks that may be experienced throughout a 20+ year production time period.

### **Section 9.2 – Ongoing Stakeholder Engagement**

*“Provide stakeholders with timely information about the Project, in ways that are appropriate to their interests and needs, and also appropriate to the level of expected risk and potential adverse impacts.”*

Given the wide spectrum of stakeholders with potential impacts, interests and concerns about the Project, engagement strategies, deliberative spaces and communication tools should be inclusive and tailored. This is critical to both enhance stakeholders' capacity and reduce their constraints to effectively understand the Project, understand how they will be impacted, participate in determining the acceptability of likely impacts and proposed benefits, contribute to mitigation and monitoring plans and to prepare for change. Special provisions should be included to enable effective participation of vulnerable and underrepresented stakeholders, who may be impacted by the Project.

For transparency and accountability, the Draft and Final ESIA should include an Appendix which lists all consultation reports that capture stakeholder concerns and comments during any and all consultation activities and how these were addressed within the ESIA process.

### **Section 10.0 – Structural Organization of the ESIA**

We suggest ensuring a non-technical summary is also developed so that a range of audiences can engage with the ESIA. A section on the monitoring plan for the project should be included.

We would also look forward to the consultation reports, any baseline studies, modelling reports, and other relevant documents alluded to in the ESIA included in Appendices.