

Offshore Cape Three Points Environmental and Social Monitoring Q2, 2019 Quarterly Monitoring Report

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OFFSHORE CAPE THREE POINTS ENVIRONMENTAL AND SOCIAL MONITORING – Q2, 2019 QUARTERLY MONITORING REPORT

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Date **20 November 2019**
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Appendix 1

Environmental and Social Action Plan

Appendix 2

Status of 'Open' Issues (End Q2, 2019)

GLOSSARY OF TERMS/ ACRONYMS

Acronym	Abbreviation
AMR	Annual Monitoring Report
BAP	Biodiversity Action Plan
BOD ₅	Biological Oxygen Demand (5 day)
COD	Chemical Oxygen Demand
DAoI	Direct Area of Influence
E&S	Environmental and Social
ESAP	Environmental and Social Action Plan
ESDD	Environmental and Social Due Diligence
EHS	Environmental, Health and Safety
EPA	Environmental Protection Agency
ESMS	Environmental and Social Management System
DEQ	DEQ Change Foundation
ESL	ESL Consulting
FMCC	Fisheries Management Coordination Committee
FMP	Fisheries Management Plan
FPSO	Floating Production Storage and Offloading Vessel
GNGC	Ghana National Gas Company
GNPC	Ghana National Petroleum Corporation
GWS	Ghana Wildlife Society
HSE	Health, Safety and Environment
IDA	International Development Association (World Bank)
IESC	Independent Environmental and Social Consultant
IFC	International Finance Corporation
LRP	Livelihood Restoration Plan
MIGA	Multilateral Investment Guarantee Agency
mmscf	Million standard cubic feet
MoC	Management of Change
NAG	Non-Associated Gas
O&G	Oil and Gas
OCTP	Offshore Cape Three Points
OOC	Oil-on-Cuttings Ratio
ORF	Onshore Receiving Facility
PAPs	Project-Affected Persons (by land acquisition)
PS	Performance Standard
QRA	Quantitative Risk Assessment
QMR	Quarterly Monitoring Report
SLC	Sustainability & Local Content
STP	Sewage Treatment Plant
TPH	Total Petroleum Hydrocarbon
TTIP	Takoradi to Tema Interconnection Project
TSP	Total Suspended Particulates
Vitol	Vitol Exploration and Production Limited
VUGL	Vitol Upstream Ghana Limited
WAPCo	West African Pipeline Company
WB	World Bank

WBG	World Bank Group
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EXECUTIVE SUMMARY

Ramboll Environment and Health UK Limited (Ramboll) was commissioned in January 2017 by Vitol Upstream Ghana Limited (VUGL) to undertake environmental and social monitoring of the Offshore Cape Three Points (OCTP) project (the 'Project'), Republic of Ghana. The Project is operated by Eni Ghana Exploration and Production Ltd (Eni Ghana). VUGL, an affiliate of Vitol Exploration and Production Limited (Vitol), and Ghana National Petroleum Corporation are JV non-operating partners.

This report presents findings from Ramboll, acting in the role of Independent Environmental and Social Consultant (IESC) for the Project, following a review of the Q2 2019 OCTP Quarterly Monitoring Report (QMR) and additional documents embedded within the QMR. Thus, the findings presented in this report are based exclusively on a desk-top review of the Q2 2019 QMR, plus a limited number of other documents relating to specific topics requested by the IESC. Ramboll has a duty of care towards the World Bank Group (WBG).

The QMR reviewed for this report covers the period, 1st April to 30th June 2019. Within this report, the IESC provides status updates against the 'open' issues identified in the IESC's preceding site visit report, in this case the May 2019 site visit report (itself based on the findings from an earlier Q1 2019 QMR report and findings carried over from other earlier reports). The IESC has provided updates, where possible, for issues previously identified, most notably within recent reports (the IESC's May 2019 Site visit report). For the purposes of this report, the IESC has updated the status of previously identified issues identified based solely on desk top review and without direct interaction with Eni Ghana Health, Safety & Environment and Sustainability & Local Content representatives. A more comprehensive status update will be provided following face-to-face discussion with Eni Ghana staff during the future IESC monitoring visit in Q1 2020. Nevertheless, noteworthy Project developments, milestones and issues are detailed in this report.

Stakeholder Engagement Plan

In June 2019, the OCTP Stakeholder Engagement Plan (OCTP Operations in Sankofa, Gye Nyame and the ORF) (Operations SEP) was finalized¹. This Operations SEP contains a community-level Grievance Mechanism (GM). The GM is the same GM as has been in place since the inception of site works.

Community Grievances

The QMR indicates that, by end June 2019, five grievances had been received in May (three in the final week of the month). All three grievances, raised by individuals, related to the delivery of LRP Support Services and were closed out quickly. The remaining two grievances related to the suspected anchor/cable on the seabed that, in the case of one of the complainants, is considered to have damaged fishing nets and, for the other complainant (the Chief Fisherman of Sanzule - on behalf of the Sanzule fishers) to be reducing the area available for fishing due to fishers taking avoidance action to reduce the risk to their nets/gear. Both of these grievances have been open for some time with one of them being open since 10 January 2019. This is a significant time period without resolution/closure; especially as the grievance relates to an important community-level livelihood activity.

Community Investment Strategy: Quick Impact Projects

The IESC's May 2019 site visit report highlighted a number of difficulties/challenges being faced by the community water supply project and, therefore, the community-based Water Board Committee (the Committee) which is responsible for managing the project. The QMR presents monthly updates on this project and the Minutes of two meetings with the Committee. The key difficulty being faced is generation of a sustainable level of cash flow to enable the project to operate effectively. The seriousness of the situation has necessitated a number of remedial actions including introduction of a

¹ This Operations SEP is Rev03 and signed by the Sustainability & Local Content Manager and the Managing Director.

system of payment of a minimum cash amount per 5,000 litres used before another 5,000 litres is provided.

Both components of the educational project (the other 'quick impact' project) have made progress with the capacity-building component able to allocate eight 'fellows' (teaching assistants) to five schools. Regarding the infrastructure component, procurement procedures already underway in mid-Q2 resulted in interested vendors submitting technical documents for evaluation and, subsequently, Eni Ghana and Consar have visited schools to identify locations for facilities such as staff rooms and toilets to assist preparation of Bills of Quantities.

Fishery-based Incursions into Offshore Exclusion Zones

The QMR updates data on incursions which were provided to the IESC in May 2019 and which are presented in the IESC's May 2019 site visit report. Essentially, 146 more incursions were recorded through to the end of June 2019. Thus, the cumulative total of incursions by the second week of May had reached 1600 compared to just over 1500 as presented in the IESC's May 2019 site visit report. This revised cumulative total for Q1 and Q2 2019 figure highlights the continuing challenge posed by incursions and the need for Eni Ghana to continue its efforts to reduce the number of incursions.

Transitional Support – Food Aid

The transitional food aid deliveries ceased in April 2019. Information provided in the QMR does not state clearly when the 'missing' September 2017 food aid was delivered.

Wastewater Discharges from Offshore Facilities

Optimisation works to improve effluent quality for both the Floating Production Storage and Offloading Vessel and drill ship have been completed and certificates provided confirming compliance with MARPOL, Regulation 6, Annex 1. Drilling works concluded in June 2019 and the drill ship has since left the Project area.

Offshore Environmental Monitoring

Tecnoambiente undertook a second offshore survey in November/December 2018. The timing of the survey was consistent with the Eni Ghana Environmental Monitoring Program² which anticipated two survey campaigns during the construction phase, one in 2017 and a second in 2018. The survey report identifies some increase in the concentration of certain contaminants compared with baseline and the previous sampling campaign; however, these are below threshold levels for environmental harm.

Air Quality

The QMR summarises ambient air quality results for NO₂, SO₂, PM₁₀ and Total Suspended Particulates (TSP). Monitoring results typically show ambient air quality to be below Ghanaian and WBG standards with some exceptions for PM₁₀ and SO₂ in the vicinity of the ORF. As previously reported, the SO₂ exceedances are marginal, with the more significant exceedances tending to be in Sanzule and Anwolakrom. This is consistent with earlier observations and Eni Ghana's earlier explanation that the ongoing high concentrations are likely due to localised biomass burning and vehicle exhausts.

Ambient air quality results are also provided for the Takoradi to Tema Interconnection Project (TTIP) sites, showing air quality standards were generally met with the exception of SO₂ and PM₁₀ for the Tema (West Africa Pipeline Company) Process Area (April), and SO₂ and PM₁₀ at the TTIP Ghana National Gas Company site in May and April. The exceedances are attributed to vehicle movements and power generation (presumed to be caused by the use of temporary diesel generators) in the near vicinity of the sampling locations.

² Environmental Monitoring Program, pln ms hse 018 eni ghana – Environmental Monitoring Program r01

Drilling Fluids and Cuttings Discharge/Disposal

In June 2019, drilling activities ceased following completion of the final infill well (OP-10). Drill cuttings were treated using the control systems previously reported and in accordance with permits and the waste management plan (which is aligned with Ghana Environmental Protection Agency [EPA] legal requirements and MARPOL).

The oil-on-cuttings (OOC) concentration for OP-10 was reported in the QMR to be 2.47%. In accordance with the applicable permit, this would fall into Category 2 (2 – 5% OOC) resulting in a surcharge. It is unclear whether such a surcharge was applied by Ghana EPA.

Noise

The QMR includes noise measurements from within the TTIP compounds, but there are no measurements taken at the nearby residences located adjacent to the perimeter fence. The IESC notes that a night-time noise level of 59dB(A) within a TTIP site has the potential to result in an exceedance of the WBG night-time noise limit for residential areas, although is unable to confirm without empirical data.

No new Environmental and Social Action Plan actions were due in the reporting period.

1. INTRODUCTION

Ramboll Environment and Health UK Limited (Ramboll) was commissioned in January 2017 by Vitol Upstream Ghana Limited (VUGL) to undertake environmental and social monitoring of the Offshore Cape Three Points (OCTP) project (the 'Project'), Republic of Ghana. The Project is operated by Eni Ghana Exploration and Production Ltd (Eni Ghana). VUGL, an affiliate of Vitol Exploration and Production Limited (Vitol), and Ghana National Petroleum Corporation (GNPC) are JV non-operating partners.

In fulfilling the role of Lenders' Independent Environmental and Social Consultant (IESC), Ramboll has a duty of care to a consortium of lenders (the 'Lenders') to the Project, including the International Finance Corporation³ (IFC), World Bank⁴ (International Development Association) and the Multilateral Investment Guarantee Agency⁵ (MIGA) which is also a member of the World Bank Group (WBG).

In carrying out its duties as the IESC, Ramboll is required to participate in two monitoring site visits each year during the construction phase of the Project and undertake desk-top review of the Project's Quarterly Environmental and Social Monitoring reports, submitted by VUGL and Eni Ghana to the Lenders. This report presents the IESC's findings following review of the Project's Q2 2019 OCTP Quarterly Monitoring Report (QMR) and other documentation considered relevant during review of the QMR. All QMRs are based on a template provided by the WBG.

This desk-top review is one of a series of reports written by the IESC and has three primary objectives:

1. Provision of a status update on issues identified in the previous reports, listed in the table below;
2. Highlighting any significant new findings resulting from the Project's operations in the 3-month reporting period; and
3. Updating of the status of Environmental and Social Action Plan (ESAP) compliance, for example, where an ESAP delivery date coincides with the reporting period.

Previous reports produced by the IESC are listed below.

Report title	Site visit/desk-top review	Reporting period	Date of Issue
Offshore Cape Three Points Environmental and Social Monitoring Report (status in May 2019)	Site visit	19 May to 23 May 2019	July 2019
Offshore Cape Three Points Environmental and Social Monitoring – Q4, 2018 QMR	Desk-top	1 st October to 31 st December 2018	April 2109
Offshore Cape Three Points Environmental and Social Monitoring – Q3, 2018 QMR	Desk-top	July 2018 to September 2018	February 2019
Offshore Cape Three Points Environmental and Social Monitoring Report (status in September 2018)	Site visit	17 September to 21 September 2018	December 2018
Offshore Cape Three Points Environmental and Social Monitoring – Q1 and Q2, 2018 QMR	Desk-top	January 2018 to June 2018	October 2018

³ Lender to VUGL debt financing package.

⁴ Guarantor to support the gas development.

⁵ Insurer for commercial lenders to VUGL.

OFFSHORE CAPE THREE POINTS

Report title	Site visit/desk-top review	Reporting period	Date of Issue
Offshore Cape Three Points Environmental and Social Monitoring Report (status in March 2018)	Site visit	16 September to 16 March 2018	July 2018
Offshore Cape Three Points Environmental and Social Monitoring – Q3, 2017 QMR	Desk-top	June 2017 to September 2017	December 2017
Offshore Cape Three Points Environmental and Social Monitoring Report (status in September 2017)	Site visit	21 February 2017 to 15 September 2017	November 2017
Offshore Cape Three Points Environmental and Social Monitoring – Q1, 2017 QMR	Desk-top	January 2017 to March 2017	June 2017
Offshore Cape Three Points Environmental and Social Monitoring Report (status in February 2017)	Site Visit	Period up to 20 th February 2017	May 2017

The QMR reviewed for this report covers the period 1st April to 30th June 2019. As indicated above, within this report the IESC provides status updates for the 'Open' issues identified in previous reports.

2. SCOPE AND STRUCTURE OF THE REPORT

This report follows the same format used for the previous IESC quarterly monitoring reports. Project performance is assessed against the Project's environmental and social management system (ESMS), including a suite of Project-specific management plans that were developed to satisfy agreed Project Standards. The findings present in this report are based on review of the Eni Ghana Q2 2019 QMR, which is based on a template provided by the WBG.

2.1 Project Standards

In accordance with the IESC's Terms of Reference, the Project is being assessed against the following standards and guidelines:

- Applicable laws and regulations of Ghana;
- WBG Performance Standards (2012) including:
 - PS1: Assessment & Management of Environmental & Social Risks & Impacts;
 - PS2: Labour and Working Conditions;
 - PS3: Resource Efficiency and Pollution Prevention;
 - PS4: Community Health, Safety, and Security;
 - PS5: Land Acquisition and Involuntary Resettlement; and
 - PS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources; and
- WBG Environmental Health & Safety (EHS) Guidelines applicable to the Project including:
 - EHS Guidelines for Offshore Oil and Gas Development (2015); and
 - EHS Guidelines for Onshore Oil and Gas Development (2007).

PS7 (Indigenous Peoples) was excluded from the scope of the IESC's work on the basis that the Environmental and Social Due Diligence⁶ performed prior to financial close concluded that no Indigenous Peoples are affected by the Project.

PS8 (Cultural Heritage) was excluded from the IESC's scope, however Cultural Heritage is included in so far as it relates to specific issues such as shrines and chance finds.

Given the mature stage of the Project, and incorporation of the above standards during the development of the Project's ESMS, the Project is effectively assessed against its own ESMS and associated management plans.

2.2 Structure of the Report

Following this section on structure of the report, Section 3 provides a brief Project status update at the end of Q2 2019 based on information provided by Eni Ghana, for example, completion of key milestones that have relevance to the IESC's scope of work. It is intended only to provide context to the report and is not intended to be comprehensive.

Section 4 includes Significance Criteria used primarily in the more comprehensive site visit reports to categorise issues as High/Moderate/Minor significance.

Sections 5 to 11 provide new findings and updates on issues raised in the IESC's preceding May 2019 site visit report (which itself includes findings carried over from earlier reports) organized by the applicable Performance Standards. Reporting is by exception only; no commentary is

⁶ An environmental and social due diligence (ESDD) exercise was performed by KBC Process Technology Ltd on behalf of potential lenders [Ref: Environmental and Social Review OCTP Project, Ghana September 2016]. The ESDD Report identified a number of issues and made recommendations that were transposed into an Environmental and Social Action Plan (ESAP). The ESAP provided in the ESDD report is consistent with the final agreed ESAP developed by the WBG and included in Appendix 1 of this report.

provided where the status/categorisation of significance is unchanged. In Appendix 2, the 'Summary of Findings' tables for each of the applicable Performance Standards are consolidated and the status confirmed, for example, stated as 'closed' where applicable or otherwise left as 'open'. Of note, the status of many issues will remain open because the updates in this Q2 2019 report are based almost solely on information provided in Eni Ghana's QMR (QMRs provide content determined by a template provided by the WBG at the outset of Project's construction phase – to ensure consistency of reporting). As such, issues raised by the IESC, notably in its earlier site visit reports, are not necessarily addressed in subsequent QMRs. Issues and uncertainties identified in this report will be highlighted for further consideration during the next IESC site visit, scheduled for Q1 2020.

2.3 Limitations

The findings expressed in this report are based exclusively on a desk-top review of material provided. The IESC has not engaged in discussion with Project staff on the understanding that detailed discussions will take place during the forthcoming site visit.

The IESC has not duplicated all information provided in previous reports. Therefore, this report should be read in conjunction with previous IESC reports listed in the table in Section 1.

3. PROJECT STATUS UPDATE

A Project description and status of the Project was provided in the IESC's May 2019 site visit report. The QMR template does not require the provision of a project status update, and in the absence of a status update the Project description provided in the May 2019 site visit report is duplicated, in part, below for convenience with minor updates reflecting new information obtained from the QMR.

3.1 Project Description

The Project, as described in the ESIA documentation, involves the development of the Sankofa East oil field and non-associated gas in the Sankofa and Gye Nyame Gas Fields, which are located offshore, 55 to 60 km from the coastline of the Western Region of the Republic of Ghana (Figure 1). The operator, Eni Ghana, is developing these fields as an integrated oil and gas development Project utilising a newly converted double-hulled Floating Production Storage and Offloading Vessel (FPSO). Other key components of the Project include:

- Fourteen wells for oil exploitation (producing and injection wells); oil is transferred to tankers for direct export to market;
- Five wells for non-associated gas exploitation;
- A 63km subsea gas pipeline from the FPSO to shore;
- A 1.5 km onshore gas pipeline from the shore to the ORF;
- The Onshore Receiving Facility (ORF) (Figure 2), including a gas compressor station, pilot and permanent accommodation camps, firefighting station, helipad and medical facility; and a tie-in to the existing Ghana National Gas Company (GNGC) 20-inch gas pipeline; and
- A logistics base in Takoradi and a quay within the port of Takoradi.

The Project is split into two phases:

- Phase 1: Oil Development Project. This phase consists of the 14 subsea wells (8 oil producers, 3 water injectors and 3 associated gas injectors), subsea facilities, and the FPSO located approximately 60 km offshore south of Sanzule; and
- Phase 2: Gas Development Project. This phase will consist of 5 subsea wells, subsea facilities, gas treating facilities on the FPSO, a 63km subsea gas pipeline (gas export sealine [GES]), the ORF, and tie-in with the GNGC sales gas pipeline.

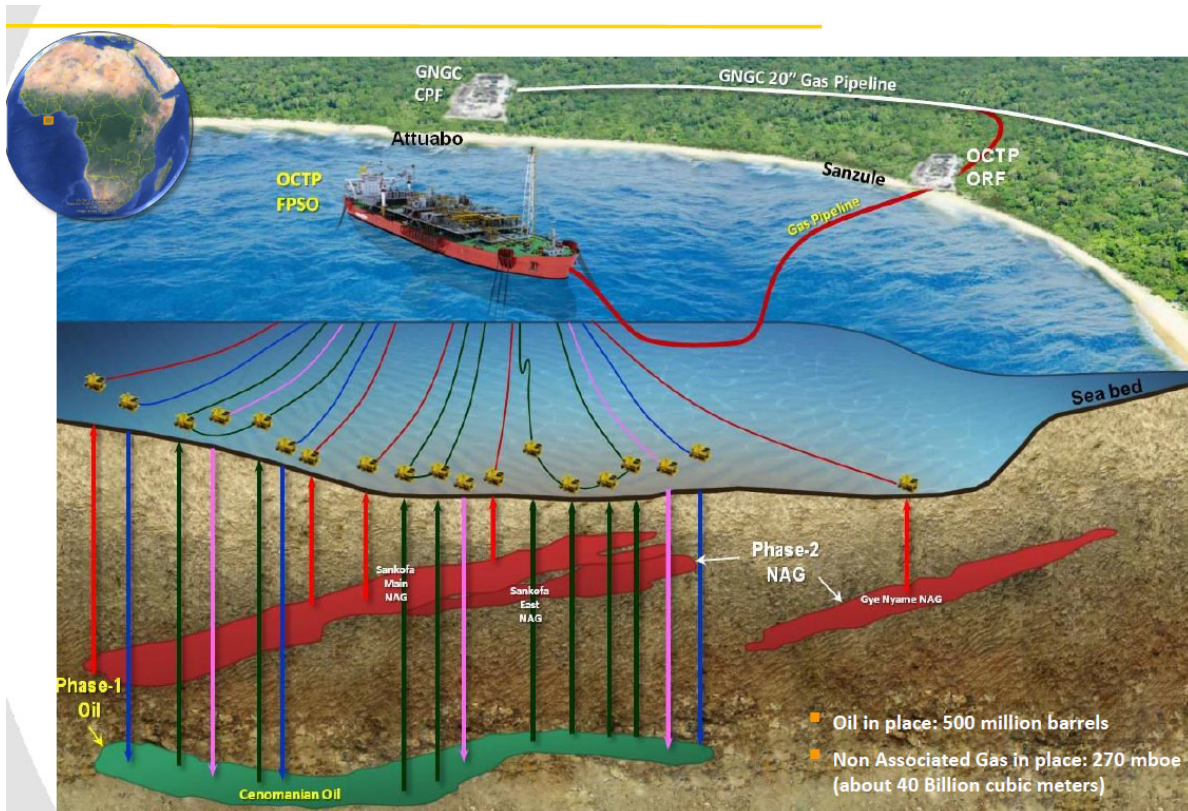


Figure 1: Schematic of the OCTP Project

Material Project design/scope changes since the ESIA Report was prepared include 3 infilling wells, the upgrade of regulating and metering stations with a short interconnecting pipeline in Takoradi associated with the West Africa Gas Pipeline and a revised approach to nearshore pipeline installation/beach crossing. These changes are described in previous reports and are not duplicated here.

3.2 Status of the Project in Q2, 2019

The Project is now in its Production phase with first oil achieved in Q2, 2017 and first gas Q3, 2018. At the time of the May 2019 monitoring visit:

- The FPSO had been in position and lifting oil since mid-2017;
- Materials supply was complete (Q1, 2018);
- Drilling and completion of the 19 subsea wells was complete;
- Construction of the ORF tie-in to the GNGC gas pipeline was complete;
- The GES was installed with gas being exported to the ORF since 4th August 2018; post lay trenching (Figure 3) was completed in November/December 2018;
- All three compressors were operational, and gas was being supplied to the GNGC gas sales pipeline for onward distribution;
- ORF Fencing was largely erected;
- Reinstatement of disturbed land progressing as planned; and
- The three infill wells had been completed with the third (OP-10) completed and entered into production on 6th June.

In summary, construction was largely complete at the onshore facilities with the exception of minor works and construction of the permanent accommodation camp. Completion of works at the permanent accommodation camp was ongoing⁷.



Figure 2: Onshore facilities

3.2.1 Employment data

Employee numbers provided in the QMR indicate an ORF workforce of 474 (three contractors) including the security guards (84 from two security contractors: 7 of which are guarding ORF workers' accommodation at Esiama) plus 39 (an increase of 1) direct Eni Ghana employees. The figure of 474 is down from 601, as of end December 2018, reflecting continuing worker demobilisation. Of these 474 workers, 451 are Ghanaian and of the Ghanaian non-security workforce, 134 are from villages in the Direct Area of Influence (DAoI). The QMR does not give a figure for the number of security guard by origin. The IESC understands that many of the guards are from the DAoI. Excluding the security guards, the proportion of ORF workers from the DAoI villages is 34% and this percentage is in line with percentages previously reported, which were consistently within the range of 30-35% since the beginning of the construction phase. Fourteen members of the ORF workforce are women – a decrease of 14 female employees over the six-month period from 01 January to end June 2019.

There are 232 workers on the FPSO excluding the number of government employees stationed onboard (18) but including direct Eni Ghana employees (13). Of the 232 workers, 125 are Ghanaian and none of these Ghanaian workers originate from the DAoI villages. Compared to the situation at the end December 2018 the total number of FPSO workers has declined slightly (down from 248), and the number of Ghanaian workers, also, has decreased, but to a lesser extent (down from 127 to 125).

⁷ The permanent accommodation camp was completed in early October 2019.

4. SIGNIFICANCE ASSESSMENT

4.1 Introduction

Within this report, the IESC provides status updates (including significance) against the issues identified in the IESC's May 2019 site visit report where evidence in the QMR and embedded documentation allows for an update of the status of such issues. Table 1 in Appendix 2 presents these issues with a status update, when possible, arising from review of the QMR.

4.2 Presentation of Earlier Review Findings

Issues arising from the September 2018 site visit report (and earlier reports) are presented in a consolidated table (Table 2) in Appendix 2 of this report. Changes to these specific issues, arising from the QMR review findings, are recorded in this consolidated table.

4.3 Interpretation of the Consolidated Table

To assist interpretation of the consolidated table in Appendix 2, the following brief description is provided.

For each issue, the following information is presented:

- The aspect;
- A description of the issue, for example deficiencies or omissions;
- The phase(s) to which an issue relates;
- Identification of the standard(s) against which the deficiency or omission has been identified;
- IESC's recommendation, where applicable, to resolve/manage the deficiency or omission; and
- The significance of the issue: on a three-point scale (see below for criteria).

A ranking system has been used to indicate the relative significance, based on the level of non-compliance, of an issue. As well as highlighting key areas requiring attention, it can also be used to aid the tracking and rectification of specific items requiring improvement.

Identified issues have been placed into one of the following four categories:

- Minor:** Minor non-compliance, risk or minor technical breach of Applicable Standards and commitments with no material, actual or likely potential: environmental or social consequences; or significant human injury or harm.
- Moderate:** Moderate non-compliance or risk with actual or likely potential: localised and short-term environmental or social consequences; minor human injury or harm; or material short-term breach of Applicable Standards and commitments.
- High:** Major non-compliance or risk with actual or likely potential: spatially extensive and/or long-term environmental or social consequences; serious human injury/death or harm; or material and extensive breach of Applicable Standards and commitments.
- Not** Issue is noteworthy, but it is not an issue of non-compliance.

Applicable

Where time-critical recommendations for specific actions are presented, a timeframe linked to Construction/Operational phase milestones is indicated in the IESC recommendations column. Time-critical issues can lead to a higher classification of significance.

Table 1: Example of the summary table format

ID	Aspect	Issue Description	Phase ⁸	Standard	IESC Recommendations	Significance
00	Storm water run-off – monitoring	<p>The ESAP requires <i>Company X</i> monitors the quality of surface water run-off from facilities.</p> <p>To date the Company has been unable to procure monitoring equipment – no monitoring has been undertaken.</p>	Ops	<p>WBG EHS Guidelines</p> <p>ESAP</p>	<p><i>Company X shall expedite procurement of monitoring equipment with the support of senior management.</i></p>	Moderate

⁸ Phases can include: construction; operations; decommissioning or; any combination of these phases.

5. PERFORMANCE STANDARD 1: ASSESSMENT AND MANAGEMENT OF ENVIRONMENTAL AND SOCIAL RISKS AND IMPACTS

5.1 Status update for previously identified issues

In the May 2019 IESC site visit report, five issues relating to PS1 were identified for the Project's attention/action. None of the issues identified in the May 2019 site visit report can be closed out based on the information provided in the QMR.

5.2 New PS1 findings in Q2, 2019

5.2.1 Management of Change

No Management of Change actions were initiated in Q2 2019.

5.3 Community Investment Strategy: Quick Impact Projects

With respect to the 'Quick Impact Projects' component of the Community Investment Strategy (CIS), the QMR records the progress on both the water supply (villages of Sanzule [including Anwolakrom]; Krisan and Bakanta) and the educational project.

5.3.1 Water Supply Project

The IESC's May 2019 site visit report highlighted a number of difficulties/challenges being faced by this project and, therefore, the community-based Water Board Committee (the Committee) which is responsible for managing the project.

The QMR presents monthly updates on this project and the Minutes of two meetings with the Committee. The key difficulty being faced is generation of a sustainable level of cash flow to enable the project to operate effectively. A number of decisions/actions have been taken to try to rectify matters:

- Issue of tender (May) for works to extend the network/fetching points within Sanzule (to encourage more users and hence income);
- Appointment and training of a community-based technical operator to manage the system and improve collection of 'fees' for water consumed;
- Improved training of the vendors in each village responsible for collection of the 'fees' from each user at the fetching points;
- Introduction of a system of payment of a minimum cash amount per 5,000 litres used before another 5,000 litres is provided;
- Opening of two project bank accounts (for project capital and operational expenditures respectively); and
- Maintenance occurred in May and June (not in April due to lack of funds) but, in one case, maintenance was done at no cost to the Committee (received income is supposed to cover such costs). Also, in May water quality was tested prior and following maintenance. Results from the pre-maintenance samples indicated good water quality as quality was, "....up to WHO standards" (Eni Ghana May 2019 Community Investment Strategy and Quick Impact Project Report).

Finally, it is reported that the solar power system is not functioning and requires attention. However, costs of repairs or replacement will not be the responsibility of the Committee as the system is still 'under guarantee' (Eni Ghana June 2019 Community Investment Strategy and Quick Impact Project Report).

5.3.2 Educational Project

As stated in the IESC's May 2019 site visit report, the educational project is not as advanced as the water supply project. Essentially, the educational project consists of two components:

- Improvements to schools and related infrastructure; and
- Capacity-building for school staff.

Regarding the 'schools infrastructure' component, procurement procedures already underway in mid-Q2 resulted in interested vendors submitting technical documents for evaluation and Eni Ghana and Consar have visited schools to identify locations for facilities such as staff rooms and toilets to assist in the preparation of Bills of Quantities.

With respect to the capacity-building component, the following decisions/actions are reported:

- A draft MoU between the appointed implementing partner 'Teach for Ghana' and the head teachers of the DAoI schools was provided to Eni Ghana for review;
- Recruitment of eight 'fellows' (teaching assistants) was completed in June 2019;
- These 'fellows' will be allocated to five DAoI village schools (includes new Bakanta) with a maximum of two at any single school;
- The 'fellows' will begin work in the schools in September 2019; and
- Head teachers to select teachers for the training programme in Q3 2019.

Progress occurred with respect to the CIS and the following decisions/actions are reported:

- Definition of a procurement plan for all CIS interventions;
- Validation and consolidate of information obtained by the WOOD Group (CIS consultants for preparation of the CIS implementation plan) to inform the draft CIS implementation plan with the final draft of the CIS implementation plan submitted to the JV OCTP partners and to key external stakeholders;
- Prioritization of the CIS interventions for 2019-2021; and
- Discussion held with TechnoServe concerning the possibility of contracting its services to support the key CIS component of 'Economic diversification (focus on improving livelihoods and building sustainable businesses)'. TechnoServe submitted a Concept Note for Eni Ghana review.

The status of the two Quick Impact Projects, progress on delivery of the CIS implementation plan, the new findings and previously identified issues (May 2019 IESC site visit report) relating to PS1, will be further assessed during the next IESC site visit, expected to occur in Q1 2020.

5.3.3 Stakeholder Engagement

In June 2019, the OCTP Stakeholder Engagement Plan (OCTP Operations in Sankofa, Gye Nyame and the ORF) (Operations SEP) was finalized.⁹ This Operations SEP contains a community-level Grievance Mechanism (GM). The GM is the same GM as has been in place since the inception of site works. The SEP states that the GM procedure is provided at Annex C of the SEP. However, Annex C (and other Annexes) were not included in the copy of the SEP embedded in the QMR.

5.3.4 Grievances

In the IESC's May 2019 site visit report, it is stated that, to the end of May 2019, two 'community' grievances had been received. The QMR shows that three other grievances were received in Q2; two on the same day (29 May) and one on 23 May. The 29 May grievances were

⁹ This Operations SEP is Rev03 and signed by the Sustainability & Local Content Manager and the Managing Director.

very similar with both grievances concerning LRP implementation, in particular the LRP Support Services component relating to income-generating options. The key features of both complaints concerned a lack of money, on the part of the two complainants, to feed their poultry and, as a result, deaths were occurring in their flocks. The complainants requested time-limited support, in the form of feed, from the Project to enable them to feed their flocks so that they could either begin laying again or be sold. These two grievances were closed by the end of Q2 (within four weeks of being received); in one of the cases, Eni Ghana explained that the complainant had broken her agreement with TechnoServe and, in the other case, a veterinarian opined that the complainant had starved the birds and a decision was made not to provide the requested feed.

The 23 May grievance also related to the LRP Support Services component's income-generating options, but this time concerned a PAP who wished to change from vegetable growing to aquaculture. The proposed corrective action involved a condition requiring cost-sharing between the complainant and the Project regarding installation and early operations expenses of the aquaculture option. This was rejected by the complainant and, following further consideration by the Project, the complainant's request was granted with no cost-sharing attached. This grievance appears to have been closed within one week of being received. Of note, the 23 May grievance is not recorded in the QMR table of all non-security grievances. It is recorded in the May 2019 LRP Monthly Report.

The two remaining grievances relate to the suspected anchor/cable on the seabed that, in the case of one of the complainants, is considered to have damaged fishing nets. The other complainant (on behalf of Sanzule fishers) alleges that the presence of the suspected anchor is reducing the area available for fishing due to fishers taking avoidance action to reduce the risk to their nets/gear. In both cases, the complainants want Eni Ghana to locate and remove the alleged anchor/cable.

As of end June 2019, both these grievances are open. One of the grievances (the grievance lodged on behalf of the Sanzule fishers) has been open since 10 January 2019. This is a significant time period without resolution/closure as the grievance relates to a significant community group (as fishing is the dominant livelihood occupation for Sanzule residents, especially now that demobilization of DAoI workers is nearly complete). There have been several meetings of the Fisheries Management Coordination Committee (FMCC) where this 'anchor/cable' grievance has been discussed. As stated in the IESC's May 2019 monitoring report, the FMCC has proposed, *"....that fishermen undertake their own investigation and report to Eni Ghana. Currently, Eni Ghana is considering a costing, received from the FMCC, for this work proposal by the FMCC"*. As of the end Q2 2019, the status of these grievances is described as 'ongoing' (it is not clear if Eni Ghana had reached a decision on the FMCC's proposal at that time). It is recommended that Eni Ghana accelerates its efforts to resolve the issue of the location/existence of the alleged anchor/cable (perhaps by means of a joint fact-finding action) and if an anchor/cable or other object, related to the project and which could cause damage to nets/gear is found, takes prompt action to remove it.

5.3.5 ESAP Compliance

No new ESAP actions were due in the reporting period.

6. PERFORMANCE STANDARD 2: LABOR AND WORKING CONDITIONS

6.1 Status update for previously identified issues

In the IESC's May 2019 site visit report, one issue relating to PS2 was identified for the Project's attention (relating to monitoring of reintegration of demobilized DAoI workers into the DAoI villages' economy). This issue cannot be closed out based on the information provided in the QMR.

6.2 New PS2 findings in Q2, 2019

No significant new findings are reported, following review of the QMR.

The status of the previously identified issue relating to PS2 (May 2019 IESC site visit report) will be further assessed during the next IESC monitoring site visit expected to occur in Q1 2020.

7. PERFORMANCE STANDARD 3: RESOURCE EFFICIENCY AND POLLUTION PREVENTION

In the May 2019 IESC site visit report, a number of issues relating to PS3 were identified for the Project's attention (see Appendix 2, Table 1). For the most part the QMR does not specifically address these issues because of the QMR reporting template format. The IESC understands a separate process is in place to address issues raised in the May 2019 site visit report, and these will be fully revisited during the next site visit. The QMR does however provide new information in relation to:

- Waste water discharges from offshore facilities;
- The offshore environmental monitoring campaign;
- Air emission and air quality monitoring; and
- Noise monitoring.

These subject areas are discussed in turn below with reference to previously raised concerns as applicable.

7.1 Waste water discharges from offshore facilities

In previous reports, the IESC highlighted exceedances against agreed Project Standards for treated sewage effluent discharges. In the May 2019 site visit report, optimisation works to improve effluent quality were reported for both the FPSO and drill ship (Maersk Explorer). The IESC also questioned the rationale behind the applied Project Standards, noting that they might be more appropriate for inland or nearshore waters.

The QMR does not include discharge results for the drill ship, stating the drill ship has been demobilized. Instead certificates of compliance are provided confirming compliance with MARPOL, Regulation 6, Annex 1. Similarly, there are no results provided for the FPSO, and instead there is reference to the new Sewage Treatment Plant (STP) manufactured by Wartsila that has been certified by a third party - DNV.GL. The certificate for the FPSO STP is not attached to the QMR.

7.2 Offshore Environmental Monitoring

Tecnoambiente undertook a second offshore survey in November/December 2018. The timing of the survey was consistent with the Eni Ghana Environmental Monitoring Program (EMP)¹⁰ which anticipated two survey campaigns during the construction phase, one in 2017 and a second in 2018.

The sampling programme detailed in the EMP specifies survey effort in offshore and nearshore areas, inclusive of the gas export pipeline route. The programme further details the collection of seawater for analysis of: plankton; physical-chemical parameters (TOC, BOD₅ and COD, suite of metals, hydrocarbons, phosphates, nitrites, nitrates and coliforms); and CTD water column profile measures. Sediment samples are also included for physical-chemical parameters (as above) and benthic taxonomy analysis. Air quality was included in the programme. Finally, video footage along the pipeline route and around wells should be collected.

The sampling locations detailed in Tecnoambiente's monitoring campaign report are aligned with the EMP, and also include additional monitoring locations for the new infill wells (GI-4, OP-9 and OP-10). The second survey programme in late 2018 is consistent with the timeframe in the EMP,

¹⁰ Environmental Monitoring Program, pln ms hse 018 eni ghana – Environmental Monitoring Program r01

however the IESC does note the different seasons for the two surveys; the first was in May (2017) and the second in November/December (2018), potentially affecting biological results.

The offshore monitoring report¹¹, dated May 2019, was attached to the QMR and subsequently reviewed by the IESC. The report is substantial in volume (approx. 250 pages), although provides varying levels of detail between subject matter. It is structured to include the scope of the programme (media, parameters and locations for the monitoring campaign), methodology, presentation of results and a discussion of results.

7.2.1 Scope of Programme

The report reflects the comprehensive sampling programme described above and largely aligns with the EMP with the following exception:

- For air quality, particulate matter and metals (Pb, Hg, Cd, As, Ni) were not sampled.

It is also reported that 'fast absorbing' passive samplers used in the 2017 survey were no longer commercially available. Consequently, multiple passive samplers were combined to avoid 'below limit of detection' results; results are therefore, "...a time and location weighted average of the air quality in the survey area". The short sampling duration and comingling of numerous passive samplers reduces the reliability of, and readers' ability to evaluate, the monitoring results.

The omission of particulate matter and metals (in ambient air) from the monitoring programme is not justified. However, whereas there is a clear deviation from the parameters specified in the monitoring programme for air quality, the implications in terms of environmental risk are considered to be minimal because of the offshore location/distance from human/other sensitive receptors.

7.2.2 Results

The offshore monitoring report includes a comparison of the results in the second campaign against the initial 2017 campaign thereby identifying the extent of any environmental degradation caused by the Project. A high-level summary of results is provided below based on the IESC's interpretation of the report. It should however be noted that drilling commenced in 2015 and the 2017 data should not be considered as the background.

Sediments		
	Metals	<p>No clear spatial or temporal trends have been observed. Concentrations do not show a marked increase since the 2017 monitoring campaign.</p> <p>Increased barium, cadmium and other metals are shown in proximity to some wells (likely arising from drill fluids associated with cuttings discharge). Concentrations in sediments are compared against threshold criteria (NOAA¹²) for ecotoxicity including:</p> <p>Ba – average concentrations exceed NOAA TEL¹³ (no figure for PEL¹⁴)</p> <p>Ca – all measured samples below the NOAA TEL</p> <p>Hg – all measured samples around the NOAA TEL, but well below the PEL</p> <p>Cr – all measured samples around the NOAA TEL, but well below the PEL</p> <p>The report highlights a small number of samples where concentrations above ecotoxicity threshold levels were measured, particularly Ni, Cr and</p>

¹¹ Marine Environmental Monitoring Program Offshore Cape Three Points Project Final report. Second Campaign: November - December 2018

¹² U.S. National Oceanic and Atmospheric Administration

¹³ Threshold Effect Level (concentration below which adverse effects are expected to occur only rarely)

¹⁴ Probable Effect Level (concentration above which adverse effects are likely to occur)

		Cu samples, with the recommendation that further monitoring may be necessary.
	Total Petroleum Hydrocarbon (TPH)	In general terms, TPH concentrations have increased in all the regions (nearshore, pipeline and wells). There are no ecotoxicological reference levels for TPH, but some authors suggest that negative effects may occur at concentrations (1,000 mg/kg d.w.) which is higher than the concentrations observed in the survey area (maxima of about 400-500 mg/kg d.w.).
	Benthos	Analysis performed show no evidence of negative effects upon the sea bed communities. The species and community features typically present in polluted areas (including those that are characteristic of hydrocarbon impacted sediments) have not been identified in the project area.
Water		
	Plankton	The analysis of water nutrients and planktonic communities, showed no evidence of water eutrophication, waste water discharge or other anthropogenic impacts.
	Water quality	In general terms, metals concentrations in seawater have slightly increased in all the project areas, except for copper and iron. Measured values are low and well below the ambient water quality criteria (AWQC) thresholds.
	Organic compounds	Organic compounds (TPH, PAH, VOCs, BTEX and PAHs) in seawater concentrations are low and significantly below AWQC in all the project areas. Fingerprinting analysis performed on PAHs in the well areas suggest they come from general combustion sources and not from Project sources of oil release to the sea.
	Microbiology	The microbiological quality of both water and sediment is reported to be good.
Air Quality		
	BTEX	All samples were below threshold levels with the exception of two samples analysed for toluene. The report does not offer an explanation for the elevated toluene levels.
	NO ₂ , NO _x H ₂ S and SO ₂	Measurements were typically below the limit of detection and/or well below threshold levels.
	Particulate matter and metals	Not analysed

As an overarching finding, the offshore monitoring report identifies some increase in the concentration of certain contaminants, but that these are generally well below threshold levels for environmental harm.

7.3 Air emission and air quality monitoring

7.3.1 Flaring

Flaring data in Q2 2019 are summarised below with comparable data for Qs 3 and 4 of 2018. Volumes of flared gas are significantly lower than in earlier quarters.

Table 2: Summary of flaring and venting emissions

Source	Nature of emission	Volume in Q3, 2018 (mmscf ¹⁵)	Volume in Q4, 2018 (mmscf)	Volume in Q2, 2019 (mmscf)	Comment (for Q2, 2019)
Rig, Flare stack	Flare	49.945 (July) Zero (Aug) 49.481 (Sept)	2.401 (Oct) 1.470 (Nov) 2.859 (Dec)	0 (April) 4.68 (May) 0 (June)	Flaring associated with commissioning of OP-10 infill well
ORF, Vent stack	Cold vent	23.03	3.027	4.565	Emergency shutdown system
FPSO, Flare stack	Flare (associated gas) Flare (non-associated gas)	54.23 387.49	157.45 5.95	35.97 4	Upset conditions Upset conditions
Total =		Flared 541.14 Vented 23.03	Flared 170.13 Vented 3.03	Flared 44.65 Vented 4.66	

Eni Ghana is permitted to flare gas in accordance with permits issued by the EPA. Limits are based on a percentage (%) of production i.e. less than 3% of production volumes in the case of associated gas and 1% for non-associated gas. Based on the Eni Ghana's track record in comfortably achieving these limits, and the reduced volumes of flared and vented gas in Q2, 2019, the IESC believes Eni Ghana was well below permissible limits for flaring and venting.

7.3.2 Air emissions monitoring

In its previous monitoring reports, the IESC has highlighted deficiencies with the air emissions table provided in the QMRs, primarily because emissions are expressed as tonnes, rather than mg/Nm³ in the case of WBG EHS guidelines, making comparison with WBG and Ghana requirements impossible without further analysis.

The format and content of the air emissions monitoring are unaltered in the QMR and the IESC's earlier comments remain unaddressed.

7.3.3 Ambient Air Quality

The QMR summarises ambient air quality results for NO₂, SO₂, PM₁₀ and Total Suspended Particulates (TSP), at several on-site locations and in the villages of Sanzule and Anwolakrom, that are compared with WBG and Ghanaian standards. Results are provided for March, April and May and typically show ambient air quality to be below Ghanaian and WBG standards.

Exceptions include:

PM₁₀ exceedances:

- WBG 24hour standard at the ORF and Permanent Accommodation Camp (March);
- WBG 24hour standard at the ORF (April);

¹⁵ million standard cubic feet

SO₂ exceedances:

- WBG 24hour standard at Permanent Accommodation Camp, ORF and Anwalakrom (March);
- WBG 24hour standard at Sanzule (April); and
- WBG 24hour standard at ORF, Sanzule and Anwalakrom (May).

There are no NO₂ or TSP exceedances in the reporting period.

As previously reported, the SO₂ exceedances are marginal, with the more significant exceedances tending to be in Sanzule and Anwalakrom. This is consistent with earlier observations and Eni Ghana's earlier explanation that the ongoing high concentrations are likely due to localised biomass burning and vehicle exhausts. The IESC concurs that the explanation provided is credible.

In contrast to previous QMRs, the QMR also reports high levels of PM₁₀.

In previous reports, the IESC has highlighted the absence of air quality monitoring results for the TTIP facilities. This omission has been corrected with data for NO₂, PM₁₀, SO₂ and TSP provided, showing air quality standards were generally met with the exception of SO₂ and PM₁₀ for the Tema (WAPCo) Process Area (April), and SO₂ and PM₁₀ at the TTIP GNGC site in May and April. The exceedances are attributed to vehicle movements and power generation (presumed to be the temporary use of diesel generators) in the near vicinity of the sampling locations.

7.3.4 Noise (ORF)

As previously reported, noise levels are presented for day-time hours only for industrial and residential receptors. Noise levels for residential areas are shown to be above 55dB(A) but close to baseline levels i.e. within 3dB of pre-project noise levels and on some occasions below the baseline. As such, the measured noise levels are considered to meet WBG standards.

7.3.5 Noise (TTIP)

The QMR also includes noise measurements for the TTIP facilities. Noise levels are recorded to be between 52-58 dB(A) during the day and 49-59 dB(A) during the night at the Tema WAPCo site. Noise measurements are not provided for the nearby residences located adjacent to the perimeter fence, nor is there confirmation that the noise is generated by Project activities. The IESC notes that a night-time noise level of 59dB(A) at the TCF sampling location (Figure 3) could result in an exceedance of the WBG noise limit for residential areas, although is unable to confirm without empirical data.

In recognition of the proximity of the adjacent dwellings at the Tema facility, the IESC previously recommended noise monitoring at the nearest residential location. These recommendations have not been adopted, however the IESC does acknowledge that measured noise levels were lower in Q2 2019 than in Q4, 2018.



Figure 3: Aerial view of the Tema Regulating and Metering Station

7.3.6 Surface water quality

No onshore monitoring reports were embedded in the QMR. The IESC therefore offers no commentary and will seek to review onshore monitoring reports, including surface water quality results, during the upcoming site visit in Q1 2020.

7.3.7 Drilling Fluids and Cuttings Discharge/Disposal

In June 2019, drilling activities ceased following completion of the final infill well (OP-10). Drill cuttings were treated using the control systems previously reported and in accordance with permits and waste management plan (which is aligned with EPA legal requirements and MARPOL).

The Environmental Permit to continue drilling of infilling wells, issued by the EPA on the 19th February 2019 (Ref. CE0021780539) allows for discharge of oil-on-cuttings (OOC) up to the limit of 2%. Thereafter surcharges will apply up to an oil concentration of 10%. Discharge to sea of oil on cuttings exceeding 10% is prohibited.

The OOC concentration for OP-10 was reported in the QMR to be 2.47%. Accordingly, this would fall into Category 2 (2 – 5% OOC) of the aforementioned permit resulting in a 20,000US\$ surcharge. It is unclear whether such a surcharge was applied.

There were no exceedances of mercury or cadmium in Non-Aqueous Drill Fluids in cuttings, nor exceedances of hydrocarbons in completion and well work over fluids.

8. PERFORMANCE STANDARD 4: COMMUNITY HEALTH, SAFETY, AND SECURITY

8.1 Status update for previously identified issues

In the IESC's May 2019 site visit report, two issues relating to PS4 were identified for the Project's attention. The IESC's review of the QMR has resulted in no material additional information being provided, thus both issues remain unchanged.

8.2 New PS4 findings in Q2, 2019

8.2.1 Security

The QMR confirms that there were no security incidents and, also, that no grievances were raised against security providers in Q2 2019.

There is no mention in the QMR of a revised Security Management Plan having been approved/issued.

8.2.2 Fishery-based incursions into offshore exclusion zones

The QMR provides updated information on the fishery-based incursions into offshore exclusion zones. Figure 4 presents the weekly numbers, and cumulative totals, of individual incursions into the exclusion zone around the FPSO from the beginning of January to the end of the third week in May 2019. It can be seen that weekly totals vary. However, over this period the cumulative total was rising steadily until early May and then has levelled at 1600 incursions (the line graph has been extrapolated, beyond the third week of May, and the cumulative total is shown as remaining at the same level until the end of May). It is not clear from the data presented if this is because there were zero incursions in weeks 4 and 5 of May or whether the data had not been received and analysed. The 1600 'plateau' is a higher figure than the cumulative total of just over 1500 that is presented in the IESC's May 2019 site visit report for the same period, but up to end of the second week of May. The raw data used for Figure 4 incorporate 146 incursions that were omitted from the equivalent Figure presented in the May 2019 site visit report.

It is not yet possible to determine whether the cumulative total will remain at ~1600 or will rise or, indeed, if there might be a seasonal effect on the number of incursions. It is clear, however, that this revised cumulative total serves to emphasize the extent of incursions and the enhanced risk levels to fishermen, their canoes/other fishing assets and, also, to the project's personnel and offshore assets. The IESC reiterates its previous recommendations that Eni Ghana continues to seek effective means of reducing incursions.

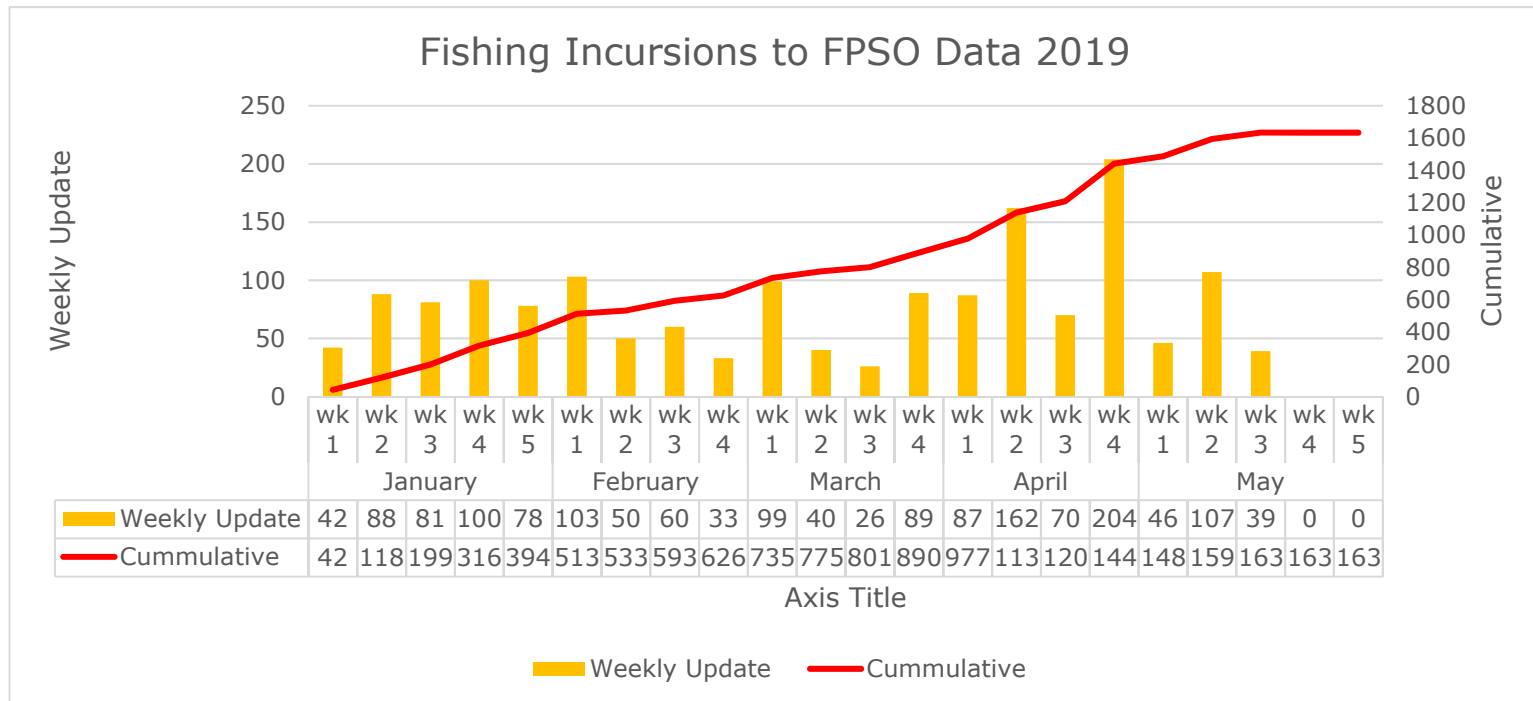


Figure 4: Fishing incursions at FPSO: Week 1 January to Week 3 May 2019

9. PERFORMANCE STANDARD 5: LAND ACQUISITION AND INVOLUNTARY RESETTLEMENT

9.1 Status update for previously identified issues

In the IESC's May 2019 site visit report, two issues relating to PS5 were identified for the Project's attention with recommendations provided. Following review of the QMR, the status of both issues remains unchanged and no new material additional information is provided.

9.2 New PS5 findings in Q2, 2019

9.2.1 Transitional Support – Food Aid

In the IESC's May 2019 site visit report, it is stated that the food aid delivery ceased in April 2019 and, as understood by the IESC at the time of writing the May 2019 report, that, "...there will be an 'extra' month of food aid distribution with the 'missing' September 2017 food aid¹⁶ being delivered in the month following the final 'termination' month (that is, May 2019)." Both the May and June 2019 LRP Reports, embedded in the QMR, mention that food aid delivery ceased in April 2019, but are silent on the date on which the, "... 'missing' September 2017 food aid....." was delivered. Annex 1 of the April 2019 LRP Report presents a table listing all monthly deliveries over the entire period for which food aid was delivered (2016 – 2019). The September 2017 entry is missing from the table. It remains unclear when, if at all, the 'missing' September 2017 food aid was delivered. [Note: Eni Ghana confirmed, subsequently, that the final delivery of the food aid terminated in March 2019 and the 'missing' September 2017 food aid was delivered in April 2019. May 2019 was the first month with no food aid delivery].

9.2.2 LR Programme Support Services

In the IESC's May 2019 site visit report, it is recorded that, in early/mid May 2019, 209 out of a planned total of 213 1st options were completed with only a single 1st option left to start (the remaining 3 options were in progress). At the same date, 37 out of a planned total of 125 2nd options were completed. The QMR provides updated figures, as follows: all 213 1st options and 85 from 125 2nd options were completed. It is noted in the May 2019 LRP Report that, for 20 of the 2nd options, PAPs were still searching for suitable land upon which they could build necessary structures/implement option activities.

9.2.3 External Interim LRP Audit

As mentioned in the IESC's May 2019 site visit report, an external consultant (Wood/Synergy Global Consulting Ltd) was commissioned and undertook an external interim audit of the implementation of the Livelihood Restoration Plan (LRP) between 23 April and 3 May 2019. The first draft of the audit report was due to be submitted in June 2019 (Note: in fact it is dated July 2019). However, the QMR provides the preliminary findings as presented in a close-out presentation by the consultant. The key preliminary findings are outlined below for 'strengths' and 'implementation risks'.

The key strengths of LRP implementation, to date, are stated as being:

- The LRP programme is well resourced by ENI and TechnoServe;
- The TechnoServe team are competent;
- There is ongoing engagement with PAPs from Eni Ghana and TechnoServe;

¹⁶ The September 2017 food aid distribution did not occur due to contractual issues.

- ENI and TechnoServe have made a large number livelihood restoration options available, maintaining a varied economy;
- ENI and TechnoServe have been flexible with the choosing of options and allowed for changes between options;
- TechnoServe have paid attention to market linkages and opportunities for PAPs;
- Relevant training has been provided, followed up, and, by in large, ongoing advice to PAPs by consultants is regular;
- One-on-one meetings were held with households choosing options; and
- Design was done in collaboration with the PAPs.

Similarly, key 'implementation risks', to date, are considered to be:

- Termination of Transitional Food Aid Support creating potential for some PAPs failing to restore their livelihood (if not able to be in receipt of sustainable benefits stream from selected livelihood restoration options at time of cessation of the Food Aid Support);
- Monitoring & Evaluation reports focus only high-level indicators (TechnoServe and Eni Ghana monitoring reports only include averaged for all PAPs) and there is no specific focus on vulnerable PAPs or those facing difficulties in restoring their livelihoods;
- Adequacy of structure and starter packs provided for livelihood restoration options (there have been criticisms by some PAPs on the quality of structures and duration of provision of inputs (such as animal feed) and access to water needed for options implementation) [Post Q2 IESC observation: It is noted in the, 'Livelihood Restoration Plan (LRP) Implementation OCTP Project Interim Audit Report (Wood/Synergy, July 2109) that, "*TechnoServe verbally confirmed that 6 months feed for aquaculture and livestock was provided, as outlined in the LRP Feasibility study, rather than 1 year as indicated in the LRP*". The QMR confirms that six months feed is provided for poultry];
- Attitudes and behaviour of some PAPs inhibiting them from fully committing to their selected LR options (acknowledged that this is not a fault of TechnoServe and Eni Ghana, but, nevertheless, constitutes a threat to achieving livelihood restoration for all PAPs); and
- Management of grievances received by TechnoServe (not clear that Eni Ghana's oversight of TechnoServe's grievance management is sufficiently rigorous to ensure that legacy issues are not created)¹⁷.

The 'completion audit', as required by the ESAP, still remains to be undertaken. It is scheduled to occur, "...one year after the completion of the implementation of the LRP". Currently, the LRP is still being implemented.

¹⁷ Of note, the July 2019 Interim Audit report lists five findings. None were of high significance. There were 3 findings of moderate significance and two findings of minor significance.

10. PERFORMANCE STANDARD 6: BIODIVERSITY CONSERVATION AND SUSTAINABLE MANAGEMENT OF LIVING NATURAL RESOURCES

10.1 Status update for previously identified issues

In the May 2019 IESC site visit report, seven issues were identified that required either corrective action or verification of completion. The QMR does not provide information that allows the status of these issues to be changed. As a general comment, the QMR provides little biodiversity related information or review, other than confirmation that *GWS conducted Avian and Sea Turtle BAP implementation during the 2nd Quarter of 2019*. No monitoring reports were provided with the QMR.

The IESC is aware that, consistent with the implementation work undertaking by GWS, the Avian and Sea Turtle BAPs have been revised for the production phase and shared with the WBG for WBG approval (see issue Appendix 2, Table 1, 017_5/19). Similarly, Eni Ghana has provided a shorebird monitoring composite report in accordance with the recommendation made in 016_5/19.

The IESC will review these documents during the upcoming site visit

10.2 New PS6 findings in Q2, 2019

No new findings are reported following review of the QMR.

11. PERFORMANCE STANDARD 8: CULTURAL HERITAGE

11.1 Status update for previously identified issues

There are no issues presented in the IESC's May 2019 site visit report.

11.2 New PS8 findings in Q2, 2019

No new findings are reported following review of the QMR.

APPENDIX 1

ENVIRONMENTAL AND SOCIAL ACTION PLAN

Updated ESAP - 01 February 2018 to replace the version updated 16 June 2017. No items are due in Q2 2019.

	Task	Indicator of Completion	Timeframe
1	Eni Ghana with support from Vitol will develop a construction/ development phase Environmental, Social, Health Management Plan (ESHMP) and the relevant management plans and programs in advance of development drilling and construction, followed by a production/operations ESHMP which will be developed before first oil, with gas-related elements integrated as needed before first gas. The ESHMP will be updated as required, such as in the event of any significant changes to the project and its environmental and social risks and impacts occur, following a Management of Change process. The ESHMP will include social management plans and procedures to meet the objectives of the Performance Standards, and those plans and procedures will be incorporated into an integrated Environmental and Social (E&S) Management System for the OCTP project.	Plans and procedures submitted to WBG: a) Development drilling and construction phase: ESHMP, Procurement Plan, Grievance Mechanism, Waste Management Plan, Security Management (Offshore) Strategy by November 15, 2015 b) Recruitment, Employment and Training Plan, Local Content Development Plan, Workers Development Plan, Marine Traffic Management Strategy, Commitment Register by end of November 2015 c) Development drilling and construction phase: all management plans (others than the plans specified in the action items below) approved by end of December 2016 d) Phase-1 commissioning and production operations: by end of August 2017 or one month prior to commissioning / production operations whichever comes first e) Phase-2 commissioning and production operations: by end of July 2018 or one month prior to commissioning / production operations whichever comes first.	a) 11/15/2015 – Complete b) 11/30/2015 - Complete c) 12/31/2016 - Complete d) 08/31/2017 or one month prior to commissioning / production operations whichever comes first - Complete e) 07/31/2018 or one month prior to commissioning / production operations whichever comes first
2	Eni Ghana will require that contractors adopt measures and bridging documents to ensure that their management systems are compatible with HSE Policy, guidelines and procedures and the project ESHMP.	Evidences (i.e., approved bridging documents) collected and submitted to WBG.	12/31/2015 – Complete and ongoing
3	Eni Ghana will implement well integrity and control strategies and develop specific Well Control Emergency Response Plans for each well drilled. All drilling programs will be approved by eni headquarters (that will act as independent, expert third party in charge of verification/review).	a) WCEMP applicable to the first three wells drilled approved by eni headquarters and submitted to WBG by September 2015, and evidences of implementation of the third party verification/review of the drilling programs by October 15, 2015 b) Auditable evidences of implementation provided to WBG in the Annual Monitoring Report.	a) 10/15/2015 - Complete b) 12/31/2017
4	Eni Ghana will develop the specific E&S monitoring plans. A number of pre-construction surveys will be implemented, including: (i) preconstruction fish catch surveys at Sanzule and in the project area of influence, with specific focus on beach seine fishing activities; (ii) phyto- and zooplankton surveys (near the same time as the catch surveys and focusing on fishing grounds); (iii) ambient air quality and noise monitoring in the area of influence of the ORF; (iv) preconstruction survey of sensitive avian species that may be present, particularly during the boreal winter.	a) Terms of reference of the time sensitive surveys (birds and sea turtles) submitted to WBG by end of October 2015 b) Pre-construction surveys and monitoring plans submitted to WBG.	a) 10/31/2015 - Complete b) 06/30/2016 - Complete
5	Eni Ghana will report on their best efforts to engage other developers, local institutions and government, and other stakeholders in designing coherent management strategies to mitigate cumulative impacts.	a) Cumulative impact mitigation strategy submitted to WBG b) Evidences of implementation provided to WBG as part of the Annual Monitoring Report	a) 11/30/2015 - Complete b) 12/31/2016 - Complete

	Task	Indicator of Completion	Timeframe
6	Eni Ghana will update and refine the air emission dispersion and noise propagation modeling during production facility final design to inform the identification and development of a package of air emission reduction measures.	Modeling updated and submitted to WBG during production facility final design and by anticipated completion date.	10/31/2017 - Complete
7	Eni Ghana will develop and enforce a policy and relevant procedures to ensure that operations of drillship, support vessels and helicopters minimize disturbance to marine mammals and turtles.	Policy and procedures submitted to WBG.	12/31/2015 - Complete
8	Eni Ghana will maintain a quantification program for GHG emissions, according to an internationally recognized emissions estimation methodology, and will establish annual review programs to identify areas of improvement and GHG emission reduction. Eni Ghana has committed to implement a Zero-Permanent Flaring policy, and will implement measures for minimization of venting and flaring (consistent with the Global Gas Flaring and Venting Reduction Voluntary Standard) and minimization of fugitive emissions.	a) Quantification and minimization program for GHG emissions submitted to WBG b) First annual report by anticipated completion date.	a) 10/31/2017 - Complete b) 12/31/2017 – presented to WBG
9	Eni Ghana will include an environmental lead as part of the oil spill response team and will develop a clear mechanism of escalation of response effort based on coastal and biodiversity sensitivity. Mutual aid agreements with other operators in Ghana will be established.	Evidences of implementation (i.e., approved revised OSCP) submitted to WBG.	12/31/2015 - Complete
10	Eni Ghana with the support of Vitol will develop and implement a Livelihood Restoration Plan (LRP) for affected people in the community of Sanzule. Once all mitigation measures have been substantially completed and displaced persons are deemed to have been provided adequate opportunity and assistance to sustainably restore their livelihoods, eni Ghana will undertake a completion audit comparing outcomes against objectives of the plan and current living conditions against living conditions prior to the start of the project. eni Ghana will develop a Land Acquisition and Compensation Framework for any potential additional land acquisitions that may be required for the project or future expansions.	a) LRP workshop held b) Draft final LRP submitted to WBG c) Final LRP submitted to WBG d) Update report by Eni Ghana/Vitol on actions taken (e.g., financial training, food aid, education and health support, stakeholder engagement, feasibility studies by the 4 NGOs). The report will also summarize implementation issues faced in 2016-2017 and lessons learned. e) Evidences of implementation included in the periodic E&S progress reports and Annual Monitoring Report f) Interim Implementation Audit carried out by an external competent resettlement professional and report submitted to WBG g) Finalization report by implementing organization submitted to WBG and Completion Implementation audit carried out by an external competent resettlement professional and report submitted to WBG	a) 10/31/2015 - Complete b) 11/30/2015 - Complete c) 12/31/2015 or six weeks prior to construction early works whichever comes first - Complete d) 02/28/2018 - Complete e) Based on LRP – Ongoing f) 03/31/2019) – Completed (post Q2, 2019) g) Finalization report: at the completion of the LRP Completion audit: One year after the completion of the implementation of the LRP - can only be closed after LRP implementation period has ceased.
11	Eni Ghana with the support of Vitol will develop a Fisheries Management Plan (FMP) to ensure fishermen are compensated appropriately and assistance for improving or at least restoring their living conditions is provided. The FMP will be monitored throughout its implementation to its completion. A participatory monitoring program will be developed with the involvement of local fishermen. The plan	a) FMP strategy submitted to WBG. b) FMP submitted to WBG.	a) 12/31/2016 Complete b) 5/31/2017 or 2 months prior to construction sea pipeline whichever comes first - Complete

	Task	Indicator of Completion	Timeframe
	will also include a compensation framework in line with PS 5 in case fishers are adversely impacted by an oil spill.	c) Evidences of implementation of the FMP and participatory monitoring program included in the Annual Monitoring Report.	c) 12/31/2017
12	Eni Ghana with the support of Vitol will develop a Biodiversity Management Plan (BMP and relevant Biodiversity Action Plans) and will implement it, in collaboration with recognized species specialists. Seasonal constraints, associated with peak turtle nesting season between October and February and with dwelling season of the IBA triggering species, will be incorporated in the construction and operation management plans.	a) BMP submitted to WBG, including identification of opportunities to enhance conservation of priority bird species (including specific focus on the hood vulture) and/or habitat in the project area b) BAPs for sea turtles and for birds submitted to WBG c) Evidences of implementation of the BMP / BAPs included in the Annual Monitoring Report.	a) 07/31/2016 - Complete b) 11/30/2016 - Complete c) 12/31/2017 - Ongoing
13	Eni Ghana will ensure that support helicopters will routinely avoid flying over the sensitive areas of Amansuri wetland and that, if avoidance is not feasible due to weather conditions, a minimum altitude will be specified, according to international good practice, when flying over this area to minimize disturbance to wildlife.	Evidences of avoidance (i.e., helicopter flight plans and relevant language on flights associated with emergency/oil spill response drills in the revised BMP - see Action Item 12) provided to WBG.	05/31/2016 - Complete
14	Eni Ghana and Vitol Ghana, as partner of the OCTP project, will develop and implement a community investment strategy for the area of influence of the project by identifying areas of potential social investment based on community assets and needs. The community investment strategy will be developed in consultation with local and regional stakeholders.	a) Community investment strategy submitted to WBG b) Final Community Investment Strategy submitted to WBG c) Updates and evidences of implementation of the strategy included in the Monthly E&S Reports and Annual Monitoring Report.	a) 12/31/2015 - Complete b) 10/31/2017 - Complete c) 12/31/2018
15	Eni Ghana and Vitol Ghana, as partner of the OCTP project, will hire an independent E&S consultant (IESC) to monitor and report on implementation of this E&S Action Plan and compliance with Performance Standards and E&S commitments. The monitoring visits will be carried out biannually (every six months) during development drilling and annually during production operations. The reports of the IESC will be published.	a) IESC's Terms of Reference submitted and approved by the WBG, and IESC hired b) First monitoring visit and report submitted.	a) 12/31/2016 - Complete b) 03/31/2017 - Complete
16	Vitol Ghana will assign an E&S assurance manager to the OCTP project to oversee environmental, health, safety and social aspects, ensuring compliance with Performance Standards and project E&S commitments.	E&S assurance manager appointed.	10/31/2015 - Complete
17	Vitol Ghana will develop and adopt a Human Resource Policy.	Human Resource Policy submitted to WBG.	12/31/2015 - Complete
18	Vitol Ghana will update its security policy to be aligned with the Voluntary Principles on Security and Human Rights.	Policy submitted to WBG.	12/31/2015 - Complete

APPENDIX 2

STATUS OF 'OPEN' ISSUES (END Q2, 2019)

This Appendix includes two tables. First, Table 1 presents issues identified during the May 2019 site visit; whereas, Table 2 presents issues identified prior to the May 2019 site visit. Initially, for both tables, only issues considered to be 'open' by the IESC, as of May 2019, were included. Subsequently, the right-hand column has been updated based on the results of the review of the Q2 2019 QMR. Within the ID column, an issue is identified by a composite reference number combining the issue number and year (for example, all Table 1 issues follow the format shown by the first issue, '001_5/19') and all Table 2 issues follow the format shown by the first issue, '021 2/17').

Table 1. Issues identified during the May 2019 site visit

ID	Aspect	Issue Description	Phase	IESC Recommendations	Significance	Open/Closed/Superseded (IESC Opinion)
001_5/19	Community investment (potable water supply QIP)	Development of more robust management of the potable water supply project	PS1 Construction and Production	Eni Ghana to continue to work closely with the WBC to improve the levy collection/project cash flow and ability of operators to perform their tasks effectively.	Minor	Open
002_5/19	TTIP QRA (revised scope)	The potential need to relocate community members living near the Tema RMS cannot be ruled out at this stage. Pending preparation of a new QRA for the revised plant design/operating philosophy.	PS1, PS4 Production	In the event that relocation is required, Eni Ghana's responsibility and ability to influence any future relocation needs to be clarified and agreed between Eni Ghana and the WBG.	Minor (increasing to Moderate if resettlement is required)	Open
003_5/19	Operational readiness	The ESHMP refers to the Offshore Hydrotest Disposal Plan despite hydrotesting being completed prior to reissue of the ESHMP. Other socio-economic plans referenced in the ESMHP are yet to be updated for the Production phase.	PS1 Production	Eni Ghana should confirm all hydrotesting is complete, and if this is the case, remove the Offshore Hydrotest Disposal Plan from the ESHMP during periodic management review of the ESHMP. The Security Management Plan and the Stakeholder Engagement Plan to be agreed with WBG and approved/signed off by Eni Ghana as soon as possible (see also 010_5/19)	Minor	Open (ongoing progress is being made)

ID	Aspect	Issue Description	Phase	IESC Recommendations	Significance	Open/Closed/ Superseded (IESC Opinion)
004_5/19	T-cards	The T-card system for visitors at the temporary accommodation camp did not accurately reflect visitor presence on site/departure times.	PS1/PS2 Construction and Production	The use of T-cards at the site should be reviewed with consideration of further training for security personnel and provision of additional T-cards to allow for peak visitor numbers.	Minor	Open
005_5/19	Environmental monitoring sampling points	In its previous site visit report, the IESC highlighted an ambient air sampling point located upwind of the main emissions sources and therefore likely to be of little use in monitoring any impacts to ambient air quality originating from the Project. The monitoring locations have not been revised/supplemented.	PS1 Production	The location of sampling points for Production phase monitoring should be reviewed and revised as necessary based on operational emission sources, sensitive receptors and zones of maximum impact identified in predictive air quality studies.	Moderate	Open (a map of sampling locations accompanying the Q2 2019 QMR does not indicate a new sampling location)
006_5/19	Monitoring of demobilised workers	Reintegration of workforce	PS2 Production	Eni Ghana to: a) expand the scope of the survey to include livelihood/income status of the demobilised workers and their households as well as their occupations and means of livelihood; and b) re-consider the survey sampling parameters to be used, in the future, in the context of the needs of the potential users of the data	Minor	Open
007_5/19	Sewage treatment	Despite recent upgrades to the STPs on the PFSO and drillship, certain	PS3	The limit values used in the QMRs should be reviewed by Eni Ghana, and, in	Minor	Closed

ID	Aspect	Issue Description	Phase	IESC Recommendations	Significance	Open/Closed/Superseded (IESC Opinion)
	effluent (offshore)	parameters to continue to exceed the limits quoted in the QMRs.	Production	particular, standards applicable to the offshore environment confirmed with the Ghana EPA/other authorities with reference to MARPOL 73/78 as applicable.		
008_5/19	Waste management	Poor segregation of wastes at source in the PAC construction area	PS3 Construction	Eni Ghana to ensure multiple bins are available for the different types of waste intended for segregation and recycling as per the Waste Management Plan.	Minor	Open
009_5/19	Community water quality	Eni Ghana/ESL has not undertaken water level/drinking water quality monitoring from community wells. Eni Ghana indicated that it was not part of ESL's scope to analyse water quality for drinking water parameters, but instead this was the responsibility of the SLC team.	PS3 Construction and Production	Eni Ghana should clarify its position with respect to the monitoring of water quality from community water wells and fulfil the requirements of the Environmental Monitoring Programme (2018). Eni Ghana have provided contradictory information concerning the use of old drinking water wells. Consequently, it is believed some individuals are still using the old wells.	Minor	Open (remains open unless Eni Ghana can confirm no use of the wells)
010_5/19	Project Security SMP	The Project SMP requires substantial revision following the labour unrest in Q1 2018 and, also, in response to the IESC's finding that offshore security provisions have not changed since September 2018. IESC understands that agreement between Eni Ghana and WBG is close with respect to finalising the current draft SMP. Project need for state-sponsored security back-up provision for the operational	PS4 Construction and Production	The Project SMP to be agreed with WBG and approved/signed off as soon as possible. The final SMP needs to include all pertinent international and O&G sector guidance on managing security and be aligned with other Eni Ghana plans that impinge on security-related issues (such as the Production phase Fisheries Management Plan).	High	Open

ID	Aspect	Issue Description	Phase	IESC Recommendations	Significance	Open/Closed/ Superseded (IESC Opinion)
		ORF. Currently, there is only an informal agreement/understanding between Eni Ghana and the local police regarding the role of the police in providing security. Such an agreement/understanding is not sufficient.		An MoU to be reached, as soon as possible on the use of State actors (Navy and/or Army) in the protection of offshore and onshore assets and personnel (especially the operational ORF). This MoU should be based, to the extent practical, on international and O&G sector guidance; such as IFC's (2017) Good Practice Handbook entitled ' <i>Use of Security Forces: Assessing and Managing Risks and Impacts: Guidance for the Private Sector in Emerging Markets</i> '. An 'agreement' between the Project and the police should be formalized soon, perhaps via an MoU, to remove the uncertainty inherent in an informal 'agreement'.		
011_5/19	Project Security Management Plan – fishing vessel incursions	Incursion of fishermen into exclusion zones	PS4 Construction and Production	Efforts to enforce exclusion zones must continue/new initiatives need to be sought. Eni Ghana should continue liaison with other O&G operators in the region (and consider experience from other West African regions and those beyond West Africa to identify effective practices that may be transferable to OCTP). Continue with efforts with Ghanaian authorities, such as GMA and GNPC, to expedite agreement on measures and mechanisms that can improve offshore security in both the short and long-term (recognizing that a sustainable long-term solution/s may not be implemented for	High	Open

ID	Aspect	Issue Description	Phase	IESC Recommendations	Significance	Open/Closed/ Superseded (IESC Opinion)
				several years). These efforts to include concluding an MoU with the Ministry of Defence with respects to the contribution of the Navy to provision of offshore security.		
012_5/19	Livelihood Restoration (LR) Programme Support Services	At time of food aid termination, about 20% of PAPs had not, "...officially started to generate revenue...".	PS5 Construction and Production	Eni Ghana to maintain a register of each individual PAP, from the estimated 20%, who has not yet started to generate revenue and record remedial actions taken with date, responsible entity/person, and results, to assist it to track success in restoring livelihood status to these PAPs; with emphasis on vulnerable PAPs.	High	Open
013_5/19	Livelihood Restoration (LR) Programme Support Services	Certain sites selected for LR Programme Support Services options may have caused environmental harm to forested areas/swamps resulting in habitat loss.	PS 5 and PS6 Construction and Production	Eni Ghana (environmental team) and TechnoServe to work together to create a simple E&S screening procedure to guide site selection with allocation of responsibility to senior HSE staff members in terms of making the final decision and then sign off. Supervision of option implementation including a monitoring procedure), for certain cases, up to the point where the option is operational should be part of the appraisal process. The extent of any habitat loss, due to livelihood restoration activities, to be calculated and included in overall Project calculations of net loss of natural habitat.	Moderate	Open

ID	Aspect	Issue Description	Phase	IESC Recommendations	Significance	Open/Closed/ Superseded (IESC Opinion)
014_5/19	Site drainage and erosion control	Eni Ghana, under advice from ESL, has chosen to regenerate swamp (by lowering the ground level) rather than use soft engineering options to reduce erosion and subsequent sedimentation of the swamp.	PS6/PS3 Construction	It is unclear how successful the concept will be. Water levels in swamp areas at the time of the visit were relatively high however were not inundating the area at the point of surface water discharge. This approach needs to be carefully monitored and soft engineering measures implemented if the concept of swamp regeneration fails.	Minor	Open
015_5/19	Reinstatement - Removal of soil	The disposal strategy for the large quantity of waste soil stored behind the Consar laydown is not described in the ORF Reinstatement and Restoration Plan and is therefore unclear.	PS6/PS3 Construction	The quantity of waste soil should be calculated and a clear disposal/reuse strategy prepared. Priority should be given to beneficial reuse.	Minor	Open
016_5/19	Shorebird birds	Monthly shorebird monitoring reports indicate reduced number of birds but conclude no linkages between the decline in numbers and the Project.	PS6 Construction and operations	Eni Ghana should produce a report summarising all monthly data to date and providing an analysis of the findings taking account of seasonal fluctuations and other variables that might be influencing bird numbers. The report should provide robust interpretation of the results to support the conclusion that the Project has had no direct or indirect impact on the shorebirds. Input from FFI is required.	Moderate	Closed
017_5/19	Additional conservation actions	The selection of additional conservation actions has not been made, but is underway, and will be presented in revised Avian and MMST BAPs.	PS6 Operations	The ACAs should complement the requirement for no net loss of wetland habitat and clearly presented in revised versions of the BAPs for WBG review. The original authors of the BAPs should	Moderate	Open (IESC aware BAPs have been revised but item remains closed until revised)

ID	Aspect	Issue Description	Phase	IESC Recommendations	Significance	Open/Closed/ Superseded (IESC Opinion)
				provide input into the revision of BAPs and the ACAs defined therein.		BAPs have been reviewed)
018_5/19	Biodiversity: Environmental Monitoring of Wetland Water Levels and Vegetation	The culverts, located close to the GNGC pipeline tie in, that have installed beneath the access road and pipeline to maintain the hydrological connectivity and functioning in the adjacent wetland natural habitats appear to be position above the dry season water level	PS6 Construction and Operation	Water levels in the wetlands <u>either side</u> of the RoW should be monitored over the long-term to check that hydrological connectivity and functionality has been maintained and that changes are not impacting the wetland habitats.	Minor	Open
019_5/19	Biodiversity: No Net Loss of natural habitats	The Identification and Assessment of Potential No Net Loss Options, scheduled to be completed by Q1 2019, has not been initiated	PS6 Construction and Operation	It is recommended that Eni Ghana initiate the prescribed programme as soon as possible and reports the findings of its options study to the WBG.	Moderate	Open

Table 2. Issues identified prior to the May 2019 site visit

ID	Aspect	Issue Description	Standard/ Phase	Previous IESC Recommendations	Signifi- cance	Open/Closed/ Superseded (IESC Opinion)
006_ 09/18	Operational readiness	The ESHMP refers to the Offshore Hydrotest Disposal Plan despite hydrotesting being completed prior to reissue of the ESHMP. Other socio-economic plans referenced in the ESMHP are yet to be updated for operations.	PS1 Operations	Eni Ghana should confirm all hydrotesting is complete, and if this is the case, remove the Offshore Hydrotest Disposal Plan from the ESHMP.	Minor	Superseded (see 003_5/19)
008_ 09/18	Environ-mental monitoring sampling points	An ambient air sampling location is located upwind of the main emissions sources and therefore likely to be of little use in monitoring any impacts to ambient air quality originating from the Project.	PS1 Operations	The location of sampling points for operations phase monitoring should be reviewed and revised as necessary based on operational emission sources, sensitive receptors and zones of maximum impact identified in predictive air quality studies.	Minor	Superseded (see 005_5/19)
012_ 09/18	Labour management	Reinforcement of induction training on worker terms and conditions of employment and worker rights and responsibilities	PS2 Construction and Production	Amend the Worker Management Plan to contain a requirement for repeat refresher training on worker terms and conditions of employment and worker rights and responsibilities (as provided to new recruits during induction) and then implement the refresher training according to the schedule set out in the revised Worker Management Plan.	Minor	Open (The Workers Management Plan - Production [SUST-Plan-003] includes actions on refresher training. The IESC will seek to close this item after inspection of Eni Ghana's corrective action log during the next IESC monitoring visit).

ID	Aspect	Issue Description	Standard/ Phase	Previous IESC Recommendations	Signifi- cance	Open / Closed / Superseded (IESC Opinion)
014_ 09/18	Community water quality	Eni Ghana/ESL has not undertaken water level/drinking water quality monitoring from community wells. Eni Ghana indicated that it was not part of ESL's scope to analyse water quality for drinking water parameters, but instead this was the responsibility of the SLC team.	PS3 Construction and Production	Eni Ghana should clarify its position with respect to the monitoring of water quality from community water supplies and fulfil the requirements of the Environmental Monitoring Programme (2017).	Minor	Superseded (see 009_5/19)
016_ 09/18	Project Security Management Plan – fishing vessel incursions	Incursion of fishermen into exclusion zones	PS4 Construction and Operations	Efforts to enforce exclusion zones must continue/new initiatives need to be sought. Eni Ghana should continue liaison with other O&G operators in the region (and consider experience from other West African regions and those beyond West Africa to identify effective practices that may be transferable to OCTP. 1. Continue with efforts with Ghanaian authorities, such as GMA and GNPC, to expedite agreement on measures and mechanisms that can improve offshore security in both the short and long-term (recognizing that a sustainable long-term solution/s may not be implemented for a number of years).	High	Superseded (see 011_ 5/19 above).
018_09/18	Security Provision	TechnipFMC will complete its work by December 2018 and its security provider (DFI) employs about 30 security guards many	PS4	The previous transition of security provision between Real Life Security and G4S to be reviewed by Eni Ghana, TechnipFMC and G4S to identify lessons	Minor	Superseded

ID	Aspect	Issue Description	Standard/ Phase	Previous IESC Recommendations	Signifi- cance	Open/Closed/ Superseded (IESC Opinion)
		of whom are local. G4S will be providing all security from January 2019. Previously there were local-level concerns/unrest about the transfer of jobs.	Construction and Operations	learnt to try to ensure a smooth handover which avoids any labour/community unrest		(All ORF security is now provided by G4S).
025_ 09/18	Biodiversity: Sea Turtle Biodiversity Action Plan	Security personnel are not completing patrols of the beach in the concession at night during peak nesting period (June–August) as part of their regular circuit.	PS6 Construction and Operation	Eni Ghana to ensure that the all security personnel are trained and motivated to perform these patrols. It would be appropriate for GWS to provide this training. As the security contract for the operational phase is being handed to a new provider (G4S), additional training and motivation is required to implement the security patrols.	Minor	Open
026_ 09/18	Biodiversity: Sea Turtle Biodiversity Action Plan	It is understood that GWS has submitted a proposal to Eni Ghana for the completion of a community conservation programme and that this is being currently under consideration in Eni Ghana's procurement process	PS6 Construction and Operation	IESC recommends that the GWS proposal is shared with the IESC and Lenders for review and that a timetable for implementation of a community conservation programme is confirmed.	Moderate	Open
027_ 09/18	Biodiversity: Avian Biodiversity Action Plan	The Avian BAP includes the action " <i>Engage and contribute to existing community-based Vulture conservation programme.</i> " It is understood that some engagement sessions were completed in 2017, but that Eni Ghana has no existing plans to progress this action.	PS6 Construction and Operation	It is recommended that Eni Ghana progresses a long-term programme of community-engagement focussing on vulture conservation, possibly targeted to the nearby villages known to hunt vultures.	Moderate	Open (IESC understands Avian BAP has been revised and potential addresses this issue. IESC will review the revised BAP during the next site visit and

ID	Aspect	Issue Description	Standard/ Phase	Previous IESC Recommendations	Signifi- cance	Open/Closed/ Superseded (IESC Opinion)
						update the status accordingly)
033_ 09/18	Biodiversity: No Net Loss of natural habitats	Identification and Assessment of Potential No Net Loss Options is scheduled to be completed by Q1 2019.	PS6 Construction and Operation	It is recommended that Eni Ghana initiate the prescribed programme as soon as possible. This would also potentially reduce the level of compensation required to offset for the time-lag between habitat losses and the delivery of the offset.	Moderate (becoming High if not completed according to schedule set out in the management plan.)	Open (IESC to review the BAP during forthcoming site visit and revise status of this issue accordingly)
006_ 03/18	FPSO walkover	Large quantities of fuel/other hydrocarbon-based products were stored without localised secondary containment.	PS1 Operations	Project should consider localised secondary containment around the stockpile and reducing the number of drums stockpiled on board the FPSO.	Minor	Open (IESC will seek to close this item following review Eni Ghana's corrective action log during the next site visit).
007_ 03/18	FPSO walkover	A 200-litre drum containing unknown contents was present. The IESC understands the drum has been on board since the FPSO left Singapore.	PS1 Operations	Efforts are required to identify the contents of the drum. The drum and its contents should be safely disposed in accordance with the approved waste management plan.	Minor	Open (IESC will seek to close this item following review Eni Ghana's corrective action log during the next site visit).
020_ 03/18	Waste water discharge	The 2017 AMR [and subsequent QMRs] reports: 2. exceedances of WBG and Ghanaian effluents	PS3 Construction	Eni Ghana should provide the WBG and IESC an update on this issue, further describing remedial actions and the results of any additional monitoring	Minor	Superseded (see 007_5/19)

ID	Aspect	Issue Description	Standard/ Phase	Previous IESC Recommendations	Signifi- cance	Open/Closed/ Superseded (IESC Opinion)
		standards for BOD ₅ , COD, total nitrogen and total phosphorous at the Maersk Voyager; and exceedances of total coliform bacteria at the FPSO.		performed to confirm the effectiveness of remedial actions is anticipated at the end of April 2018.		
024_ 3/18	Project Security Management Plan – fishing vessel incursions	Incursion of fishermen into exclusion zones	PS4 Construction and Operations	Efforts to enforce exclusion zones must continue/new initiatives must be sought. Eni Ghana should consider liaison with other O&G operators in the region to understand whether they have experienced similar issues, and if so, what measures have been used to enforce exclusions zones. Efforts to be renewed to try to progress reaching agreement on an MoU with the Ghana Navy with regard to mutual and shared responsibilities for preventing incursions and resolving them promptly when they occur.	High	Superseded (See 011_ 5/19 above).
008 9/17	Human Resources Policy	Eni Ghana does not have a Human Resources Policy that is tailored to its operations in Ghana.	Construction and Operations PS2	Prepare, approve, disseminate and implement an Eni Ghana – specific Human Resources Policy. This policy to include explicit statements that child and forced labour will not be employed and trafficked persons will not be hired.	Minor	Open (A policy is still required. It is recognized that the Recruitment, Employment and Training Plan and Worker Management Plan both cover the issues, mentioned in

ID	Aspect	Issue Description	Standard/ Phase	Previous IESC Recommendations	Signifi- cance	Open/Closed/ Superseded (IESC Opinion)
						the column opposite, to varying extents).
009 9/17	Forced labour	The Recruitment, Employment and Training Plan does not contain a clear commitment that forced labour will not be employed.	Construction and Operations PS2	The Recruitment, Employment and Training Plan to be amended to contain a clear commitment that forced labour will not be employed.	Minor	Open (No revised Recruitment, Employment and Training Plan incorporating the required commitment has been prepared).
010 9/17	Accommodation Provision	No Eni Ghana accommodation policy exists.	Construction and Operations PS2	Prepare, approve, disseminate and implement an Accommodation Policy or incorporate it into a (combined) Human Resources and Workers' Accommodation Policy.	Minor	Open (No Accommodation Policy of Human Resources Policy has been prepared. A stand-alone policy or one combined with a Human Resources Policy is still required).
019 9/17	Contractor Management - security	Appendix Q is not always issued to all contractors.	Construction and Operation PS4	Appendix Q to be updated to reflect the approved and 'signed off' Security Management Plan requirements (approval and 'sign off' has not yet occurred) regarding application of the Voluntary Principles for Security and Human Rights to procurement and management of security providers. Once updated and revised Appendix Q to be issued with all ITTs/model contracts to prospective contractors (with a proviso	Moderate	Open (As the current draft of the Project Security Management Plan is undergoing Lender review, Appendix Q will need to be updated accordingly when it is finalized).

ID	Aspect	Issue Description	Standard/ Phase	Previous IESC Recommendations	Signifi- cance	Open/Closed/ Superseded (IESC Opinion)
				that a contractor can seek Eni Ghana approval that security requirements are not applicable to its operations).		
022 9/17	Influx Management	The potential effectiveness of the Influx Management Plan is threatened by the limited progress to date in establishing the collaborative Multi-Stakeholder Forum for managing cumulative impacts, including coordinated actions to manage influx.	Construction and Operations PS5	Eni Ghana must continue to support WBG efforts to establish a collaborative Multi-Stakeholder Forum. Establish whether the 'influx management approach' prepared by WRCF, is an appropriate basis for revising the Influx Management Plan by end of Q4 2017.	Moderate	Open (The Multi-Stakeholder Forum is not yet established and functioning (See comment for item ID 027_2/17). This element remains OPEN. The recommendation about the influx management approach' is closed.
021 2/17	Contractor Management - security	The extent of the involvement of the Security Manager in the procurement of contractors is limited.	PS 4 Construction and Operation	Ensure that the Security Management Plan will contain minimum requirements to be met by contractors and that these requirements will be factored into procurement processes (and subsequent contractor management) with regards to security provision.	Moderate	Open (Prior to the labour unrest of March 2018, an approved Project Security Management Plan was in place. This approved SMP included the 'minimum requirements'. However, following the labour unrest of March 2018 the SMP requires further

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						<p>updating, revision and approval). Currently, as of end June 2019, this remains an OPEN action.</p> <p>Appendix Q needs to be revised to reflect the final version of this Plan and then the revised Appendix Q needs to be incorporated into all documentation provided to potential contractors.</p>